2017 PAI ENGINE PARTS CATALOG AND CROSS REFERENCE



ISO 9001
CERTIFIED

CUMMINS APPLICATION

PAI Industries, Inc.
950 Northbrook Parkway, Suwanee, GA 30024
Tel: (770) 822-1000 I Fax: (770) 822-1421
E-mail: postmaster@paiindustries.com
Website: www.paiindustries.com

QUALITY SYSTEM CERTIFICATION
ISO 9001:2008
DNV

Our Vision

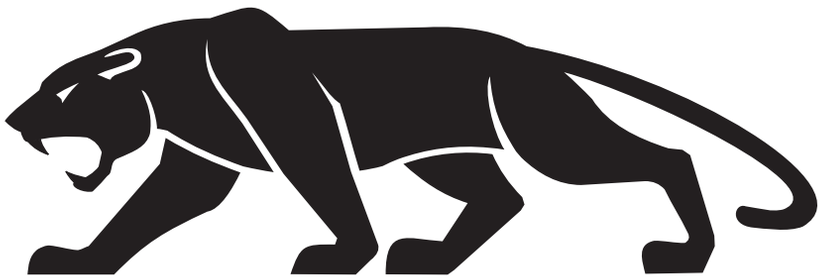
To be recognized as the world's best Service parts provider to the trucking industry by providing a full line of top-quality products, rapid customer support and technical expertise that in turn enable our customers to be successful.

Our Mission

At PAI Industries, our Customers are the foundation of our business and we strive to exceed their expectations. We are committed to expanding our product range to enable PAI to become a single-source supplier to our customers. Through product development, strong customer Service and comprehensive technical support we endeavor to achieve our ultimate goal of complete customer satisfaction.

Quality Policy

PAI is committed to compliance of all customer requirements, regulatory requirements and original equipment specifications by means of our Quality Management System. Our goal is to ensure customer satisfaction by maintaining the highest levels of quality for the products and services we provide. Quality, continual improvement and customer satisfaction are the personal responsibility of every PAI employee.



We have implemented a new parts numbering system to accommodate our expanding product line. The numbering system for our new parts is increasing from four digits to six digits--providing plenty of numbers for future new parts. This is an expansion to our existing six digit system for the Cummins, Navistar and Detroit Diesel product lines. Please continue to use existing part numbers when ordering. Only **new** PAI parts will use the six digit scheme.

Bold part numbers indicate new parts to this catalog.

IMPORTANT: Catalog and Cross Reference are solely for informational purposes. PAI does not assume any responsibility or liability for printer errors. Order parts by number, not by visual identification, as illustrations may not be identical to actual parts. This catalog is for reference purposes only and should not be used as a Service or assembly guide. All responsibility for correct application remains that of the end user.

PAI parts are manufactured for the replacement trade. It is not intended to convey the thought that they are original parts made by the original truck manufacturer. They are intended for use in replacing broken or worn parts and should be resold for such purposes only.

PAI is not affiliated with American Bosch, Bendix, Caterpillar, Cummins, Dana, Detriot Diesel, Eaton, Euclid, Fuller, Mack® Truck, Inc., Intenational, Midland/Haldex, National, Navistar, Rockwell, Schwitzer, Sealco. All manufacturer's names, numbers, symbols and descriptions are used for reference only. It is not implied that any part listed is the product of these manufacturers.

PAI © Copyright 2017
Printed in the U.S.A.



PAI CATALOG COVERAGE

ENGINE COMPONENT CATALOGS

CUMMINS 2017.....NOV1387
MACK ENGINE 2015.....NOV1207
INTERNATIONAL 2015.....NOV1072
VOLVO/RENAULT 2014.....NOV1065
CATERPILLAR 2013.....NOV172
DETROIT DIESEL 2013.....NOV171

TRUCK COMPONENT CATALOGS

DRIVE TRAIN 2016.....NOV1304
CAB ACCESSORIES 2014.....NOV1050
CAB & CHASSIS 2012.....NOV165
WATER PUMPS & THERMOSTATS.....NOV1200

GENUINE PAI®
WORLD TESTED • PERFORMANCE PROVEN

Table of Contents

855 Series

Cylinder Block Components 6
Small Cam - Non-FFC and FFC, Big Cam - FFC 6
Oil Pan and Components 9
Front Cover and Components 10
Crankshafts 12
Piston Kits, Pistons, Rod Bearings and Ring Sets 14
Cylinder Kits by CPL 18
Camshafts and Components 33
Rocker Box
5 Bolt Rocker Box 34
7 Bolt Rocker Box 35
Rocker Covers and Rocker Box Gasket Sets 36
Engine Brake Components 37
Cylinder Head Assemblies and Components 38
Water Rail Components 42
Cam Follower Housings Components 44
Flywheel Assemblies 46
Water Pumps
Small Cam - FFC 48
Small Cam - Non-FFC 5-1/2in Shaft 51
Big Cam I, II, III, and Early Big Cam IV
Vented and Non-Vented 52
88NT (with Idler) 54
Water Pumps with Idler 48
Fuel System Components 56
Oil Pump Assembly 58
Big Cam II,III and IV - FFC 58
Small Cam and Big Cam I 59
Oil Cooler 60
Small Cam and Big Cam 60
86NT and 88NT 62
88NT 64
Accessory Drive 66
Aftercoolers and Intake Manifold Components 68
Small Cam - FFC and Big Cam I, II, III - FFC 68
Exhaust System 72
Low Forward Side Mount Turbo,
Ford L and LT 9000 Application 72
Pulse Exhaust Manifolds - Current Style 74
Turbochargers
Turbocharger Applications by CPL 76
Turbocharger Repair Kits 117
Inframe Kits
Inframe Kits by CPL 118
Gasket Sets
Upper Gasket Sets 132
Single Cylinder Head 132
Lower Gasket Sets 133
Overhaul Gasket Set 133
Miscellaneous 134
Gaskets 134

N14 Series

Cylinder Block Components 136
Oil Pan and Components 138
Crankshaft and Components 139
Front Cover Components 140
Camshafts 142
Piston Kits, Pistons, Rod Bearings and Ring Sets
One Piece Piston 144
Two Piece Piston 146
Cylinder Kits
Cylinder Kits by CPL 148
Cylinder Head Assembly Components 152
Cam Follower Housing Components 154
Flywheel Assembly 156
Water Pump with Idler 158
Fuel System Components 160
Fuel Injectors 162
Oil Pump Assembly 163
Oil Cooler 164
Accessory Drive 166
Cast Iron Housing 166
Intake Manifold Components 168
Exhaust Manifold 169
Turbochargers
Turbocharger Applications by CPL 170
Turbocharger Repair Kit 171
Inframe Kits
Inframe Kits by CPL 172
Inframe Kit Breakdown 176
Pistonless Overhaul Kit Breakdown 176
Complete Engine Assembly 178
Gasket Sets
Upper Gasket Sets 179
Single Cylinder Head 179
Lower Gasket Sets 179
Miscellaneous 178
Gaskets 178

ISX Series

Oil Pan 180
Front Cover Components 181
Crankshaft 182
Camshaft 183
Flywheel Housing 184
Pistons, Rod Bearing and Ring Sets 185
One Piece Piston 185
Two Piece Piston 188
Cylinder Head Assembly 190
Water Pump and Thermostat 192
Oil Pump 193
Fuel Pump 193
Oil Cooler 194
EGR Cooler 196
Turbocharger 201
Inframe Kits
Inframe Kits - w/ Pistons 202
Inframe Kits - w/o Pistons 205
Gasket Sets
Lower Gasket Sets 205
Upper Gasket Sets 204
Miscellaneous 206
Gaskets 206

L10, M11 & ISM Series

Cylinder Block Components 208
Oil Pan 210

PAI Copyright 2017

Front Cover Components 211
Internal Dampening 211
External Dampening 212
Camshaft 213
Idler Gear Components - Internal Dampening 214
Crankshafts 216
Pistons, Rod Bearing and Ring Sets 218
One Piece Piston 218
Two Piece Piston 220
Cylinder Kits by CPL 222
L10 Series 222
M11 Series 225
ISM Series 226
QSM Series 226
Cam Follower Housing Components 227
Cylinder Head Assembly 228
Flywheel Assembly 230
Water Pump 232
4 Hole Flange Mount - L10 Series 232
3 Hole Flange Mount - L10E, M11 & ISM Series 234
Fan Drive Components 236
Oil Pump 238
Oil Cooler and Components 239
L10 Series 239
M11 Series 240
Cooling Components 242
Accessory Drive Components 243
Exhaust Manifold and Components 244
Fuel System Components 245
Thermostats and Components 246
Turbochargers 248
Turbocharger Application by CPL 250
Inframe Kits by CPL 254
L10 Series 254
M11 Series 258
ISM Series 259
Inframe Kit Breakdown 260
L10 Series 260
ISM Series 262
M11 Series 262
Gasket Sets
Lower Gasket Sets 264
Upper Gasket Sets 264
Miscellaneous Components 264
4B Series
Cylinder Block 266
Gear Housing and Gear Cover 268
Crankshafts 270
Pistons, Rod Bearings and Ring Sets 272
Camshaft 275
Cylinder Head Assemblies 276
Water Pump and Thermostat 278
Fuel Transfer Pumps 278
Fuel Shutoff Solenoid 279
Oil Pump 280
Oil Cooler 280
Gasket Sets
Lower Gasket Sets 281
Upper Gasket Sets 281
Miscellaneous 281
Gaskets 281
Rebuild Kit Breakdown 282
6B Series
Cylinder Block Components 284
Gear Housing and Gear Cover 286
Crankshaft Components 288
Piston Kits, Pistons, Rod Bearings and Ring Sets 290
Cylinder Head Assemblies 296
Camshafts 298
Water Pump and Thermostat 299
Fuel Shutoff Solenoid 300
Fuel Transfer Pumps 301
Oil Pump 302
Oil Cooler 302
Turbocharger 303
Turbocharger Applications by CPL 304
4B and 6B Series 304
Turbocharger Repair Kit 306
Rebuild Kit Breakdown 308
Gasket Sets
Lower Gasket Sets 312
Upper Gasket Sets 312
Miscellaneous Components 313
Gaskets 313
ISB & QSB Series
Cylinder Block Components 314
Cylinder Head Assembly 316
Crankshaft 320
3.9 L 320
4.5 L Industrial Engine 322
5.9 L and 6.7 L 322
Pistons, Rod Bearings and Ring Sets 324
Camshaft 330
Water Pump and Thermostat 331
Fuel System Components 332
Oil Pumps 333
Oil Cooler 334
Turbocharger 335
Gasket Sets
Lower Gasket Sets 336
Upper Gasket Sets 336
Rebuild Kit Breakdowns 372
4 Cylinder 338
6 Cylinder 339
Miscellaneous Components 343
6C & ISC Series
Cylinder Block Components 344
Gear Housing and Gear Cover 346
Crankshaft 348
Piston Kits, Pistons, Rod Bearings and Ring Sets 350
One Piece Piston 350
Two Piece Piston 354
Cylinder Kits 356
Cylinder Head Assembly 358
Camshaft 361
Valve Cover Gasket 362

Water Pump and Thermostat 363
Fuel Shutoff Solenoid 364
Fuel System Components 365
Oil Pump 366
Oil Cooler - 8.3 liter 367
Turbocharger 368
Turbocharger Application by CPL 369
Gasket Sets
Lower Gasket Set 376
Upper Gasket Set 376
Miscellaneous 376
Gaskets 377
K Series
Crankshaft 378
Cam Follower Housing 379
Oil Pan Components 380
Piston Kits, Pistons, Rod Bearings and Ring Sets 382
Cylinder Head Components 384
Oil Cooler 387
Gasket Sets
Lower Gasket Sets 388
Upper Gasket Sets 388
Miscellaneous 389
Gaskets 390
Miscellaneous Engines
378 / 504 / 555 Series 392
743 Series 393
903 Series 395
1710 and V28 Series 397
Turbocharger
Turbocharger Applications by CPL 399
Miscellaneous Components
Sensors 403
Sensors Connectors 402
Air Pressure 403
Air Temperature 403
Boost 403
Cam / Crank Position 404
Crankshaft 405
Coolant Level 405
EGR Pressure 406
Coolant Level 406
Map Sensor Kits 407
Oil Pressure 408
Oil Temperature 409
Dual Pressure / Temperature 410
Temperature 411
Speedometer 413
Air Compressor Components 414
QE Series 414
13.2 CFM Model SS296 416
Twin Cylinder ST676 / ST773 418
Fittings
Compression Assembly Fuel Fittings 418
Straight Thread O-Ring Boss Plugs(Metric) 419
Oil Caps and Dipstick 420
Fan Clutch 424
Fan Clutch Components 421
Fan Blades 422
Repair Kits 426
Filters 428
Fuel Filters and Brackets 428
Oil Filters 430
Air Filters 431
Oil Filter Element 431
Water Filters and Bracket 432
Belts 435
Tensioners 433
Miscellaneous Components
Cross Reference 442
Numerical Listings 478
Index 526

PAI Copyright 2017

HIGH PERFORMANCE GEARS
NOW AVAILABLE!

PAI
HIGH PERFORMANCE

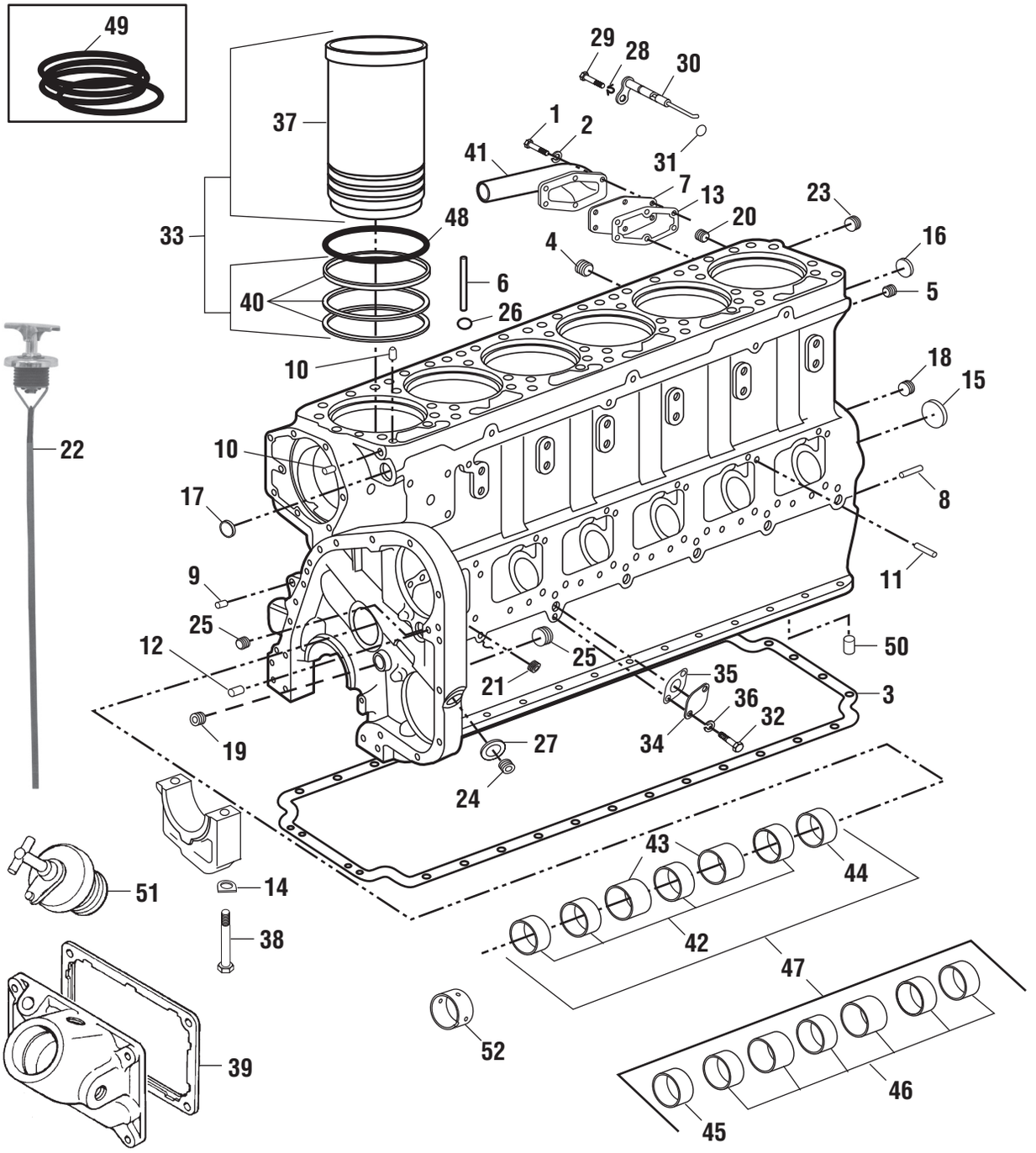
HIGH-GRADE STEEL
ROBOTIC CNC MACHINGING
PRECISION GROUND TOOTH FINISH
100% NOISE TEST
PROTECTIVE PACKAGING

5 YEAR WARRANTY

5 YEAR WARRANTY

Small Cam - Non-FFC and FFC, Big Cam - FFC, Including 88NT

FIGURE 6000



Please note:

1. **In Non-FFC blocks, do not install nylon Cooling Nozzle (CUM 3013591).**
2. **Big Cam - Camshaft Bushing (CUM 3007689) contains thinwall bushing. The wall thickness on new bushings are 1/16in (1.59mm). Check wall thickness on all bushings removed to insure proper bushings are installed.**
3. **Big Cam - Camshaft Bushing Set (CUM 3801106) contains thickwall bushings and can only be used on blocks that are machined for thickwall bushing. The wall thickness of the new bushings is 3/32in (2.38mm).**

PAI Copyright 2017

Small Cam - Non-FFC and FFC, Big Cam - FFC, Including 88NT

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 3013904	SCREW,Water Cover	
2	EWA-0703		MAK 36AX1	WASHER,Lock	CUM S-600
3	131346		CUM 3049408	GASKET,Oil Pan(Segmented)	
3	131347		CUM 3032861	GASKET,Oil Pan(One Piece) **(Refer to Page 9 for Oil Pan Kit)**	CUM 3027983
4	EPP-3566		MAK 49AX226	PLUG,Pipe(1in NPT)	CUM S-962
5	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 69901
6	Call		CUM 133029	PIPE,Oil(Non-FFC)(SC)	
7	Call		CUM 132019	PLATE,Water Cover	
8	Call		CUM 9226	PIN,Dowel(Flywheel Housing)	
9	Call		CUM 60408	PIN,Dowel(Gear Case)	
10	045020		CUM 68445	PIN,Dowel(Head to Block)	
11	Call		CUM 68585	PIN,Dowel(Cam Follower Housing)	
12	Call		CUM 70653	PIN,Dowel(Gear Case)	
13	131365		CUM 3069098	GASKET,Water Cover	CUM 69316
14	171695		CUM 3009213	LOCKPLATE	CUM 9427
15	042011		CUM 3011952	PLUG,Cup(Camshaft)	
16	Call		CUM S-719	PLUG,Expansion	
17	Call		CUM S-716	PLUG,Expansion	
18	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4in NPT)	CUM 3008466
19	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
20	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
21	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B, CUM 69901
22	141290		CUM 216484	DIPSTICK,Universal	CUM 155015
23	Call		CUM S-966-E	PLUG,Pipe(1-1/2in)	
24	ECP-3476		MAK 6635-10HP5NS	PLUG,Threaded(7/8in-18 NPT)	CUM 210884
25	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM 3008469, CUM S-995
26	131294		CUM 156545	O-RING(Non-FFC)(SC)	CUM 43696-B
27	EWA-2441		MAK 39AX23	WASHER,Flat(7/8in)	CUM 66292
28	EWA-0049		MAK 36AX22	WASHER,Lock(5/16in)	CUM S-605
29	Call		CUM S-102-A	SCREW(5/16in-24 x 5/8in)	
30	045000		CUM 3013591	NOZZLE,Piston Cooling	CUM 3007976, CUM 3014404
31	121219		CUM 3007442	O-RING,Piston Cooling Nozzle	CUM 211891
32		EF01120	FUL X-7-603	SCREW,Suction Flange Cover	CUM S-129
33	161597		CUM 3801387	KIT,Liner(.020in UPF) Includues Liner (1)161596 O-Ring Kit (1)121201	CUM 3035812
33	161599		CUM 3803219	KIT,Liner(.020in/.040in LPF) Includes Liner (1)161598 O-Ring Kit (1)121201	
33	161601	**161601E**	CUM 3801826	KIT,Liner(STD) Includes Liner (1)161600 O-Ring Kit (1)121201	
34	Call		CUM 132648	COVER,Suction Flange	
35	131383		CUM 67963	GASKET,Suction Flange	
36	FWA-0050		MAK 36AX3	WASHER,Lock(3/8in)	CUM S-604
37	161596		CUM 3046325	LINER,Cylinder(.020in)	
37	161598		CUM 3065405	LINER,Cylinder(.020in/.040in)	
37	161600	**161600E**	CUM 3055099	LINER,Cylinder(STD)	
38	Call		CUM 208346	SCREW,Main Bearing(New Style) (3/4in-16 x 6-5/8in)	
38	Call		CUM 105953	SCREW,Main Bearing(Old Style)	
39	131364		CUM 3069097	GASKET,Hand Hole	
39	131469		CUM 3068466	GASKET,Hand Hole	
40	121201		CUM AR51477	KIT,O-Ring,Liner	
41	Call		CUM 210695	CONNECTION,Water	
42	151502		CUM 3028075	BEARING,Cam(#1, 2, 4, 6)(BC)	
43	151503		CUM 3028269	BEARING,Cam(#3, 5)(BC)	
44	151504		CUM 3011951	BEARING,Cam(#7)(BC)	CUM 3014970
45	151544		CUM 100670	BEARING,Cam(#1)(SC)	CUM 9229-2
46	151545		CUM 157870	BEARING,Cam(#2-7)(SC)	CUM 9230-2

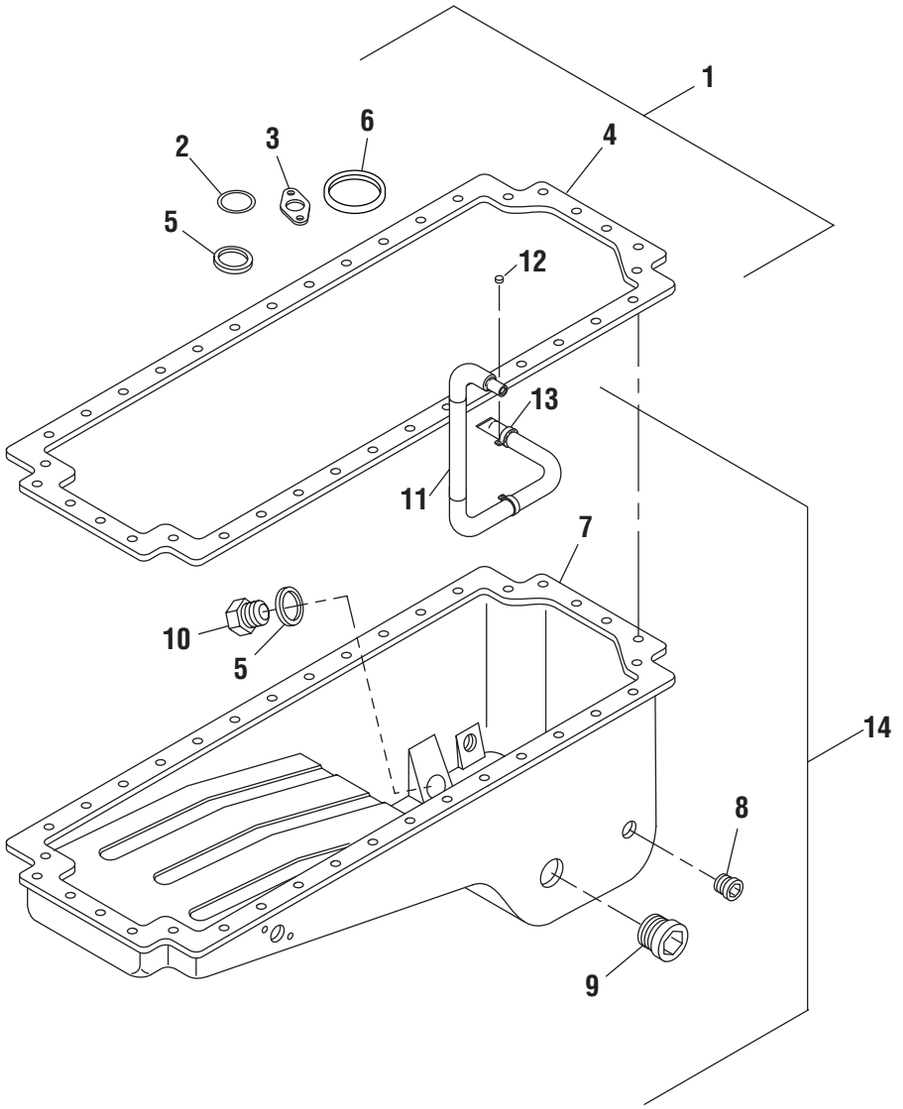
• **Please see following page for keys 47-52.**

Small Cam - Non-FFC and FFC, Big Cam - FFC, Including 88NT

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
47	151490		CUM BM27253	SET,Bearing,Camshaft(SC & 743 Engine)	
47	151501		CUM 3801106	SET,Bearing,Camshaft(Thickwall)(BC)	CUM 3352395
48	**161998**		**CUM 3054947**	**SHIM,Liner(.0195)**	
48	**161999**		**CUM 3054949**	**SHIM,Liner(.0215)**	
48	162000		CUM 3019955	SHIM,Liner(.007in)	
48	162001		CUM 3019956	SHIM,Liner(.008in)	
48	162002		CUM 3019957	SHIM,Liner(.009in)	
48	162003		CUM 3054948	SHIM,Liner(.020in,White)	CUM 3019958
48	**162004**		CUM 3019959	**SHIM,Liner(.032in)**	
48	162005		CUM 3019960	SHIM,Liner(.062in)	
48	162007		CUM 3066843	SHIM,Sealing Ring(.0180in) (Use w/ CUP 161598 .020in/.040in Liner)	
48	162008		CUM 3065406	SHIM,Sealing Ring(.020in) (Use w/ CUP 161598 .020in/.040in Liner)	CUM 3059860
48	162012		CUM 3066844	SHIM,Sealing Ring(.022in) (Use w/ CUP 161598 .020in/.040in Liner)	CUM 3061998
49	162006		CUM AR51478	KIT,Shim(STD Liner) Includes Shims (1)162000 (1)162001 (1)162002 (1)162003 (1)162004 (1)162005	
50	Call		CUM 67211	PIN,Dowel	
51	EFC-8551		MAK 222GB214	CAP,Filler	CUM 107981
52	151505		CUM 3007689	BEARING,Camshaft(Thinwall)(BC)(7 Req'd)	CUM 215560

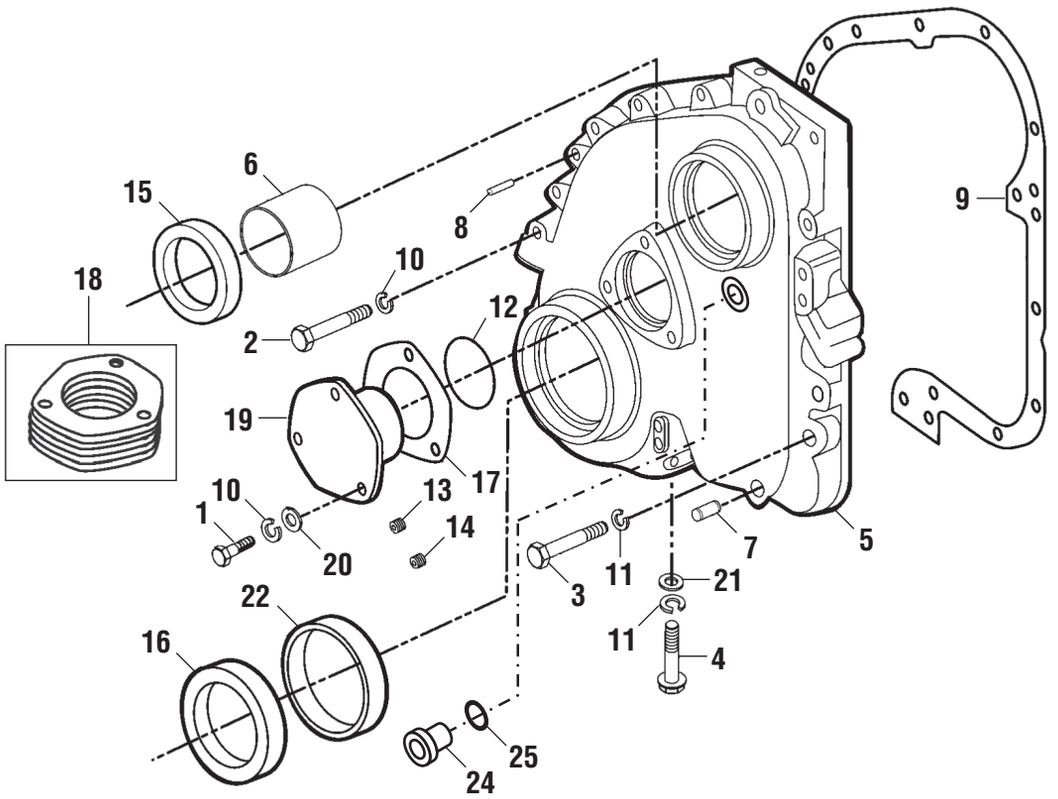
PAI Copyright 2017

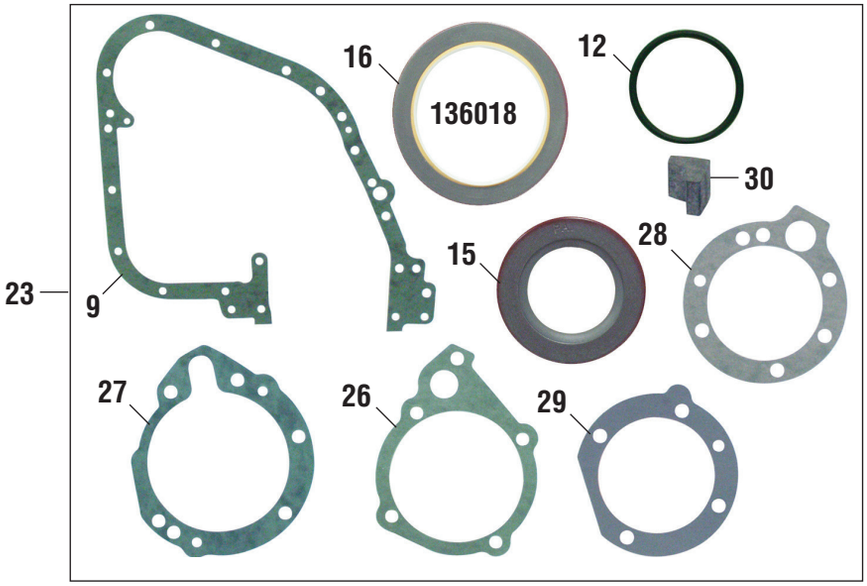
FIGURE 6055



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131394		CUM 3804303	KIT,Oil Pan Gasket Installation Includes O-Ring (1)121224 Gaskets (1)131295 (1)131347 Washer (1)131391 Seal (1)136011	
2	121224		CUM 3029847	O-RING	
3	131295		CUM 157551	GASKET	
4	131347		CUM 3032861	GASKET,Pan	CUM 3027983
5	131391		CUM 67946	WASHER	CUM S-3050
6	136011		CUM 3034986	SEAL	
7	141281		CUM 3031959	PAN,Oil (Rear Sump-Stamped Steel w/ Pick-up Tube)	CUM 3030257
7	**141318**		**CUM 3046947**	**PAN,Oil**	
8	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2 NPT)	CUM 3008468
9	EPP-3566		MAK 49AX226	PLUG,Pipe(1 NPT)	CUM 3008470
10	042010		CUM 3055069	PLUG,Threaded	CUM 3055069
11	**141325**		**CUM 3095050**	**TUBE,Oil Pickup**	**CUM 3046948**
12	**040100**		**CUM 3095723**	**NUT,Flanged**	**CUM 3050685**
13	**042031**		**CUM 3039267**	**CLAMP,Loop**	
14	141282		CUM 3046951	KIT,Oil Pan(Front Sump-Stamped Steel) (For BC III, IV, N-14) Includes Oil Pan (1)141318 Pickup Tube (1)141325 Plugs (1)042010 (1)EPP-3566 (2)EPP-3575 Clamps (2)042031 Nuts (2)040100 Washer (1)131391	

FIGURE 6001





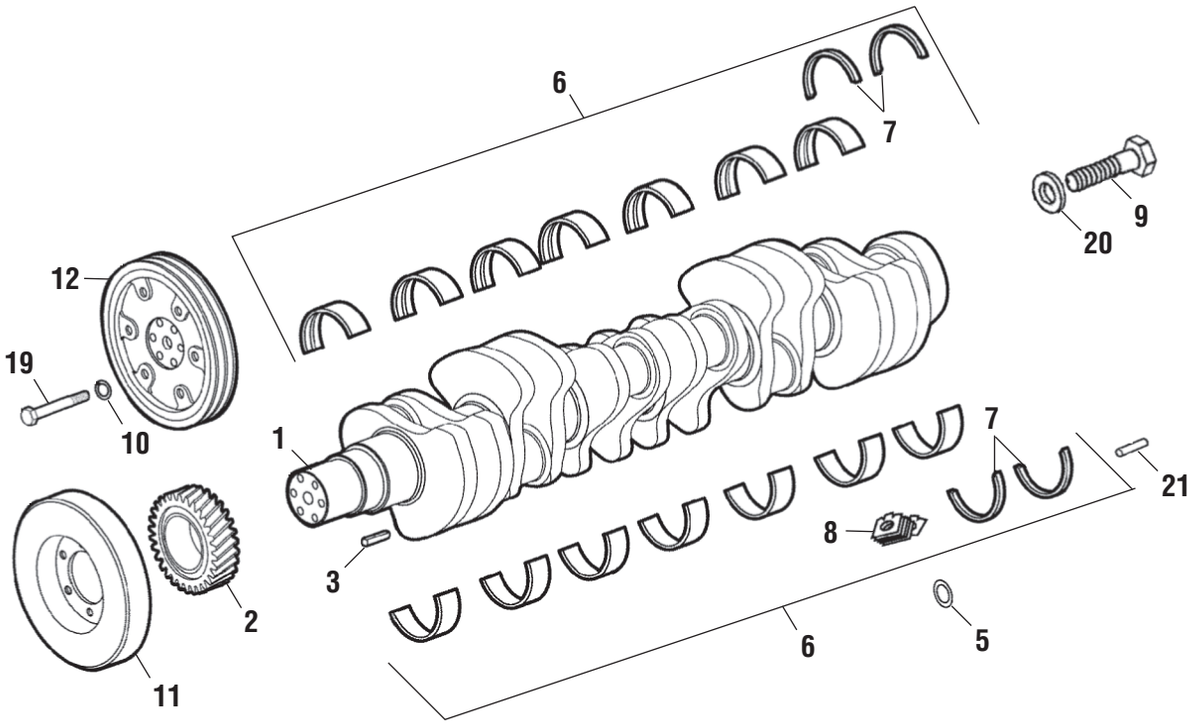
PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 3011715	SCREW(3/8in-16 x 1-3/16in Lg)	
2	ESC-0012		MAK 4AX1	SCREW(3/8in-16 x 1in Lg)	CUM S-112
3	Call		CUM 3011713	SCREW(7/16in-14 x 2-5/8in Lg)	
4	Call		CUM 3011712	SCREW(7/16in-14 x 2-3/16in Lg)	
5	060085		CUM 3024442	COVER,Front Gear (Small Accessory Drive Shaft)	CUM 3076146
6	151513		CUM 132770	BUSHING,Front Cover	CUM 121932
7	Call		CUM S60408	PIN,Dowel	
8	Call		CUM S70653	PIN,Dowel	
9	131279		CUM 3021704	GASKET,Gear Cover(1 Piece)	CUM 210412
9	131326		CUM 3021705	GASKET,Gear Cover(Split Type)	CUM 210411
10	FWA-0050		MAK 36AX3	WASHER,Lock(3/8in)	CUM S-604
11	BWA-0051		MAK 36AX4	WASHER,Lock(7/16in)	CUM S-610
12	136021		CUM 215705	O-RING	CUM 65260
13	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
14	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
15	136006		CUM 3004316	SEAL,Accessory Drive Oil	
15	136076		CUM 3020185	SEAL,Accessory Drive(w/ Dust Shield)	
16	136000		CUM 3006736	SEAL,Crankshaft,Front Oil(Bull) (w/o Dust Shield)	CUM 208579
16	136008		CUM 3010457	SEAL,Crankshaft,Front Oil (Tapered Nose Crankshaft)	CUM 212227
16	136018		CUM 3020183	SEAL,Crankshaft,Front Oil(Bull) (w/ Dust Shield)	
17	162024		CUM 65259C	SHIM(.002in) (Use 162015 Shim Kit) **(Shim not sold separately)**	
17	162025		CUM 65259B	SHIM(.005in) (Use 162015 Shim Kit) **(Shim not sold separately)**	
17	162026		CUM 65256A	SHIM(.010in) (Use 162015 Shim Kit) **(Shim not sold separately)**	
17	162027		CUM 185573	SHIM(.025in) (Use 162015 Shim Kit) **(Shim not sold separately)**	
18	162015		CUM AR1176	KIT,Camshaft Thrust Shim Includes Shims(1)162024 (2)162025 (2)162026 (1)162027	CUM 65259
19	151481		CUM 708124	HOUSING,Camshaft Support(Flanged BC)	
19	151482		CUM 150002	HOUSING,Camshaft Support(SC)	
19	151483		CUM 3008530	HOUSING,Camshaft Support(Flangeless BC)	
20	GWA-0062		MAK 37AX472U	WASHER,Flat(3/8in)	CUM S-602
21	GWA-0063		MAK 35AX1542	WASHER,Flat(7/16in)	CUM S-622
22	136038		CUM 3006742	RING,Wear,Front,Crankshaft(Bull)	
23	131395		N/A	SET,Gasket,Front Cover (855 BC/N14 Small Accessory Drive Shaft) Includes Gaskets (1)131279 (1)131361 (1)131366 (1)131367 (1)131368 Seals (1)136018 (1)136006 O-Ring (1)136021	
24	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded(7/8in-18 NPT) (w/ CUP 121227 Seal)	CUM 3037536
25	121227		CUM 3037537	SEAL,Plug	
26	131361		CUM 3067613	GASKET,Mounting(Pump to Block)	
27	131366		CUM 3069101	GASKET,Mounting	
28	131367		CUM 3069102	GASKET,Mounting	
29	131368		CUM 4026171	GASKET,Fuel Pump Mounting	
30	136019		CUM 3008947	SEAL,Keyway	

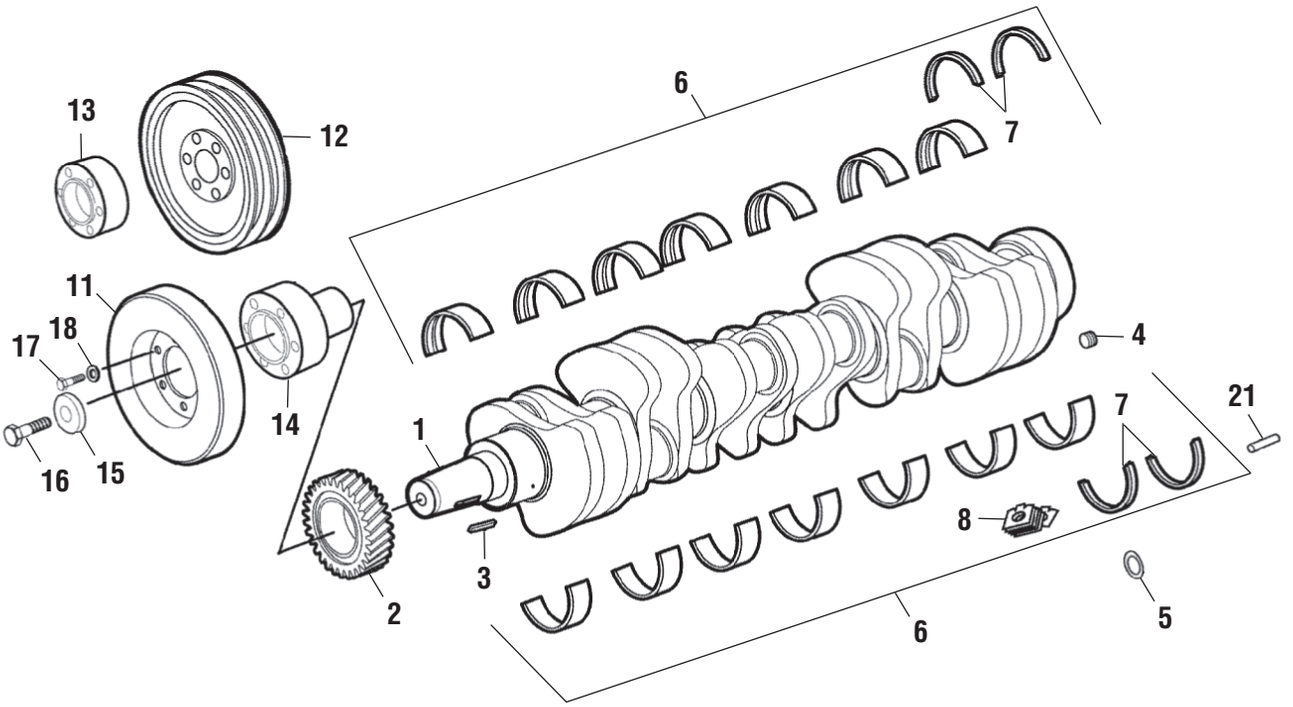
PAI Copyright 2017

New Parts are in BOLD text

FIGURE 6002



Note: Key 22 includes Keys 1, 2, & 3



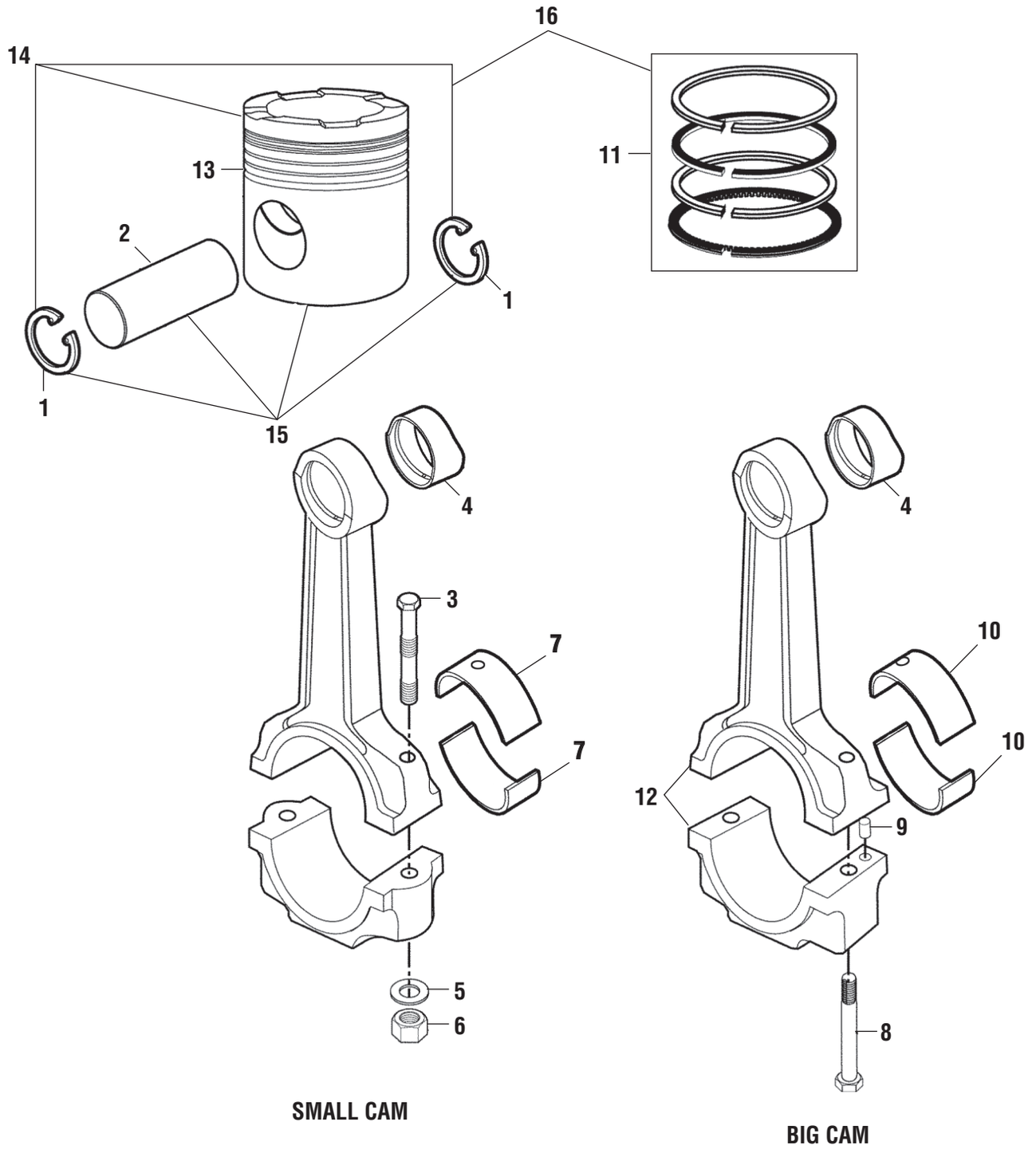
Please note:

- *** When replacing Vibration Damper, use the part number stamped on the old damper. 855 Series vibration damper must be changed every 360,000 miles for automotive or every 15,000 hours on industrial, even if the vibration damper meets all inspection criteria.**
- *** Check vibration damper for any cracking in the mounting area. Check the housing for any dents or raised surfaces. Replace vibration damper if any of these defects are identified.**

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171701	171701E	CUM 3608833	CRANKSHAFT(Bull)(FFC)(BC)	CUM 300140
1	171708		CUM 3029340	CRANKSHAFT(Tapered)(Non-FFC)(SC)	CUM 202180
2	171733		CUM 142804	GEAR,Crankshaft(Use w/ Tapered Nose)(Non-FFC)	
2	171735		CUM 3014614	GEAR,Crankshaft(FFC)	CUM 214237
3	040150		CUM 9300-1	KEY,Crankshaft (Use w/ Tapered Nose)(Non-FFC)	CUM 9300
3	040151		CUM 210179	KEY,Crankshaft(FFC)(Bull Nose)	
4	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in)(Non-FFC)	CUM S-911-B
5	171692		CUM 60575	DOWEL,Ring(1in ID)	
5	171694		CUM 3037045	DOWEL,Ring(3/4in ID)	
6	171720		CUM 3801260	KIT,Main Bearing(STD) Includes Main Bearing Set (1) Lockplates (14) Thrust Washers (2 pair)	CUM AR7110
6	171721		CUM 3801261	KIT,Main Bearing(.010in) Includes Main Bearing Set (1) Lockplates (14) Thrust Washers (2 pair)	CUM AR7111
6	171722		CUM 3801262	KIT,Main Bearing(.020in) Includes Main Bearing Set (1) Lockplates (14) Thrust Washers (2 pair)	CUM AR7112
6	171723		CUM 3801263	KIT,Main Bearing(.030in) Includes Main Bearing Set (1) Lockplates (14) Thrust Washers (2 pair)	CUM AR7113
6	171724		CUM 3801264	KIT,Main Bearing(.040in) Includes Main Bearing Set (1) Lockplates (14) Thrust Washers (2 pair)	
7	171699		CUM 3019219	WASHER,Thrust(.010in)	CUM 3074361
7	171700		CUM 3019218	WASHER,Thrust(STD)	CUM 3067568
8	171695		CUM 3009213	LOCKPLATE	CUM 9427
9	040021		CUM 204165	SCREW,Locking,Flywheel (5/8in-18 x 1-5/8in)	CUM 193793
10	Call		CUM 127316	WASHER,Crankshaft(5/8in)	
11	202000		CUM 211915	DAMPER,Vibration (12.3in Dia.)(1.75in thk)	CUM AR10319
11	202005	202005E	CUM 3101655	DAMPER,Vibration(13.5in Dia.)	CUM 217323
11	202010		CUM 217321	DAMPER,Vibration(NTC 335)(Tapered Nose)	
11	202015		CUM 217322	DAMPER,Vibration(NTC 335/KT 450)	
11	Call		CUM 3037157	DAMPER,Vibration(10.88 Dia.)(1.62in thk)	
12	181896		CUM 211918	PULLEY,Crankshaft	CUM 3150032, CUM 3030889
13	Call		CUM 154918	SPACER,Vibration Damper	
14	Call		CUM 204836	FLANGE,Crankshaft(Non-FFC)	
15	Call		CUM 196654	WASHER,Flange Retaining(Non-FFC)	
16	Call		CUM 196653	SCREW,Flange Retaining(Non-FFC)	
17	Call		CUM S163B	SCREW,Hex Head(Damper Mount)	
18	EWA-0052		MAK 36AX5	WASHER,Lock(Damper Mount)	CUM S-608
19	Call		CUM 206355	SCREW,Pulley(5/8in-18 x 3-1/2in)	
20	040024		CUM 200861	WASHER,Flywheel	
21	045043		CUM 202903	PIN,Roll,Thrust Washer	
22	**171646**		**CUM 3054866**	**ASSEMBLY,Crankshaft(Bull)(FFC)(BC) Includes Crankshaft (1)171701 Key Crankshaft (1)040151 Gear Crankshaft (1)171735**	

FIGURE 6003



Please note:

1. **To ensure correct parts for application, please have CPL and Engine serial number available.**
2. **Due to weight differences, small cam and big cam connecting rods cannot be mixed in an engine.**
3. **Rod bearings cannot be interchanged in connecting rods due to oil hole passages in connecting rods.**
4. **Big cam connecting rods must be used in big cam engine only.**
5. **Small cam engine may be upgraded by replacing with a complete set of big cam connecting rods and big cam bearings.**

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111095		CUM 175755	RING,Retaining	
2	111094		CUM 191970	PIN,Piston	
3	040014		CUM 9195-3	SCREW,Connecting Rod(SC)	
4	151510		CUM 187420	BUSHING,Piston Pin	
5	040024		CUM 200861	WASHER,Connecting Rod	
6	040018		CUM 69936	NUT,Connecting Rod	
7	171745		CUM 203660	BEARING,Shell(STD) (Centered Oil Hole)(SC)	
7	171746		CUM 203661	BEARING,Shell(.010in) (Centered Oil Hole)(SC)	
7	171747		CUM 203662	BEARING,Shell(.020in) (Centered Oil Hole)(SC)	
7	171748		CUM 203663	BEARING,Shell(.030in) (Centered Oil Hole)(SC)	
8	040015		CUM 219153	SCREW,Connecting Rod(w/ shoulder)(BC)	
8	**040016**		**CUM 3349806**	**SCREW,Connecting Rod(w/o shoulder)**	
9	045021		CUM 3034438	PIN,Groove	CUM 70550
10	171765		CUM 214950	BEARING,Shell(STD) (Offset Oil Hole)(BC)	
10	171766		CUM 214951	BEARING,Shell(.010in) (Offset Oil Hole)(BC)	
10	171767		CUM 214952	BEARING,Shell(.020in) (Offset Oil Hole)(BC)	
10	171768		CUM 214953	BEARING,Shell(.030in) (Offset Oil Hole)(BC)	
10	171769		CUM 214954	BEARING,Shell(.040in) (Offset Oil Hole)(BC)	CUM 3150015
11	505025		CUM 3803471	SET,Ring(Premium Plus)(w/ Steel Oil Ring)	CUM 4089811
11	505065		CUM 3804500	SET,Ring(3 Ring)	
11	505070		CUM 4089810	SET,Ring(Premium)(w/ Steel Oil Ring)	CUM 3801056S
12	171630		CUM 3013930	ROD,Connecting(BC)	
13	111101		CUM 3050480	PISTON,Dual-Ni	CUM 3053500
13	111104		CUM 3017348	PISTON,Single-Ni	CUM 3095755, CUM 200400
13	111107		CUM 3028685	PISTON,Single-Ni	CUM 3095737, CUM 3031227
13	111109		CUM 3017349	PISTON,Single-Ni	CUM 3095756, CUM 3024676
13	111114		CUM 3051556	PISTON,Single-Ni	
13	111119		CUM 3051557	PISTON,Single-Ni	
13	111121		CUM 3052794	PISTON,Dual-Ni	
13	111124		CUM 3042320	PISTON,Single-Ni	
13	111127		CUM 3051553	PISTON,Single-Ni	
13	111129		CUM 3045948	PISTON,Dual-Ni	
13	111132		CUM 3051554	PISTON,Single-Ni	
13	111134		CUM 3051555	PISTON,Single-Ni	
13	111139		CUM 3069212	PISTON,Dual-Ni	CUM 3053526, CUM 3095064
13	111141		CUM 3042319	PISTON,Single-Ni	
13	111144		CUM 3048650	PISTON,Single-Ni	
13	111146		CUM 3048808	PISTON,Dual-Ni	
13	111148		CUM 3048809	PISTON,Dual-Ni	
13	111150		CUM 3050366	PISTON,Dual-Ni	
13	111152		CUM 3042318	PISTON,Single-Ni	
13	**111451**		**CUM 3226010**	**PISTON(Natural Gas)**	
13	111510		CUM 3354829	PISTON,Single-Ni(Marine)	
13	111641		CUM 3095746	PISTON,Single-Ni(3 Ring)	
13	**111663**		**CUM 3058566**	**PISTON,Dual-Ni**	
13	**111665**		**CUM 166630**	**PISTON(Natural Gas)**	**CUM 164890**
13	**111674**		**CUM 3226009**	**PISTON(Natural Gas)**	

KEY	PAI REFERENCE	OEM REFERENCE	DESCRIPTION	COMP. RATIO	PISTON NUMBER
14	111102	CUM 3801744	KIT,Piston Includes Retainers (2)111095 Piston (1)111101	14.0:1	CUM 3050480
14	111105	CUM 3801057	KIT,Piston Includes Retainers (2)111095 Piston (1)111104	15.0:1	CUM 3017348
14	111108	CUM 3801233	KIT,Piston Includes Retainers (2)111095 Piston (1)111107	14.0:1	CUM 3028685

• Please see following pages for keys 14-16.

KEY	PAI REFERENCE	OEM REFERENCE	DESCRIPTION	COMP. RATIO	PISTON NUMBER
14	111110	CUM 3801058	KIT,Piston Includes Retainers (2)111095 Piston (1)111109	14.5:1	CUM 3017349
14	111115	CUM 3801773	KIT,Piston Includes Retainers (2)111095 Piston (1)111114	14.0:1	CUM 3051556
14	111120	CUM 3801393	KIT,Piston Includes Retainers (2)111095 Piston (1)111119	13.5:1	CUM 3051557
14	111122	CUM 3801954	KIT,Piston Includes Retainers (2)111095 Piston (1)111121	15.5:1	CUM 3052794
14	111125	CUM 3801535	KIT,Piston Includes Retainers (2)111095 Piston (1)111124	15.5:1	CUM 3042320
14	111128	CUM 3801766	KIT,Piston Includes Retainers (2)111095 Piston (1)111127	16.0:1	CUM 3051553
14	111130	CUM 3801534	KIT,Piston Includes Retainers (2)111095 Piston (1)111129	14.5:1	CUM 3045948
14	111133	CUM 3801876	KIT,Piston Includes Retainers (2)111095 Piston (1)111132	15.0:1	CUM 3051554
14	111135	CUM 3801770	KIT,Piston Includes Retainers (2)111095 Piston (1)111134	14.5:1	CUM 3051555
14	111140	CUM 3803344	KIT,Piston Includes Retainers (2)111095 Piston (1)111139	17.0:1	CUM 3069212
14	111145	CUM 3801703	KIT,Piston Includes Retainers (2)111095 Piston (1)111144	15.5:1	CUM 3048650
14	111147	CUM 3801819	KIT,Piston Includes Retainers (2)111095 Piston (1)111146	14.0:1	CUM 3048808
14	111149	CUM 3801820	KIT,Piston Includes Retainers (2)111095 Piston (1)111148	15.0:1	CUM 3048809
14	111151	CUM 3801818	KIT,Piston Includes Retainers (2)111095 Piston (1)111150	15.5:1	CUM 3050366
14	111153	CUM 3801533	KIT,Piston Includes Retainers (2)111095 Piston (1)111152	14.5:1	CUM 3042318
14	111165	CUM 3801229	KIT,Piston Includes Retainers (2)111095 Piston (1)111141	15.0:1	CUM 3042319
15	111181	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111104	15.0:1	CUM 3017348
15	111182	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111109	14.5:1	CUM 3017349
15	111183	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111107	14.0:1	CUM 3028685
15	111185	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111152	14.5:1	CUM 3042318
15	111186	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111141	15.0:1	CUM 3042319
15	111187	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111124	15.5:1	CUM 3042320
15	111188	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111129	14.5:1	CUM 3045948
15	111189	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111144	15.5:1	CUM 3048650
15	111190	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111146	14.0:1	CUM 3048808
15	111191	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111148	15.0:1	CUM 3048809
15	111192	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111150	15.5:1	CUM 3050366

PAI Copyright 2017

KEY	PAI REFERENCE	OEM REFERENCE	DESCRIPTION	COMP. RATIO	PISTON NUMBER
15	111193	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111101	14.0:1	CUM 3050480
15	111194	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111127	16.0:1	CUM 3051553
15	111195	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111132	15.0:1	CUM 3051554
15	111196	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111134	14.5:1	CUM 3051555
15	111197	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111114	14.0:1	CUM 3051556
15	111198	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111119	13.5:1	CUM 3051557
15	111199	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111121	15.5:1	CUM 3052794
15	111200	N/A	KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111139	17.0:1	CUM 3069212
15	**111452**	**N/A**	**KIT,Piston(Natural Gas) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111451**	**8.5:1**	**CUM 3226010**
15	111511	N/A	KIT,Piston(Marine) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111510	**14.0:1**	
15	111642	N/A	KIT,Piston(3 Ring) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111641	**15.0:1**	CUM 3095746
15	**111664**	**N/A**	**KIT,Piston Includes Retainers (2)111095 Pin (1)111094 Piston (1)111663**	**15.0:1**	**CUM 3058566**
15	**111666**	**CUM 3880945**	**KIT,Piston(Natural Gas) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111665**	**12.0:1**	**CUM 166630**
15	**111675**	**N/A**	**KIT,Piston(Natural Gas) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111674**	**10.0:1**	**CUM 3226009**
16	**111453**	**CUM 4955662**	**KIT,Piston(Natural Gas) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111451 Ring Set (1)505025**	**8.5:1**	**CUM 3226010**
16	111643	N/A	KIT,Piston(3 Ring) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111641 Ring Set (1)505065	**15.0:1**	
16	**111667**	**CUM AR3560**	**KIT,Piston(Natural Gas) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111665 Ring Set (1)505025**	**12.0:1**	**CUM 166630**
16	**111676**	**CUM 4955661**	**KIT,Piston(Natural Gas) Includes Retainers (2)111095 Pin (1)111094 Piston (1)111674 Ring Set (1)505025**	**10.0:1**	**CUM 3226009**

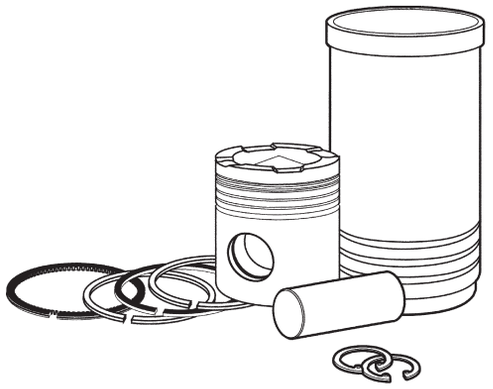
Please note:

1. **To ensure correct parts for application, please have CPL and Engine serial number available.**
2. **Due to weight differences, small cam and big cam connecting rods cannot be mixed in an engine.**
3. **Rod bearings cannot be interchanged in connecting rods due to oil hole passages in connecting rods.**
4. **Big cam connecting rods must be used in big cam engine only.**
5. **Small cam engine may be upgraded by replacing with a complete set of big cam connecting rods and big cam bearings.**

PAI Copyright 2017

New Parts are in BOLD text

FIGURE 6013



CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
1	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
2	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
3	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
4	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
5	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
6	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
7	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
8	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
9	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
10	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
11	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
12	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
13	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
14	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
16	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
17	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
18	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
19	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
20	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—

PAI Copyright 2017

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
21	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
22	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
23	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
24	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
25	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
26	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
69	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
70	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
71	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
75	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
76	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
77	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
85	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
101	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
102	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
104	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
107	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
108	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
109	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
113	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
117	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
120	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
121	101008 CUM 3801774	101009 CUM 3801775	—	—	101034 CUM 3803210	—
123	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
132	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
135	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
144	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216

PAI Copyright 2017

New Parts are in BOLD text

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
146	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
147	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
152	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
154	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
155	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
156	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
160	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
161	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
162	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
163	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
164	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
166	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
168	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
170	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
172	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
173	101031 CUM 3801872	101032 CUM 3801873	—	—	101040 CUM 3803226	—
174	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
175	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
176	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
178	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
180	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
181	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
182	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
187	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
188	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
189	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
190	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—

New Parts are in BOLD text

PAI Copyright 2017

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
196	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
197	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
198	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
199	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
200	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
201	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
202	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
204	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
205	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
207	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
214	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
215	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
217	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
220	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
221	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
222	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
226	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
227	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
230	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
233	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
246	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
248	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
249	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
250	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
254	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
255	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
256	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—

PAI Copyright 2017

New Parts are in BOLD text

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
258	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
259	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
260	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
266	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
267	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
270	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
271	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
272	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
276	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
277	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
278	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
281	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
288	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
294	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
298	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
299	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
300	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
306	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
307	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
308	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
309	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
310	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
312	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
314	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
315	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
316	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
317	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216

New Parts are in BOLD text

PAI Copyright 2017

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
318	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
319	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
320	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
322	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
323	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
324	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
325	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
326	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
327	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
328	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
329	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
330	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
331	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
332	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
338	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
339	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
344	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
345	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
346	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
347	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
348	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
349	101014 CUM 3801779	101002 CUM 3801768	101026 CUM 3801824	101100 CUM 3801769	101035 CUM 3803213	101024 CUM 3803215
353	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
354	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
356	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
357	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
358	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—

PAI Copyright 2017

New Parts are in BOLD text

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
359	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
360	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
362	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
363	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
364	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
365	101014 CUM 3801779	101002 CUM 3801768	101026 CUM 3801824	101100 CUM 3801769	101035 CUM 3803213	101024 CUM 3803215
366	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
369	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
370	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
371	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
372	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
373	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
374	100990 CUM 3801764	100991 CUM 3801765	—	—	100992 CUM 3803211	—
375	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
376	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
377	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
380	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
381	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
382	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
384	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
391	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
392	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
393	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
394	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
395	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
396	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
397	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—

New Parts are in BOLD text

PAI Copyright 2017

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
402	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
407	100994 CUM 3801874	100995 CUM 3801875	—	—	100996 CUM 3803223	—
408	100994 CUM 3801874	100995 CUM 3801875	—	—	100996 CUM 3803223	—
413	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
414	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
416	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
419	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
431	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
432	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
433	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
435	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
436	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
437	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
448	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
449	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
450	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
454	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
455	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
456	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
457	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
458	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
459	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
460	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
461	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
462	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
463	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
469	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216

PAI Copyright 2017

New Parts are in BOLD text

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
470	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
471	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
472	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
473	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
479	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
481	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
482	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
483	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
485	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
488	100994 CUM 3801874	100995 CUM 3801875	—	—	100996 CUM 3803223	—
491	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
492	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
494	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
495	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
497	100994 CUM 3801874	100995 CUM 3801875	—	—	100996 CUM 3803223	—
498	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
499	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
500	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
506	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
509	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
510	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
511	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 UM 3803213	101038 CUM 3803216
516	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
517	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
518	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
523	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
529	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218

New Parts are in BOLD text

PAI Copyright 2017

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
530	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
531	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
536	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
537	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
538	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
539	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
540	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
541	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
542	101025 CUM 3801781	101042 CUM 3801782	—	—	101044 CUM 3803228	—
543	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
544	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
545	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
547	100994 CUM 3801874	100995 CUM 3801875	—	—	100996 CUM 3803223	—
551	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
552	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
553	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
554	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
558	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
566	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
567	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
572	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
573	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
574	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
575	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
578	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
579	101008 CUM 3801774	101009 CUM 3801775	—	—	101034 CUM 3803210	—
581	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218

PAI Copyright 2017

New Parts are in BOLD text

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
582	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
583	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
585	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
586	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
588	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
606	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
609	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
611	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
612	101008 CUM 3801774	101009 CUM 3801775	—	—	101034 CUM 3803210	—
614	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
616	—	—	—	—	—	—
617	—	—	—	—	—	—
625	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
632	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
633	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
634	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
635	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
636	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
637	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
650	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
651	—	100983 CUM 3801796	100986 CUM 3801746	—	100984 CUM 3803209	100987 CUM 3803233
653	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
654	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
657	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
659	—	100983 CUM 3801796	100986 CUM 3801746	—	100984 CUM 3803209	100987 CUM 3803233
669	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
670	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—

New Parts are in BOLD text

PAI Copyright 2017

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
673	—	101059 4 Ring CUM 3801798 101159 3 Ring CUM 3804440	101026 CUM 3801824	—	— 101160 3 Ring CUM 3804442	101024 CUM 3803215
674	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
675	—	101016 CUM 3801797	101030 CUM 3801817	—	101017 CUM 3803225	101038 CUM 3803216
676	—	100983 CUM 3801796	100986 CUM 3801746	—	100984 CUM 3803209	100987 CUM 3803233
677	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
695	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
699	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
700	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
702	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
706	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
709	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
718	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
719	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
731	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
732	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
733	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
743	101008 CUM 3801774	101009 CUM 3801775	101033 CUM 3801822	—	101034 CUM 3803210	101041 CUM 3803218
744	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
745	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
749	—	101059 4 Ring CUM 3801798 101159 3 Ring CUM 3804440	101026 CUM 3801824	—	— 101160 3 Ring CUM 3804442	101024 CUM 3803215
757	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
769	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
794	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
795	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
796	—	—	101026 CUM 3801824	—	—	101024 CUM 3803215

PAI Copyright 2017

New Parts are in BOLD text

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
797	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
798	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
806	—	—	N/A CUM 3801747	—	—	N/A CUM 3803232
808	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
811	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
812	—	—	101026 CUM 3801824	—	—	101024 CUM 3803215
813	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
814	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
821	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
827	—	—	101003 CUM 3801956	—	—	—
832	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
833	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
837	**101151** **N/A**	—	—	**101152** **N/A**	**101153** **N/A**	—
838	—	—	101027 CUM 3803346	—	—	—
840	—	—	101027 CUM 3803346	—	—	—
849	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
880	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
891	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
903	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
904	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
905	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
907	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
908	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
909	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
910	—	—	**101133** **N/A**	**101134 (Dual NI)** **N/A**	—	**101135** **N/A**
911	—	—	101003 CUM 3801956	—	—	—
963	101008 CUM 3801774	101009 CUM 3801775	—	—	101034 CUM 3803210	—

New Parts are in BOLD text

PAI Copyright 2017

Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
972	101011 CUM 3801776	101012 CUM 3801777	101026 CUM 3801824	—	101013 CUM 3803212	101024 CUM 3803215
974	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
988	—	—	101033 CUM 3801822	—	—	101041 CUM 3803218
989	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
990	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
991	—	100983 CUM 3801783	—	—	100984 CUM 3803227	—
1167 (Marine)	—	101170 CUM 3357993	—	—	—	—
1171	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
1181	101014 CUM 3801779	101002 CUM 3801768	—	101100 CUM 3801769	101035 CUM 3803213	—
1183	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
1185	—	—	101003 CUM 3801956	—	—	—
1186	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
1187	—	—	101027 CUM 3803346	—	—	—
1188	—	—	101003 CUM 3801956	—	—	—
1193	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1194	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
1197	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
1203	101010 CUM 3801795	—	—	—	100988 CUM 3803221	—
1204	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
1205	101011 CUM 3801776	101012 CUM 3801777	—	—	101013 CUM 3803212	—
1210	—	—	**101133** **N/A**	**101134 (Dual NI)** **N/A**	—	**101135** **N/A**
1211	—	—	101003 CUM 3801956	—	—	—
1215	—	—	100986 CUM 3801746	—	—	100987 CUM 3803233
1252	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1255	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
1256	—	—	—	—	—	—
1280	—	—	—	—	—	—

PAI Copyright 2017

New Parts are in BOLD text

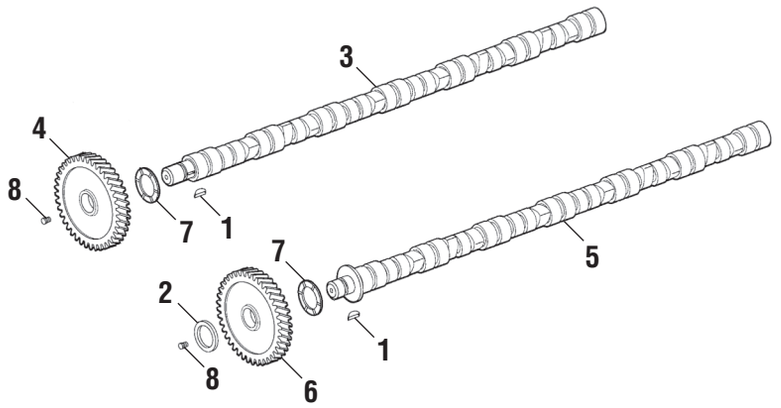
Cylinder Kits by CPL

CPL #	PREMIUM SINGLE NI CYLINDER KIT	PREMIUM PLUS SINGLE NI CYLINDER KIT	PREMIUM PLUS DUAL NI CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20 UPF) CYLINDER KIT	PREMIUM PLUS SINGLE NI (.20/.40 LPF) CYLINDER KIT	PREMIUM PLUS DUAL NI (.20/.40 LPF) CYLINDER KIT
1314	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1350	—	100983 CUM 3801796	101028 CUM 3801823	—	100984 CUM 3803209	101029 CUM 3803217
1352	—	—	101027 CUM 3803346	—	—	—
1381	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1382	—	—	—	—	—	—
1383	—	—	—	—	—	—
1401	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
1409	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
1410	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
1411	101015 CUM 3801780	101006 CUM 3801771	101028 CUM 3801823	—	101036 CUM 3803214	101029 CUM 3803217
1415	101014 CUM 3801779	101002 CUM 3801768	101030 CUM 3801817	101100 CUM 3801769	101035 CUM 3803213	101038 CUM 3803216
1416	—	—	101030 CUM 3801817	—	—	101038 CUM 3803216
1417	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1418	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1421	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1425	—	—	101026 CUM 3801824	—	—	101024 CUM 3803215
1436	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
1502	—	—	101026 CUM 3801824	—	—	101024 CUM 3803215
1557	—	—	101028 CUM 3801823	—	—	101029 CUM 3803217
3081	**101146 N/A**	—	—	**101147 N/A**	**101148 N/A**	—
3264	**101143 N/A**	—	—	**101144 N/A**	**101145 N/A**	—
3337	**101143 N/A**	—	—	**101144 N/A**	**101145 N/A**	—
4301	**101146 N/A**	—	—	**101147 N/A**	**101148 N/A**	—
4463	**101143 N/A**	—	—	**101144 N/A**	**101145 N/A**	—
4470	**101146 N/A**	—	—	**101147 N/A**	**101148 N/A**	—
4573	**101146 N/A**	—	—	**101147 N/A**	**101148 N/A**	—
4652	**101143 N/A**	—	—	**101144 N/A**	**101145 N/A**	—

New Parts are in BOLD text

PAI Copyright 2017

FIGURE 6004

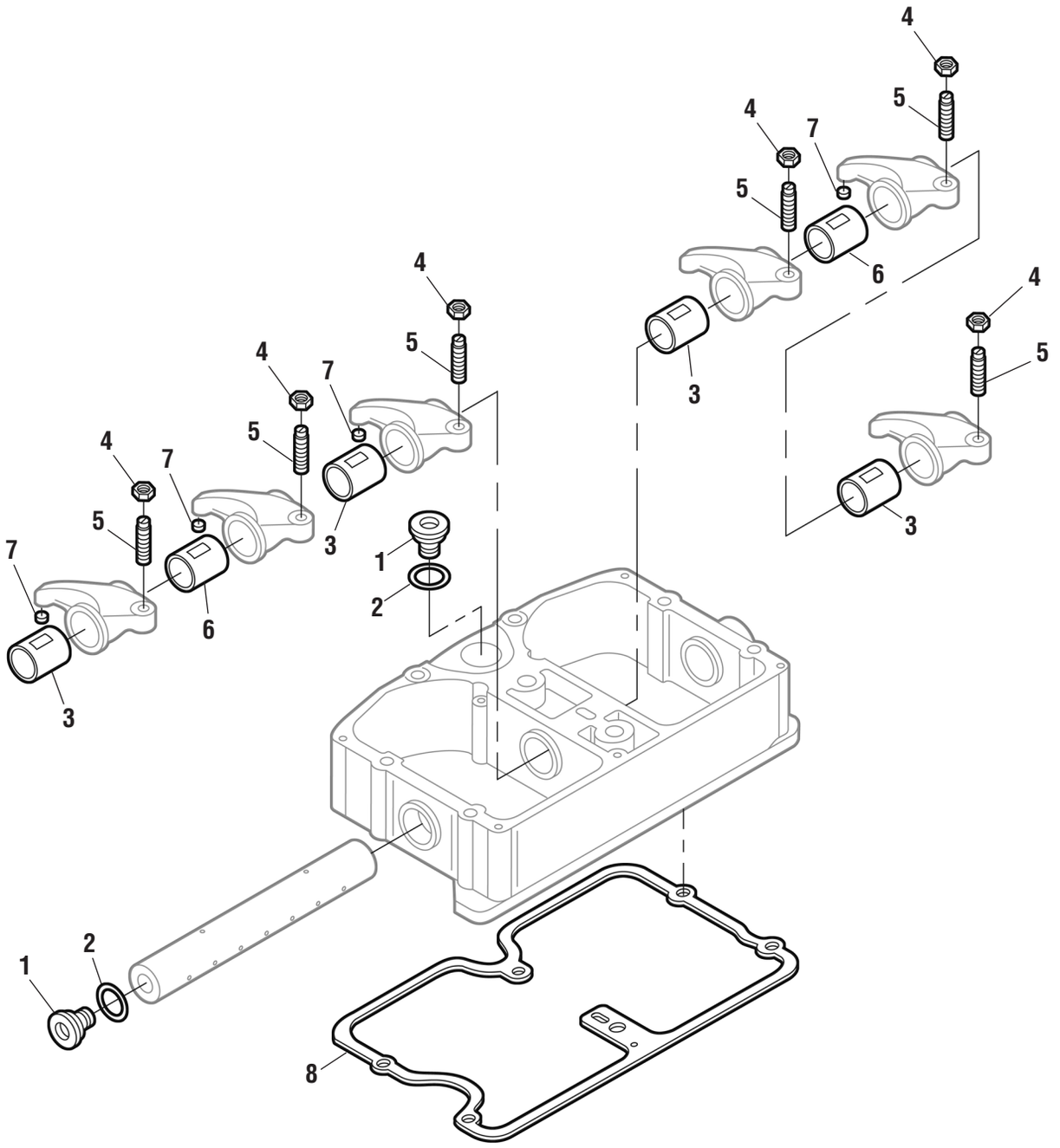


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	OFFSET	EQUIVALENT IN GASKET THICKNESS
1	191850		CUM 3021601	KEY,Camshaft	None	None
1	191851		CUM 3021592	KEY,Camshaft	0.0115in	0.023in
1	191852		CUM 3021596	KEY,Camshaft	0.0255in	0.051in
1	191853		CUM 3021597	KEY,Camshaft	0.0390in	0.078in
1	191854		CUM 3021595	KEY,Camshaft	0.0060in	0.012in
1	191855		CUM 3021598	KEY,Camshaft	0.0310in	0.062in
1	191856		CUM 3021600	KEY,Camshaft	0.0510in	0.102in
1	Call		CUM 3022352	KEY,Camshaft For Mechanical Variable Timing Engines	0.0185in	N/A
1	Call		CUM 3022353	KEY,Camshaft For Mechanical Variable Timing Engines	0.0310in	N/A
2	Call		CUM 708123	RETAINER(Use w/ Flanged Camshaft)		
3	191908		CUM 3801426	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191909	191909E	CUM 3026972	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191913	191913E	CUM 3801668	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191924	191924E	CUM 3049024	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191927	191927E	CUM 3801749	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191928		CUM 3801448	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191929	191929E	CUM 3608786	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
3	191930	191930E	CUM 3608787	CAMSHAFT,Non-Flanged Includes Plug (1)191896		
4	191882		CUM 3002901	GEAR,Non-Flanged Camshaft(855,N14)		
5	191915	191915E	CUM 3023177	CAMSHAFT,Flanged Includes Plug (1)191896		
5	191920	191920E	CUM 3801030	CAMSHAFT,Flanged Includes Plug (1)191896		
5	191925	191925E	CUM 3801763	CAMSHAFT,Flanged Includes Plug (1)191896		
6	191880		CUM 215966	GEAR,Flanged Camshaft		
7	151524		CUM 9235-1	WASHER,Thrust(Flanged Camshaft)		
7	151525		CUM 215233	WASHER,Thrust(855,N14)(Non-Flanged Camshaft)		
8	191896		CUM 68193	PLUG,Pipe(1/8in NPT)(Drilled)		

Please note

1. **If you upgrade from a flanged camshaft to a non-flanged camshaft, you must change the gear and support.**
2. **Arrow to front is advance.**

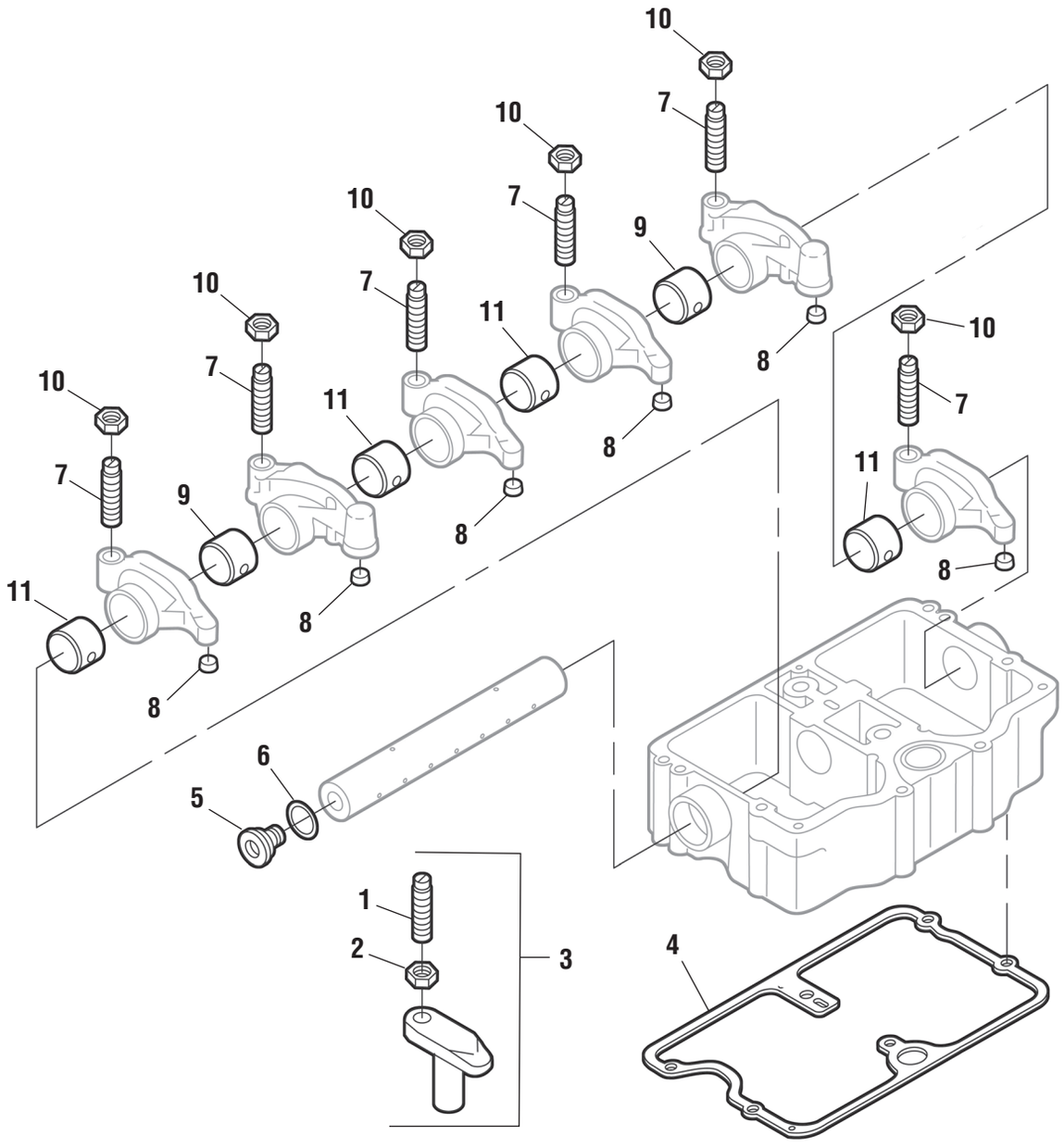
FIGURE 6014



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042007		CUM 3038903	PLUG,Rocker Lever Shaft	
2	121233		CUM 3058653	O-RING	
3	151535		CUM 140330	BUSHING(1-1/4in Lg)	
4	HNU-0263		MAK 20AX5	NUT,Regular Hex(1/2in-20)	CUM S-212
5	042005		CUM 168306	SCREW,Slotted Set(1/2in-20 x 2-3/64in)	
6	151536		CUM 218153	BUSHING(1.80in Lg)	
7	042006		CUM 194037	SOCKET,Rocker Lever	
8	131390		CUM 3017750	GASKET,Rocker Lever Housing	

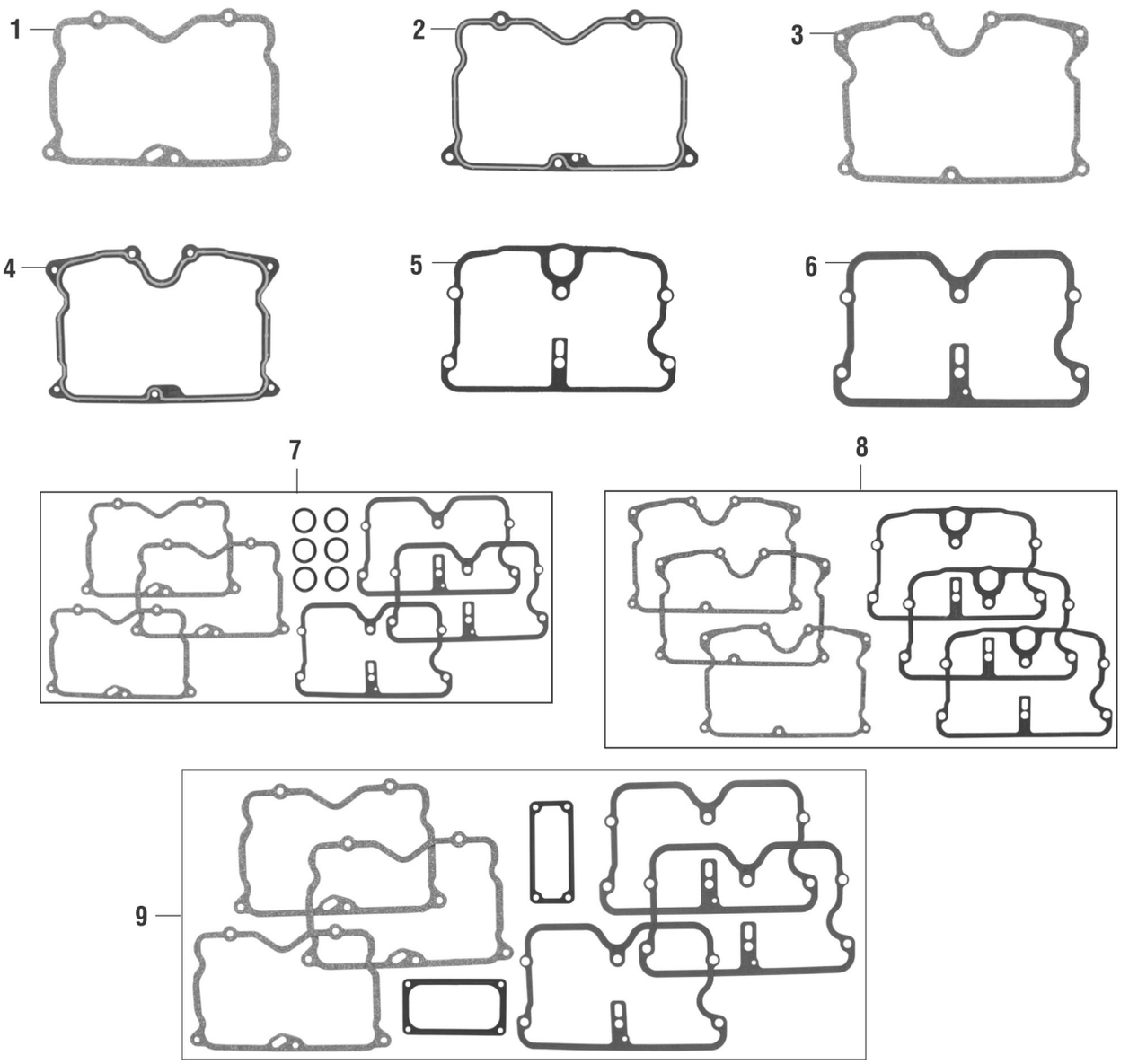
PAI Copyright 2017

FIGURE 6033



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042004		CUM 147389	SCREW,Crosshead Adjusting (3/8in-24 x 3/4in)	
2	040060		CUM 203131	NUT,Heavy Hex(3/8in-24)	
3	192067		CUM 3030038	ASSEMBLY,Crosshead Includes Screw (1)042004 Nut (1)040060 Crosshead (1)	
4	131354		CUM 3049187	GASKET,Rocker Box(7 Hole)	
5	042007		CUM 3038903	PLUG,Rocker Lever Shaft	
6	121233		CUM 3058653	O-RING	
7	042005		CUM 168306	SCREW,Slotted Set	
8	042006		CUM 194037	SOCKET,Rocker Lever	
9	151536		CUM 218153	BUSHING(1.80in Lg)	
10	HNU-0263		MAK 20AX5	NUT,Regular Hex(1/2in-20)	CUM S-212
11	151535		CUM 140330	BUSHING(1-1/4in Lg)	

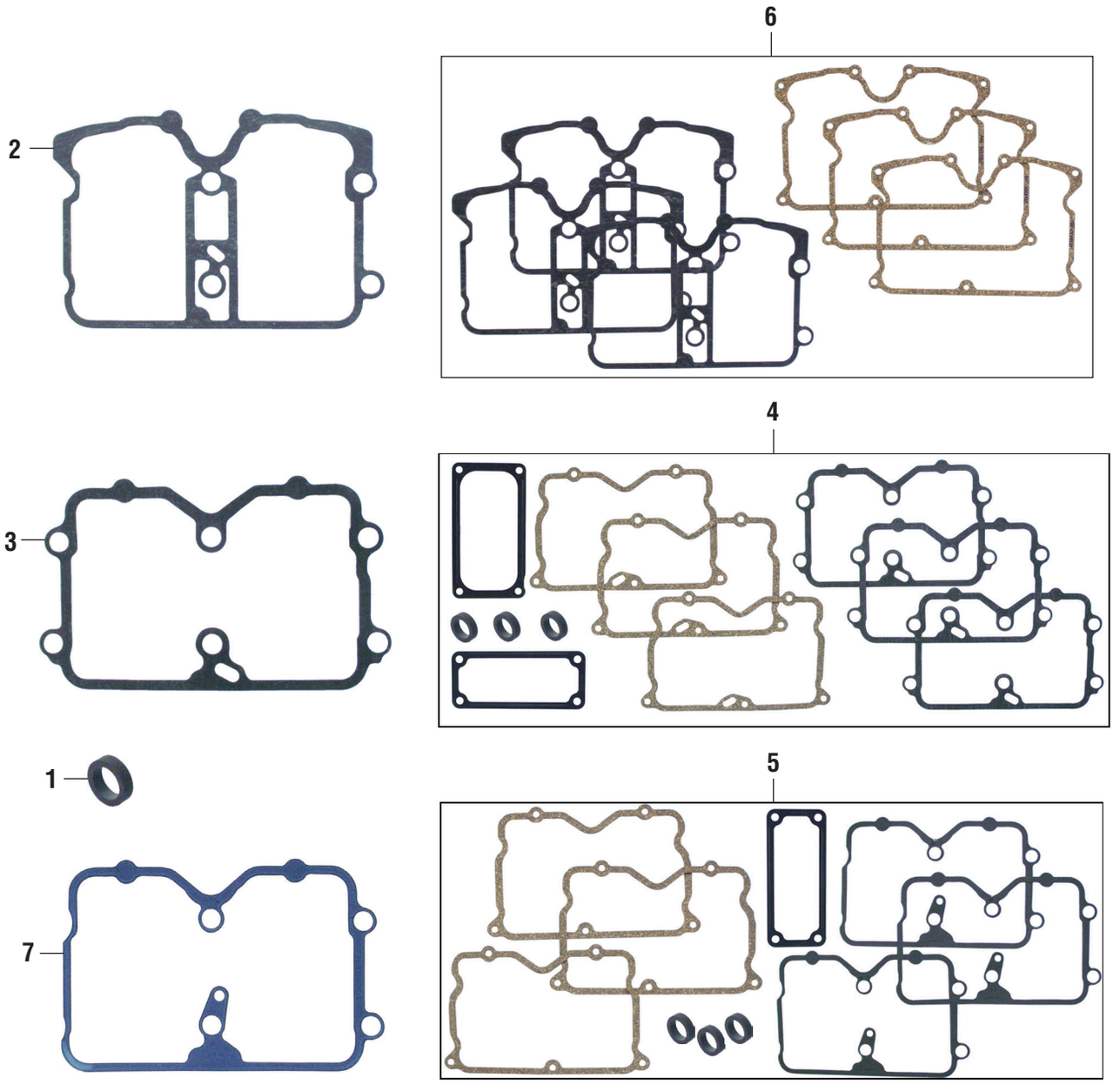
FIGURE 6010



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131358		CUM 3054841	GASKET,Rocker Cover(5 Hole)(Cork)	
2	131475		CUM 3067459	GASKET,Rocker Cover(5 Hole)(Plastic)	
3	131359		CUM 3058532	GASKET,Rocker Cover(7 Hole)(Cork)	
4	131476		CUM 3067460	GASKET,Rocker Cover(7 Hole)(Plastic)	
5	131354		CUM 3049187	GASKET,Rocker Box(7 Hole)	
6	131390		CUM 3017750	GASKET,Rocker Box(5 Hole)	
7	131489		N/A	KIT,Gasket,Rocker Box(5 Hole) Includes O-Rings (6)121233 Gaskets (3)131358 (3)131390	
8	131488		N/A	KIT,Gasket,Rocker Box(7 Hole) Includes Gaskets (3)131354 (3)131359	
9	131490		N/A	KIT,Gasket,Rocker Box (5 Hole)(Overhead w/o Jake Brake) Includes Gaskets (1)131306 (1)131319 (3)131390 (3)131358	

PAI Copyright 2017

FIGURE 6011



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	121239		CUM 3045534	O-RING,Jake	
2	131389		CUM 3053132	GASKET,Jake (Model 430 Brake 88NT)	
3	131415		CUM 3045533	GASKET,Jake	
4	131416		CUM 3801640	SET,Gasket(Jake Brake SC & BC)(5 Bolt Cover) Includes O-Rings (3)121239 Gaskets (1)131306 (1)131319 (3)131358 (3)131415	
5	131429		CUM 3801606	SET,Gasket(BC IV,1985-1987)("C" Brake)(5 Bolt Cover) Includes Gaskets (1)131306 (3)131351 (3)131358	
6	131546		N/A	SET,Gasket(88NT,BC IV,"C" Brake)(7 Bolt Cover) Includes Gaskets (3)131359 (3)131389	
7	131351		CUM 3042551	GASKET,"C" Brake	

FIGURE 6005A

ENGINE MODEL	N-855	NHC-MILITARY	BCIV	BCIV	BCIV (2)
HORSE POWER RANGE	All	All	Below 400hp	400hp & Above	Below 400hp
ASSEMBLY NUMBER	N/A CUM 3007834	N/A CUM 3007835	N/A CUM 3041993	N/A CUM 3037989	N/A CUM 3008095
CASTING NUMBER	N/A CUM 3041991				
INTAKE VALVE	191950 / 191950E CUM 135957			Please see Note 2	191950 / 191950E CUM 135957
EXHAUST VALVE	191956 CUM 3040830				
INTAKE SEAT	191994 CUM 200354				
EXHAUST SEAT	192009 / **192009E** CUM 3017759				
VALVE SPRING	192047 CUM 211999		192050 CUM 3035996		192047 CUM 211999
VALVE COLLET (LOCK)	192017 CUM 127554				
VALVE GUIDE	192030 / **192030E** CUM 3050369				
UPPER SPRING RETAINER	192060 CUM 170296			N/A CUM 3036966	192060 CUM 170296
VALVE STEM SEAL	N/A				
RING DOWEL	N/A				
BOTTOM SPRING RETAINER	192062 CUM 3042745		N/A CUM 172034	N/A CUM 3047395	N/A CUM 172034

Please note:

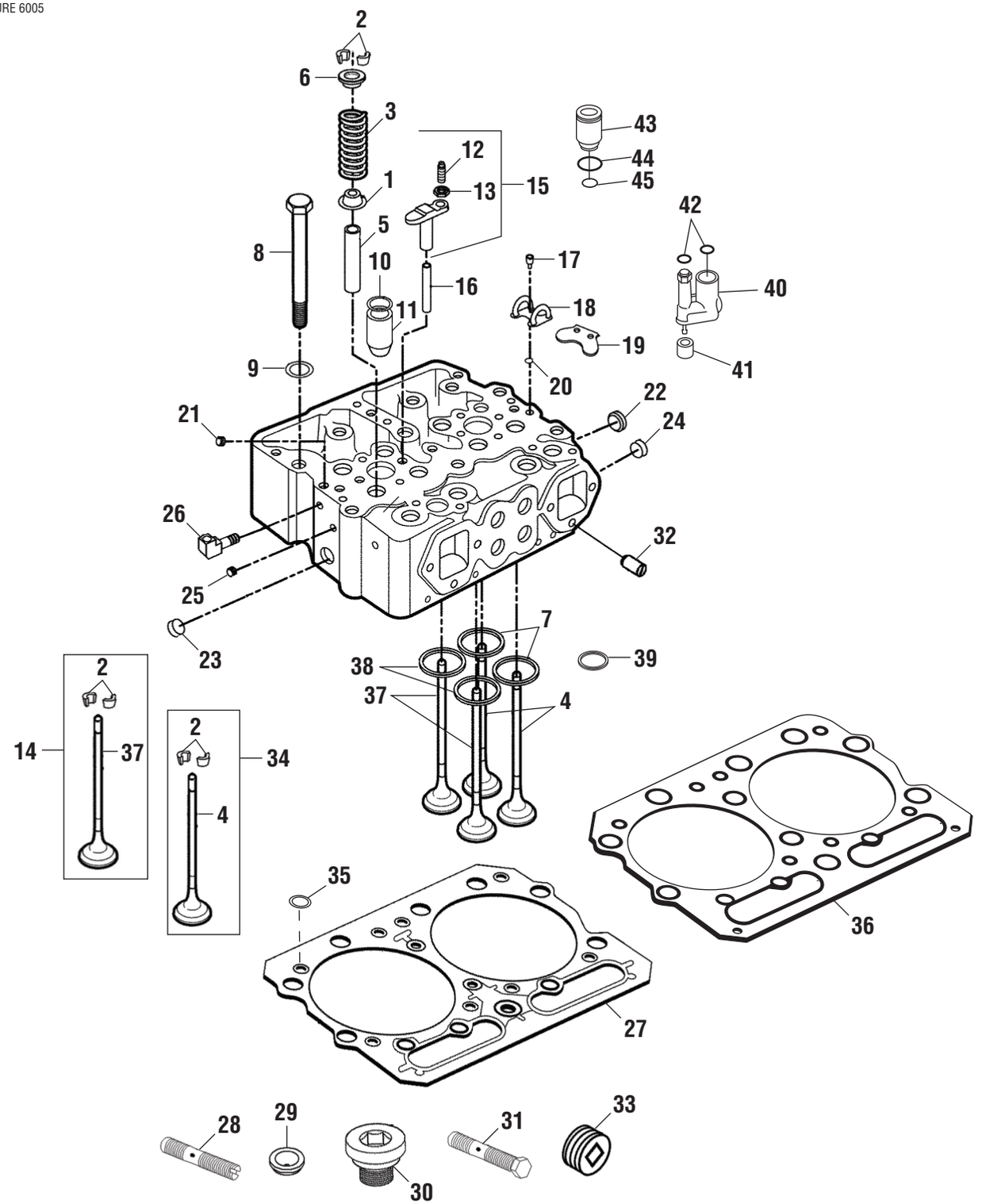
1. Intake Valve Spring - CUM 211999 / CUP 192047
   Exhaust Valve Spring - CUM 3005959 / CUP N/A, CUM 3005960 / CUP N/A
2. Use Exhaust Valve - CUM 3040830 / CUP 191956

Please see the following pages for Cylinder Head Assembly breakdown.

PAI Copyright 2017

NBCIV	NBCIV	BC DUAL SPRING (2)	88 BCIV	NT-MARINE	NT-MARINE
Below 350hp	350hp & Above	All	All	All	All
N/A CUM 3055098	N/A CUM 3050419	N/A CUM 3060446	N/A CUM 3053346	N/A CUM 3075421	N/A CUM 3075422
N/A CUM 3046760				N/A CUM 3041991	N/A CUM 3046760
191950 / 191950E CUM 135957					
191956 CUM 3040830				191955 / 191955E CUM 145701	
191994 CUM 200354			192000 CUM 3054590	191994 CUM 200354	
192009 / **192009E** CUM 3017759			192001 CUM 3054600	192009 / **192009E** CUM 3017759	
192047 CUM 211999	192050 CUM 3035996	Please see Note 1	192050 CUM 3035996	192047 CUM 211999	
192017 CUM 127554					
192030 / **192030E** CUM 3050369					
192060 CUM 170296	N/A CUM 3036966	N/A CUM 3005961	N/A CUM 3058100	192060 CUM 170296	
N/A					
N/A					
192062 CUM 3042745	N/A CUM 3047396	192062 CUM 3042745	N/A CUM 3047395	192062 CUM 3042745	

FIGURE 6005



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	192062		CUM 3042745	SEAT,Valve Small Spring,Lower	
1	Call		CUM 3047395	SEAT,Valve Large Spring,Lower	
2	192017		CUM 127554	COLLET,Valve Locks	
3	192047		CUM 211999	SPRING,Valve	
3	192050		CUM 3081212	SPRING,Valve	CUM 3035996
3	Call		CUM 3005959	SPRING,Valve,Dual Inner	
3	Call		CUM 3005960	SPRING,Valve,Dual Outer	
4	191950	191950E	CUM 135957	VALVE,Intake	

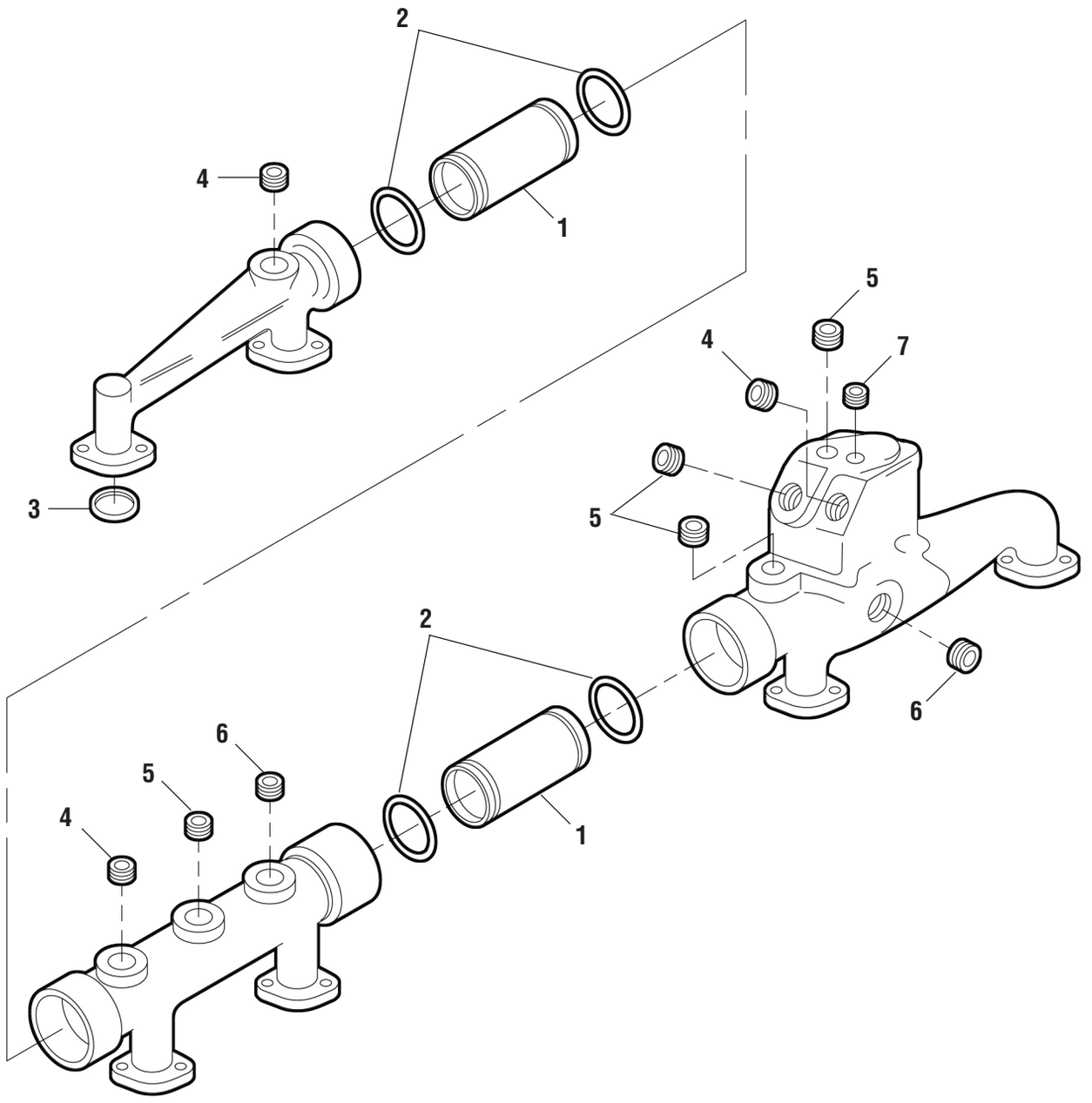
PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
5	192026		CUM 138937	GUIDE,Valve(NH/NT)**(Finished)**	
5	192027	**192027E**	CUM 3006456	GUIDE,Valve(Flat Nose)**(Finished)**	
5	192030	**192030E**	CUM 3050369	GUIDE,Valve(Sharp Nose)**(Finished)**	
6	192060		CUM 170296	RETAINER,Valve Small Spring,Upper	
6	Call		CUM 3036966	RETAINER,Valve Small Spring,Upper(BCIV)	
6	Call		CUM 3005961	RETAINER,Valve Small Spring,Upper	
6	Call		CUM 3058100	RETAINER,Valve Small Spring,Upper(88 NT)	
7	191994		CUM 200354	INSERT,Intake(STD)	
7	192000		CUM 3054590	INSERT,Intake(STD)(Thin Style)(88 NT)	
8	040000		CUM 209700	SCREW,Head Bolt(SC)(6-3/8in Lg)	
8	040001		CUM 3013623	SCREW,Head Bolt(BC)(7in Lg)	
8	040006		CUM 3071161	SCREW,Head Bolt(NH/NT)(11/16-16 x 7-1/4in)	
9	040023		CUM 3071075	WASHER,Head Bolt	
10	121195		CUM 3007759	O-RING,Injector Sleeve	
11	192085		CUM 3070486	TUBE,Injector(Thin Wall)	
11	192086		CUM 3071147	TUBE,Injector(Thick Wall)	
12	042004		CUM 147389	SCREW,Crosshead Adjusting	
13	040060		CUM 203131	NUT,Crosshead	
14	191941	191941E	CUM 3803524	KIT,Exhaust Valve(Stellite) Includes Valve (1)191955 Collets (2)192017	
14	191942		CUM 3803519	KIT,Exhaust Valve Includes Valve (1)191956 Collets (2)192017	
15	192067		CUM 3030038	ASSEMBLY,Crosshead Includes Nut (1)040060 Screw (1)042004 Crosshead (1)	
16	192063		CUM 123558	GUIDE,Crosshead	
17	040026		CUM 70772	SCREW,Fillister Head(1/4in-20 x 1/2in)	
18	045100		CUM 147100	ASSEMBLY,Fuel Crossover	
19	045101		CUM 135308	PLATE,Fuel Cover	
20	121214		CUM 131026	O-RING,Fuel Crossover	
21	EPP-3572		MAK 49AX242	PLUG,Pipe(1/16in NPT)	CUM S-965-E
22	040085		CUM 175831	PLUG,Cup(3/4in)	
23	040086		CUM 3007635	PLUG,Cup(1in)	
24	GCP-3495		MAK 79AX71	PLUG,Expansion	CUM 216524
25	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
26	042100		CUM 181213	FITTING,Fuel Return(Elbow)	
27	131255		CUM 3074982	GASKET,Head(w/ STD Grommet)	
27	131355		CUM 3049998	GASKET,Head(w/ .010in Grommet)	
27	**131970**		**CUM 3098985**	**GASKET,Head(.010in oversize Steel Plate)**	**CUM 3040180**
28	042005		CUM 168306	SCREW,Rocker Arm Adjusting	
29	042006		CUM 194037	SOCKET,Rocker Arm	
30	042007		CUM 3038903	PLUG,Rocker Lever	
31	042008		CUM 3047924	SCREW,Injector Adjusting	
32	045022		CUM 105199	PIN,Drive	
33	EPP-3566		MAK 49AX226	PLUG,Threaded(1in NPT)	CUM S-962
34	191940		CUM 3803512	KIT,Intake Valve Includes Valve (1)191950 Collets (2)192017	
35	131570		CUM 193949	GROMMET,Water(STD)	
35	131571		CUM 193958	GROMMET,Water(.010in)	
36	131555		CUM 4058790	GASKET,Head(Edge Molded)	
37	191955	191955E	CUM 145701	VALVE,Exhaust(Stellite)	
37	191956		CUM 3040830	VALVE,Exhaust	
37	**192146**		**CUM 3394112**	**VALVE,Exhaust(Natural Gas)**	
38	192001		CUM 3054600	INSERT,Exhaust(STD)	
38	192009	**192009E**	CUM 3017759	INSERT,Exhaust(STD)	
39	192093		CUM 3032291	INSERT,Intake and Exhaust(+.005in)	
39	192094		CUM 3032287	INSERT,Intake and Exhaust(+.010in)	
39	192095		CUM 3032288	INSERT,Intake and Exhaust(+.020in)	
39	192096		CUM 3032289	INSERT,Intake and Exhaust(+.030in)	
39	**192233**		**CUM 3394116**	**INSERT,Intake and Exhaust(STD-Natural Gas)**	
40	180270		CUM 3054260	CONNECTION,Oil Supply(STC)	CUM 3048819
41	136015		CUM 3050867	SEAL,Grommet	
42	121232		CUM 3052587	O-RING,Oil	
43	**195020**		**CUM 3394117**	**ADAPTER,Spark Plug(NH/NT)(Natural Gas)**	
44	**321426**		**CUM 172205**	**O-RING,Adapter(Natural Gas)**	
45	**131943**		**CUM 3394114**	**GASKET,Plug Adapter(Natural Gas)**	

PAI Copyright 2017

New Parts are in BOLD text

FIGURE 6026

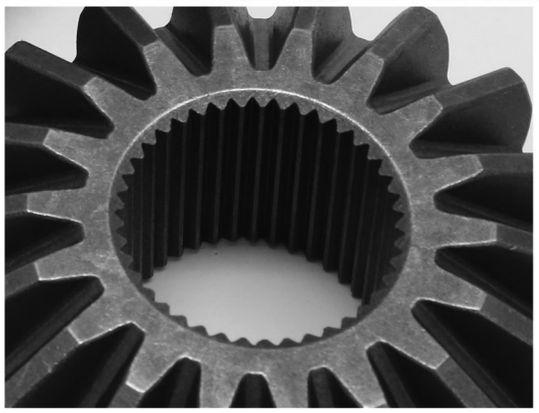


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181920		CUM 130394	CONNECTION,Water	
2	131384		CUM 70624	SEAL,O-Ring	
3	136010		CUM 3024709	SEAL,Rectangular Ring	
3	136016		CUM 3063618	SEAL,Water Restrictor	CUM 3631805
4	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM 3008469
5	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3088468
6	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
7	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3025458

PAI Copyright 2017

NEED HELP IDENTIFYING PARTS?







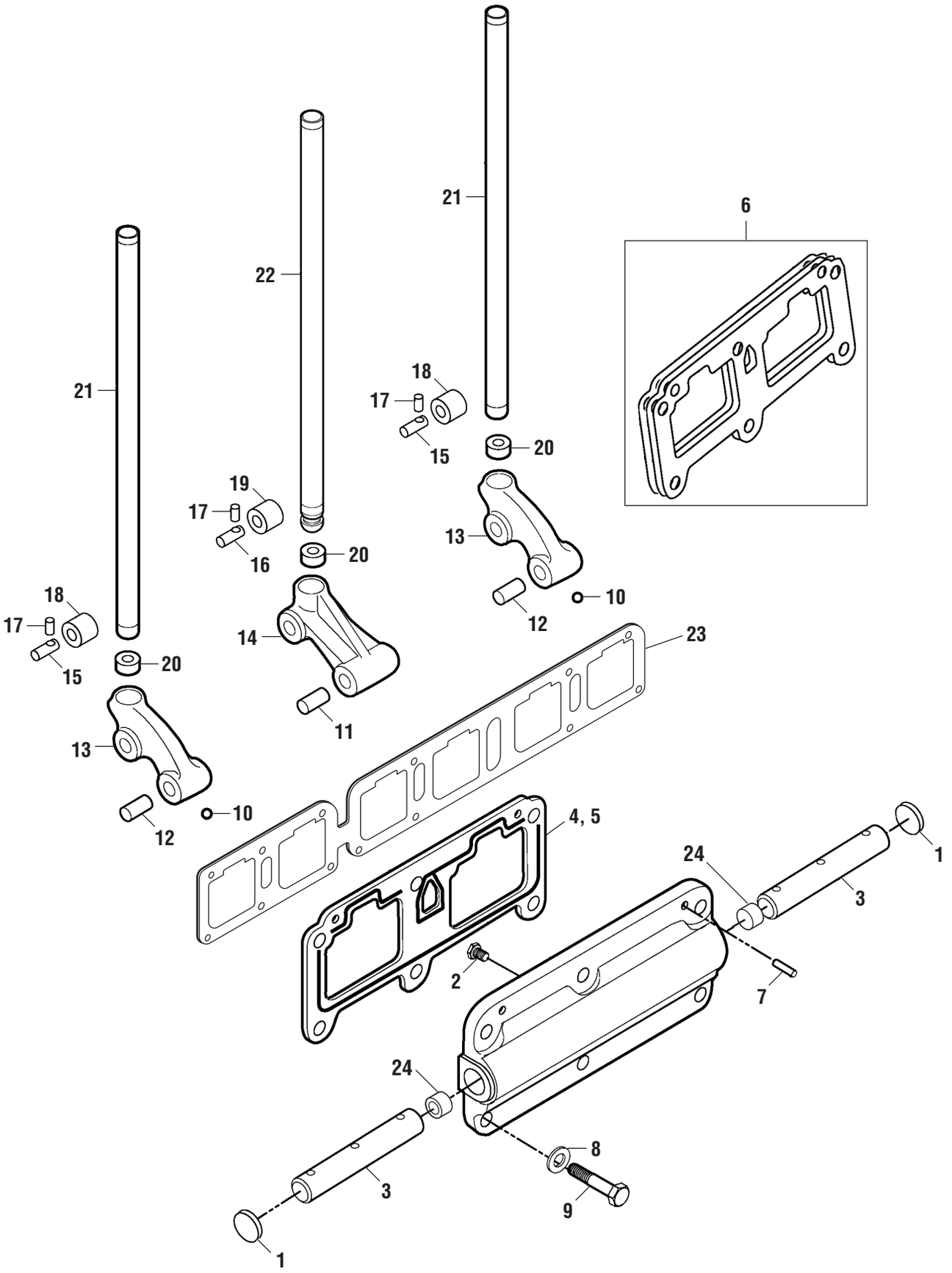


Contact our Technical Support Group: Tel: 678-518-6567
Submit Your Request Online at: www.paiindustries.com

Navigate to ONLINE REQUEST: SELECT “PART TAB”, THEN “ENGINE SUPPORT”.

After reviewing your request, PAI Technical Group and Sales Department will contact you with your requested information along with pricing and availability (Account# Required).

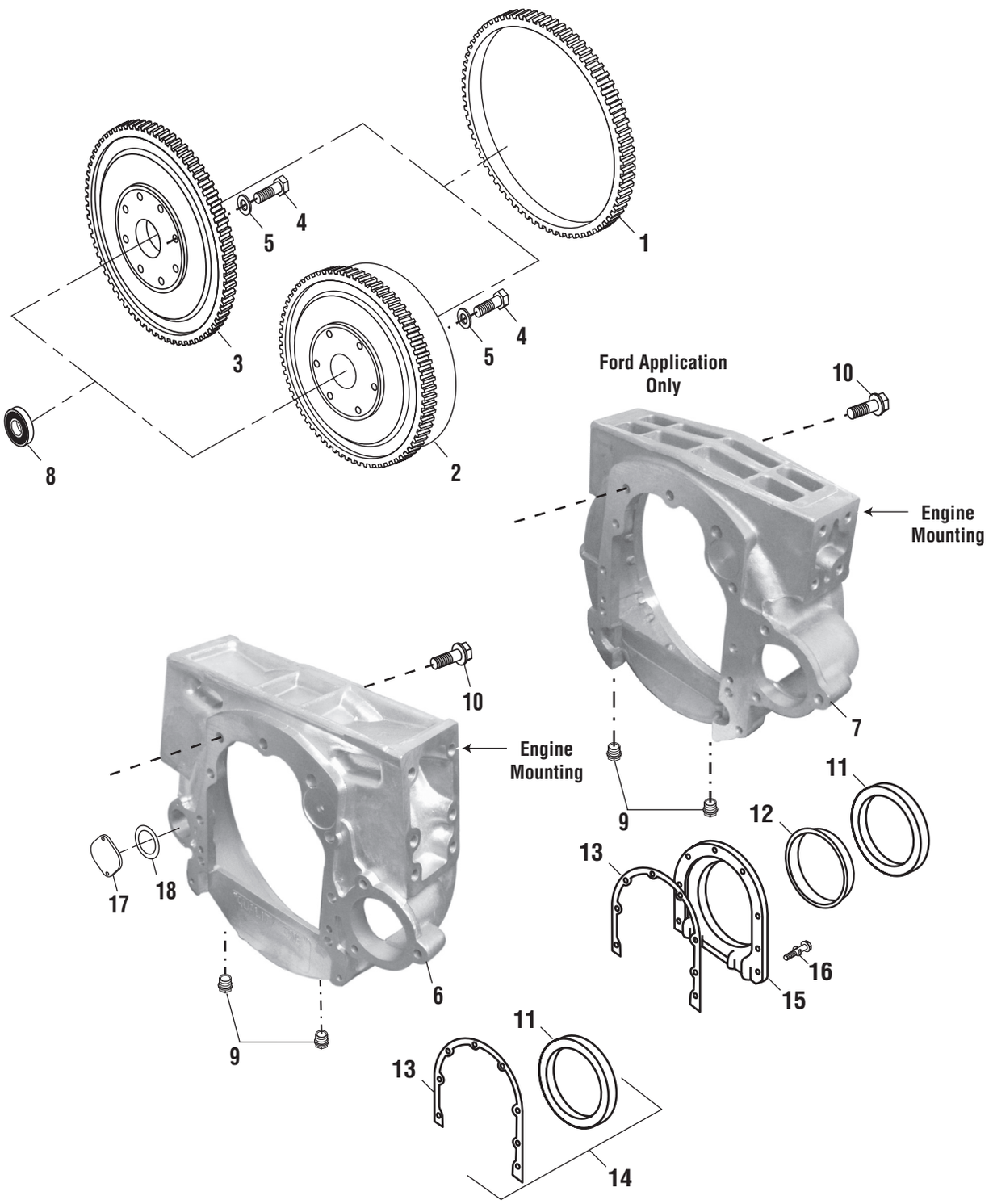
FIGURE 6007



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	040085		CUM 175831	PLUG,Expansion	
2	Call		CUM 69736	SCREW,Shaft	
3	045005		CUM 3065125	SHAFT,Cam Follower	
4	131281		CUM 120819	GASKET,Cam Follower(.027in-.033in)(SC)	
4	131313		CUM 3011272	GASKET,Cam Follower(.020in-.024in)(SC)	
4	131314		CUM 3011273	GASKET,Cam Follower(.037in-.041in)(SC)	
4	131386		CUM 9266	GASKET,Cam Follower(.014in-.020in)(SC)	
4	131387		CUM 9266-A	GASKET,Cam Follower(.006in-.008in) (Use First)	
5	131373		CUM 3074400	GASKET,Silicone Sealing Bead(.017in) (Use First)	
5	131374		CUM 3074401	GASKET,Cam Follower(.006in-.008in)(BC)	
5	131375		CUM 3074402	GASKET,Cam Follower(.014in-.021in)(BC)	
5	131376		CUM 3074404	GASKET,Cam Follower(.026in-.036in)(BC)	
5	131426		CUM 3074403	GASKET,Cam Follower(.018in-.025in)(BC)	
6	131392		N/A	KIT,Cam Follower Gasket(BC) Includes Gaskets (3)131373 (3)131374 (3)131375 (3)131376	
6	131393		N/A	KIT,Cam Follower Gasket(SC) Includes Gaskets (3)131387 (3)131281 (3)131386	
7	Call		CUM 68585	DOWEL,Housing to Block	
8	FWA-0050		MAK 36AX3	WASHER,Lock(3/8in)	CUM S-604
9		EF01120	FUL X-7-603	SCREW,Hex Head(3/8in-24 x 1in)	CUM S-129
10	Call		CUM 3067941	PLUG,Ball	
11	151529		CUM 118377	BUSHING,Injector Lever	
12	151530		CUM 118378	BUSHING,Valve Lever(Intake and Exhaust)	
13	Call		CUM 3056568	LEVER,Cam Follower(BC) (Intake and Exhaust)	
13	Call		CUM BM37634	LEVER,Cam Follower(SC) (Intake and Exhaust)	
14	Call		CUM 3018049	LEVER,Injector Cam Follower(SC)	
14	Call		CUM 3056569	LEVER,Injector Cam Follower(BC)	
14	Call		CUM 3036936	LEVER,Cam Follower	
15	045003		CUM 68513	PIN,Valve(Intake and Exhaust)(SC)	
15	045007		CUM 3013331	PIN,Valve(Intake and Exhaust)(BC)	
16	045004		CUM 3017544	PIN,Injector(SC)	
16	045006		CUM 3013330	PIN,Injector(BC)	
17	045008		CUM 118939	PIN,Roll	
17	045013		CUM 3064309	PIN,Roll	
18	045011		CUM 3036933	ROLLER,Intake and Exhaust(Crowned)(BC)	
18	045044		CUM 9260-1	ROLLER,Intake and Exhaust(SC)	
19	045010		CUM 3081248	ROLLER,Injector(Crowned)(BC)	CUM 3036934
19	045045		CUM 3062096	ROLLER,Injector(SC)	
20	045060		CUM 213559	SOCKET,Injector(SC)	
20	Call		CUM 107738	SOCKET,Intake and Exhaust	
21	192075		CUM 3046418	PUSHROD,Intake and Exhaust(SC)	
21	192077		CUM 3046420	PUSHROD,Intake and Exhaust(BC)	
21	192081		CUM 3053377	PUSHROD(w/ Compression Release)(SC)	
21	192120		CUM 3058469	PUSHROD,Intake and Exhaust(BC)(STC)	
22	192072		CUM 3058471	PUSHROD,Injector(BC)(STC)	
22	192078		CUM 3046430	PUSHROD,Injector(BC)	
22	192079		CUM 3046431	PUSHROD,Injector(SC)	
23	131545		CUM 3029416	GASKET,Cam Follower Housing(MVT Engine)	
24	**121401**		**CUM 3031278**	**RING,Seal (Used w/ MVT Cam Follower Housing only)**	

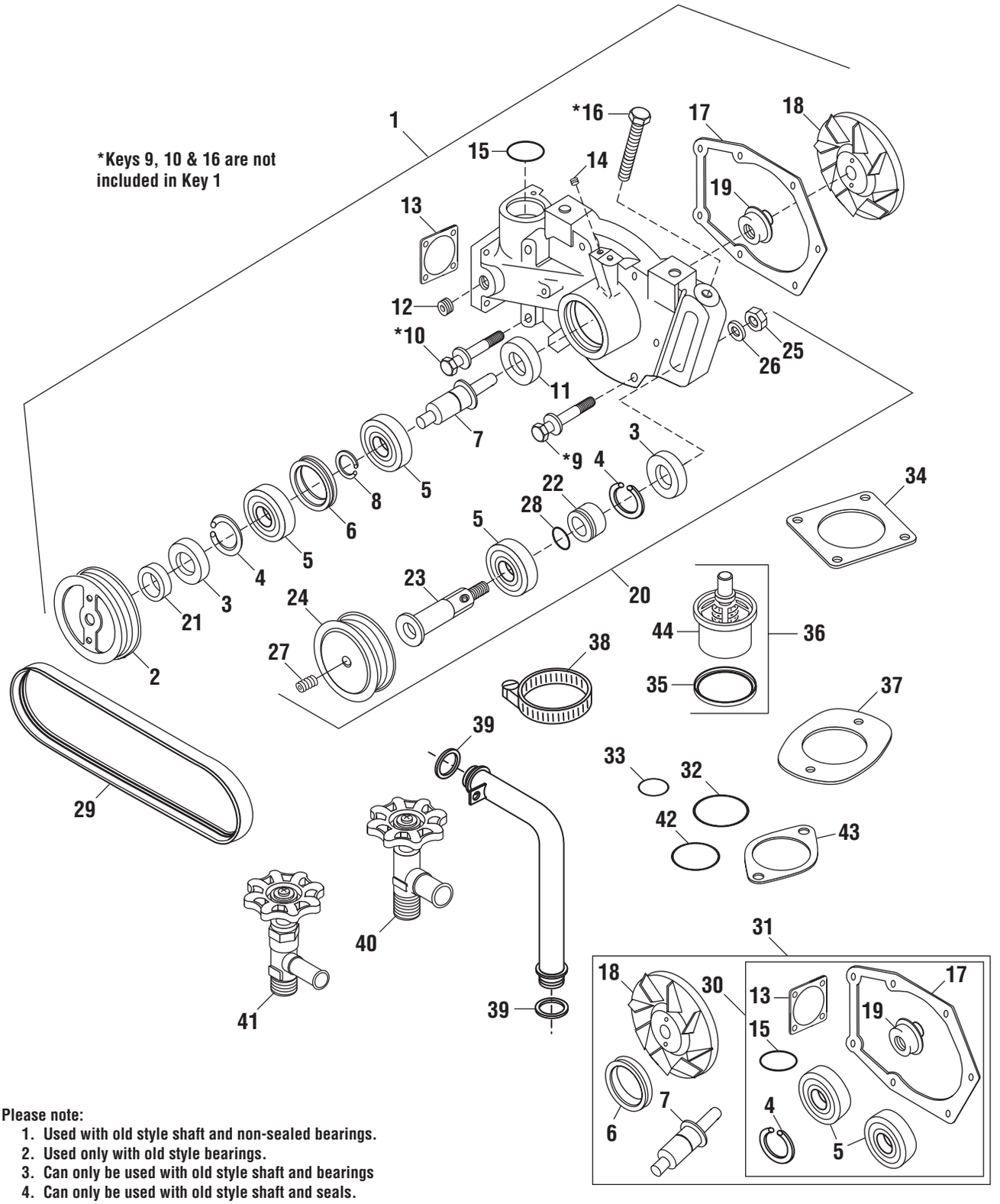
FIGURE 6009



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	060070		CUM 4797	GEAR,Ring (Fits Both Flywheel Assemblies)	CUM 3065151
2	060045		CUM 3016495	ASSEMBLY,Flywheel(14in)	CUM 3005145
3	060046		CUM 3021660	ASSEMBLY,Flywheel(15-1/2in)	
4	040021		CUM 204165	SCREW(5/8in-18 x 1-5/8in)	
5	040024		CUM 200861	WASHER(5/8in)	
6	060003		CUM 3036011	HOUSING,Flywheel(Aluminum #1) (3/4in Mounting Bolts)	CUM 3007723, CUM 3036005
7	060004		CUM 3002067	HOUSING,Flywheel(Aluminum #2) (5/8in Mounting Bolts) (Ford Application)	CUM 3035977
7	060005		CUM 3048766	HOUSING,Flywheel(Aluminum #2) (3/4in Mounting Bolts) (Ford Application)	
8	EBG-8688		BCA 306DD	BEARING,Pilot(Sealed)	CUM 104998
9	042165		CUM 3042004	PLUG,Plastic	
10	040041		CUM 3048353	BOLT,Flywheel Housing (5/8in - 18 x 1-3/4in)	
11	136001		CUM 3006737	SEAL,Rear Crankshaft(Dry Clutch)	CUM 204829
11	136023		CUM 3006738	SEAL,Rear Crankshaft(Wet Clutch)	CUM 212832
12	136039		CUM 3006743	RING,Wear(Rear Crankshaft)	NAT 99599
13	131362		CUM 3067616	GASKET,Rear Cover	CUM 40662
14	131396		N/A	KIT,Rear Seal(Dry Clutch) Includes Gasket (1)131362 Seal (1)136001	
15	060102		CUM 3049018	COVER,Rear	
16	Call		CUM 3010594	SCREW,Captive	
17	Call		CUM 70657	PLATE,Cover	
18	131388		CUM 9333-1	GASKET,Cover Plate	

FIGURE 6020



Please note:

1. **Used with old style shaft and non-sealed bearings.**
2. **Used only with old style bearings.**
3. **Can only be used with old style shaft and bearings**
4. **Can only be used with old style shaft and seals.**
5. **Can be used with old style shaft or new style shaft.**
6. **Can only be used with sealed bearings.**
7. **Automotive equipment with shutterless cooling systems require a ventless thermostat to eliminate water flow through the vent hole which could prevent the engine from reaching an acceptable operating temperature.**
8. **Ventless thermostats should not be used with engines that do not have an external vent line in the cooling system. The use of ventless thermostats without an external vent line may result in improper cooling of the engine.**
9. **Vented thermostats continue to be used in shutter controlled automotive systems that do not have vented cooling systems.**

PAI Copyright 2017

Small Cam - FFC

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181806		CUM 3801715	PUMP,Water(w/ Gasket and Cast Impeller)	CUM 3051354
1	**181801**		**CUM 3022471**	**PUMP,Water**	**CUM 3022480**
2	181898		CUM 3007075	PULLEY(2 Groove)	CUM 3005506
3	136013		CUM 3038998	SEAL,Oil(See Note 1)	CUM 203101
4	042060		CUM S-16255	RING,Retaining	
5	EBG-8041	**EM80410**	MAK 46AX58	BEARING,Non-Sealed(See Note 4)	CUM 3010150
5	EBG-8042		MAK 46AX474	BEARING,Sealed(See Note 5)	CUM 3063246
6	181846		CUM 196844	SPACER	
7	180908		CUM 3050394	SHAFT(New Style)	CUM 3000889
8	Call		CUM 112302	RING,Retaining(See Note 1)	
9	040030		CUM 3012468	SCREW(w/ Washer)	
10	040031		CUM 3012469	SCREW(w/ Washer)	
11	136012		CUM 3038997	SEAL,Oil(See Note 3)	CUM 203100
12	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
13	131339		CUM 3024960	GASKET	CUM 208132
14	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
15	121236		CUM 43463-A	O-RING	
16	040040		CUM 182706	SCREW,Idler Adjustment	
17	131308		CUM 3002385	GASKET,Mounting	CUM 130226
18	181869		CUM 3010646	IMPELLER,Cast Iron(4in)	CUM 213811
18	181870		CUM 208134	IMPELLER,Cast Iron(5-1/4in)	
19	181845		CUM 3033677	ASSEMBLY,Seal & Seat	CUM AR62495
20	180900		CUM AR8851	IDLER,Assembly(2 Groove Pulley)	CUM 3064920
21	**136159**		**CUM 203097**	**RING,Wear**	
22	Call		CUM 208120	SPACER,Mounting	
23	180909		CUM 3050396	SHAFT,Idler(New Style)(See Note 6)	CUM 208119
24	Call		CUM 208118	PULLEY,Idler(2 Groove)	
25	FNU-0280		MAK 23AX459	NUT	CUM S-201
26	Call		CUM 213082	WASHER(5/8in ID)	
27	EPP-3572		MAK 49AX242	PLUG,Pipe(1/16in NPT)	CUM S-965-E
28	121213		CUM 145506	O-RING(See Note 2)	CUM 135528
29	050465		CUM 178657	V-BELT(40-5/8in)	
29	050466		CUM 178679	V-BELT(42-7/8in)	
29	050487		CUM 134809	V-BELT(7/8in x 49-7/8in)	CUM S-3115
29	Call		CUM 204481	V-BELT	
30	181849		CUM 3801710	KIT,Water Pump Repair(Minor) Includes Ring (1)042060 Gaskets (1)131308 (1)131339 Bearings (2)EBG-8042 O-Ring (1)121236 Seal & Seat Assembly (1)181845	CUM 3801377
31	181851		CUM 3801714	KIT,Water Pump Repair(Major) (Use w/ Cast Iron Impeller, 4in) Includes Minor Kit (1)181849 Spacer (1)181846 Shaft (1)180908 Impeller (1)181869	CUM 3390114
31	181852		CUM 3801716	KIT,Water Pump Repair(Major) (Use w/ Cast Iron Impeller, 5-1/4in) Includes Minor Kit (1)181849 Spacer (1)181846 Shaft (1)180908 Impeller (1)181870	CUM 3390115
32	131384		CUM 70624	O-RING,Water Manifold	
33	136010		CUM 3024709	SEAL,Ring	CUM 148203
34	131290		CUM 208128	GASKET,Thermostat Housing	
35	131289		CUM 186780	SEAL,Thermostat Housing (Interchangeable w/ EOS-3305 Seal)	CUM 135600
36	181830		CUM 201737	KIT,Thermostat(180 deg)(Non-Vented) Includes Thermostat (1) Seal (1)EOS-3305	
36	181833		CUM 204586	KIT,Thermostat(175 deg)(Non-Vented) Includes Thermostat (1) Seal (1)EOS-3305	
36	181835		CUM 146076	KIT,Thermostat(160 deg)(Vented) Includes Thermostat (1) Seal (1)EOS-3305	
36	181836		CUM 135675	KIT,Thermostat(170 deg)(Vented) Includes Thermostat (1) Seal (1)EOS-3305	
36	181837		CUM 146077	KIT,Thermostat(180 deg)(Vented) Includes Thermostat (1) Seal (1)EOS-3305	

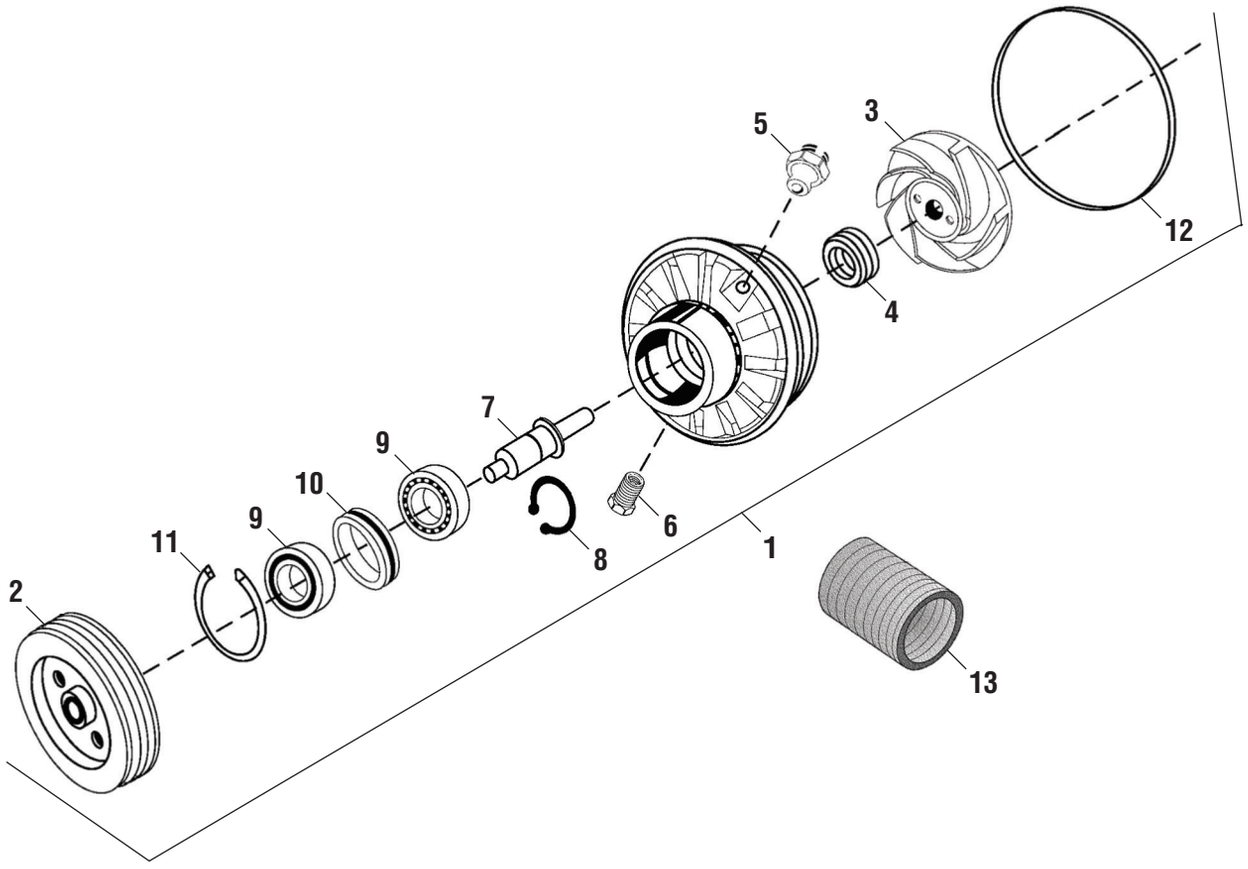
Keys 37-44 are on the following page.

Small Cam - FFC

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
37	131323		CUM 3019158	GASKET,Water Outlet	CUM 210859
38	ECL-1954		MAK 45SF20	CLAMP,Hose	CUM 3010550
39	121217		CUM 212161	O-RING,Water Manifold	CUM 211126
40	MHV-4223		MAK 25MF126	VALVE,Water Heater(5/8in Hose)	CUM 157098
41	MSV-4119		MAK 6635-V404P66	VALVE,Shutoff(3/8in Hose)	CUM 179901
42	121208		CUM 100328	O-RING,Water Tube	
43	131318		CUM 3011931	GASKET,Water Transfer	
44	181830-001		CUM 201737	THERMOSTAT**(NSS)** (Used in kit 181830)	CUM 3076489

PAI Copyright 2017

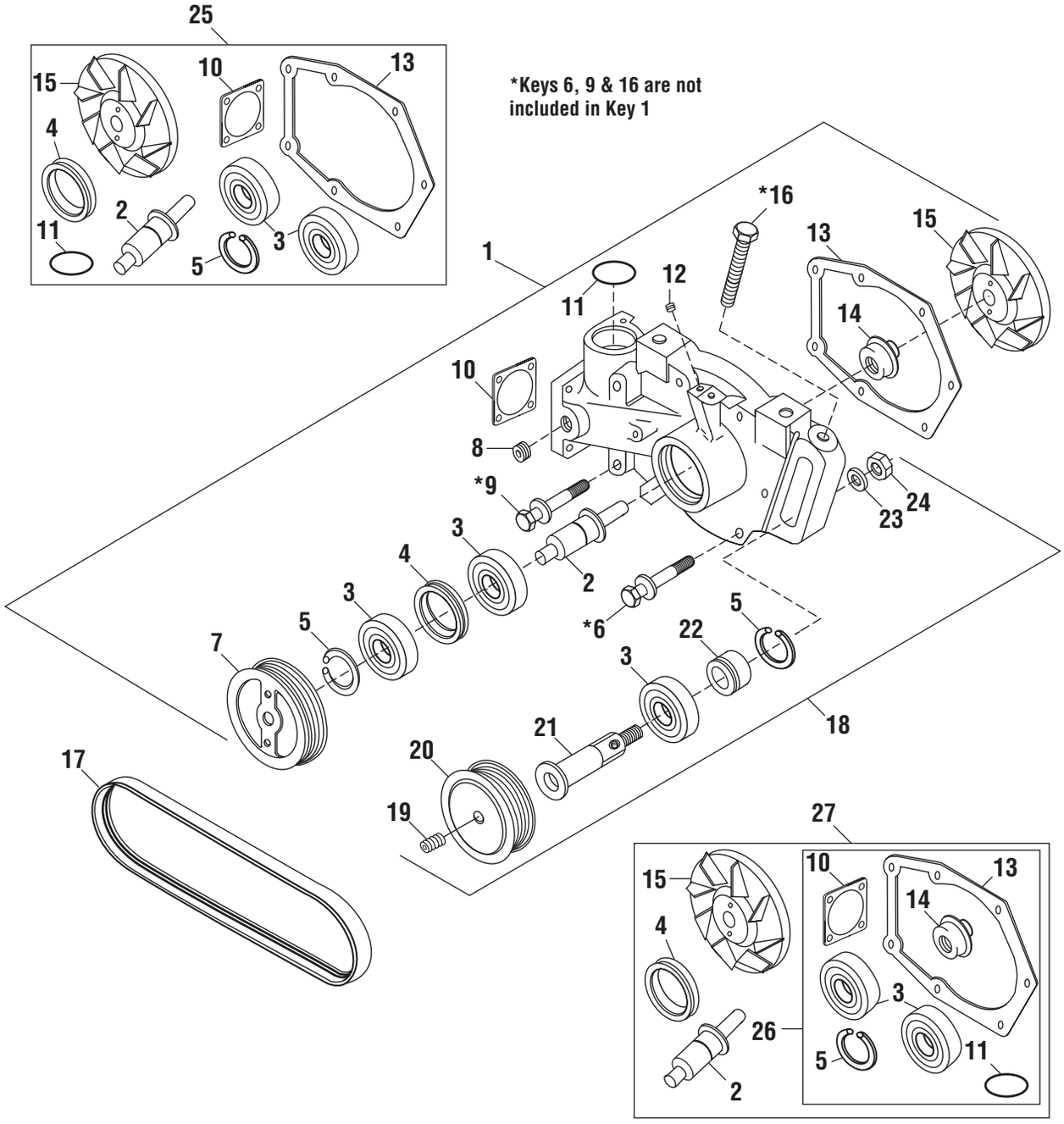
FIGURE 6025



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181803	181803E	CUM AR4284	ASSEMBLY,Water Pump	
2	Call		CUM 154966	PULLEY,Water Pump	
3	Call		CUM 201766	IMPELLER	
4	181845		CUM 3033677	SEAL,Assembly	
5	Call		CUM S-2268	FITTING,Grease	
6	Call		CUM 191175	FITTING,Relief	
7	180907		CUM 199410	SHAFT,Water Pump	
8	Call		CUM 112302	RING,Retaining	
9	EBG-8042		MAK 46AX474	BEARING	CUM 3063246
10	181846		CUM 196844	SPACER,Bearing	
11	042060		CUM S-16255	RING,Retaining	
12	131283		CUM 130240	GASKET,Mounting	
13	121045		CUM 102522	HOSE,Rubber(1-1/2in x 3in Lg)	

Big Cam I, II, III, and Early Big Cam IV Vented and Non-Vented

FIGURE 6023

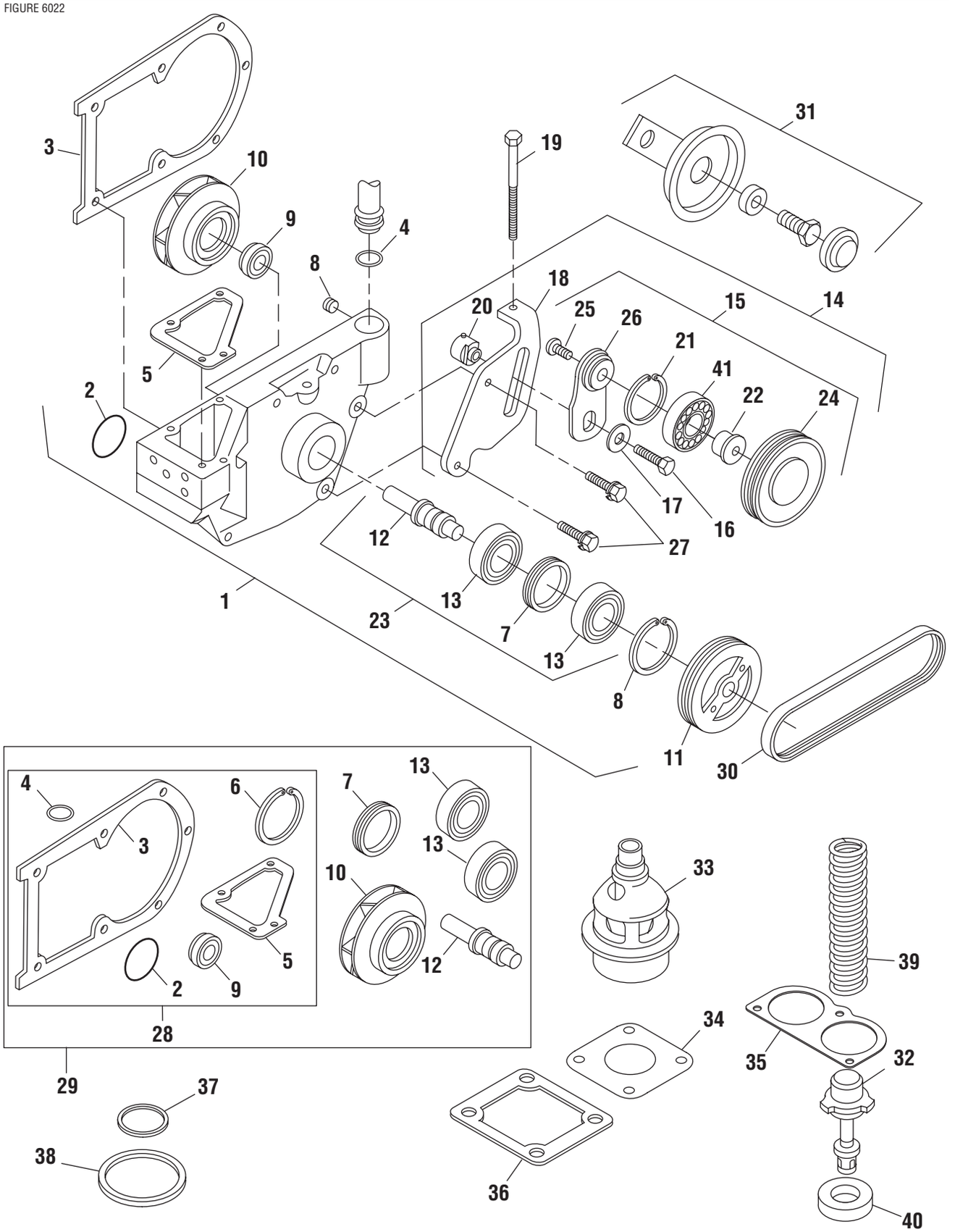


PAI Copyright 2017

Big Cam I, II, III, and Early Big Cam IV Vented and Non-Vented

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181805		CUM 3801708	PUMP,Water(BC I,II,III,Early IV) (Vented)(4.27in OD)	CUM 3024386
1	181807		CUM 3801788	PUMP,Water(BC I,II) (Non-Vented)(4.67in OD)	CUM 3022474
1	181809		CUM 3801787	PUMP,Water(4.67in OD)	CUM 3051351
2	180908		CUM 3050394	SHAFT(Current Style)(No Seals)	CUM 208138
3	EBG-8042		MAK 46AX474	BEARING(Sealed On One Side)	CUM 3063246
4	181846		CUM 196844	SPACER	
5	042060		CUM S-16255	RING,Retaining	
6	040030		CUM 3012468	SCREW(w/ Washer)	
7	Call		CUM 3025861	PULLEY,Multi-Groove(4.27in OD)	
7	Call		CUM 3005507	PULLEY,Multi-Groove(4.67in OD)	
8	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
9	040031		CUM 3012469	SCREW(w/ Washer)	
10	131339		CUM 3024960	GASKET,Water Outlet	CUM 208132
11	121236		CUM 43463-A	O-RING	
12	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
13	131308		CUM 3002385	GASKET	CUM 130226
13	131434		CUM 3076522	GASKET	CUM 3064381
14	181845		CUM 3033677	ASSEMBLY,Seal & Seat	CUM AR62495
15	181873		CUM 3602788	IMPELLER(Cast Iron) (Interchangeable w/ Phenolic)	
16	040040		CUM 182706	SCREW,Adjustment Idler	
17	050483		CUM 3058383	BELT,V(44in Lg, 7/16in Wide)	
17	050484		CUM 217638	BELT,Multi-Groove (44-1/8in Lg, 27/32in Wide)	CUM 3019406
17	050486		CUM 3063817	BELT,Multi-Groove (43-5/8in Lg, 9/16in Wide)	
18	180901		CUM 3064919	IDLER,Assembly	CUM 3051348
19	EPP-3572		MAK 49AX242	PLUG,Pipe(1/16in NPT)	CUM S-965-E
20	Call		CUM 215397	PULLEY,Idler	
21	180909		CUM 3050396	SHAFT,Idler(Current Style)	CUM 208119
22	Call		CUM 208120	SPACER,Mounting	
23	Call		CUM 213082	WASHER(5/8in ID)	
24	FNU-0280		MAK 23AX459	NUT(5/8in-11 UNC)	CUM S-201
25	181856		CUM 3803202	KIT,Water Pump Repair(Major) For Pump CUM 3801787 Includes Shaft (1)180908 Impeller (1)181873 Gaskets (1)131434 (1)131339 O-Ring (1)EGA-1660 Spacer (1)181846 Bearings (2)EBG-8042 Retaining Ring (1)040260	
26	181849		CUM 3801710	KIT,Water Pump Repair(Minor) For Pumps 181805 & 181807 Includes Seal & Seat Assembly (1)181845 Bearings (2)EBG-8042 Gaskets (1)131339 (1)131308 O-Ring (1)EGA-1660 Retaining Ring (1)042060	CUM 3801377
27	181850		CUM 3801712	KIT,Water Pump Repair(Major) For Pumps 181805 & 181807 Includes Impeller (1)181873 Minor Repair Kit (1)181849 Spacer (1)181846 Shaft (1)180908	CUM 3801380

FIGURE 6022



PAI Copyright 2017

88NT

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181808		CUM 3803138	PUMP,Water	
2	121211		CUM 109080	O-RING,Seal	
3	131308		CUM 3002385	GASKET,Water Pump	CUM 130226
4	121228		CUM 3049221	O-RING,Seal	
5	131357		CUM 3052877	GASKET,Thermostat Housing	
6	042060		CUM S-16255	RING,Retaining	
7	181846		CUM 196844	SPACER,Bearing	
8	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
9	181845		CUM 3033677	ASSEMBLY,Seal & Seat	
10	181872		CUM 3045801	IMPELLER,Stamped	
11	Call		CUM 3046304	PULLEY,Water Pump	
12	180910		CUM 3047469	SHAFT,Water Pump	CUM 3062929
13	EBG-8042		MAK 46AX474	BEARING,Sealed One Side	CUM 3063246
14	Call		CUM 3062930	ASSEMBLY,Idler (w/ Mounting Bracket)	
15	180902		CUM 3062931	ASSEMBLY,Idler (w/o Mounting Bracket) Includes Screw (1)040130 Arm (1)180940 Ring (1)ESR-2831 Bearing (1)EBG-6163 Spacer (1)040139 Pulley (1)180941	
16	ESC-0012		MAK 4AX1	SCREW(3/8in-16 x 1in)	CUM S-112
17	040022		CUM 170664	WASHER,Plain	
18	Call		CUM 3046809	BRACKET,Mounting	
19	Call		CUM 3049212	SCREW,Cap	
20	Call		CUM 3062696	ADJUSTER	
21	ESR-2831		MAK 325GC120	RING,Retaining	CUM 160586
22	040139		CUM 3062694	SPACER,Idler	
23	180916		CUM 3064974	ASSEMBLY,Water Pump Shaft Includes Shaft (1)180910 Spacer (1)181846 Bearings (2)EBG-8042	
24	180941		CUM 3064201	PULLEY,Idler	
25	040130		CUM 3062989	SCREW,Flat Head(3/8in-16 x 1in)	
26	180940		CUM 3077743	ARM,Idler	CUM 3064200
27	Call		CUM 3049232	SCREW,Captive Washer Cap	
28	181848		CUM 3803139	KIT,Water Pump Repair(Minor) Includes Retaining Ring (1)042060 O-Rings (1)121211 (1)121228 Gaskets (1)131308 (1)131357 Seal (1)181845	
29	181853		CUM 3803140	KIT,Water Pump Repair(Major) Includes Minor Repair Kit (1)181848 Spacer (1)181846 Shaft (1)180910 Impeller (1)181872 Bearings (2)EBG-8042	
30	050486		CUM 3063817	BELT,Multi-Groove(43-5/8in Lg, 9/16in Wide)	
31	180912		CUM 3065000	ASSEMBLY,Idler,Pulley(Backside)	
32	181838		CUM 3064454	THERMOSTAT(173 deg)(LFC Engine)	
32	181839		CUM 3064453	THERMOSTAT(173 deg)(LFC Engine)	
32	181841		CUM 3064455	THERMOSTAT(187 deg)(LFC Engine)	
33	181840		CUM 3049000	THERMOSTAT(160 deg)	
33	181842		CUM 3061649	THERMOSTAT(180 deg)	
34	131464		CUM 3064313	GASKET,Thermostat	
35	131348		CUM 3040056	GASKET,Thermostat	
36	131349		CUM 3040057	GASKET,Water Cover	
37	121279		CUM 3049215	RING,Rectangular(Filter Head Assembly)	
38	121280		CUM 3033525	RING,Rectangular(Filter Head Assembly)	
39	181891		CUM 3039396	SPRING,Thermostat	
40	181892		CUM 3046865	SEAT,Thermostat	CUM 3039390
41	EBG-6163	**EM61630**	MAK 9383-6205LL	BEARING,Ball	CUM 3063245

FIGURE 6030



PAI Copyright 2017

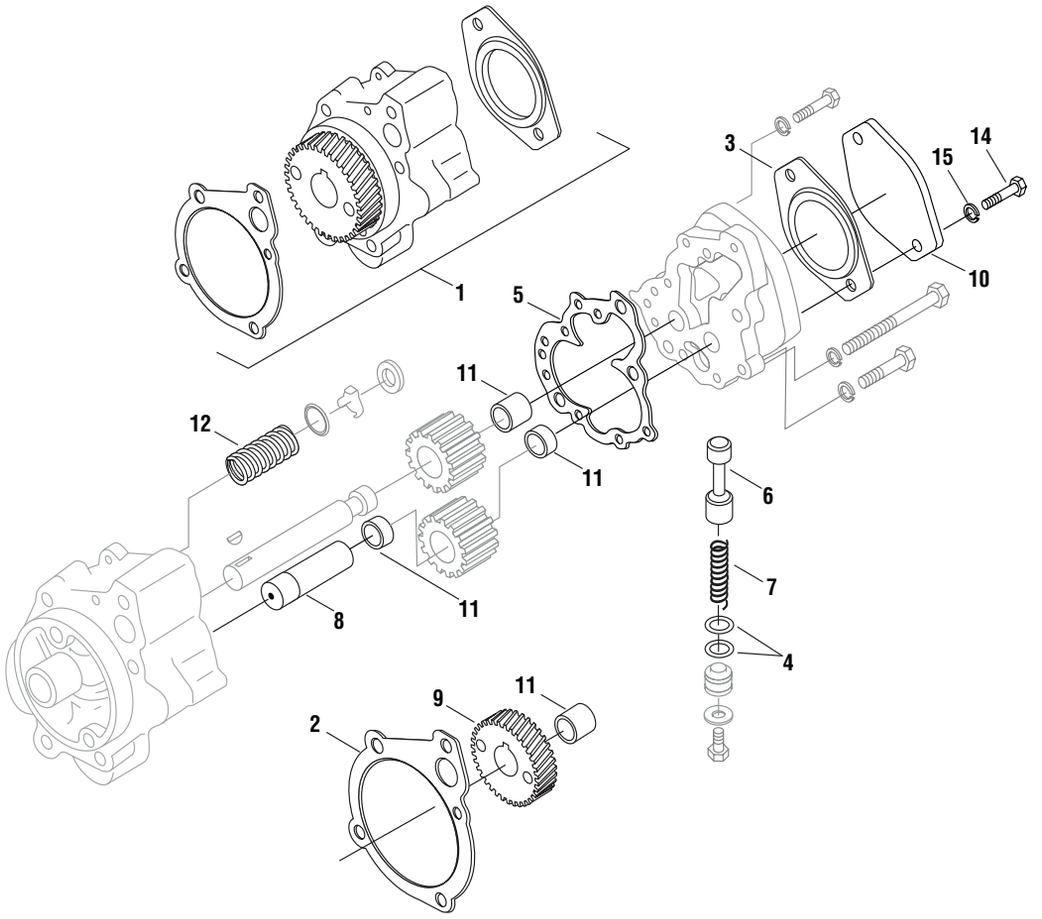
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180200		CUM 3035342	VALVE,Shutoff(12V)(Solenoid) (Single Term)(1/8in NPT)	
1	180201		CUM 3035346	VALVE,Shutoff(24V)(Two Terminal)	
1	180202		CUM 3053430	VALVE,Shutoff(12V)(Solenoid Single Terminal) (w/ 1/4in NPT Fitting)	
1	180203		CUM 3045883	VALVE,Shutoff(12V)(Single Terminal) (for Compucheck Coupling)	
1	180207		CUM 3035344	VALVE,Shutoff(24V)(Solenoid) (Single Term)(1/8in NPT Fitting)	
1	180208		CUM 3018453	VALVE,Shutoff(24V)	
2	180205		CUM 3013036	SHAFT	
3	210000		CUM 3012538	CUP,Injector(NH, NT, V1710)(9-.008 x 18 deg)	
3	210001		CUM 3012536	CUP,Injector(8-.008 x 18 deg)	CUM 196943
3	210002		CUM 3012537	CUP,Injector(8-.0065 x 18 deg)	CUM 208423
3	210004		CUM 3018862	CUP,Injector(8-.009 x 18 deg)	CUM 208739
4	045002		CUM 191916	LINK,Injector Plunger	
5	141303		CUM 157088	CAP,Filter,Fuel Pump	
6	180210		CUM 3054610	SOLENOID(24V)(Single Terminal)	
6	180211		CUM 3054611	SOLENOID(12V)(Single Terminal)	
7	MSV-4119		MAK 6635-V404P66	VALVE,Shutoff(3/8in Hose)	CUM 179901
8	121196		CUM 193736	O-RING,Injector Mounting(3 Req'd)	
9	131368		CUM 4026171	GASKET,Fuel Pump	
10	180927		CUM 162426	SPIDER,Coupling,Black	
10	180929		CUM 3046200	SPIDER,Coupling,White	
11	FAD-4099		MAK 6635-638F50GS	ADAPTER(Use w/ MSV-4119 Shutoff Valve)	CUM 3087692
12	192125		CUM 185138	RETAINER,Nut,Injector	
13	121278		CUM 154087	RING,Rectangular Seal	
14	180030		CUM 3048294	LEVER,Injector Pump Throttle(4 Hole)	
14	180031		CUM 3048296	LEVER,Injection Pump Throttle(2 Hole)	
15	121284		CUM 3040817	O-RING,Fitting	
16	209931		CUM 3047964	BARREL/PLUNGER (PTD, Direct Feed, High Flow)	CUM 3018219
17	**209972X**		**CUM 3071494X**	**ASSEMBLY,Injector(Reman)(NTC400)**	
17	**209973X**		**CUM 3054228**	**ASSEMBLY,Injector(Reman)(NH/NT)**	**CUM 3018352**
17	**209978**		**CUM 3054254**	**ASSEMBLY,Injector(NH/NT)**	
17	**209978X**		**CUM 3054254**	**ASSEMBLY,Injector(Reman)(NH/NT)**	**CUM 3019932**
17	**209979**		**CUM 3054250**	**ASSEMBLY,Injector(NH/NT)**	
17	**209979X**		**CUM 3054250**	**ASSEMBLY,Injector(Reman)(NH/NT)**	**CUM 3018835**
17	209980		CUM 3054219	ASSEMBLY,Injector(NTA 855-G)	
17	209980X		CUM 3054219	ASSEMBLY,Injector(Reman)(NTA 855-G)	CUM 3018854
17	**209985X**		**CUM 3069767**	**ASSEMBLY,Injector(Reman) (NH/NT)**	**CUM 3059424**
17	**209986X**		**CUM 3047973**	**ASSEMBLY,Injector(Reman) (NH/NT)**	**CUM 3030445**
18	121352		CUM 129888	SEAL,O-Ring	
19	040058		CUM 3028279	SCREW,12 pt(Injector Mount) (5/16in-18 x 1-1/8in lg)	
19	**040102**		**CUM 3049333**	**SCREW(12pt)(3/8 x 16 x 1 1/4) (Injector Hold Down Bracket Bolt)**	
20	210025		CUM 3008706	SCREEN,Fuel Injector	CUM 174298
21	180230		CUM 129839	SHIELD,Valve Shutoff	
22	840135		PKR 2225P-4	FITTING,Tee	CUM 3818101
23	**042210**		**CUM 3028325**	**VALVE,Fuel Check**	**CUM 216737**
24	**180191**		**CUM 3408328**	**ACTUATOR,Fuel**	**CUM 3090742**
25	**136138**		**CUM 3062676**	**SEAL,Fuel Pump**	**CUM 3045173**

*** Please Note - Parts numbers with an X at the end are Remanufactured Products.**

Oil Pump Assembly

Big Cam II,III and IV - FFC

FIGURE 6028

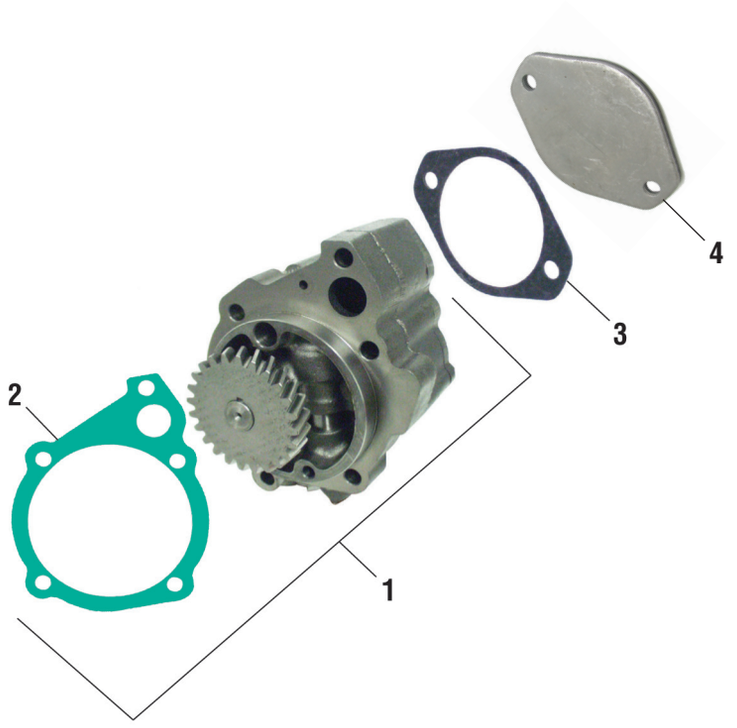


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141300	141300E	CUM 3821572	PUMP,Oil Assembly Includes Lube Pump (1) 141300-100 Gaskets (1)131361 (1)131451	CUM 3821575
2	131361		CUM 3067613	GASKET,Mounting(Pump to Block)	
3	131451		CUM 3558515	GASKET,Hydraulic Cover	
4	EGA-3877		MAK 446GC1225	O-RING,Oil Relief Valve	CUM 145504
5	131322		CUM 3014778	GASKET,Housing Cover	
6	141304		CUM 109333	PLUNGER,Relief	
6	141305		CUM 3012529	PLUNGER,Relief	
6	**141306**		**CUM 3884126**	**PLUNGER,Relief**	
7	141330		CUM 68274	SPRING,Relief Plunger	
7	141331		CUM 211939	SPRING,Relief Plunger	
7	**141332**		**CUM 3010146**	**SPRING,Relief Plunger**	
8	141350		CUM 3012532	SHAFT,Oil Pump(Keyed)	
8	**141349**		**CUM 3012531**	**SHAFT,Oil Pump**	
9	**141355**		**CUM 204832**	**GEAR,Lube Pump**	
9	**141354**		**CUM 3609838**	**GEAR,Lube Pump(Helical Gear)**	
10	**141314**		**CUM 204048**	**COVER,Pump**	
11	**151488**		**CUM 69521**	**BUSHING,Pump**	
12	**141335**		**CUM 3014756**	**SPRING,Bypass**	
13	**141320**		**N/A**	**KIT,Lube Pump Cover** **Includes Cover Pump (1)141314** **Gasket Pump (1)131451 Screws (2)ER00950** **Washers (2)FWA-0050**	

New Parts are in BOLD text

PAI Copyright 2017

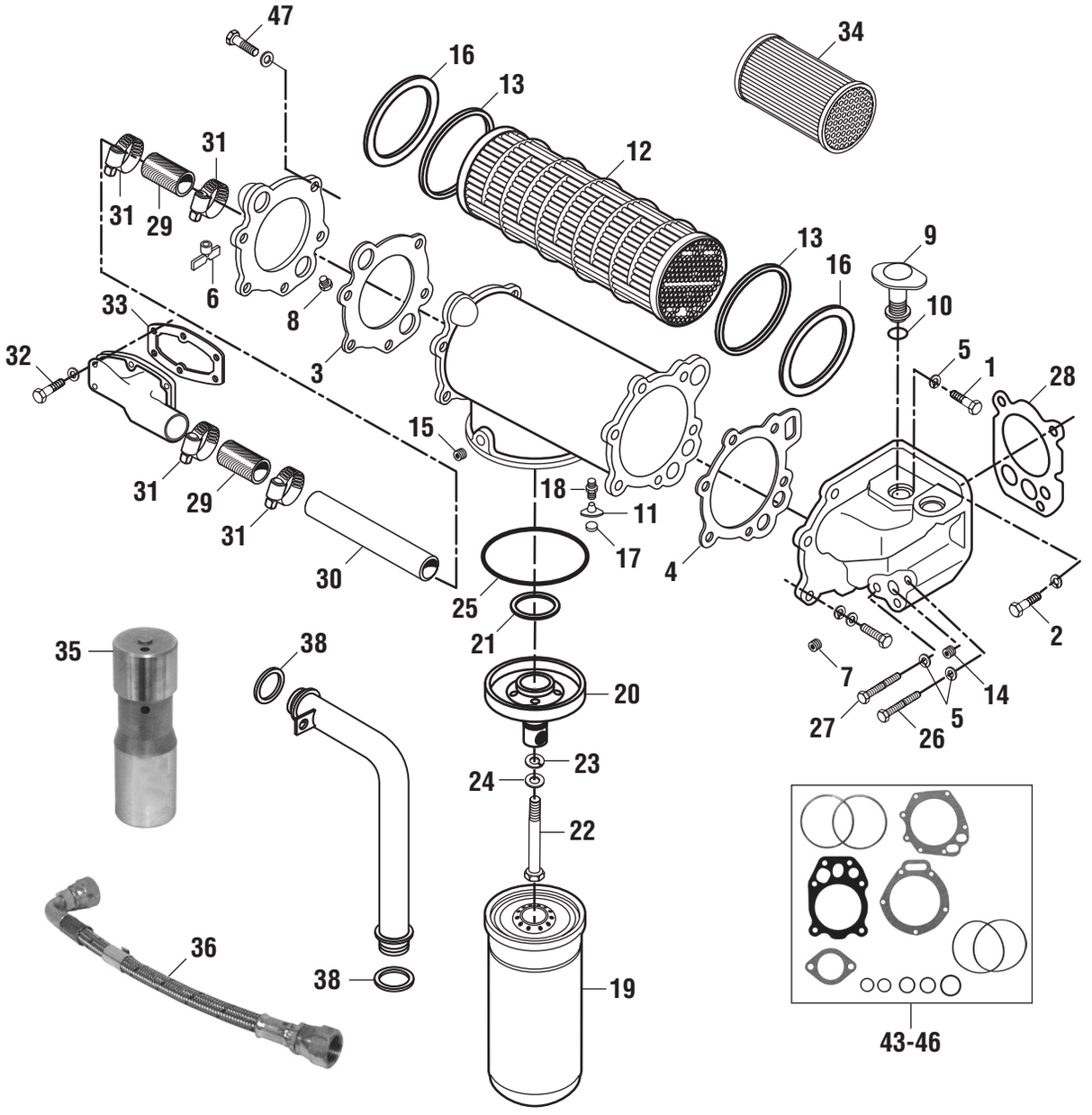
FIGURE 6017



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141292	141292E	CUM AR10172	PUMP,Oil Assembly Includes Gasket (1)131361	CUM AR10171, CUM 212767
2	131361		CUM 3067613	GASKET,Mounting(Pump to Block)	
3	131451		CUM 3558515	GASKET,Hydraulic Cover	
4	141314		CUM 204048	COVER,Pump	CUM 199593

Small Cam and Big Cam

FIGURE 6034



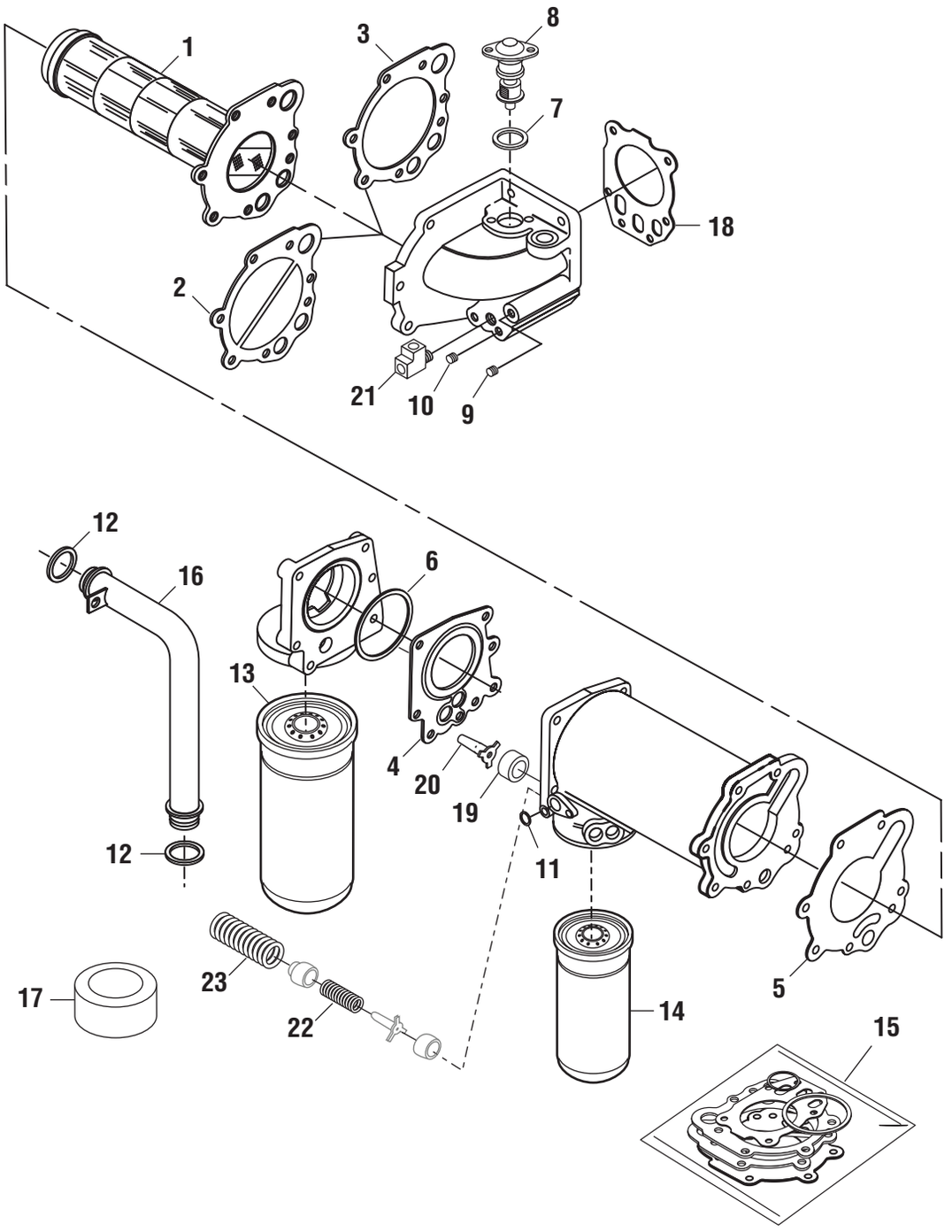
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	ESC-0025		MAK 4AX194	SCREW,Hex Head(3/8in-16 x 2-1/2in Lg)	CUM S-126
2	Call		CUM 3010596	SCREW,Captive Washer(3/8in-16 x 1-1/4in Lg)	
3	131277		CUM 211052	GASKET,Oil Cooler Cover(Low Mount)	
3	131307		CUM 218245	GASKET,Oil Cooler Cover	CUM 210865
4	131321		CUM 3010030	GASKET,Oil Cooler	CUM 211053
5	FWA-0050		MAK 36AX3	WASHER,Lock(3/8in)	CUM S-604
6	Call		CUM 108307	DRAIN	

PAI Copyright 2017

Small Cam and Big Cam

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
7	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4in NPT)	CUM 3008466
8	EPP-3566		MAK 49AX226	PLUG,Threaded(1in NPT)	CUM S-962
8	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM 3008469
9	181864		CUM 3023512	VALVE,Bypass	
10	121181		CUM 3045979	O-RING,Bypass Valve	CUM 3028333
11	Call		CUM 3018673	DISC,Bypass	
12	141405		CUM 142608	COOLER,Oil(Non-FFC, Piston Cooled)(16in Lg) Includes Oil Cooler (1) Installation Kit (1)131397	
12	141420		CUM 3021581	COOLER,Oil(12-5/8in Lg) Includes Oil Cooler (1) Installation Kit (1)131431	CUM 208149
13	121221		CUM 3007713	O-RING(Use w/ Retainer)	CUM 148295
13	121223		CUM 3019116	O-RING(Non-FFC, NTC-230)	CUM 110841
14	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
15	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
16	042001		CUM 3006745	RETAINER	CUM 142616
17	Call		CUM 3023994	PLUG,Retainer	
18	Call		CUM 202128	SPRING,Bypass	
19	050510		CUM 3889310	FILTER,Oil,Spin-on	CUM 3313279
20	050610		CUM 3300908	ADAPTER	
21	121273		CUM 3308958	GASKET	
22	Call		CUM 138045	BOLT,Center	
23	040024		CUM 200861	WASHER,Plain(5/8in)	CUM 69938
24	BWA-0054		MAK 36AX7X	WASHER,Lock(5/8in)	CUM S-603
25	121230		CUM 173368	O-RING,Seal	
25	Call		CUM 3302630	O-RING,Seal	
26	Call		CUM S-106-C	SCREW,Hex Head(3/8in-16 x 4-3/4in Lg)	
27	Call		CUM 3010597	SCREW,Captive(3/8in-16 x 3-3/4in Lg)	
28	131311		CUM 3008017	GASKET,Cooler Support	CUM 121779
29	ECH-8692		MAK 11MF2634P10	HOSE,Plain	CUM 3018059
30	Call		CUM 3000907	TUBE,Water Transfer	
31	042123		CUM 3008690	CLAMP,Hose(1-3/4in to 2-1/4in)	
32	Call		CUM 3013904	SCREW,Captive(1/2in-20 x 5/8in Lg)	
33	131365		CUM 3069098	GASKET,Connection	CUM 69316
34	141406		CUM 110848	COOLER,Oil(Non-FFC, Non-Piston Cooled) (6-1/2in Lg)	CUM 116209
35	141302		CUM 127558	PLUNGER,Oil Pressure Relief(FFC)	
36	121085		CUM 3035580	ASSEMBLY,Hose(10in Lg)	
37	121236		CUM 43463-A	O-RING	
38	121217		CUM 212161	O-RING	
39	131385		CUM 9221	GASKET	
40	121208		CUM 100328	O-RING	
41	131291		CUM 146309	GASKET	
42	131302		CUM 203922	GASKET	
43	131399		N/A	KIT,Oil Cooler Installation(For Oil Cooler CUP 142608) Includes Gaskets (1)131278 (4)131277 (1)131311 (1)131321 Retainers (2)042001 O-Rings (1)121217 (2)121221	
44	131431		CUM 3801198	KIT,Oil Cooler Installation(FFC Engine) (For Oil Cooler CUP 141420)(Major Kit) Includes O-Rings (3)121217 (2)121221 Gaskets (1)131307 (1)131311 (1)131321 (1)131365 Retainers (2)042001	
45	131397		N/A	KIT,Oil Cooler Installation(Non-FFC Engine) (For Oil Cooler CUP 141405) Includes Gaskets (1)131385 (1)131291 (1)131302 (1)131311 O-Rings (2)121208 (1)121271 (1)121236 (2)121221 Retainers (2)042001	
46	131398		N/A	KIT,Oil Cooler Installation(FFC Engine) (For Oil Cooler CUP 141420) (Ford Application, Low Mount) Includes O-Rings (3)121217 (2)121221 Gaskets (1)131307 (1)131311 (1)131321 Retainers (2)042001	
47	Call		CUM 3012475	SCREW,Captive Washer(3/8in-16 x 2-1/4in Lg)	

FIGURE 6006

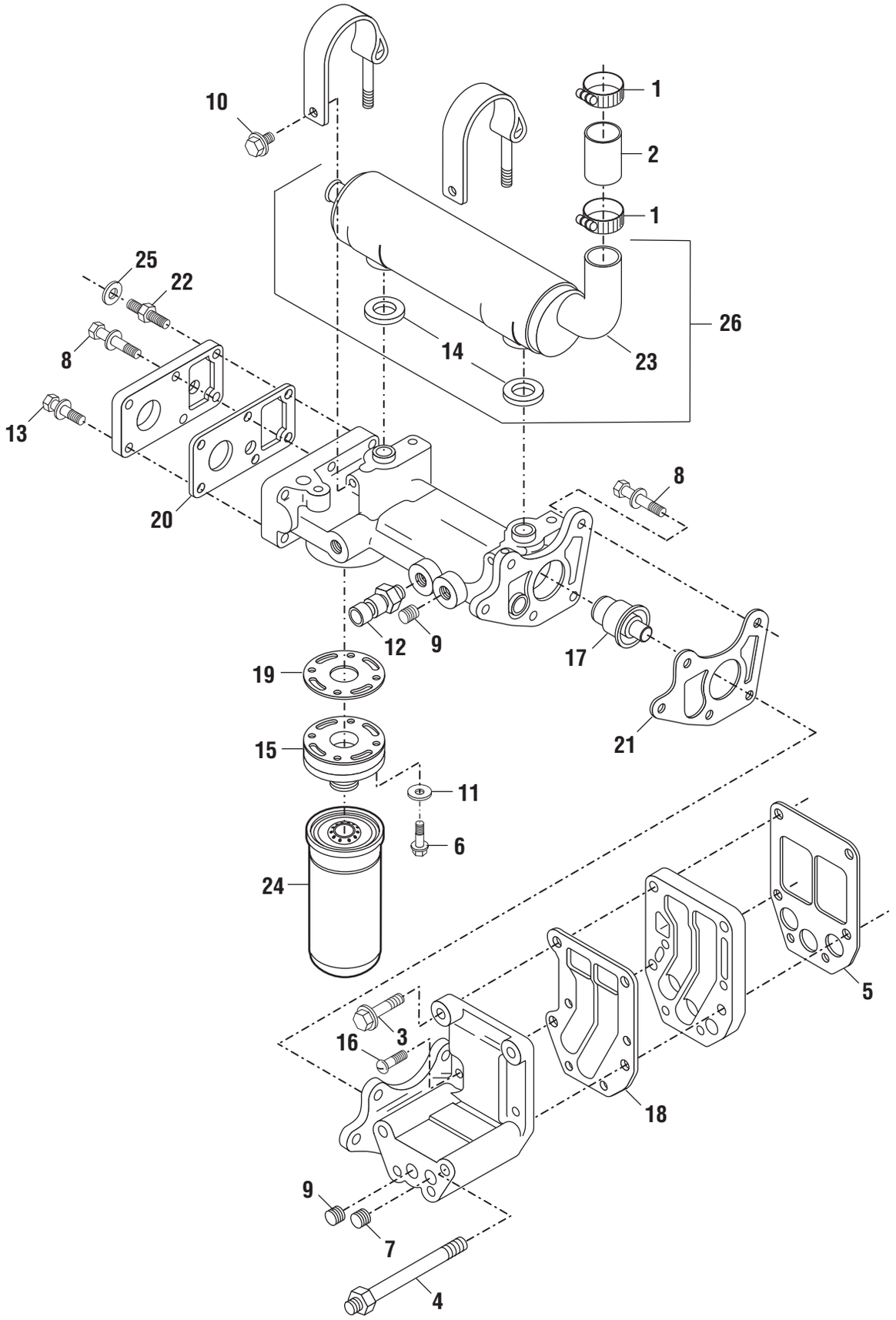


PAI Copyright 2017

86NT and 88NT

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141403		CUM 3052514	CORE,Oil Cooler (Single Pass)	
1	141407		CUM 3045483	CORE,Oil Cooler (Dual Pass)	
2	131352		CUM 3047464	GASKET,Cooler,Mounting (Dual Pass)	
3	131547		CUM 3054445	GASKET,Mounting(Single Pass)	
4	131363		CUM 3069014	GASKET,Oil Cooler Cover	CUM 3052513
5	131353		CUM 3047465	GASKET,Oil Cooler Housing	
6	136009		CUM 3018695	SEAL,Rectangular Ring	
7	121181		CUM 3045979	SEAL,O-Ring	
8	181864		CUM 3023512	VALVE,Bypass	
9	ECP-3477		MAK 6635-14HP5ONS	PLUG,Pipe(Threaded)(1/4in NPT) (w/ 121252 Seal)	CUM 3008466
10	EPP-3574		MAK 49AX233	PLUG,Pipe(Threaded)(3/8in NPT) (w/ 121227 Seal)	CUM 3013786
11	121226		CUM 3030808	SEAL,O-Ring	
12	121217		CUM 212161	SEAL,O-Ring	
13	050515		CUM 3304232	FILTER,Oil	CUM 3889311
14	050510		CUM 3889310	FILTER,Oil	
15	131432		CUM 3801199	KIT,Oil Cooler Installation (For Oil Cooler 141707 and 141403) Includes O-Rings (2)121217 (1)121226 (1)121181 Gaskets (1)131311 (1)131353 (1)131352 (1)131363 (1)131547 Seals (1)136009 Sleeve (1)136017	
16	181921		CUM 3024666	TUBE,Water	
17	121180		CUM 3034579	SEAL,Grommet(Black w/ Yellow Stripe)	
17	136017		CUM S-1003-A	SLEEVE(Light Blue)	
18	131311		CUM 3008017	GASKET,Oil Cooler Support	
19	141429		CUM 3030804	VALVE,Bypass	
20	141308		CUM 3030806	PLUNGER,Bypass	
21	840135		PKR 2225P-4	FITTING,Tee	CUM 3818101
22	**141334**		**CUM 3030803**	**SPRING,Oil Cooler**	
23	**141338**		**CUM 3039296**	**SPRING,Oil Cooler**	

FIGURE 6016

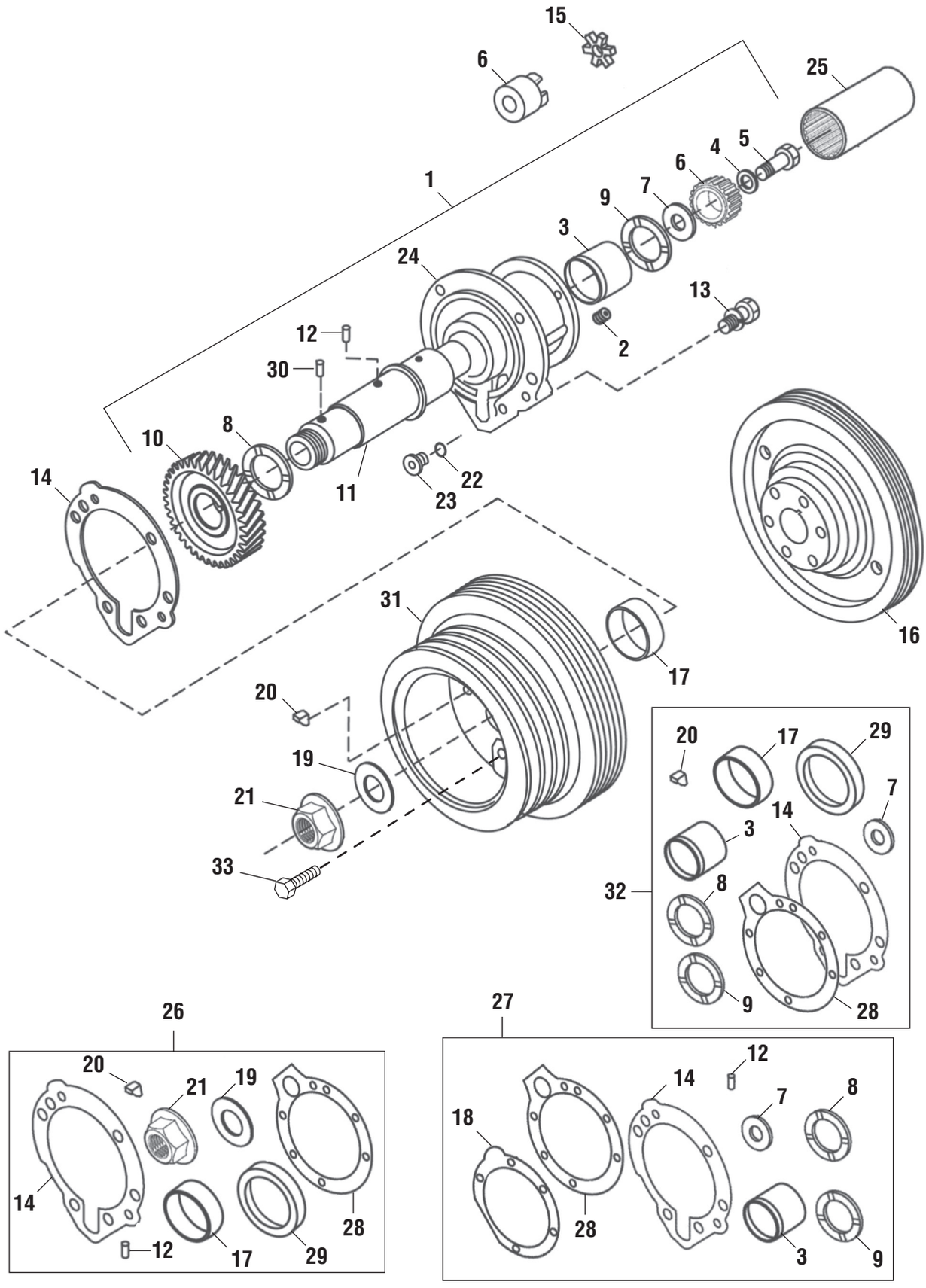


PAI Copyright 2017

88NT

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042124		CUM 3026806	CLAMP,Hose(1-3/8in - 1-3/4in)	
2	121043		CUM 3071159	HOSE.Plain	
3	Call		CUM 3040837	SCREW,Captive Washer Cap (3/8in-16 x 2-1/4in)	
4	Call		CUM 3058683	SCREW,Captive Washer Cap (3/8in-16 x 6in)	
5	131369		CUM 3069176	GASKET,Oil Cooler Support	CUM 3051991
6	Call		CUM 212535	SCREW,Twelve Point Cap (5/16in-18 x 1in)	
7	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4in NPT)	CUM S-910-B
8	Call		CUM 3011716	SCREW,Captive Washer Cap (3/8in-16 x 1-3/8in)	
9	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
10	Call		CUM 3015283	SCREW,Captive Washer Cap (5/16in-18 x 3/4in)	
11	Call		CUM 3017915	WASHER,Plain(1/4in)	
12	Call		CUM 3042619	NIPPLE,Coupling	
13	Call		CUM 3042889	SCREW,Captive Washer Cap (3/8in-16 x 1-7/8in)	
14	136014		CUM 3049302	SEAL,Rectangular Ring	
15	Call		CUM 3918334	HEAD,Lube Oil Filter	
16	Call		CUM 3055083	SCREW,Self Tapping Metal (1/4in-20 x 1in)	
17	181865		CUM 3059408	THERMOSTAT	CUM 3048784
18	131486		CUM 3064195	GASKET,Oil Cooler Support	CUM 3051993
19	131468		CUM 3070478	GASKET,Filter Head	CUM 3052127
20	131356		CUM 3052136	GASKET,Connection	
21	131423		CUM 3064196	GASKET,Connection(Early Style)(4 Bolt)	
21	131487		CUM 3064823	GASKET,Connection(Current Style)(5 Bolt)	
22	Call		CUM 3065948	SCREW,Captive Washer Cap (3/8in-16 x 1-1/2in)	
23	141430		CUM 3066842	COOLER,Oil	CUM 3051997
24	050511		CUM 3318853	FILTER,Oil Element	CUM 3825970
25	Call		CUM 108330	WASHER,Plain	
26	141418		N/A	KIT,Oil Cooler Includes Oil Cooler (1)141430 Seals (2)136014	

FIGURE 6008

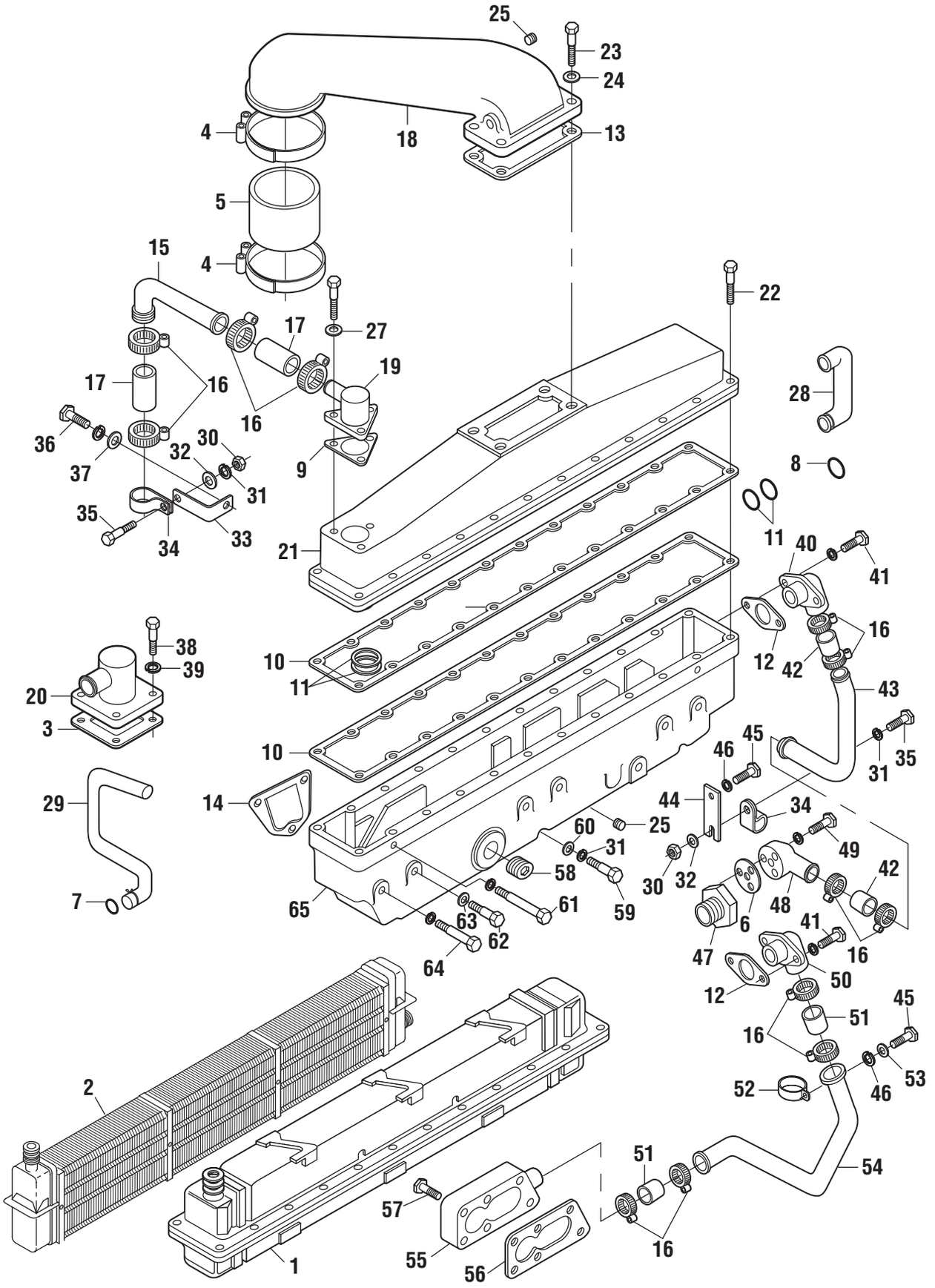


PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180905		CUM 3005133	DRIVE,Accessory(Iron Cast Housing) Includes Housing Assembly (1)180915 Washers (1)040022 (1)042020 (1)151521 (1)151522 Screw (1)040025 Coupling (1)180926 Gear (1)180925 Shaft (1)180906 Pin (1)045021 Gasket (1)131366	
2	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
3	151489		CUM 116391	BUSHING	
4	040022		CUM 170664	WASHER(3/8in ID)	
5	040025		CUM 3000173	SCREW(3/8in-16 x 1in)(Drilled)	
6	180926		CUM 3000174	COUPLING,Spline	
6	180930		CUM 3000175	COUPLING(w/o Air Compressor)	
6	Call		CUM 190769	COUPLING,Spider	
7	042020		CUM 3014103	WASHER	
8	151521		CUM 3026556	WASHER,Thrust	
9	151522		CUM 3026557	WASHER,Thrust	
10	180925		CUM 142689	GEAR	
11	180906		CUM 3000171	SHAFT	
12	045021		CUM 3034438	PIN,Groove	
13	Call		CUM 3010590	SCREW	
14	131366		CUM 3069101	GASKET,Mounting	
15	180927		CUM 162426	SPIDER,Coupling(Black)	
15	180929		CUM 3046200	SPIDER,Coupling(White)	
16	181895		CUM 3023473	PULLEY,Accessory Drive (Multi-Groove w/ Sleeve)	
17	136022		CUM 190397	SLEEVE,Wear	
18	131368		CUM 4026171	GASKET,Fuel Pump Mounting	
19	042021		CUM 193136	WASHER(Steel)	CUM 118350
19	136049		CUM 3200287	SEAL,Keyway(Rubberized Washer) (Use w/ Woodward Governor)	
20	136019		CUM 3008947	SEAL,Keyway	
21	040061		CUM 3012526	NUT,Flange	
22	121227		CUM 3037537	O-RING,Seal	
23	ECP-3474		MAK 6635-6HP50NS	PLUG,Threaded	CUM 3040813
24	180915		CUM AR45724	ASSEMBLY,Housing	
25	180928		CUM 199349	SLEEVE,Spline Coupling	
26	180923		N/A	KIT,Accessory Drive Installation Includes Gaskets (1)131366 (1)131367 Sleeve (1)136022 Seals (1)136006 (1)136019 Nut (1)040061 Washer (1)042021 Pin (1)045021	
27	151540		N/A	KIT,Accessory Drive Repair(Minor) Includes Bushing (1)151489 Pin (1)045021 Washers (1)042020 (1)151522 (1)151521 Gaskets (1)131366 (1)131367 (1)131368	
28	131367		CUM 3069102	GASKET,Mounting	
29	136006		CUM 3004316	SEAL,Accessory Drive	
30	045024		CUM 70550	PIN,Dowel(5/16 x 1/2)	
31	Call		CUM 210926	PULLEY,Accessory Drive	
32	151541		N/A	KIT,Accessory Drive Repair(Major) Includes Bushings (1)151489 (1)151513 Sleeve (1)136022 Gaskets (1)131366 (1)131367 Seals (1)136006 (1)136019 Washers (1)042020 (1)151521 (1)151522	
33	040071		CUM 175833	SCREW(3/8in-16 x 1-1/8in Hex)	CUM 3970500

Small Cam - FFC and Big Cam I, II, III - FFC

FIGURE 6015



New Parts are in BOLD text

PAI Copyright 2017

Small Cam - FFC and Big Cam I, II, III - FFC

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181825		CUM 214836	CORE,Aftercooler(Flanged)(SC)	
2	181827	181827E	CUM 3068724	CORE,Aftercooler(Current Style)(BC)	
3	131297		CUM 195950	GASKET,Housing	
3	131665		CUM 3008024	GASKET,Housing(4 hole mount)	
4	042003		CUM 208326	CLAMP,Air Crossover Hose(3-21/32in)	
5	045001		CUM 202994	HOSE,Turbo Connection (3-1/2in ID x 3-1/2in Lg)	
5	045015		CUM 3058396	HOSE,Turbo Connection (3-3/8in ID x 2-3/4in Lg)	
5	045019		CUM 3060613	HOSE,Turbo Connection (3-3/8in ID x 3-1/2in Lg)	
5	045023		CUM 3058397	HOSE,Turbo Connection (2-3/4in ID x 3-1/2in Lg)	
6	131411		CUM 215045	GASKET,Water Outlet	
7	121218		CUM 217037	O-RING,Front Water Crossover	
8	121211		CUM 109080	O-RING,Air Intercooler	
9	131304		CUM 215044	GASKET,Connection Water Transfer	
10	131410		CUM 216486	GASKET,Aftercooler Housing	CUM 3077201
11	121216		CUM 195952	O-RING,Aftercooler Core	
12	131342		CUM 3032348	GASKET,Water Outlet Connection	
13	131306		CUM 216487	GASKET,Air Crossover Connection	
14	131312		CUM 3008591	GASKET,Intake Manifold	
15	Call		CUM 3018099	TUBE,Water Transfer	
16	ECL-1958		MAK 83AX627	CLAMP (11/16in x 1-1/2in Lg)	CUM 43828A
17	121042		CUM 200517	HOSE,Connection,Coolant(3in Lg)	
18	Call		CUM 3018686	CROSSOVER,Air(Aluminum)	
18	Call		CUM 3043984	CROSSOVER,Air(Steel)	
19	Call		CUM 3013296	CONNECTION,Water Outlet	
20	Call		CUM 215038	CONNECTION,Water Outlet (Use w/ Cover CUM 195763)	
20	Call		CUM 3019999	CONNECTION,Water Outlet(4 hole) (Use w/ Cover CUM 218544)	
21	Call		CUM 3046170	COVER,Aftercooler	
21	Call		CUM 195763	COVER,Aftercooler	
21	Call		CUM 218544	COVER,Aftercooler	
22	Call		CUM 3005508	SCREW,Hex Flange Head (5/16in-18 x 7/8in)	
23	Call		CUM S-106-D	SCREW,Crossover (3/8in-16 x 1-1/4in)	
24	Call		CUM S-679	WASHER,Flat(3/8in)	
25	EPP-3573		MAK 49AX230	PLUG,Threaded(1/8in NPT)	CUM 70295, CUM S-911-B
26	131412		N/A	KIT,Aftercooler(SC,BC I,II) Includes Gaskets (1)131297 (1)131304 (1)131306 (1)131312 (1)131342 (1)131410 (1)131411 O-Rings (1)121211 (4)121216	
27	042090		CUM S-684	WASHER,Flat(Copper)(1/4in)	
28	Call		CUM 200944	CONNECTION,Water Transfer	
29	Call		CUM 215269	TUBE,Front Water Crossover	
30	Call		CUM S-223	NUT(3/8in x 16)	
31	FWA-0050		MAK 36AX3	WASHER,Lock(3/8in)	CUM S-604
32	GWA-0062		MAK 37AX472U	WASHER,Flat(3/8in)	CUM S-602
33	Call		CUM 3035607	BRACE,Tube	
34	Call		CUM 107460	CLIP	
35	ESC-0012		MAK 4AX1	SCREW(3/8in-16 x 1in)	CUM S-112
36	Call		CUM 3012481	SCREW,Captive Washer (7/16in-14 x 1-1/2in)	
37	GWA-0063		MAK 35AX1542	WASHER,Flat(7/16in)	CUM S-622
38	Call		CUM 101622	SCREW,Hex Head (5/16in-18 x 4-1/2in)	
39	EWA-0049		MAK 36AX22	WASHER,Lock(5/16in)	CUM S-605
40	Call		CUM 3028282	CONNECTION,Water Inlet	

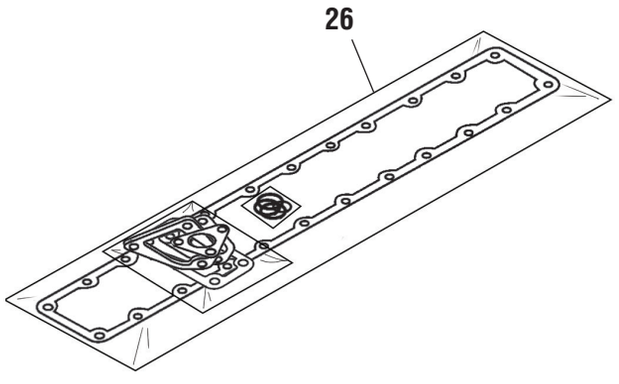
Please see following page for keys 41-66.

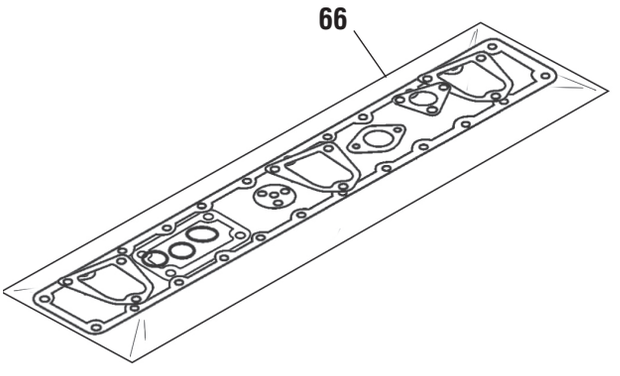
PAI Copyright 2017

New Parts are in BOLD text

Small Cam - FFC and Big Cam I, II, III - FFC

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
41	Call		CUM 3012471	SCREW,Captive Washer (3/8in-16 x 1-1/8in)	
42	121041		CUM 155789	HOSE,Tube Connecting(2-9/16in Lg)	
43	Call		CUM 3036258	TUBE,Water Transfer	
44	Call		CUM 217934	BRACE,Crossover Tube	
45	Call		CUM S-190	SCREW,Hex Head(5/8in-18 x 1in)	
46	BWA-0054		MAK 36AX7X	WASHER,Lock(5/8in)	CUM S-603
47	Call		CUM 215587	ADAPTER	
48	Call		CUM 217932	CONNECTION,Water Outlet	
49	Call		CUM 3019572	SCREW,Captive Washer (1/4in-20 x 1-3/4in)	
50	Call		CUM 3030843	CONNECTION,Water Inlet	
51	121044		CUM 3056138	HOSE,Connection,Coolant	CUM 3025874
52	Call		CUM 204263	CLIP	
53	Call		CUM S-658	WASHER,Flat(5/8in)	
54	Call		CUM 3028312	TUBE,Water Transfer	
55	Call		CUM 3028288	CONNECTION,Water Outlet	
56	131365		CUM 3069098	GASKET,Connection	
57	Call		CUM 3011342	SCREW,Captive Washer (1/4in-20 x 3/4in)	
58	EPP-3566		MAK 49AX226	PLUG,Threaded(1in NPT)	CUM S-962, CUM 3008470
59	Call		CUM 69047A	SCREW,Socket Head (3/8in-16 x 1-1/2in)	
60	EWA-0068		MAK 35AX1345	WASHER,Flat(3/8in)	CUM 63842
61	Call		CUM 3028967	SCREW,Captive Washer (3/8in-16 x 5-7/32in)	
62	Call		CUM 3030286	SCREW,Captive Washer (5/16in-18 x 1-1/2in)	
63	Call		CUM 3011610	WASHER,Flat(5/16in)	
64	Call		CUM 3011716	SCREW,Captive Washer (3/8in-16 x 1-3/4in)	
65	Call		CUM 3036811	HOUSING,Aftercooler	
66	131413		N/A	KIT,Aftercooler(BC III) Includes Gaskets (1)131304 (1)131306 (3)131312 (1)131342 (1)131410 O-Rings (1)121211 (4)121216 (1)121218	

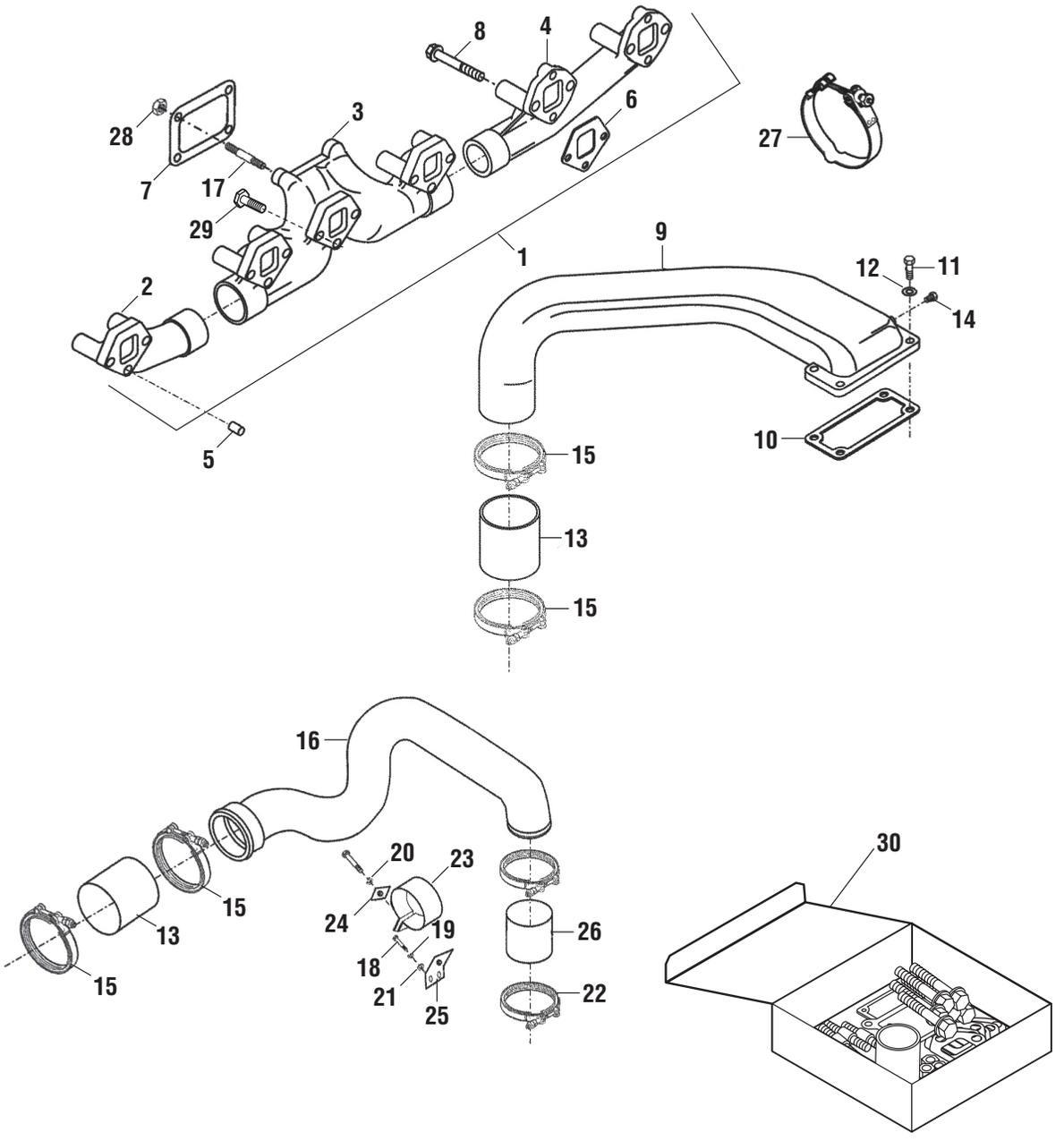




PAI Copyright 2017

Low Forward Side Mount Turbo, Ford L and LT 9000 Application

FIGURE 6018



New Parts are in BOLD text

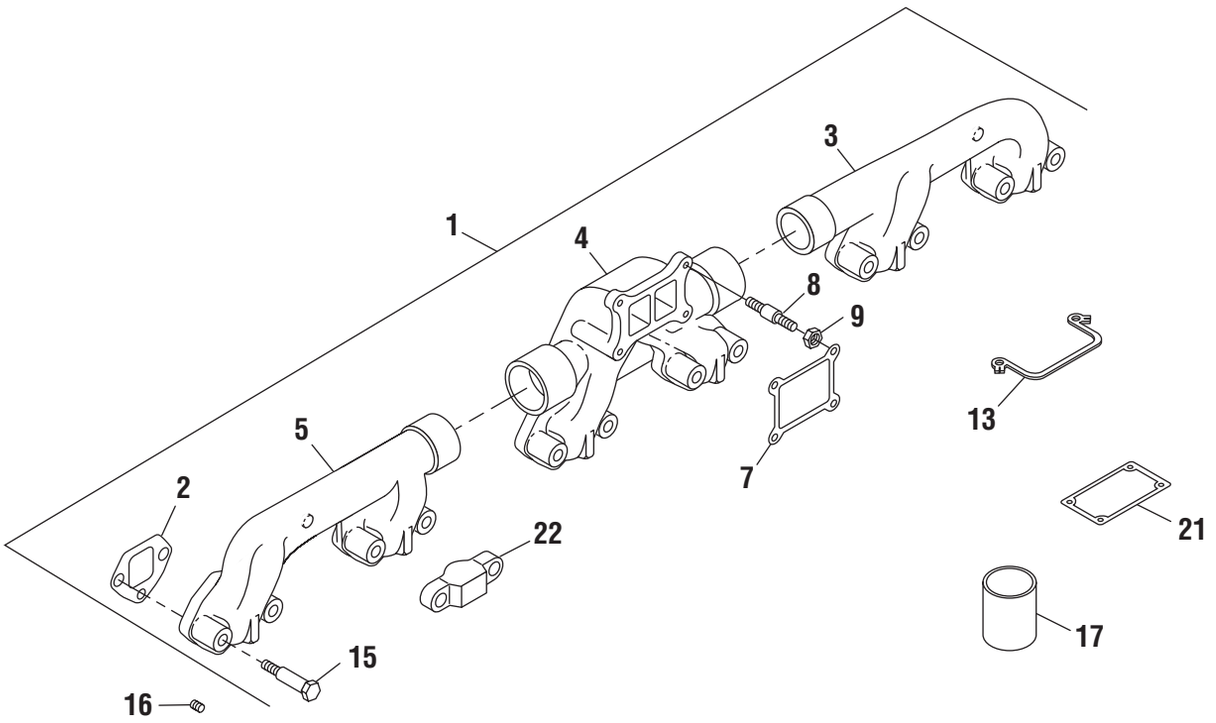
PAI Copyright 2017

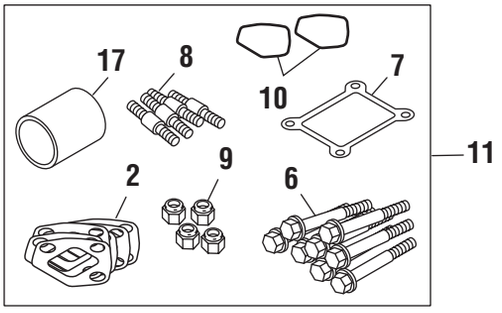
Low Forward Side Mount Turbo, Ford L and LT 9000 Application

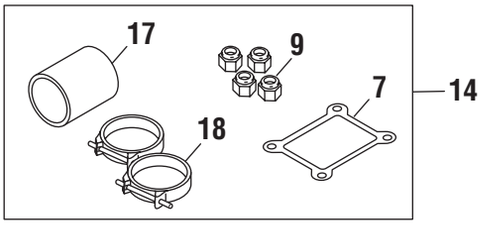
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181000		CUM 3801916	KIT,Exhaust Manifold Includes Front (1)CUM 3070424 Center (1)CUM 3050688 Rear (1)CUM 3053138 Bolts (10)040007 (2)BSC-0011 Studs (4)040008 Nuts (4)040009 Hose (1)045019 Gaskets (6)131324 (1)131370	
2	SEE KEY 1		CUM 3050688	MANIFOLD,Front (Use CUP 181000 Manifold Kit) (Manifold not sold separately)	
3	SEE KEY 1		CUM 3070424	MANIFOLD,Center (Use CUP 181000 Manifold Kit) (Manifold not sold separately)	
4	SEE KEY 1		CUM 3053138	MANIFOLD,Rear (Use CUP 181000 Manifold Kit) (Manifold not sold separately)	
5	045022		CUM 105199	PIN,Drive	
6	131324		CUM 3020943	GASKET,Exhaust Manifold	
7	131370		CUM 3069177	GASKET,Turbo Mounting	
8	040007		CUM 3031124	BOLT,Flange(7/16in-14 x 3-1/2in Lg)	
9	Call		CUM 211012	CONNECTION,Crossover	
10	131306		CUM 216487	GASKET,Connection	
10	131319		CUM 3012972	GASKET,Intake Connection	
11	GSC-0009		MAK 6AX1308X	SCREW,Cap(3/8in-16 x 1-1/4in Lg)	CUM S-130-D
12	Call		CUM S-679	WASHER,Plain	
13	045019		CUM 3060613	HOSE,Turbo(3-3/8in ID x 3-1/2in Lg)	
14	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3008465
15	042003		CUM 208326	CLAMP(3-21-32in)	
16	Call		CUM 3042534	TUBE,Air	
17	040008		CUM 3010915	STUD,Turbo	
18	Call		CUM S-118-A	SCREW,Hex Head(1/4in-20 x 5/8in Lg)	
19	EWA-0703		MAK 36AX1	WASHER,Lock	CUM S-600
20	EWA-0049		MAK 36AX22	WASHER,Lock(5/16in)	CUM S-605
21	FWA-0158		MAK 37AX471	WASHER	CUM S-631
22	Call		CUM 3040793	CLAMP(2-7/8in)	
23	Call		CUM 3043455	CLIP	
24	Call		CUM 3042456	WASHER	
25	Call		CUM 3042454	BRACE,Tube	
26	045023		CUM 3058397	HOSE,Crossover(2-3/4in ID x 3-1/2in Lg)	
27	042009		CUM 186917	CLAMP,V-Band(Turbo Exhaust)	
28	040009		CUM 3010914	NUT,Turbo Lock	
29	BSC-0011		MAK 6AX1317X	SCREW(7/16in-14 x 1-1/4in)	CUM 3031125
30	**180984**		**CUM 3800232**	**KIT,Exhaust Manifold Mounting** **Includes Hose (1)045001 Screws (4)BSC-0011** **Bolts (10)040007 Studs (4)040111 Nuts (4)040009** **Gaskets (6)131324 (1)131306 (1)131370**	

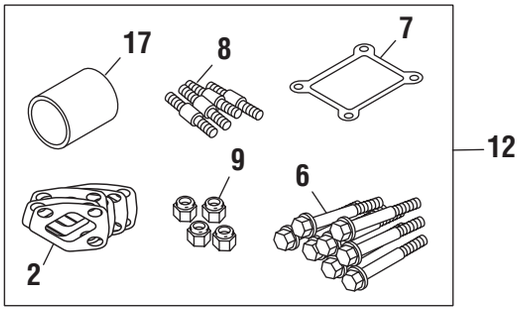
Current Style

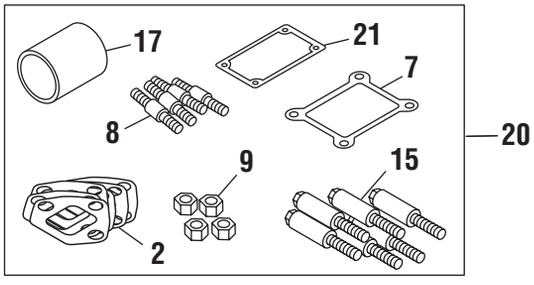
FIGURE 6024











Please note:

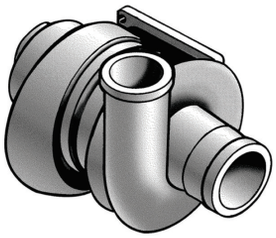
*** Do not use washers or lock plates with part CUM 3043647 / CUP 040007 capscrews. These capscrews are self locking. An anti-seize compound must be applied to the capscrew threads before installation. Torque the cap screw to 60 foot pounds.**

PAI Copyright 2017

Current Style

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181026		CUM 3071485	KIT,Exhaust Manifold(Current) (Low Mounting Boss) Includes Front Manifold (1)181004 Center Manifold (1)181025 Rear Manifold (1)181002 Mounting Kit (1)181010	
2	131324		CUM 3020943	GASKET,Manifold Mounting	
3	181004		CUM 3065024	MANIFOLD,Front(Low Boss)	
4	181025		CUM 3062566	MANIFOLD,Center(Low Boss)	
5	181002		CUM 3062568	MANIFOLD,Rear(Low Boss)	
6	040007		CUM 3031124	BOLT,Mounting Flange (7/16in-14 x 3-1/2in Lg)	CUM 3043647
7	131370		CUM 3069177	GASKET,Turbo	
7	131661		CUM 114753	GASKET,Turbo(6 hole)	CUM 102086
8	040008		CUM 3010915	STUD,Turbo Mounting	
9	040009		CUM 3010914	NUT,Turbo Lock	
10	180990		CUM 3027653	RING,Sealing(Old Style)	
11	180986		N/A	KIT,Mounting Hardware (Old Style, High Boss Mounting w/ Sealing Rings) Includes Nuts (4)040009 Studs (4)040008 Gaskets (6)131324 (1)131370 Bolts (12)040007 O-Rings (2)180990 Hose (1)045001	
12	180985		N/A	KIT,Mounting Hardware (Old Style, High Boss Mounting) Includes Nuts (4)040009 Studs (4)040008 Gaskets (6)131324 (1)131370 Bolts (12)040007 Hose (1)045001	
13	042000		CUM 116982	LOCK(Log Manifold Only)	
14	131414		N/A	KIT,Turbo Installation (High Mounting Boss) Includes Hose (1)045001 Clamps (2)042003 Gasket (1)131370 Nuts (4)ENU-0188	
15	040027		CUM 3067930	ASSEMBLY,Screw & Spacer (Use w/ Towerless Exhaust Manifold)	
16	045022		CUM 105199	PIN,Drive(Grooved)	
17	045001		CUM 202994	HOSE,Turbo Connection(3-1/2in ID x 3-1/2in Lg)	
18	042003		CUM 208326	CLAMP,Air Crossover Hose(3-21/32in)	
19	ENU-0188		MAK 21AX852	NUT,Locking(3/8in-24)	
20	181010		CUM 3803271	KIT,Mounting Hardware(Low Mounting Boss) Includes Gaskets (6)131324 (1)131370 (1)131306 Hose (1)045001 Nuts (4)040009 Studs (4)040111 Screw Assembly (12)040027	
21	131306		CUM 216487	GASKET,Crossover	
22	180991		CUM 200919	CLAMP,Manifold	CUM 67360

FIGURE 6027



Please note:

1. **Check oil feed line for any restrictions.**
2. **Check oil return line for any restrictions that would block the oil from draining back into the engine.**
3. **Check air filter.**
4. **Always relube Turbocharger before starting engine.**
5. **The most common failures are due to low oil pressure, contaminated oil and hot shut down.**

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
1	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
2	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
3	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
4	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
5	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
6	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
7	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
8	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
9	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
10	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	ETC-9295 CUM 3003708 SCH 193903 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
11	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 SCH 193903 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
13	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
14	N/A	N/A	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A
16	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
18	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
19	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
20	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
21	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
23	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
25	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
69	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 97916	N/A
70	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
71	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
75	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
76	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A
77	N/A	N/A	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A
85	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
88	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
89	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
90	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
91	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
92	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
93	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
101	N/A	N/A	N/A	N/A SCH 196046	N/A
102	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
104	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
107	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
108	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
109	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
113	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
115	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
117	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A
120	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
123	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
125	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
132	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
133	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
135	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
144	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
146	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
147	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
152	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
154	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
155	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
156	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A	N/A
160	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
161	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
162	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
163	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
164	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
166	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
168	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
173	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
174	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
175	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
176	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
178	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
180	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
181	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
182	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
187	N/A	N/A	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A
188	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
189	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
190	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
194	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
196	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
197	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
198	N/A	N/A	N/A	N/A	N/A
199	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
201	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
202	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
204	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
205	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
207	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
215	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
217	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
220	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
221	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
222	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
226	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
227	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
230	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
233	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
246	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
248	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
249	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A SCH 196046	N/A
250	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
254	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
256	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
259	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
260	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
266	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
267	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
270	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A SCH 196046	N/A
271	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
272	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
276	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
277	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A SCH 196046	N/A
278	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
280	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
281	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
285	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
288	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
294	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
298	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
299	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
300	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
306	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A SCH 196046	N/A
307	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
308	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
309	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
310	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
314	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
315	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
316	ETC-9291 / EM92910 AIR 144402-0000 CUM 3520600 CUM 3521053 CUM 3521830 CUM 3522865 CUM 3522866 CUM 3523272 CUM 3523273 CUM 3524206 CUM 3801476 CUM 3801613 CUM 3801617	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	340-380 HP USE: CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390 ABOVE 380 HP USE: ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
317	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
318	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
319	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801614 CUM 3520698 CUM 3803670 CUM 3521054 SCH 196464 CUM 3522867 CUM 3532819 CUM 3801477	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
322	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
323	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
324	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
325	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
326	ETC-9293 / EM92930 AIR 144403-0000 CUM 3532819 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803287 CUM 3527693 SCH 167050 CUM 3529040 CUM 3803279	N/A	N/A	ETC-9297 CUM 3007688 CUM 3801936 CUM 3018066 SCH 196390 CUM 3024740 CUM 3032061
327	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
328	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
329	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
331	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
332	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A SCH 196046	N/A
338	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
339	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
344	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
345	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
346	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
349	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391
353	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A

PAI Copyright 2017

New Parts are in BOLD text

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
354	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
358	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
359	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
360	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
361	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
362	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
363	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
364	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A
365	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
366	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391
369	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
370	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
371	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
372	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
373	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
374	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
375	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
376	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391
380	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A SCH 196046	N/A
381	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
382	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391
384	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
393	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
394	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
395	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
396	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
397	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900
402	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
407	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
408	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
411	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
412	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
414	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
416	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
431	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
432	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
433	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
436	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
448	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A	N/A
449	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
450	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
452	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
453	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
454	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050 or ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
455	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
456	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A SCH 196046	N/A
457	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050 or ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	ETC-9296 CUM AR12789 CUM AR45428 CUM 3002723 CUM 3011902 CUM 3023900 CUM 3024741 CUM 3025391
458	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
459	N/A	N/A	N/A	N/A	N/A

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
460	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
461	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
462	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
463	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
466	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
467	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
468	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
469	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
470	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
471	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
472	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
473	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
481	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
482	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
483	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
485	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
488	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
489	N/A	N/A	N/A	N/A	N/A
490	N/A	N/A	N/A	N/A	N/A
491	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
492	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
494	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A SCH 196046	N/A
495	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
497	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	ETC-9295 CUM 3003708 CUM 3013679 CUM 3018067 CUM 3018068 CUM 3029515 CUM 3801989 SCH 193903	N/A	N/A
498	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A SCH 196046	N/A
499	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
506	N/A	N/A	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A
509	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
510	ETC-9292 / EM92920 AIR 144404-0000 CUM 3801475 CUM 3520659 CUM 3801599 CUM 3521052 SCH 196463 CUM 3522871 CUM 3522872 CUM 3524202	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
511	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
512	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
516	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
517	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
529	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
530	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
531	ETC-9294 / EM92940 AIR 144400-0000 CUM 3521551 CUM 3524208 CUM 3522861 CUM 3801482 CUM 3522862 CUM 3801597 CUM 3523415 CUM 3801598 CUM 3523822 SCH 196800	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
536	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
538	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
539	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
540	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	N/A
541	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391
542	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801614 CUM 3520698 CUM 3803670 CUM 3521054 SCH 196464 CUM 3522867 CUM 3532819 CUM 3801477	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
543	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
545	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3029514 CUM AR45428 CUM 3032068 CUM 3002723 CUM 3801904 CUM 3011902 SCH 196389 CUM 3023900 CUM 3024741 CUM 3025391
547	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
553	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050 or ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
554	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050 or ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
558	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A SCH 196046	N/A
566	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
567	ETC-9293 / **EM92930** AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
572	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
573	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
574	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
575	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
579	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
581	N/A	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
582	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801614 CUM 3520698 CUM 3803670 CUM 3521054 SCH 196464 CUM 3522867 CUM 3532819 CUM 3801477	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
583	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801614 CUM 3520698 CUM 3803670 CUM 3521054 SCH 196464 CUM 3522867 CUM 3532819 CUM 3801477	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
585	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
588	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
606	N/A	N/A	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A
609	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
611	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
612	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
614	N/A	N/A	N/A	N/A	N/A
615	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
616	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A SCH 196046	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
617	ETC-9292 / EM92920 AIR 144404-0000 CUM 3524202 CUM 3520659 CUM 3801475 CUM 3521052 CUM 3801599 CUM 3522871 SCH 196463 CUM 3522872	N/A	N/A	N/A SCH 196046	N/A
625	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
632	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
633	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	N/A	N/A
634	N/A	N/A	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A
636	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
637	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
642	N/A	N/A	N/A	N/A	N/A
647	N/A	N/A	N/A	N/A	N/A
650	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
651	N/A	N/A	N/A	N/A	N/A
657	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
669	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
670	N/A	N/A	N/A	N/A	N/A
673	N/A	N/A	N/A	N/A	N/A
674	N/A	N/A	N/A	N/A	N/A
675	ETC-9255 AIR 144407-0000 CUM 3801591 CUM 3523417 SCH-167049 CUM 3524178	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390
676	N/A	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390
677	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
695	N/A	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
699	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
700	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	ETC-9256 / EM92560 AIR 144700-0000 SCH 167050 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287	N/A	N/A	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
701	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801614 CUM 3520698 CUM 3803670 CUM 3521054 SCH 196464 CUM 3522867 CUM 3532819 CUM 3801477	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
706	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
718	N/A	N/A	N/A	N/A	N/A
731	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
732	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
733	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
743	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
744	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
745	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
746	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 380328 SCH 167050	N/A	N/A	N/A

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
749	ETC-9255 AIR 144407-0000 CUM 3801591 CUM 3523417 SCH-167049 CUM 3524178	N/A	N/A	N/A	N/A
757	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
769	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
794	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
795	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936 SCH 196390
796	ETC-9255 AIR 144407-0000 CUM 3801591 CUM 3523417 SCH-167049 CUM 3524178	N/A	N/A	N/A	N/A
797	ETC-9255 AIR 144407-0000 CUM 3801591 CUM 3523417 SCH-167049 CUM 3524178	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390
798	N/A	N/A	N/A	N/A	N/A
806	N/A	N/A	N/A	N/A	N/A
808	N/A	N/A	N/A	N/A	N/A
811	N/A	N/A	N/A	N/A	N/A
812	ETC-9255 AIR 144407-0000 CUM 3523417 CUM 3524178 CUM 3801591 SCH-167049	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
813	ETC-9255 AIR 144407-0000 CUM 3801591 CUM 3523417 SCH-167049 CUM 3524178	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
814	N/A	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390
821	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
827	N/A	N/A	N/A	N/A	N/A
832	N/A	N/A	N/A	N/A	N/A
833	N/A	N/A	N/A	N/A	N/A
838	N/A	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	N/A
840	N/A	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390
849	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A	N/A
880	N/A	N/A	N/A	N/A	N/A
891	ETC-9294 / EM92940 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	N/A	N/A	N/A	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741
903	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
904	N/A	N/A	N/A	N/A	N/A
905	ETC-9255 AIR 144407-0000 CUM 3523417 CUM 3524178 CUM 3801591 SCH-167049	N/A	N/A	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
908	N/A	N/A	N/A	N/A	N/A
909	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
910	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A

New Parts are in BOLD text

PAI Copyright 2017

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
963	N/A	ETC-9293 / EM92930 AIR 144403-0000 CUM 3801477 CUM 3520698 CUM 3801614 CUM 3521054 CUM 3803670 CUM 3522867 SCH 196464 CUM 3532819	N/A	N/A	N/A
972	N/A	N/A	N/A	N/A	N/A
988	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
989	N/A	N/A	N/A	N/A	N/A
990	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
991	N/A	N/A	N/A	N/A	N/A
992	N/A	N/A	N/A	N/A	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390
1167	N/A	N/A	N/A	N/A	N/A
1171	N/A	N/A	N/A	N/A	N/A
1179	N/A	N/A	N/A	N/A	N/A
1181	N/A	N/A	N/A	N/A	N/A
1182	N/A	N/A	N/A	N/A	N/A
1183	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
1185	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1186	N/A	N/A	N/A	N/A	N/A
1187	N/A	N/A	N/A	N/A	N/A
1188	N/A	N/A	N/A	N/A	N/A
1193	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1194	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1204	N/A	ETC-9257 AIR 144702-0000 CUM 3803108 CUM 3526801 SCH 167713 CUM 3527046 CUM 3529032 CUM 3803055	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3525325 CUM 3528281 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
1205	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	ETC-9256 / EM92560 AIR 144700-0000 CUM 3527693 CUM 3529040 CUM 3803279 CUM 3803287 SCH 167050	N/A	N/A	N/A
1210	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1211	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1215	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1252	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
1255	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	ETC-9297 CUM 3007688 CUM 3801936 CUM 3018066 SCH 196390 CUM 3024740 CUM 3032061
1256	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1280	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1310	N/A	N/A	N/A	N/A	N/A
1314	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1315	N/A	N/A	N/A	N/A	N/A
1350	N/A	ETC-9294 AIR 144400-0000 CUM 3524208 CUM 3521551 CUM 3801482 CUM 3522861 CUM 3801597 CUM 3522862 CUM 3801598 CUM 3523415 SCH 196800 CUM 3523822	N/A	N/A	N/A
1381	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1382	N/A	N/A	N/A	N/A	N/A

PAI Copyright 2017

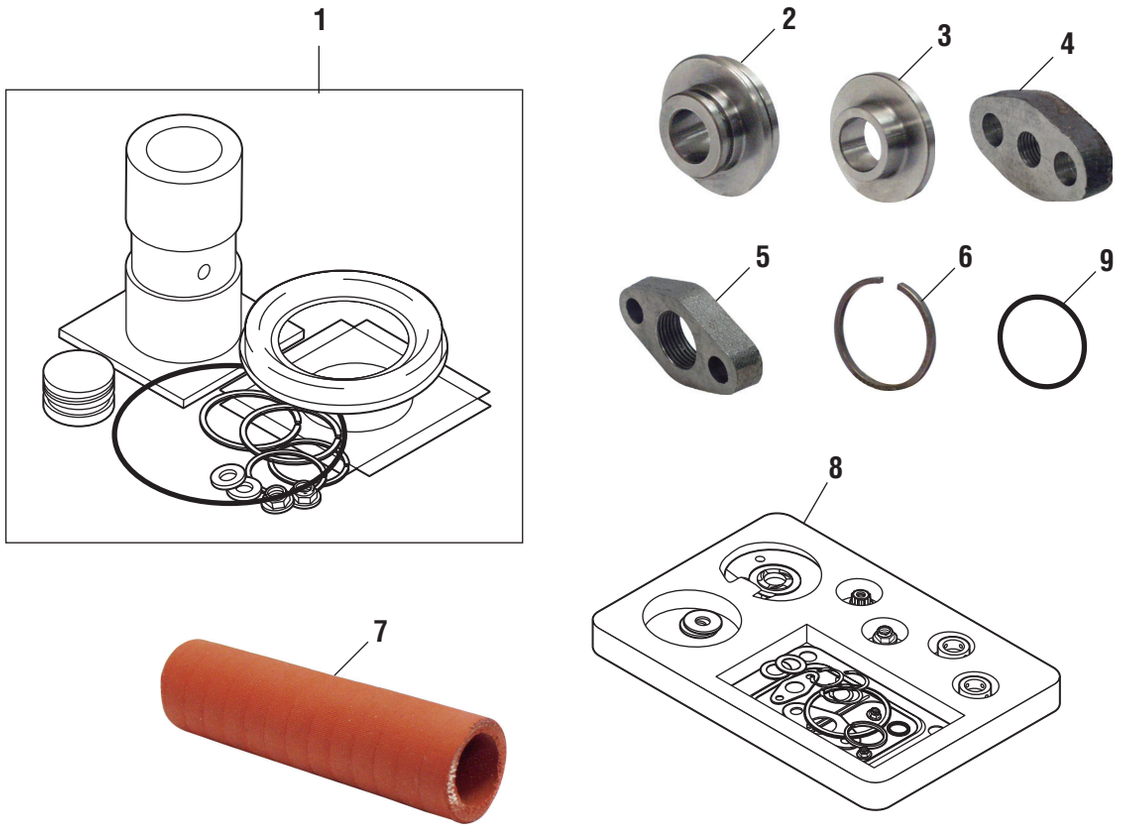
CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
1383	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1409	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
1415	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1416	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1417	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
1418	N/A	ETC-9256 / EM92560 AIR 144700-0000 CUM 3803279 CUM 3527693 CUM 3803287 CUM 3529040 SCH 167050	N/A	N/A	N/A
1421	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1425	N/A	N/A	N/A	N/A	N/A
1436	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1501	N/A	N/A	N/A	N/A	N/A
1502	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1546	ETC-9291 / EM92910 AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
1557	N/A	N/A	N/A	N/A	N/A
1576	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A

Turbocharger Applications by CPL

CPL #	HT3B TURBO	BHT3B TURBO	4LHR TURBO BELOW 290 HP	4LHR TURBO 290 - 340 HP	4LHR TURBO ABOVE 340 HP
1594	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1600	N/A	ETC-9258 AIR 144704-0000 CUM 3803199 CUM 3527547 SCH 167715 CUM 3529035	N/A	N/A	N/A
1650	ETC-9291 / **EM92910** AIR 144402-0000 CUM 3523273 CUM 3520600 CUM 3524206 CUM 3521053 CUM 3801476 CUM 3521830 CUM 3801613 CUM 3522865 CUM 3801617 CUM 3522866 SCH 196441 CUM 3523272	N/A	N/A	N/A	N/A
1803	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A
1851	N/A	ETC-9257 AIR 144702-0000 CUM 3803055 CUM 3526801 CUM 3803108 CUM 3527046 SCH 167713 CUM 3529032	N/A	N/A	N/A

PAI Copyright 2017

FIGURE 6035



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	219931		CUM 3801097	KIT,Turbocharger Minor Repair (V, VT, ST, T46 Only)	
1	219932		CUM 3803042	KIT,Turbocharger Major Repair (T46, T50, ST50, ST50) Includes Kit (1)219931 O-Rings (1)121334 (1)EGS-3900-027	
2	219970		CUM 3521439	SLINGER,Oil(BHT3B)	
3	219971		CUM 3521440	COLLAR,Thrust(BHT3B)	
4	121140		CUM 201017	FLANGE,Oil Inlet(HT3B)	
5	121141		CUM 3058655	FLANGE,Oil Drain(HT3B)	
6	219972		CUM 3521442	RING,Turbine Wheel Shaft Seal(HT3B)	
7	121054		CUM 3065061	HOSE,Return Line(7/8in x 4-1/2in Lg)	
7	121055		CUM 3065062	HOSE,Return Line(7/8in x 5in Lg)	
8	EKT-9260		MAK 7536-196006	KIT,Turbocharger Repair(HT3B) Includes Gaskets (1)EGS-2861 (1)EGS-2862(1)131370 O-Rings (1)121227 (1)EGA-2620 Bearings (2)EBG-2890 Washer (1)ETC-2870 Nuts (1)ENU-0229 (2)ENU-2781 Sleeve (1)EOS-2850 Rings (1)219972 (2)EPR-2811 (4)ESR-2900 (1)ETR-2950 Spacer (1)ESS-2880 Slinger (1)219970	SCH 196006
8	EKT-9261		MAK 7536-187197	KIT,Turbocharger Repair(4LHR) Includes Gaskets (1)EGS-2861 (1)EGS-2862 (1)131370 Rings (1)ESR-2901 (4)ESR-2900 (1)EPR-2811 (1)ETR-2950 (1)219972 Washer(1)ETC-2870 Nuts (2)ENU-2781 (1)ENU-0229 Slinger (1)219970 Bearings (2)EBG-2890 O-Ring (1)EGA-2620 Spacer (1)ESS-2880 Deflector (1)197010 Sleeve (1)EOS-2850 Insert (1)197011	SCH 187197
9	121334		CUM 211375	O-RING(9.062in x 0.125in)	
9	EGS-3900-027		MAK 56AX456	O-RING(5.237in x 0.103in)	CUM 202457

FIGURE 6038

Please note:

(*) Specify ring type and size of Sleeves, Rods and Mains when ordering Inframe Kits.

1. **Only Use Dual-Ni Pistons where indicated on the chart.**
2. **Dual-Ni Resist Piston is of a different weight, replace in sets of six.**
3. **All Inframe Kits include a Pan Gasket Kit.**
4. **Lower Gasket Sets are for reference only and are not included with the Inframe Kits. Lower Gasket Sets are sold Separately.**

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
1	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
2	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
3	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
4	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
5	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
6	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
7	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
8	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
9	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
10	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
11	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
12	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
13	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
14	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
16	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
17	855008-(*) Includes: CUM 3048650 Piston	—	131334 CUM 3801463
18	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
19	855015-(*) Includes: CUM 3051555 Piston	—	131331 CUM 3014459
20	855015-(*) Includes: CUM 3051555 Piston	—	131331 CUM 3014459
21	Superseded by CPL 160	—	—
22	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
23	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
24	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
25	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
26	855008-(*) Includes: CUM 3048650 Piston	—	131334 CUM 3801463
69	Superseded by CPL 174	—	—
70	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
71	855015-(*) Includes: CUM 3051555 Piston		131336 CUM 3801464
75	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
76	855017-(*) Includes: CUM 3051557 Piston	—	131336 CUM 3801464
77	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
85	Superseded by CPL 004	—	—
101	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
102	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
104	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
107	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
108	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
109	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
113	Superseded by CPL 175	—	—
117	855001-(*) Includes: CUM 3017349 Piston	—	131334 CUM 3801463
120	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
121	855006-(*) Includes: CUM 3042320 Piston	—	131336 CUM 3801464
123	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
132	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
135	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
144	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
146	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
147	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
152	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
154	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
155	855015-(*) Includes: CUM 3051555 Piston	—	131331 CUM 3014459
156	Superseded by CPL 005	—	—
160	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
161	855015-(*) Includes: CUM 3051555 Piston	—	131331 CUM 3014459

PAI Copyright 2017

New Parts are in BOLD text

Inframe Kits by CPL

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
162	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
163	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
164	855028-(*) Includes: CUM 3048650 Piston	—	131334 CUM 3801463
166	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
168	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
170	855008-(*) Includes: CUM 3048650 Piston	—	131334 CUM 3801463
172	Superseded by CPL 026	—	—
173	855001-(*) Includes: CUM 3017349 Piston	—	131336 CUM 3801464
174	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
175	Superseded by CPL 181	—	—
176	Superseded by CPL 189	—	—
178	Superseded by CPL 188	—	—
180	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
181	Superseded by CPL 207	—	—
182	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
187	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
188	855013-(*) Includes: CUM 3051553 Piston	—	131334 CUM 3801463
189	855013-(*) Includes: CUM 3051553 Piston	—	131334 CUM 3801463
190	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
196	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
197	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
198	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
199	Superseded by CPL 233	—	—
200	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
201	Superseded by CPL 346	—	—
202	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
204	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
205	855017-(*) Includes: CUM 3051557 Piston	—	131337 CUM 3801468
207	Superseded by CPL 217	—	—
214	855028-(*) Includes: CUM 3048650 Piston	—	131337 CUM 3801468
215	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
217	855013-(*) Includes: CUM 3051553 Piston	—	131336 CUM 3801464
220	Superseded by CPL 407	—	—

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
221	855013-(*) Includes: CUM 3051553 Piston	—	131336 CUM 3801464
222	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
226	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
227	855015-(*) Includes: CUM 3051555 Piston	—	131331 CUM 3014459
230	855013-(*) Includes: CUM 3051553 Piston	—	131331 CUM 3014459
233	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
246	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
248	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
249	855013-(*) Includes: CUM 3051553 Piston	—	131336 CUM 3801464
250	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
254	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
255	855008-(*) Includes: CUM 3048650 Piston	—	131334 CUM 3801463
256	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
258	855008-(*) Includes: CUM 3048650 Piston	—	131334 CUM 3801463
259	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
260	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
266	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
267	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
270	Superseded by CPL 408	—	—
271	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
272	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
276	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
277	855014-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
278	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
281	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
288	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
294	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
298	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
299	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459

PAI Copyright 2017

New Parts are in BOLD text

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
300	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
306	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
307	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
308	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
309	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
310	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
312	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
314	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
315	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
316	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
317	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
318	855015-(*) Includes: CUM 3051555 Piston	—	131331 CUM 3014459
319	855017-(*) Includes: CUM 3051557 Piston	—	131331 CUM 3014459
320	855034-(*) Includes: CUM 3051554 Piston	—	N/A CUM 3801470
322	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
323	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
324	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
325	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
326	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
327	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
328	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
329	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
330	Use 855022-(*) Includes: CUM 3031227 Piston	—	131337 CUM 3801468
331	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
332	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
338	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
339	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
344	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
345	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
346	855015-(*) Includes: CUM 3051555 Piston	—	131336 CUM 3801464
347	Superseded by CPL 419	—	—
348	Superseded by CPL 391	—	—
349	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
353	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
354	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
356	855014-(*) Includes: CUM 3051554 Piston	—	131336 CUM 3801464
357	855014-(*) Includes: CUM 3051554 Piston	—	131336 CUM 3801464
358	Superseded by CPL 499	—	—
359	Superseded by CPL 499	—	—
360	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
362	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
363	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
364	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
365	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
366	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
369	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
370	855015-(*) Includes: CUM 3051555 Piston	—	N/A CUM 3801470
371	855013-(*) Includes: CUM 3051553 Piston	—	131336 CUM 3801464
372	855013-(*) Includes: CUM 3051553 Piston	—	131336 CUM 3801464
373	855013-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
374	855033-(*) Includes: CUM 3051553 Piston	—	131337 CUM 3801468
375	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
376	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
377	855034-(*) Includes: CUM 3051554 Piston	—	N/A CUM 3801470
380	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
381	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
382	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131422 CUM 3801469
384	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459

Inframe Kits by CPL

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
391	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	N/A CUM 3801470
392	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	N/A CUM 3801470
393	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
394	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
395	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
396	Superseded by CPL 574	—	—
397	Superseded by CPL 573	—	—
402	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
407	855000-(*) Includes: CUM 3017348 Piston	—	131331 CUM 3014459
408	855000-(*) Includes: CUM 3017348 Piston	—	131331 CUM 3014459
413	855028-(*) Includes: CUM 3048650 Piston	—	131337 CUM 3801468
414	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
416	855017-(*) Includes: CUM 3051557 Piston	—	131334 CUM 3801463
419	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	N/A CUM 3801470
431	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
432	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
433	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
435	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
436	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
437	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
448	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
449	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
450	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
454	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
455	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
456	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
457	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
458	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
459	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
460	Superseded by CPL 582	—	—

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
461	Superseded by CPL 583	—	—
462	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
463	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
469	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
470	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
471	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131337 CUM 3801468
472	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
473	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
479	855034-(*) Includes: CUM 3051554 Piston	—	N/A CUM 3801470
481	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
482	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
483	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
485	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
488	855000-(*) Includes: CUM 3051554 Piston	—	131336 CUM 3801464
491	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
492	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
494	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131336 CUM 3801464
495	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131336 CUM 3801464
497	855020-(*) Includes: CUM 3017348 Piston	—	131331 CUM 3014459
498	855028-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
499	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
500	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	N/A CUM 3801470
506	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131337 CUM 3801468
509	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
510	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
511	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
516	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
517	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
518	Use 855022-(*) Includes: CUM 3031227 Piston	—	131337 CUM 3801468

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
523	Use 855022-(*) Includes: CUM 3031227 Piston	—	131332 CUM 3801235
529	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
530	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
531	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
536	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
537	855028-(*) Includes: CUM 3048650 Piston	—	131337 CUM 3801468
538	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
539	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
540	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
541	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
542	855037-(*) Includes: CUM 3051557 Piston	—	131337 CUM 3801468
543	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
544	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
545	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
547	855000-(*) Includes: CUM 3017348 Piston	—	131334 CUM 3801463
551	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
552	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
553	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
554	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
558	855028-(*) Includes: CUM 3048650 Piston	—	131332 CUM 3801235
566	855035-(*) Includes: CUM 3051555 Piston	—	131337 CUM 3801468
567	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
572	855015-(*) Includes: CUM 3051555 Piston	855007-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
573	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
574	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
575	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
578	855034-(*) Includes: CUM 3051554 Piston	—	N/A CUM 3801470
579	855026-(*) Includes: CUM 3042320 Piston	—	131332 CUM 3801235

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
581	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
582	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
583	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
585	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
586	855022-(*) Includes: CUM 3031227 Piston	—	131332 CUM 3801235
588	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
606	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
609	855034-(*) Includes: CUM 3051554 Piston	—	131332 CUM 3801235
611	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
612	855026-(*) Includes: CUM 3042320 Piston	—	131332 CUM 3801235
614	—	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
616	—	—	131332 CUM 3801235
617	—	—	131332 CUM 3801235
625	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
632	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
633	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
634	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
635	Use 855022-(*) Includes: CUM 3031227 Piston	—	131332 CUM 3801235
636	855020-(*) Includes: CUM 3017348 Piston	855011-(*) Includes: CUM 3050366 Piston	131331 CUM 3014459
637	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131331 CUM 3014459
642	855042-(*) Includes: CUM 3028685 Piston	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
650	855035-(*) Includes: CUM 3051555 Piston	850027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
651	855022-(*) Includes: CUM 3028685 Piston	855032-(*) Includes: CUM 3050480 Piston	131337 CUM 3801468
653	Use 855022-(*) Includes: CUM 3031227 Piston	—	131331 CUM 3014459
654	Use 855022-(*) Includes: CUM 3031227 Piston	—	131331 CUM 3014459
657	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
659	855022-(*) Includes: CUM 3028685 Piston	855032-(*) Includes: CUM 3050480 Piston	N/A CUM 3801470
669	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468

PAI Copyright 2017

New Parts are in BOLD text

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
670	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
673	855045-(*) 4 Ring Piston Includes: CUM 3042319 Piston 855345-(*) 3 Ring Piston Includes: CUM 3095746 Piston	855050-(*) Includes: CUM 3048809 Piston	131333 CUM 3801454
674	855046-(*) Includes: CUM 3042320 Piston	855051-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
675	855044-(*) Includes: CUM 3042318 Piston	855047-(*) Includes: CUM 3045948 Piston	131333 CUM 3801454
676	855042-(*) Includes: CUM 3028685 Piston	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
677	—	855031-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
695	855016-(*) Includes: CUM 3051556 Piston	855009-(*) Includes: CUM 3048808 Piston	131331 CUM 3014459
699	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
700	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
702	Use 855022-(*) Includes: CUM 3031227 Piston	—	131337 CUM 3801468
706	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
709	855008-(*) Includes: CUM 3048650 Piston	—	131336 CUM 3801464
718	—	855047-(*) Includes: CUM 3045948 Piston	131333 CUM 3801454
719	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131332 CUM 3801235
731	855035-(*) Includes: CUM 3051555 Piston	—	131332 CUM 3801235
732	855034-(*) Includes: CUM 3051554 Piston	—	131332 CUM 3801235
733	855034-(*) Includes: CUM 3051554 Piston	—	131332 CUM 3801235
743	855026-(*) Includes: CUM 3042320 Piston	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
744	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
745	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
749	855045-(*) 4 Ring Piston Includes: CUM 3042319 Piston 855345-(*) 3 Ring Piston Includes: CUM 3095746 Piston	855050-(*) Includes: CUM 3048809 Piston	131333 CUM 3801454
757	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
769	—	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
794	—	855051-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
795	—	855051-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
796	—	855050-(*) Includes: CUM 3048809 Piston	131333 CUM 3801454

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
797	—	855047-(*) Includes: CUM 3045948 Piston	131333 CUM 3801454
798	—	855049-(*) Includes: CUM 3048808 Piston	131333 CUM 3801454
806	—	—	131333 CUM 3801454
808	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
811	—	855051-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
812	—	855050-(*) Includes: CUM 3048809 Piston	131333 CUM 3801454
813	—	855047-(*) Includes: CUM 3045948 Piston	131333 CUM 3801454
814	—	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
821	—	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
**825	—	**855082-(*)(NG) Includes: CUM 4955662 Piston (8.5:1)**	—
**825	—	**855081-(*)(NG) Includes: CUM 3226009 Piston (10.0:1)**	—
827	—	855078-(*) Includes: CUM 3052794 Piston	131338 CUM 3803041
832	—	855051-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
833	—	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
**837	—	**855080-(*)(NG) Includes: CUM 3880945 Piston (10.0:1)**	—
838	—	855079-(*) Includes: CUM 3069212 Piston	131338 CUM 3803041
840	—	855079-(*) Includes: CUM 3069212 Piston	131338 CUM 3803041
849	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
880	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
891	—	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
903	—	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
904	—	855052-(*) Includes: CUM 3050480 Piston	131333 CUM 3801454
905	—	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
907	—	855051-(*) Includes: CUM 3050366 Piston	131333 CUM 3801454
908	—	855049-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
909	—	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
910	—	**855100-(*) Includes: CUM 3058566**	**131328 CUM 3803040**

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
911	—	855078-(*) Includes: CUM 3052794 Piston	131338 CUM 3803041
963	855026-(*) Includes: CUM 3042320 Piston	—	131337 CUM 3801468
967	—	—	—
972	855034-(*) Includes: CUM 3051554 Piston	855030-(*) Includes: CUM 3048809 Piston	131337 CUM 3801468
974	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
988	—	855031-(*) Includes: CUM 3050366 Piston	131332 CUM 3801235
989	Use **855036**-(*) Includes: **CUM 3051556** Piston	**855029-(*)** Includes: CUM 3048808 Piston	131338 CUM 3803041
990	Use **855036**-(*) Includes: **CUM 3051556** Piston	**855029-(*)** Includes: CUM 3048808 Piston	131338 CUM 3803041
991	Use **855036**-(*) Includes: **CUM 3051556** Piston	**855029-(*)** Includes: CUM 3048808 Piston	131338 CUM 3803041
1167	855056-(*) Includes: CUM 3051556 Piston	855049-(*) Includes: CUM 3048808 Piston	131333 CUM 3801454
1171	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131331 CUM 3014459
1179	855056-(*) Includes: CUM 3051556 Piston	855049-(*) Includes: CUM 3048808 Piston	131333 CUM 3801454
1181	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131316 CUM 3801348
1183	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131331 CUM 3014459
1185	—	855078-(*) Includes: CUM 3052794 Piston	131338 CUM 3803041
1186	—	855072-(*) Includes: CUM 3050480 Piston	131338 CUM 3803041
1187	—	855079-(*) Includes: CUM 3069212 Piston	131338 CUM 3803041
1188	—	855078-(*) Includes: CUM 3052794 Piston	131338 CUM 3803041
1193	—	855069-(*) Includes: CUM 3048808 Piston	131338 CUM 3803041
1194	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131331 CUM 3014459
1197	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131338 CUM 3803041
1203	855028-(*) Includes: CUM 3048650 Piston	—	131337 CUM 3801468
1204	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131337 CUM 3801468
1205	855034-(*) Includes: CUM 3051554 Piston	—	131337 CUM 3801468
1210	—	—	—
1211	—	855078-(*) Includes: CUM 3052794 Piston	131338 CUM 3803041
1215	—	855072-(*) Includes: CUM 3050480 Piston	131338 CUM 3803041
1256	—	—	—
1280	—	—	—

PAI Copyright 2017

CPL NUMBER	KIT with SINGLE-NI PISTON	KIT with DUAL-NI PISTON	LOWER GASKET SET SEE NOTE 4
1314	—	855069-(*) Includes: CUM 3048808 Piston	131338 CUM 3803041
1350	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
1352	—	855079-(*) Includes: CUM 3069212 Piston	131338 CUM 3803041
1381	—	855029-(*) Includes: CUM 3048808 Piston	131337 CUM 3801468
1382	—	—	131337 CUM 3801468
1383	—	—	131338 CUM 3803041
1401	855075-(*) Includes: CUM 3051555 Piston	855067-(*) Includes: CUM 3045948 Piston	131338 CUM 3803041
1409	855075-(*) Includes: CUM 3051555 Piston	855067-(*) Includes: CUM 3045948 Piston	131338 CUM 3803041
1410	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
1411	855036-(*) Includes: CUM 3051556 Piston	855029-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
1415	855035-(*) Includes: CUM 3051555 Piston	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
1416	—	855027-(*) Includes: CUM 3045948 Piston	131332 CUM 3801235
1417	—	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
1418	—	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
1421	—	855029-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
1425	—	855070-(*) Includes: CUM 3048809 Piston	131332 CUM 3801235
1436	—	855069-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235
1502	—	855070-(*) Includes: CUM 3048809 Piston	131332 CUM 3801235
1546	—	855070-(*) Includes: CUM 3048809 Piston	131332 CUM 3801235
1557	—	855069-(*) Includes: CUM 3048808 Piston	131332 CUM 3801235

Please note:

(*) Specify ring type and size of Sleeves, Rods and Mains when ordering Inframe Kits.

(**) Must be verified by ESN or Piston #

1. **Only Use Dual-Ni Pistons where indicated on the chart.**
2. **Dual-Ni Resist Piston is of a different weight, replace in sets of six.**
3. **All Inframe Kits include a Pan Gasket Kit.**
4. **Lower Gasket Sets are for reference only and are not included with the Inframe Kits. Lower Gasket Sets are sold Separately.**

PAI Copyright 2017

Upper Gasket Sets

FIGURE 6031

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131315		CUM 3801330	SET,Upper Gasket (SC,BC I,II,III,NTC 400 & below) (Early kit w/ std. Grommet Head Gasket)	
1	131316		CUM 3801348	SET,Upper Gasket (SC,BC I,II,II,NTC 400 & below) (Early kit w/ Oversize Grommet Head Gasket)	
1	131317		CUM 3801451	SET,Upper Gasket (BC IV)(w/ Fixed Timing)(1985-1987) (Early kit w/ oversize Grommet Head Gasket)	
1	131328		CUM 3803040	SET,Upper Gasket (88NT,BC IV)(7 bolt Rocker Cover) (Early kit w/ oversize Grommet Head Gasket)	
1	131329		CUM 3801754	SET,Upper Gasket (BC IV)(STC)(1985-1987) (Early kit w/ oversize Gromment Head Gasket)	
1	131350		N/A	SET,Upper Gasket (BC IV)(5 bolt Rocer Cover)(w/ Fixed & STC Timing) (Early kit w/ oversize Grommet Head Gasket)	
1	131564		CUM 3804276	SET,Upper Gasket (SC,BC I,II,III,NTC 400 & below) (Current kit w/ Edge Molded Head Gasket)	
1	131630		CUM 4024953	SET,Upper Gasket (BC I,II,III)(Current kit w/ Edge Molded Head Gasket)	
1	131631		CUM 4024956	SET,Upper Gasket (SC)(Current kit w/ Edge Molded Head Gasket)	
1	131634		CUM 4024961	SET,Upper Gasket (SC/Ford Elba)(Current kit w/ Edge Molded Head Gasket)	
1	131679		CUM 4024918	SET,Upper Gasket (88NT, BC IV)(w/ Edge Molded Head Gasket)	CUM 3803981
1	131744		CUM 4024919	SET,Upper Gasket (BC IV)(STC)(w/ Edge Molded Head Gasket)	
1	131745		CUM 4024920	SET,Upper Gasket(w/ Edge Molded Head Gasket) (Fixed Timing BC IV)	
1	**131896**		**CUM 4024948**	**SET,Upper Gasket**	**CUM 3013479**
1	**132025**		**CUM 132025**	**SET,Upper Gasket(w/ .010 Head Gasket)**	**CUM 3099123**

Single Cylinder Head

FIGURE 6019

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131378		CUM 3801329	SET,Upper Gasket(Single) (SC,BC I,II,III)	
1	131379		CUM 3801453	SET,Upper Gasket(Single)(BC IV)	
1	131380		CUM 3801753	SET,Upper Gasket(Single) (NTC,BC IV,STC)(1985-1987)	
1	131381		CUM 3803150	SET,Upper Gasket(Single)(88NT,BC IV)	
1	131632		CUM 4024957	SET,Upper Gasket(Single) (SC/Non-FFC)(Current kit w/ Edge Molded Head Gasket)	
1	131633		CUM 4024958	SET,Upper Gasket(Single) (SC,BC I,II,III)(Current kit w/ Edge Molded Head Gasket)	
1	131678		CUM 4024923	SET,Upper Gasket(Single) (88NT, BC IV)(w/ Edge Molded Head Gasket)	CUM 3804284
1	**131828**		**CUM 4024921**	**SET,Upper Gasket(Single)(BC IV)**	
1	**131829**		**CUM 4024922**	**SET,Upper Gasket(Single)(BC IV)**	

PAI Copyright 2017

Lower Gasket Sets

FIGURE 6012

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131331		CUM 3014459	SET,Lower Gasket (SC)(Except NTA)	
1	131332		CUM 3801235	SET,Lower Gasket (BC III,NTC 400 & Below Standard)	
1	131333		CUM 3801454	SET,Lower Gasket (BC IV & 444)	
1	131334		CUM 3801463	SET,Lower Gasket (SC)(Non-FFC)(Non-Piston Cooled)	
1	131336		CUM 3801464	SET,Lower Gasket (SC)(Non-FFC)(Piston Cooled)	
1	131337		CUM 3801468	SET,Lower Gasket (BC I,II,NTC 400 & Below)	
1	131338		CUM 3803041	SET,Lower Gasket (New BC IV, 88NT)	
1	131422		CUM 3801469	SET,Lower Gasket (MVT BC I,II,NTC 475 & NTCC)(Standard MVT)	
1	**131933**		**CUM 3801529**	**SET,Lower Gasket(MVT)**	

Overhaul Gasket Set

FIGURE 6021

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131800		CUM 3801335	SET,Overhaul Gasket(SC)	

FIGURE 6036

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042002		CUM 8078	WASHER,Plain,Copper(1/4in)	
1	131371		CUM 3069182	WASHER,Sealing	
2	121209		CUM 145537	O-RING	
2	121212		CUM 116024	O-RING	
2	121222		CUM 3010937	O-RING	
2	121229		CUM 3050667	O-RING,Water Manifold	
2	121231		CUM 3052586	O-RING,Rocker Lever Housing	
2	121234		CUM 3082550	O-RING	
2	121237		CUM 43696	O-RING(Same as 6F6672)	
2	121238		CUM 67270	O-RING	
2	121275		CUM 3024012	O-RING,Rectangular	
2	121276		CUM 3025511	O-RING, Rectangular	
2	121307		CUM 3014435	O-RING	
2	131360		CUM 3044593	O-RING	
2	136003		CUM 185677	O-RING	
3	121056		CUM 64775	HOSE,Coolant	CUM 109365
4	131341		CUM 3030969	SEAL	
4	136002		CUM 106276	SEAL,Oil	
4	136004		CUM 200307	SEAL,Oil	
4	136074		CUM 3056100	SEAL	
4	136075		CUM 3024075	SEAL,Actuator	
5	161606		CUM 197230	GROMMET	
6	**121410**		**CUM 3803017**	**KIT,MVT Actuator Repair** **Includes Seals (1)136074 (1)136071 (1)121274 O-Rings (1)EGA-3877 (1)121209**	**CUM 3801069**

Miscellaneous Gaskets

FIGURE 6032

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131280		CUM 110453	GASKET,Flange	
2	131282		CUM 126295	GASKET,Oil Suction(Non-FFC)	
3	131284		CUM 130972	GASKET,Lube Pump(Non-FFC)	
4	131285		CUM 133831	GASKET	
5	131286		CUM 133844	GASKET	
6	131287		CUM 133851	GASKET	
7	131288		CUM 134285	GASKET,Scavenge Pump	
8	131292		CUM 151911	GASKET	
9	131293		CUM 156089	GASKET,Support	
10	131296		CUM 173161	GASKET,Filter Head	
11	131299		CUM 203145	GASKET	
12	131663		CUM 201698	GASKET,Water Connector	
13	131303		CUM 214633	GASKET	
14	131327		CUM 3023868	GASKET	
15	131343		CUM 3037421	GASKET	
16	131666		CUM 3011876	GASKET,Turbo Adapter	
17	131382		CUM 64376	GASKET	
18	131664		CUM 201701	GASKET,Thermostat(Oil Cooling)	

PAI Copyright 2017

GENUINE

PAI®

WORLD TESTED • PERFORMANCE PROVEN



Quality Policy

PAI is committed to compliance of all customer requirements, regulatory requirements and original equipment specifications by means of our Quality Management System. Our goal is to ensure customer satisfaction by maintaining the highest levels of quality for the products and services we provide. Quality, continual improvement and customer satisfaction are the personal responsibility of every PAI employee.

To achieve this goal PAI is pursuing the following key objectives:

- Product Quality
- Product Availability
- On-Time Delivery
- Expansion of Product Coverage
- Outstanding Customer Service
- Employee Expertise

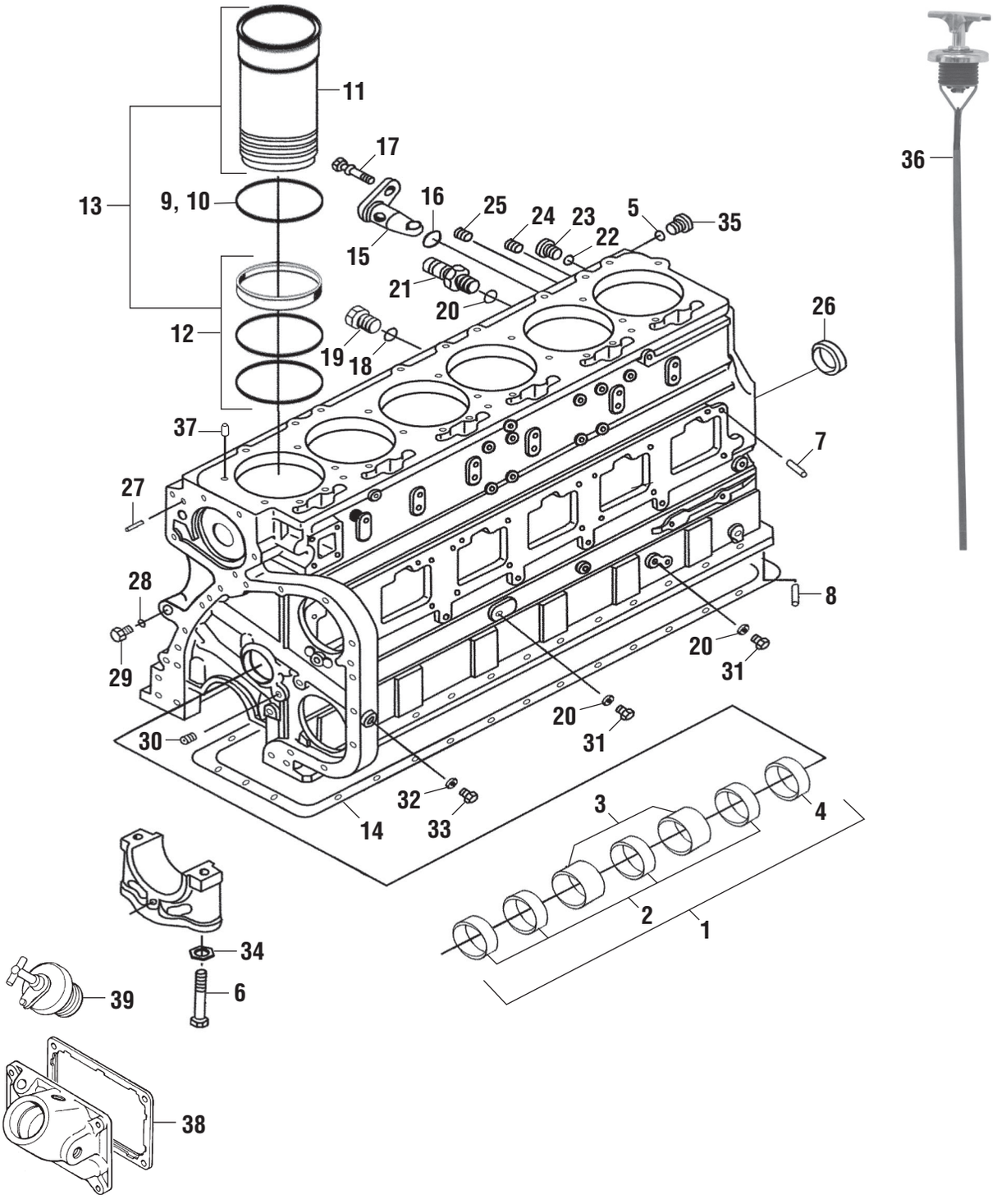
CERTIFIED QUALITY MANAGEMENT SYSTEM ISO 9001:2008

ANAB ACCREDITED

DNV

www.paiindustries.com

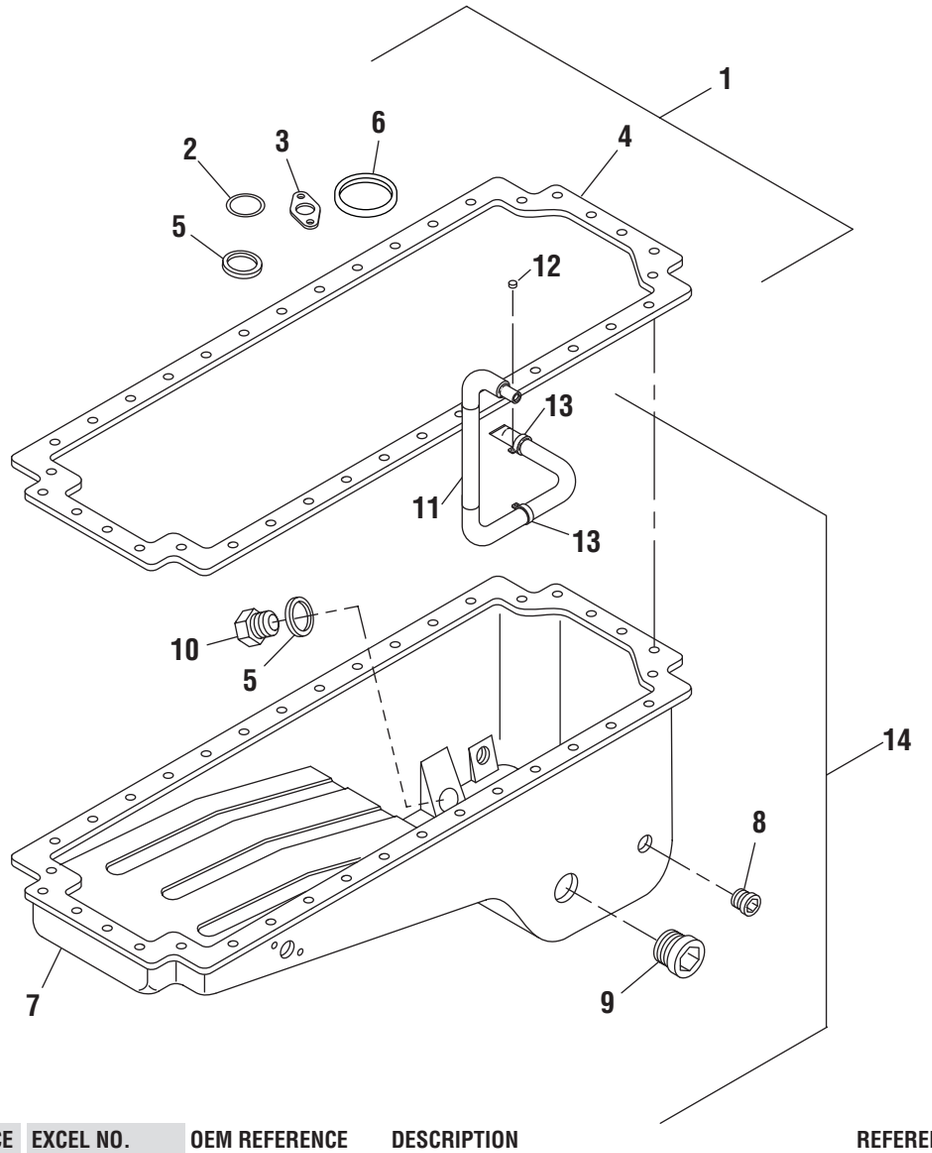
FIGURE 6403



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	151501		CUM 3801106	SET,Cam Bearing Includes Cam Bearings (4)151502 (2)151503 (1)151504	
2	151502		CUM 3028075	BEARING,Cam(#1, 2, 4 and 6)	
3	151503		CUM 3028269	BEARING,Cam(#3 and 5)	
4	151504		CUM 3011951	BEARING,Cam(#7)	
5	121253		CUM 3063166	O-RING,Plug	
6	Call		CUM 208346	SCREW,Cap	
7	Call		CUM 68585	PIN,Dowel	
8	Call		CUM 67211	PIN,Dowel(Rear Main Bearing)	
9	**161998**		**CUM 3054947**	**SHIM,Liner(.0195in)**	
9	**161999**		**CUM 3054949**	**SHIM,Liner(.0215in)**	
9	162000		CUM 3019955	SHIM,Liner(.007in)	
9	162001		CUM 3019956	SHIM,Liner(.008in)	
9	162002		CUM 3019957	SHIM,Liner(.009in)	
9	162003		CUM 3054948	SHIM,Liner(.020in,White)	
9	162004		CUM 3019959	SHIM,Liner(.031in)	
9	162005		CUM 3019960	SHIM,Liner(.062in)	
10	162007		CUM 3066843	SHIM,Liner(.020in/.040in)(.0180in)	
10	162008		CUM 3065406	SHIM,Liner(.020in/.040in)(.020in)	
10	162012		CUM 3066844	SHIM,Liner(.020in/.040in)(.022in)	
11	161596		CUM 3046325	LINER,Cylinder(.020in UPF)	
11	161598		CUM 3065405	LINER,Cylinder(.020in/.040in LPF)	
11	161600	**161600E**	CUM 3055099	LINER,Cylinder(STD)	
12	121201		CUM AR51477	KIT,O-Ring,Liner	
13	161597		CUM 3801387	KIT,Liner(.020in UPF) Includes Liner (1)161596 O-Ring Kit (1)121201	
13	161599		CUM 3803219	KIT,Liner(.020in/.040in LPF) Includes Liner (1)161598 O-Ring Kit (1)121201	
13	161601	**161601E**	CUM 3801826	KIT,Liner(STD) Includes Liner (1)161600 O-Ring Kit (1)121201	
14	131347		CUM 3032861	GASKET,Oil Pan	CUM 3027983
15	045018		CUM 4058947	NOZZLE,Piston Cooling	
16	BGA-3004		MAK 56AX436	O-RING	CUM 3068527
17	Call		CUM 3067954	SCREW,Captive Washer	
18	121252		CUM 3035228	O-RING,Plug	
19	ECP-3477		MAK 6635-14HP5ONS	PLUG,Threaded(1/4in NPT) (w/ CUP 121252 Seal)	CUM 3040818
20	121227		CUM 3037537	O-RING	CUM 118350, MAK 56AX540
21	Call		CUM 3042619	NIPPLE,Coupling	
22	121251		CUM 3034412	O-RING	
23	ECP-3468		MAK 6635-3P5ONS	PLUG,Threaded(7/8in-18 NPT)	CUM 3071181
24	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
25	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
26	042011		CUM 3011952	PLUG,Cup(Camshaft)	
27	Call		CUM 3070475	PIN,Roll	
28	EGA-3061		MAK 8813-154129	O-RING	CUM 3046201
29	ECP-3475		MAK 6635-8HP5ONS	PLUG,Threaded(3/4in-16 NPT) (w/ EGA-3061 Seal)	CUM 3046202
30	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
31	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded(9/16in-18 NPT) (w/ CUP 121227 Seal)	CUM 3037536
32	EWA-2441		MAK 39AX23	WASHER,Plain(7/8in)	CUM 66292
33	ECP-3476		MAK 6635-10HP5NS	PLUG,Threaded(7/8in-18 NPT)	CUM 210884
34	Call		CUM 3046246	WASHER(3/4in)	
35	ECP-3478		MAK 6635-20HP5ONS	PLUG,Threaded(1-5/8in-12 NPT) (w/ CUP 121253 Seal)	CUM 3066323
36	141290		CUM 216484	DIPSTICK,Universal	
37	045020		CUM 68445	PIN,Dowel(Head to Block)	
38	131364		CUM 3069097	GASKET,Hand Hole	
39	EFC-8551		MAK 222GB214	CAP,Filler	CUM 107981

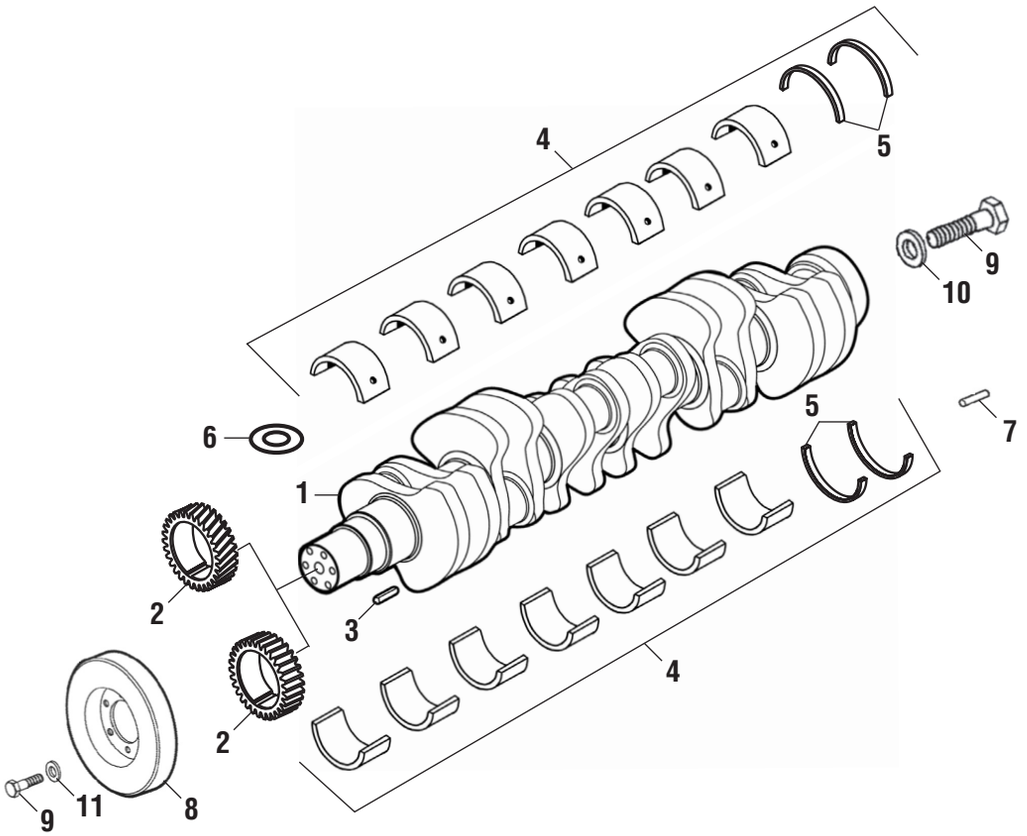
FIGURE 6400



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131394		CUM 3804303	KIT,Oil Pan Gasket Installation Includes O-Ring (1)121224 Gaskets (1)131295 (1)131347 Washer (1)131391 Seal (1)136011	
2	121224		CUM 3029847	O-RING	
3	131295		CUM 157551	GASKET	
4	131347		CUM 3032861	GASKET,Pan	CUM 3027983
5	131391		CUM 67946	WASHER	CUM S-3050
6	136011		CUM 3034986	SEAL	
7	141281		CUM 3031959	PAN,Oil (Rear Sump-Stamped Steel w/ Pick-up Tube)	CUM 3030257
7	**141318**		**CUM 3046947**	**PAN,Oil**	
8	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2 NPT)	CUM 3008468
9	EPP-3566		MAK 49AX226	PLUG,Pipe(1 NPT)	CUM 3008470
10	042010		CUM 3055069	PLUG,Threaded	CUM 3055069
11	**141325**		**CUM 3095050**	**TUBE,Oil Pickup**	**CUM 3046948**
12	**040100**		**CUM 3095723**	**NUT,Flanged(2 req'd)**	**CUM 3050685**
13	**042031**		**CUM 3039267**	**CLAMP,Loop(2 req'd)**	
14	141282		CUM 3046951	KIT,Oil Pan(Front Sump-Stamped Steel) (For BC III, IV, N-14) Includes Oil Pan (1)141318 Pickup Tube (1)141325 Plugs (1)042010 (1)EPP-3566 (2)EPP-3575 Clamps (2)042031 Nuts (2)040100 Washer (1)131391	

PAI Copyright 2017

FIGURE 6404

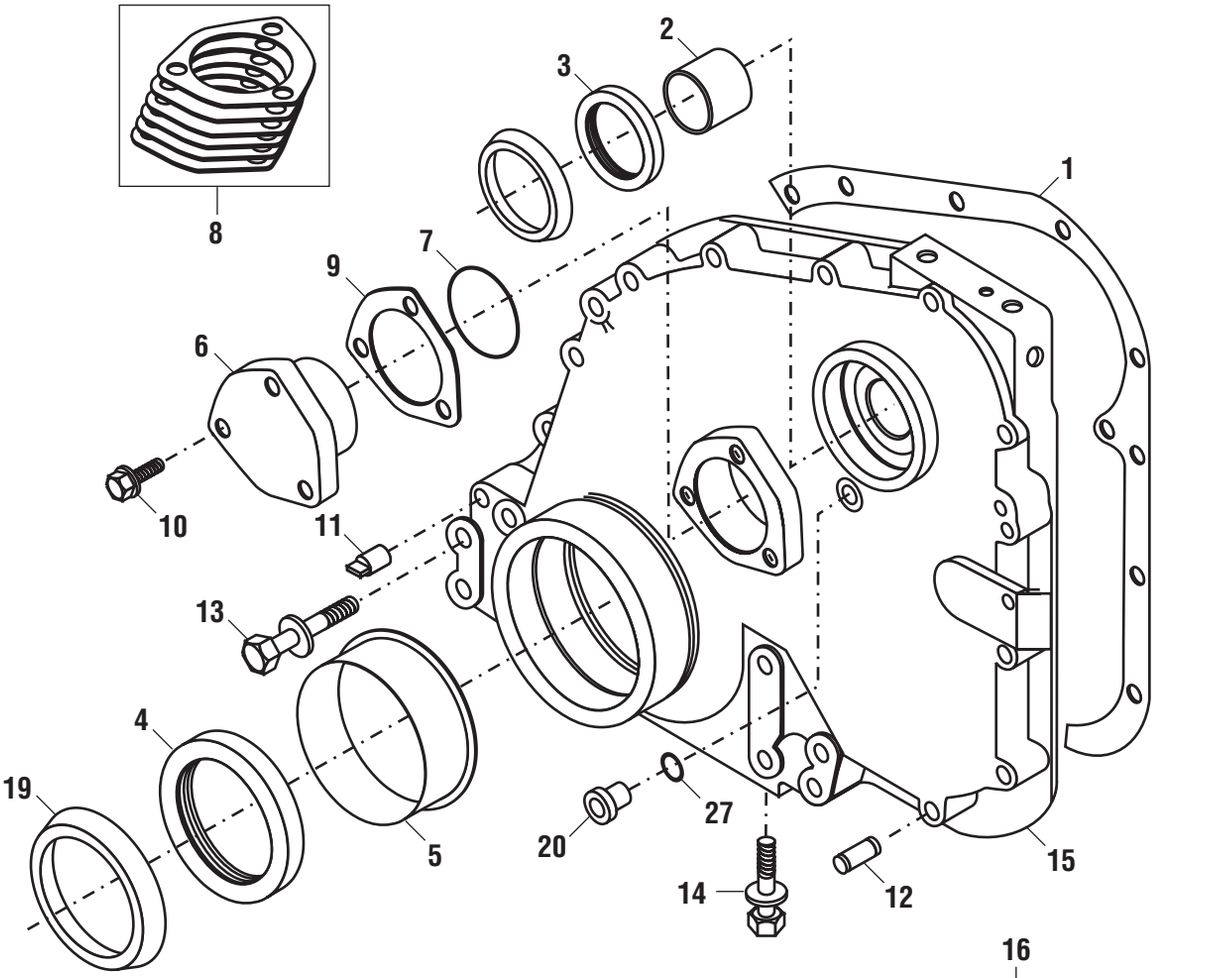


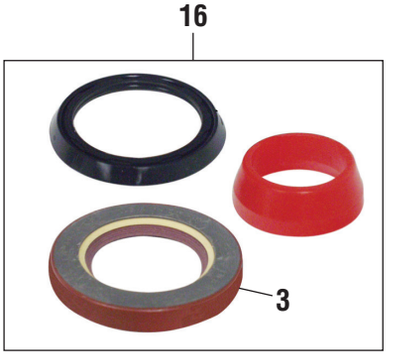
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171719	171719E	CUM 3064291	CRANKSHAFT	CUM 3053368
2	171735		CUM 3014614	GEAR,Crankshaft(Helical)	CUM 214237
2	171738		CUM 3073344	GEAR,Crankshaft(Spur)	
3	040151		CUM 210179	KEY(Rectangular)	
4	171720		CUM 3801260	KIT,Main Bearing(STD) Includes Bearing Set (1)171000 Lockplates (14)171695 Thrust Washers (4)171700	CUM AR7110
4	171721		CUM 3801261	KIT,Main Bearing(.010in) Includes Bearing Set (1)171001 Lockplates (14)171695 Thrust Washers (4)171700	CUM AR7111
4	171722		CUM 3801262	KIT,Main Bearing(.020in) Includes Bearing Set (1)171002 Lockplates (14)171695 Thrust Washers (4)171700	CUM AR7112
4	171723		CUM 3801263	KIT,Main Bearing(.030in) Includes Bearing Set (1)171003 Lockplates (14)171695 Thrust Washers (4)171700	CUM AR7113
4	171724		CUM 3801264	KIT,Main Bearing(.040in) Includes Bearing Set (1) Lockplates (14) Thrust Washers (4)	
5	171699		CUM 3019219	BEARING,Thrust(.010in)	CUM 3074361
5	171700		CUM 3019218	BEARING,Thrust(STD)	CUM 3067568
6	171694		CUM 3037045	DOWEL,Ring(3/4in ID)	
7	045043		CUM 202903	PIN,Roll(Thrust Washer)	
8	202005	202005E	CUM 3101655	DAMPER,Vibration(13.5in Dia.)	CUM 211916, CUM 217323
9	040021		CUM 204165	SCREW,Locking(Flywheel) (5/8in-18 x 1-5/8in)	
10	040024		CUM 200861	WASHER,Flywheel	
11	Call		CUM 127316	WASHER,Crankshaft(5/8in)	

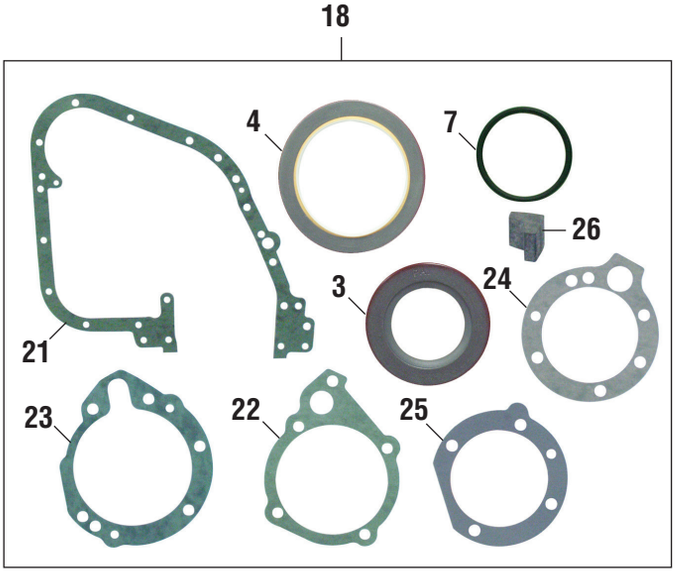
Please note:

*** Lockplates in Main Bearing Sets are not used on the N14.**

FIGURE 6408







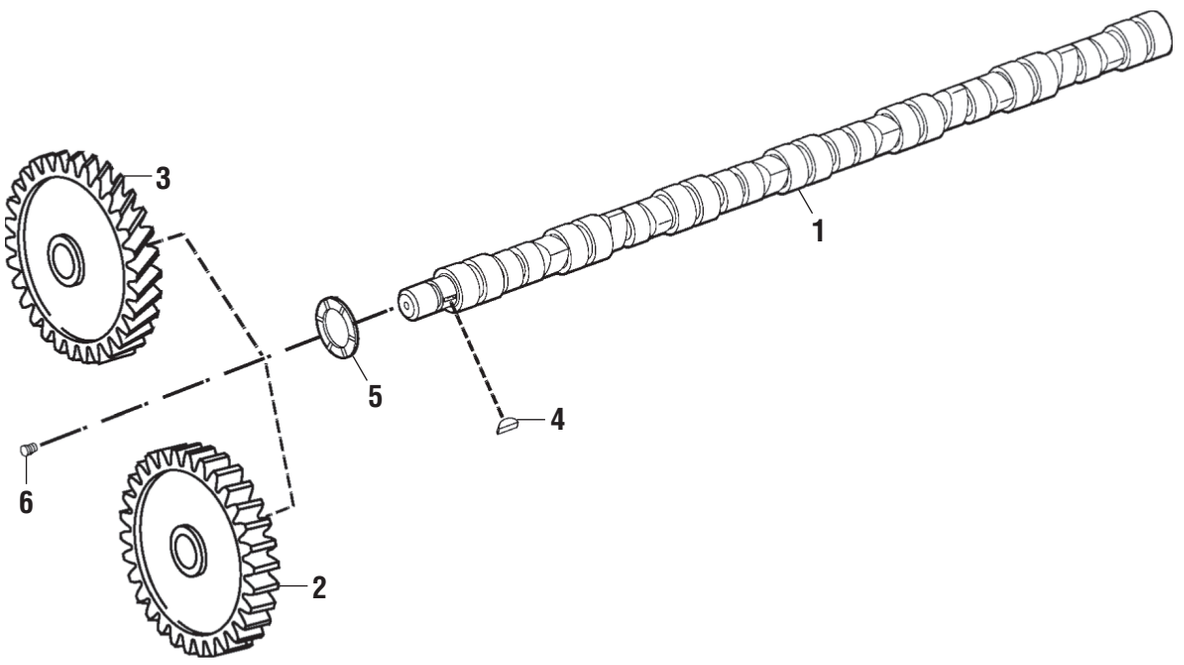
Kit 131395 is shown



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131497		CUM 4058949	GASKET,Front Cover	CUM 3065115
2	151513		CUM 132770	BUSHING,Front Cover (Small Accessory Drive Shaft)	CUM 121932
2	151517		CUM 3411389	BUSHING,Front Cover (Large Accessory Drive Shaft)	CUM 3076091
3	136006		CUM 3004316	SEAL,Accessory Drive Oil (Small Accessory Drive Shaft)	
3	136046		CUM 3078292	SEAL,Accessory Drive Oil (Use 136066 Seal kit)**(Seal not sold separately)**	
3	136082		CUM 3078221	SEAL,Front Cover Oil (Use 136083 Seal kit)**(Seal not sold separately)**	
4	136000		CUM 3006736	SEAL,Front Crankshaft Oil(Bull) (w/o Dust Shield)	CUM 208579
4	136018		CUM 3020183	SEAL,Front Crankshaft Oil(Bull) (w/ Dust Shield)	
5	136038		CUM 3006742	RING,Wear(Front Crankshaft)	
6	151483		CUM 3008530	HOUSING,Camshaft Support	
7	136021		CUM 215705	O-RING,Support	CUM 65260
8	162015		CUM AR1176	KIT,Shim(Camshaft) Includes Shims (1)162024 (2)162025 (2)162026 (1)162027	CUM 65259
9	162024		CUM 65259C	SHIM(.002in)(Use 162015 Shim kit) **(Shim not sold separately)**	
9	162025		CUM 65259B	SHIM(.005in)(Use 162015 Shim kit) **(Shim not sold separately)**	
9	162026		CUM 65259A	SHIM(.010in)(Use 162015 Shim kit) **(Shim not sold separately)**	
9	162027		CUM 185573	SHIM(.025in)(Use 162015 Shim kit) **(Shim not sold separately)**	
10	Call		CUM 3011715	SCREW,Support(3/8in-16 x 13/16in Lg)	
11	Call		CUM 70653	DOWEL	
12	Call		CUM 60408	DOWEL	
13	Call		CUM 3011714	SCREW(7/16in-20 x 3in)	
14	Call		CUM 3011712	SCREW(7/16in-14 x 2-3/16in)	
15	060085		CUM 3024442	COVER,Timing(Small Accessory Drive)	CUM 3076146
15	060086		CUM 3076496	COVER,Timing(Large Accessory Drive Shaft)	CUM 3411458
16	136066		CUM 3800616	KIT,Seal(Large Accessory Drive)(w/o Wear Ring) Includes (1)Front Cover Seal (1)Dust Seal (1)Installation Tool	
17	136083		CUM 3800617	KIT,Seal(Large Accessory Shaft)(w/ Wear Ring) Includes (1)Front Cover Seal (1)Dust Seal (1)Wear Ring (1)Installation Tool	
18	131395		N/A	SET,Front Cover Gasket(w/o Wear Ring (Small Accessory Drive Shaft) Includes Gaskets (1)131366 (1)131279 (1)131361 (1)131367 (1)131368 O-Ring (1)136021 Seals (1)136006 (1)136018 (1)136019	
18	**131595**		**N/A**	**SET,Front Cover Gasket(w/o Wear Ring) (Large Accessory Drive Shaft) Includes Gaskets (1)131366 (1)131497 (1)131361 (1)131367 (1)131368 O-Ring (1)136021 Seal Kit (1)136066 Seals (1)136018 (1)136019**	
18	131596		N/A	SET,Front Cover Gasket(w/ Wear Ring) (Large Accessory Drive Shaft w/ Accessory Drive Seal) Includes Gaskets (1)131361 (1)131367 (1)131368 (1)131497 (1)131567 Seals (1)131018 (1)136019 O-Ring (1)136021 Seal Kit (1)136066	
19	136073		CUM 3076203	SHIELD,Dust(Front Crankshaft)	
20	ECP-3474		MAK 6635-6HP50NS	PLUG,Threaded(9/16in-18 NPT)(w/ 121227 Seal)	CUM 3037536
21	131279		CUM 3021704	GASKET,Gear Cover(1 Piece)	
22	131361		CUM 3067613	GASKET,Mounting(Pump to Block)	
23	131366		CUM 3069101	GASKET,Mounting	
24	131367		CUM 3069102	GASKET,Mounting	
25	131368		CUM 4026171	GASKET,Fuel Pump Mounting	
26	136019		CUM 3008947	SEAL,Keyway	
27	121227		CUM 3037537	O-RING	

FIGURE 6409



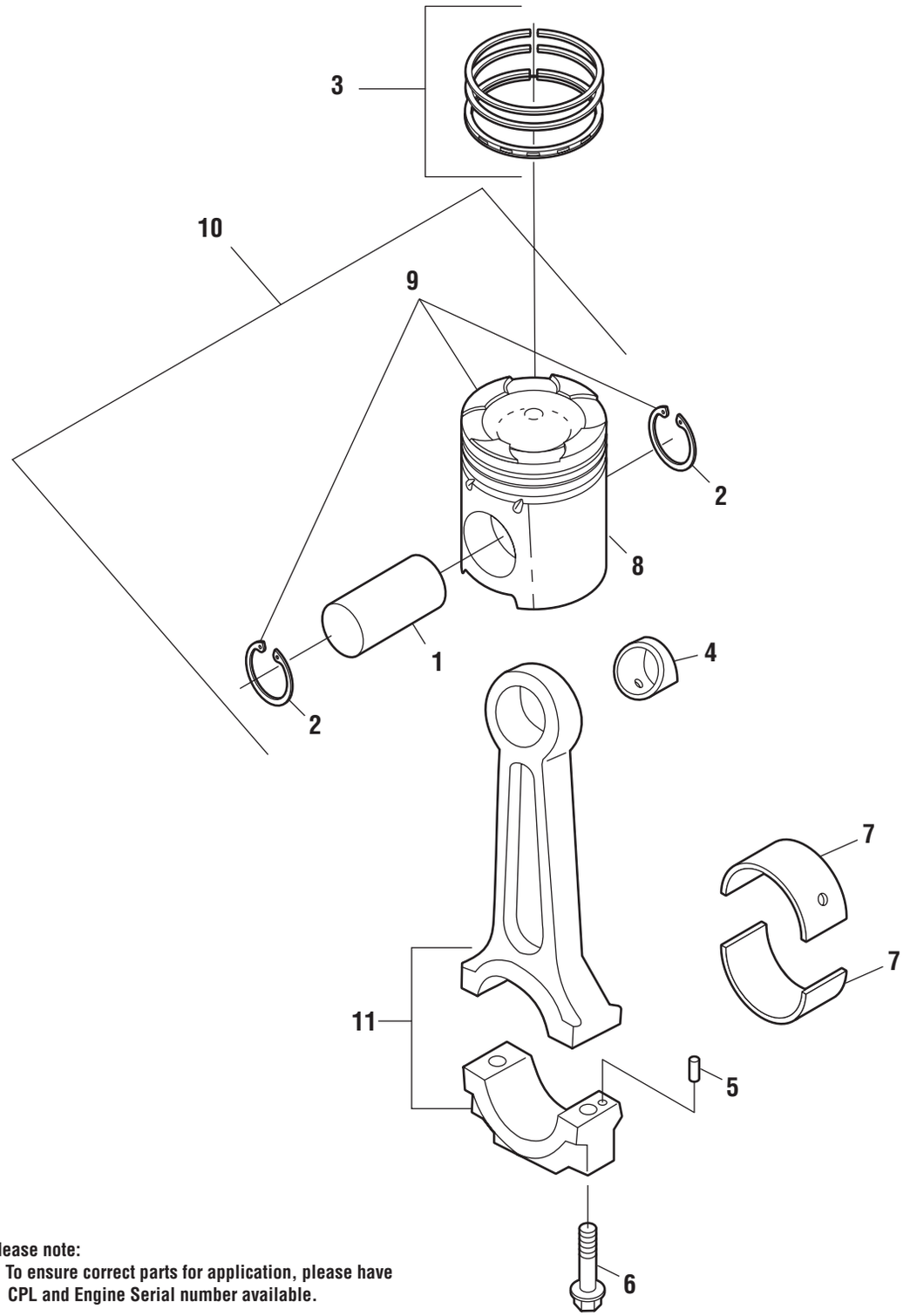
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**191840**		**CUM 3804634**	**CAMSHAFT(Natural Gas)**	
1	**191874**		**CUM 3411327**	**CAMSHAFT**	**CUM 4024849**
1	**191886**		**CUM 3803738**	**CAMSHAFT**	**CUM 3083932**
1	**191895**		**CUM 3803900**	**CAMSHAFT**	**CUM 3087654**
1	191916	191916E	CUM 3800855	CAMSHAFT	CUM 4025955
1	Call		CUM 3803901	CAMSHAFT	CUM 3087653
2	191883		CUM 3073343	GEAR,Camshaft(Spur) (w/ Large Accessory Drive Shaft)	
3	191882		CUM 3002901	GEAR,Camshaft(STC)(72 Teeth)(Helical)	
3	Call		CUM 3053129	GEAR,Camshaft(Celect)(Helical)	

					TIMING CHANGE	**OFFSET**	**EQUIVALANT IN GASKET THICKNESS**
4	191850		CUM 3021601	KEY,Camshaft	Plain	None	None
4	191851		CUM 3021592	KEY,Camshaft	Retard Offset	0.0115in	0.023in
4	191852		CUM 3021596	KEY,Camshaft	Retard Offset	0.0255in	0.051in
4	191853		CUM 3021597	KEY,Camshaft	Retard Offset	0.0390in	0.078in
4	191854		CUM 3021595	KEY,Camshaft	Retard Offset	0.0060in	0.012in
4	191855		CUM 3021598	KEY,Camshaft	Retard Offset	0.0310in	0.062in
4	191856		CUM 3021600	KEY,Camshaft	Retard Offset	0.0510in	0.102in
4	Call		CUM 3021599	KEY,Camshaft	Advance Offset	0.0115in	0.023in
4	Call		CUM 3022352	KEY,Camshaft	Advance Offset	0.0185in	N/A
4	Call		CUM 3022353	KEY,Camshaft	Advance Offset	0.0310in	N/A
5	151525		CUM 215233	WASHER,Thrust(Camshaft)			
6	191896		CUM 68193	PLUG,Pipe(1/8in NPT)			

PAI Copyright 2017

One Piece Piston

FIGURE 6402



Please note:

*** To ensure correct parts for application, please have CPL and Engine Serial number available.**

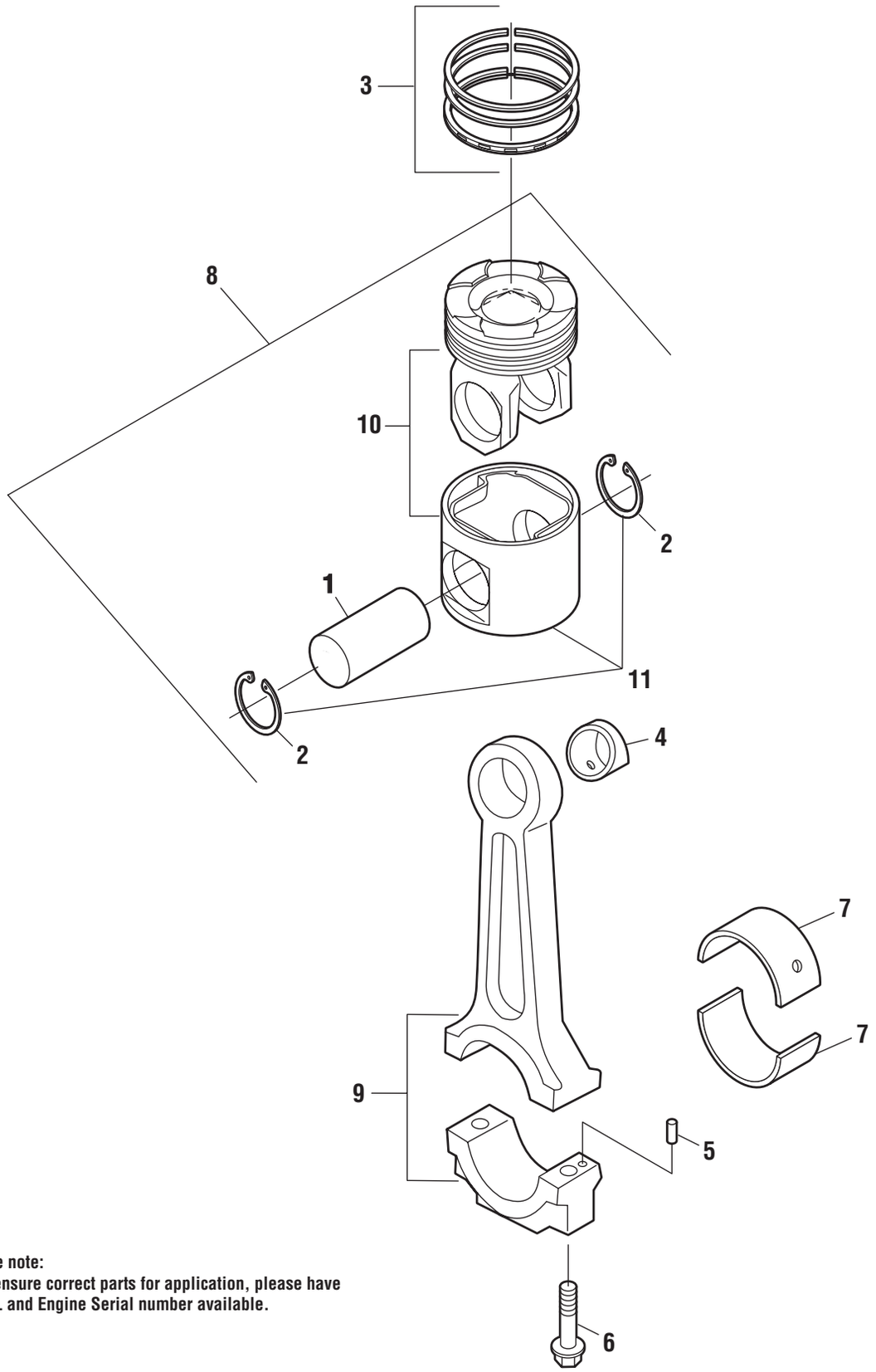
PAI Copyright 2017

One Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111170		CUM 3064304	PIN,Piston	
2	111171		CUM 3064305	RETAINER,Piston Pin	
3	505064		CUM 4089489	SET,Ring,Piston(Celect Plus Engines only)	
3	505065		CUM 3804500	SET,Ring,Piston(STC & Early Celect Engine)	
4	151512		CUM 3064295	BUSHING,Pin	
5	045021		CUM 3034438	PIN,Groove	
6	040016		CUM 3349806	BOLT,Connecting Rod	
7	171784		CUM 3055145	BEARING,Shell(STD)	
7	171785		CUM 3055146	BEARING,Shell(.010in)	
7	171786		CUM 3055147	BEARING,Shell(.020in)	
7	171787		CUM 3055148	BEARING,Shell(.030in)	
8	111162		CUM 3081266	PISTON(Celect)	
8	111164		CUM 3081267	PISTON(STC)	
8	111168		CUM 3081268	PISTON(Celect)	
8	111169		CUM 3081269	PISTON(STC)	
					PISTON NUMBER
9	111201		CUM 3803754	KIT,Piston Includes Piston (1)111168 Retaining Rings (2)111171	CUM 3081268
9	111202		CUM 3803758	KIT,Piston Includes Piston (1)111169 Retaining Rings (2)111171	CUM 3081269
9	111203		CUM 3803752	KIT,Piston Includes Piston (1)111162 Retaining Rings (2)111171	CUM 3081266
9	111204		CUM 3803756	KIT,Piston Includes Piston (1)111164 Retaining Rings (2)111171	CUM 3081267
10	111156		N/A	KIT,Piston Includes Piston (1)111162 Pin (1)111170 Retaining Rings (2)111171	CUM 3081266
10	111157		N/A	KIT,Piston Includes Piston (1)111164 Pin (1)111170 Retaining Rings (2)111171	CUM 3081267
10	111166		N/A	KIT,Piston Includes Piston (1)111168 Pin (1)111170 Retaining Rings (2)111171	CUM 3081268
10	111167		N/A	KIT,Piston Includes Piston (1)111169 Pin (1)111170 Retaining Rings (2)111171	CUM 3081269
11	171635		CUM 3078330	ROD,Connecting	

Two Piece Piston

FIGURE 6427



Please note:

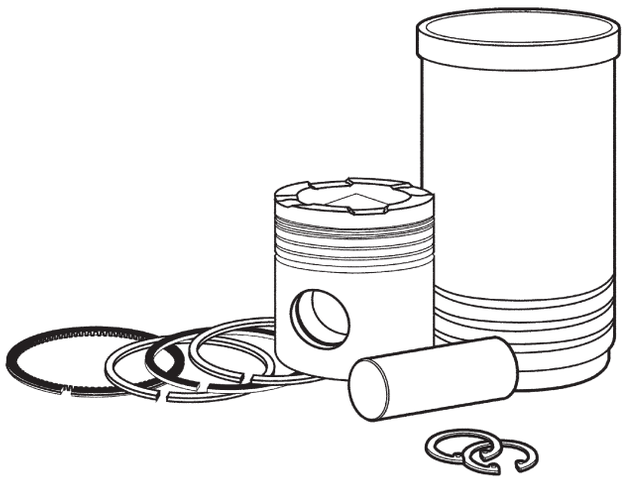
*** To ensure correct parts for application, please have CPL and Engine Serial number available.**

 PAI Copyright 2017

Two Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111170		CUM 3064304	PIN,Piston	
2	111171		CUM 3064305	RETAINER,Piston Pin	
3	505057		N/A	SET,Ring, Piston(Celect Plus Engines only) (Interchangeable w/ 505064)	
3	505064		CUM 4089489	SET,Ring,Piston(Celect Plus Engines only)	
3	505065		CUM 3804500	SET,Ring,Piston(STC & Early Celect Engines)	
4	151512		CUM 3064295	BUSHING,Pin	
5	045021		CUM 3034438	PIN,Groove	
6	040016		CUM 3349806	BOLT,Connecting Rod	
7	171784		CUM 3055145	BEARING,Shell(STD)	
7	171785		CUM 3055146	BEARING,Shell(.010in)	
7	171786		CUM 3055147	BEARING,Shell(.020in)	
7	171787		CUM 3055148	BEARING,Shell(.030in)	
8	111137		N/A	KIT,Piston(w/o Bushing) Includes Piston Kit (1) Pin (1)111170 Retainers (2)111171	
8	111154		N/A	KIT,Piston (Updated to Kit 111496) Includes Piston Kit (1)111379 Pin (1)111170 Retainers (2)111171	CUM 3087635
8	111155		N/A	KIT,Piston (Updated to Kit 111137) Includes Piston Kit (1)111377 Pin (1)111170 Retainers (2)111171	CUM 3087634
8	111161		N/A	KIT,Piston (Updated to Kit 111486) Includes Piston Kit (1)111381 Pin (1)111170 Retainers (2)111171	CUM 3865113
8	111486		N/A	KIT,Piston(w/o Bushing) Includes Piston Kit (1) Pin (1)111170 Retainers (2)111171	
8	111496		N/A	KIT,Piston(w/o Bushing) (Can be interchangeable with 111154) Includes Piston Kit (1) Pin (1)111170 Retainers (2)111171	
9	171635		CUM 3078330	ROD,Connecting	CUM 3064294, CUM 3070499
10	111378		CUM 3087634	PISTON(Design updated to 111478)	CUM 3084044
10	111380		CUM 3087635	PISTON(Design updated to 111487)	CUM 3084023
10	111382		CUM 3865113	PISTON(Design updated to 111484)	
11	111377		CUM 3803741	KIT,Piston(Updated Kit to 111477) Includes Piston (1)111378 Retainers (2)111171	
11	111379		CUM 3803739	KIT,Piston(Updated Kit to 111479) Includes Piston (1)111380 Retainers (2)111171	
11	111381		CUM 3804630	KIT,Piston(Updated Kit to 111485) Includes Piston (1)111382 Retainers (2)111171	

FIGURE 6411



CPL NUMBER	CYLINDER KIT (STD) NON-ANODIZED PISTON	CYLINDER KIT (20/40 OS) NON-ANODIZED PISTON	CYLINDER KIT (STD) ANODIZED PISTON	CYLINDER KIT (20/40 OS) ANODIZED PISTON
1309	—	—	101064 CUM 3803755	101112 N/A
1324	—	—	101064 CUM 3803755	101112 N/A
1374	—	—	101065 CUM 3803759	101113 N/A
1380	101066 CUM 3803757	101111 N/A	101065 CUM 3803759	101113 N/A
1384	—	—	101064 CUM 3803755	101112 N/A
1385	—	—	101064 CUM 3803755	101112 N/A
1386	—	—	101064 CUM 3803755	101112 N/A
1389	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1390	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1391	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1392	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1393	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1394	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1395	101066 CUM 3803757	101111 N/A	101065 CUM 3803759	101113 N/A
1405	—	—	101065 CUM 3803759	101113 N/A
1426	—	—	101064 CUM 3803755	101112 N/A

PAI Copyright 2017

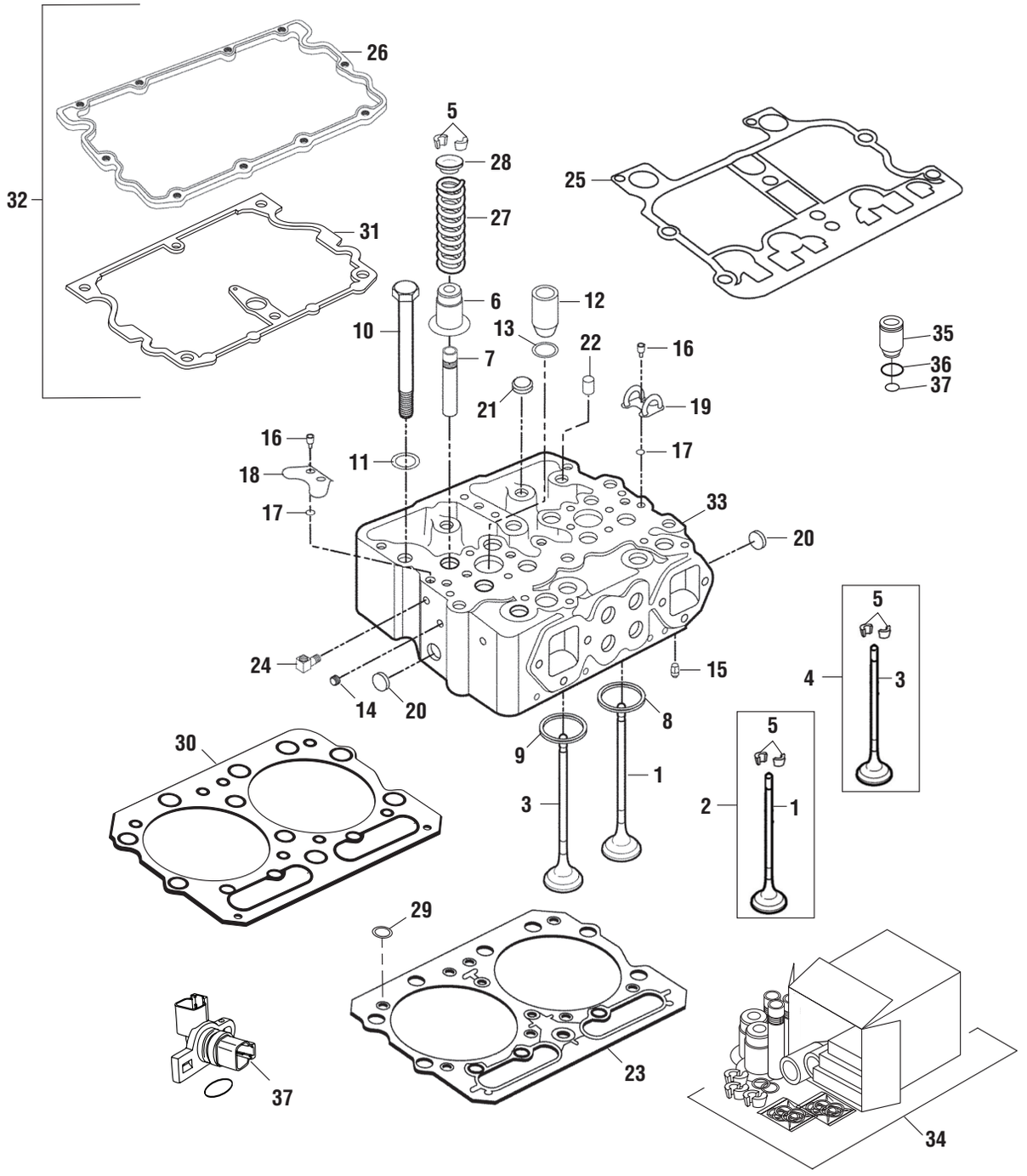
CPL NUMBER	CYLINDER KIT (STD) NON-ANODIZED PISTON	CYLINDER KIT (20/40 OS) NON-ANODIZED PISTON	CYLINDER KIT (STD) ANODIZED PISTON	CYLINDER KIT (20/40 OS) ANODIZED PISTON
1445	—	—	101064 CUM 3803755	101112 N/A
1507	101066 CUM 3803757	101111 N/A	101065 CUM 3803759	101113 N/A
1529	—	—	101065 CUM 3803759	101113 N/A
1530	101066 CUM 3803757	101111 N/A	101065 CUM 3803759	101113 N/A
1532	101066 CUM 3803757	101111 N/A	101065 CUM 3803759	101113 N/A
1533	—	—	101064 CUM 3803755	101112 N/A
1534	—	—	101064 CUM 3803755	101112 N/A
1535	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1536	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1537	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1538	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1540	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1548	—	—	101064 CUM 3803755	101112 N/A
1572	—	—	101064 CUM 3803755	101112 N/A
1573	—	—	101064 CUM 3803755	101112 N/A
1574	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1575	—	—	101064 CUM 3803755	101112 N/A
1580	—	—	101064 CUM 3803755	101112 N/A
1583	—	—	101064 CUM 3803755	101112 N/A
1607	—	—	101065 CUM 3803759	101113 N/A
1611	—	—	101064 CUM 3803755	101112 N/A
1649	101063 CUM 3803753	101110 N/A	101064 CUM 3803755	101112 N/A
1652	—	—	101065 CUM 3803759	101113 N/A
1807	101098 N/A	101099 N/A	—	—
1809	101092 N/A	101117 N/A	—	—

CPL NUMBER	CYLINDER KIT (STD) NON-ANODIZED PISTON	CYLINDER KIT (20/40 OS) NON-ANODIZED PISTON	CYLINDER KIT (STD) ANODIZED PISTON	CYLINDER KIT (20/40 OS) ANODIZED PISTON
1831	—	—	101064 CUM 3803755	101112 N/A
1833	—	—	—	—
1844	101092 N/A	101117 N/A	—	—
1852	101092 N/A	101117 N/A	—	—
1878	—	—	—	—
1896	101092 N/A	101117 N/A	—	—
1921	101092 N/A	101117 N/A	—	—
1924	101092 N/A	101117 N/A	—	—
1944	—	—	101064 CUM 3803755	101112 N/A
1956	101066 CUM 3803757	101110 N/A	101065 CUM 3803759	101113 N/A
1987	101092 N/A	101117 N/A	—	—
2003	101092 N/A	101117 N/A	—	—
2025	101092 N/A	101117 N/A	—	—
2026	101101 N/A	101102 N/A	—	—
2027	101098 N/A	101099 N/A	—	—
2033	101092 N/A	101117 N/A	—	—
2038	101098 N/A	101099 N/A	—	—
2143	101092 N/A	101117 N/A	—	—
2261	101092 N/A	101117 N/A	—	—
2287	101092 N/A	101117 N/A	—	—
2306	101092 N/A	101117 N/A	—	—
2330	101098 N/A	101099 N/A	—	—
2388	101092 N/A	101117 N/A	—	—
2389	101098 N/A	101099 N/A	—	—
2390	101092 N/A	101117 N/A	—	—

PAI Copyright 2017

CPL NUMBER	CYLINDER KIT (STD) NON-ANODIZED PISTON	CYLINDER KIT (20/40 OS) NON-ANODIZED PISTON	CYLINDER KIT (STD) ANODIZED PISTON	CYLINDER KIT (20/40 OS) ANODIZED PISTON
2391	101092 N/A	101117 N/A	—	—
2398	101101 N/A	101102 N/A	—	—
2403	101092 N/A	101117 N/A	—	—
2453	101092 N/A	101117 N/A	—	—
2492	101092 N/A	101117 N/A	—	—
2529	101092 N/A	101117 N/A	—	—
2575	101098 N/A	101099 N/A	—	—
2590	101098 N/A	101099 N/A	—	—
2591	101092 N/A	101117 N/A	—	—
2592	101092 N/A	101117 N/A	—	—
2659	101092 N/A	101117 N/A	—	—

FIGURE 6407

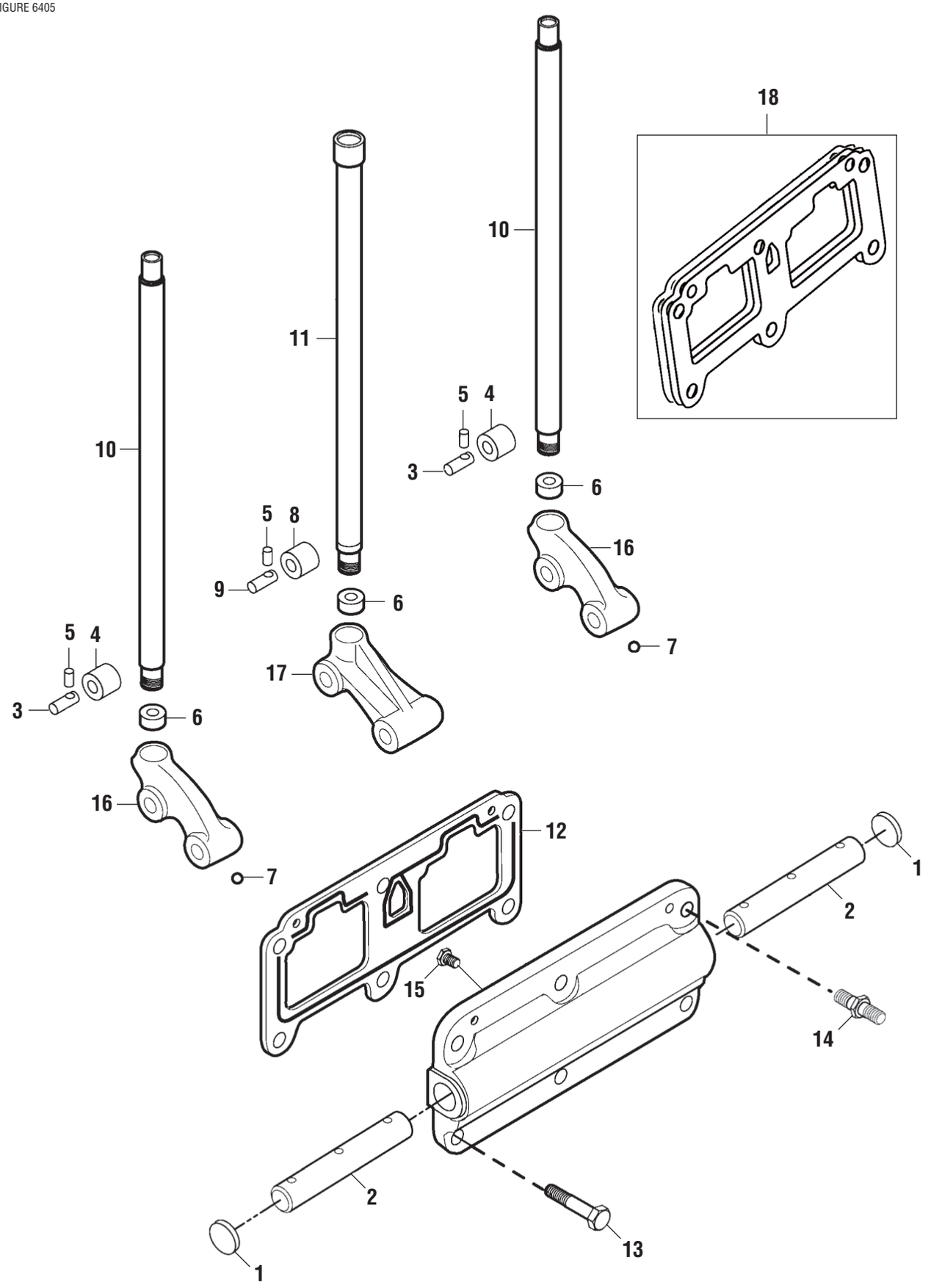


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	191953		CUM 3068519	VALVE,Intake(Early)	
1	191954		CUM 3084045	VALVE,Intake(Current)	
2	191985		CUM 3803360	KIT,Intake Valve(Early) Includes Valve (1)191953 Collets (2)192019	
2	191987		CUM 3803854	KIT,Intake Valve(Current) Includes Valve (1)191954 Collets (2)192019	CUM 3078395
3	191959		CUM 3069672	VALVE,Exhaust(Current)	
3	191960		CUM 3070473	VALVE,Exhaust(Early)	CUM 3078399
3	191961		CUM 3166410	VALVE,Exhaust(Hi-Temp)	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
4	191974		CUM 3803726	KIT,Exhaust Valve(Current) Includes Valve (1)191959 Collets (2)192019	
4	191975		CUM 3803770	KIT,Exhaust Valve(Early) Includes Valve (1)191960 Collets (2)192019	
4	191995		CUM 3800891	KIT,Exhaust Valve(Hi-Temp) Includes Valve (1)191961 Collets (2)192019	CUM 3083991
5	192019		CUM 3072369	COLLET	CUM 3070484
6	191989		CUM 3064281	SEAL,Valve Stem(Intake and Exhaust)	
7	192031	**192031E**	CUM 3064312	GUIDE,Valve(Early and Current)**(Finished)**	
7	192032		CUM 3072321	GUIDE,Valve(Early and Current)(.010in OS)**(Finished)**	
7	192033		CUM 3072322	GUIDE,Valve(Early and Current)(.015in OS)**(Finished)**	
8	192000		CUM 3054590	INSERT,Intake Valve(Early)	
8	192014		CUM 3084020	INSERT,Intake Valve(Current)	
8	**192233**		**CUM 3394116**	**INSERT,Intake/Exhaust Valve(Natural Gas)**	
9	192002		CUM 3076515	INSERT,Exhaust Valve(Current)	
9	192013		CUM 3069692	INSERT,Exhaust Valve(Early)	
9	192130		CUM 3084041	INSERT,Exhaust Valve(Celect Plus Engine)	
10	040006		CUM 3071161	BOLT,Head	CUM 3068897
11	040023		CUM 3071075	WASHER,Head Bolt	CUM 69699
12	192085		CUM 3070486	SLEEVE,Injector	
13	121195		CUM 3007759	O-RING,Injector Sleeve	CUM 196641
14	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)(10 per Head)	CUM S-911-B
15	045020		CUM 68445	PIN,Dowel	
16	040026		CUM 70772	SCREW,Fillister Head(1/4in-20 x 1/2in)	
17	121214		CUM 131026	O-RING,Fuel Crossover	CUM 152946
18	045101		CUM 135308	PLATE,Cover,Fuel	
19	045100		CUM 147100	ASSEMBLY,Crossover Fuel	CUM BM61234
20	040085		CUM 175831	PLUG,Expansion	CUM AR2213
21	040086		CUM 3007635	PLUG,Cup(1in)	CUM 3900957
22	171693		CUM 3027106	PIN,Dowel	
23	131255		CUM 3074982	GASKET,Head(w/ STD Grommet)	
23	131355		CUM 3049998	GASKET,Head(w/ .010in Grommet)	
23	**131970**		**CUM 3098985**	**GASKET,Head(w/ .010in oversize Steel Plate)**	**CUM 3040180**
24	042100		CUM 181213	FITTING,Fuel Return(Elbow)	
25	131427		CUM 4058981	GASKET,Rocker Housing(Metal)	
26	131275		CUM 3066311	GASKET,Rocker Cover	
27	192051		CUM 3070460	SPRING,Valve	
28	**192163**		**CUM 4026228**	**RETAINER,Valve Spring**	**CUM 3349811**
29	131570		CUM 193949	GROMMET,Water(STD)	
29	131571		CUM 193958	GROMMET,Water(.010in)	
30	131555		CUM 4058790	GASKET,Head(Edge Molded)	CUM 3349819, CUM 3076189
31	131428		CUM 3068135	GASKET,'C' Brake	
32	131491		N/A	KIT,Gasket(Engine Brake) Includes Gaskets (3)131275 (3)131428	
33	**060160X**		**CUM 3083981**	**HEAD,Bare Cylinder(Reman)(NSS use 060161X)**	
33	**060161X**		**CUM 3084992**	**HEAD,Loaded Cylinder Assembly(Reman)** **Includes Bare Head (1)060160X Retainers (8)192163** **Valve Seals (8)191989 Exhaust Valve kits (4)191995** **Intake Valve kits (4)191987 Springs (8)192051** **Ring Dowel (2)171693 Crossover Assembly (1)045100** **Screws (4)040026 O-Rings (4)121214 Plate (1)045101**	**CUM 3406742**
34	**060140**		**N/A**	**KIT,Cylinder Head Repair** **Includes Valve Seals (24)191989** **Valve Guides (24)192031 Collets (48)192019** **Injector Tubes (6)192085 O-Rings (6)121195**	
35	**195020**		**CUM 3394117**	**ADAPTER,Spark Plug(NH/NT)(Natural Gas)**	
36	**321426**		**CUM 172205**	**O-RING,Adapter(Natural Gas)**	
37	**131943**		**CUM 3394114**	**GASKET,Plug Adapter(Natural Gas)**	
38	**050710**		**CUM 3824010**	**CONNECTOR,Electrical** **Includes O-Ring (1)321249**	

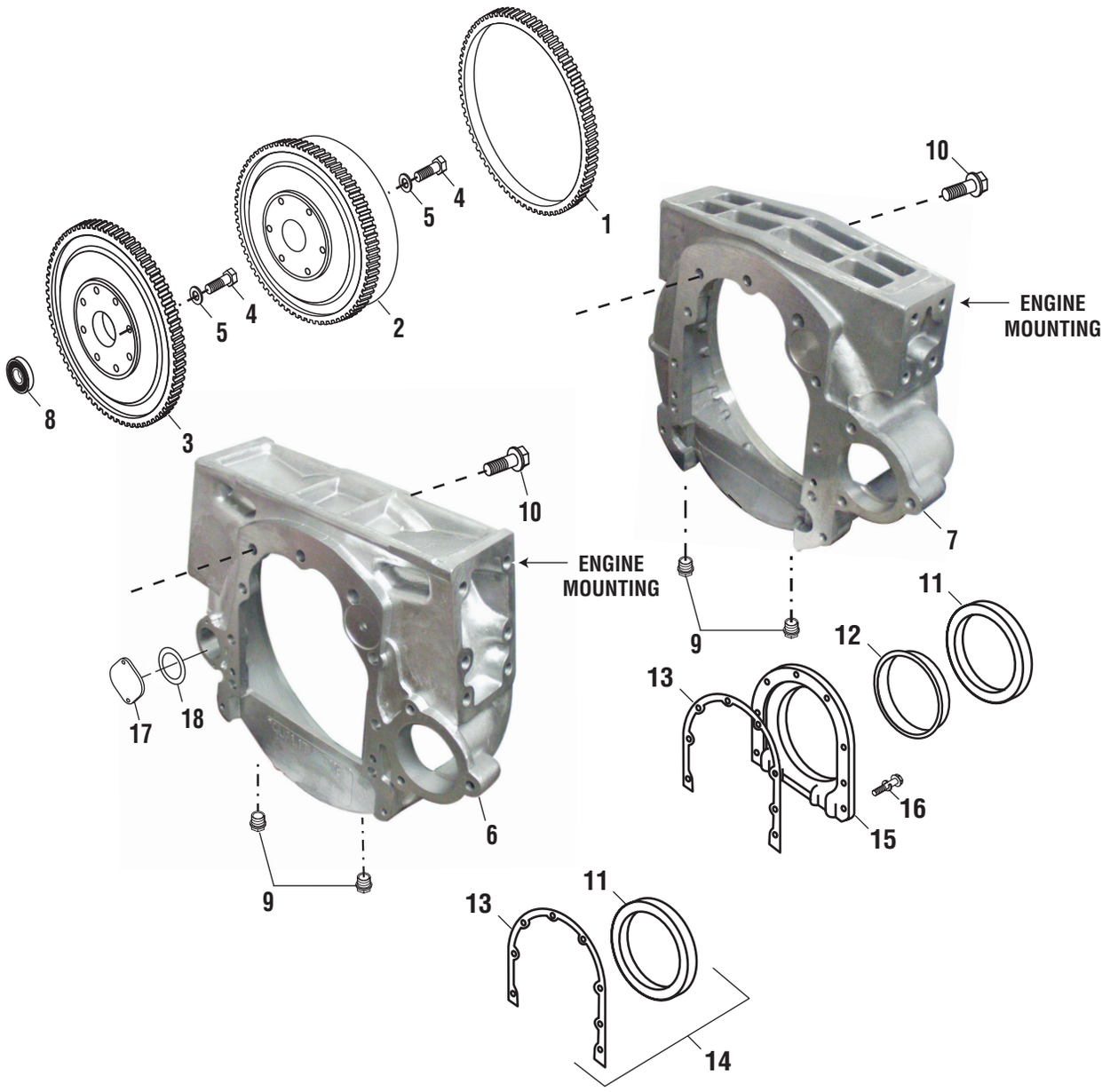
FIGURE 6405



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	GCP-3484		MAK 79AX57X	PLUG,Expansion	CUM 205401
2	045016		CUM 3066217	SHAFT,Cam Follower	
3	045039		CUM 3166428	PIN,Roller(Valve) (Use w/ 045026 Roller)	
4	045026		CUM 3865237	ROLLER (Intake and Exhaust Valve) (Use w/ 045039 Pin)	
5	045013		CUM 3064309	PIN,Roll(Injector and Valve)	
6	Call		CUM 3064621	SOCKET,Tappet	
7	Call		CUM 3067941	PLUG,Ball	
8	045025		CUM 4025956	ROLLER,Cam Follower(Injector)(3/4in ID)	
8	045027	**045027E**	CUM 3161423	ROLLER,Cam Follower(Injector)(7/8in ID)	
9	045009		CUM 3066220	PIN,Roller(Injector)(3/4in) (Use w/ 045025 Roller)	
9	045040		CUM 3166388	PIN,Roller(Injector)(7/8in) (Use w/ 045027 Roller)	
10	192115		CUM 3066291	PUSHROD,Valve	
11	192116		CUM 3067932	PUSHROD,Injector	
11	192117		CUM 3073499	PUSHROD,Injector (For Jake Brake Application)	
12	131373		CUM 3074400	GASKET,Beaded(Cam Follower) (Use First)(.017in)	
12	131374		CUM 3074401	GASKET,Spacer(Cam Follower) (.006in - .008in)	
12	131375		CUM 3074402	GASKET,Spacer(Cam Follower) (.014in - .021in)	
12	131376		CUM 3074404	GASKET,Spacer(Cam Follower) (.029in - .036in)	
12	131426		CUM 3074403	GASKET,Spacer(Cam Follower) (.018in - .025in)	
12	131460		CUM 3068473	GASKET,Beaded(Cam Follower) (Use First)(.032in)	
12	131541		CUM 3068475	GASKET,Beaded(Cam Follower) (Use First)(.042in)	
12	131568		CUM 3068476	GASKET,Beaded(Cam Follower) (Use First)(.047in)	CUM 3062356, CUM 3067928
13		EF01120	FUL X-7-603	SCREW(3/8in-24 x 7/8in Lg)	CUM S-120-A
14	Call		CUM 3081278	SCREW(3/8in-24 x 2in Lg)	
15	Call		CUM 69736	SCREW,Cam Follower Shaft	
16	Call		CUM 3166418	LEVER,Cam Follower(Valve)	
17	Call		CUM 3331390	LEVER,Cam Follower(Injector)	
18	131392		N/A	KIT,Cam Follower Gasket Includes Gaskets (3)131373 (3)131374 (3)131375 (3)131376	

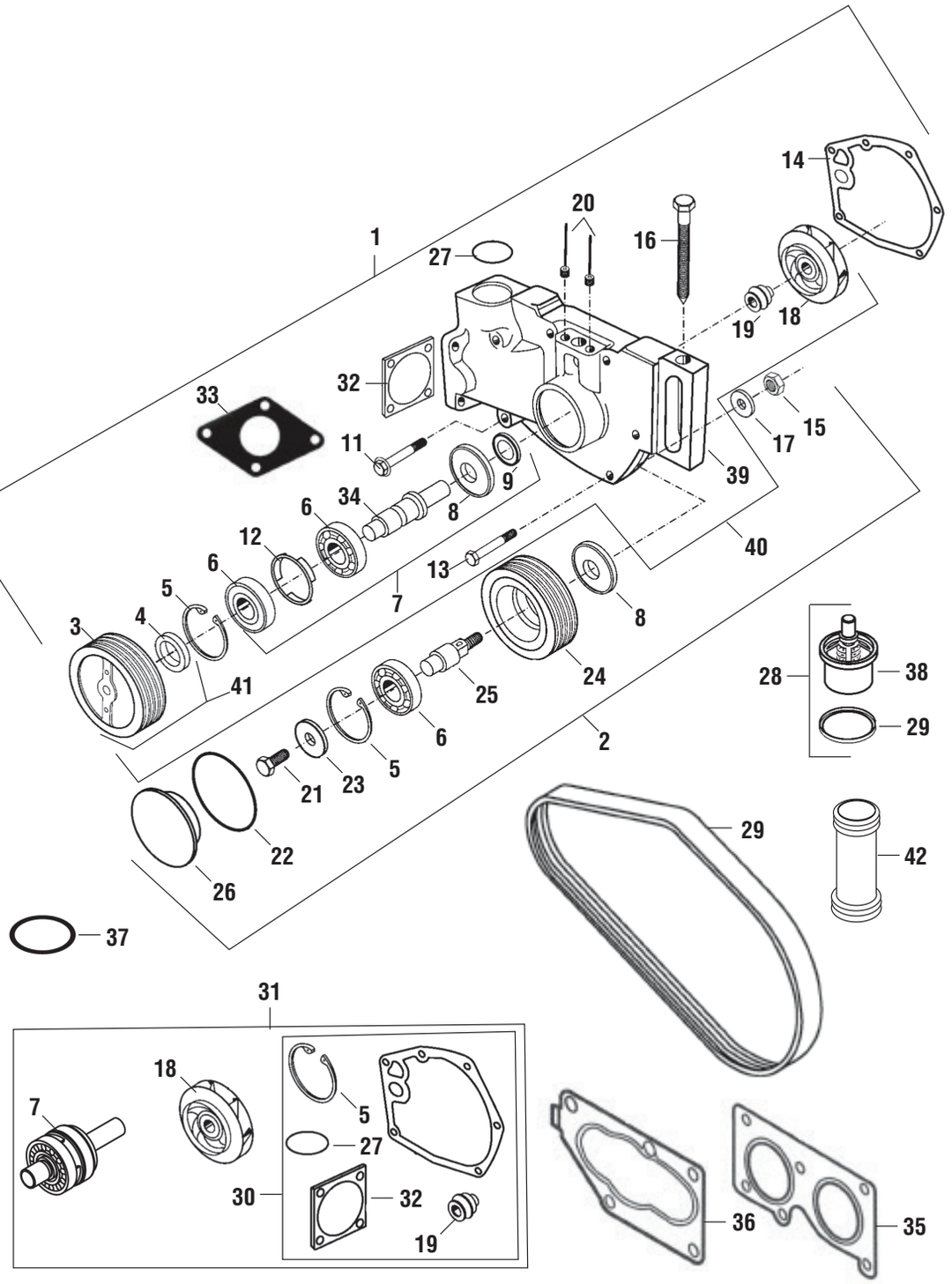
FIGURE 6422



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	060070		CUM 4797	GEAR,Ring (Fits Both Flywheel Assemblies)	CUM 3065151
2	060045		CUM 3016495	ASSEMBLY,Flywheel(14in)	CUM 3005145
3	060046		CUM 3021660	ASSEMBLY,Flywheel(15-1/2in)	
4	040021		CUM 204165	SCREW (5/8in-18 x 1-5/8in)	
5	040024		CUM 200861	WASHER(5/8in)	
6	060003		CUM 3036011	HOUSING,Flywheel(Aluminum #1)	CUM 3007723, CUM 3036005
7	060004		CUM 3002067	HOUSING,Flywheel(Aluminum #2) (5/8in Mounting Bolts) (Ford Application)	CUM 3035977
7	060005		CUM 3048766	HOUSING,Flywheel(Aluminum #2) (3/4in Mounting Bolts) (Ford Application)	
8	EBG-8688		BCA 306DD	BEARING,Pilot(Sealed)	CUM 104998
9	042165		CUM 3042004	PLUG,Plastic	
10	040041		CUM 3048353	BOLT,Flywheel Housing (5/8in - 18 x 1-3/4in)	
11	136001		CUM 3006737	SEAL,Rear Crankshaft(Dry Clutch)	CUM 204829
11	136023		CUM 3006738	SEAL,Rear Crankshaft(Wet Clutch)	CUM 212832
12	136039		CUM 3006743	RING,Wear(Rear Crankshaft)	NAT 99599
13	131362		CUM 3067616	GASKET,Rear Cover	CUM 40662
14	131396		N/A	KIT,Rear Seal(Dry Clutch) Includes Gasket (1)131362 Seal (1)136001	
15	060102		CUM 3049018	COVER,Rear	
16	Call		CUM 3010594	SCREW,Captive	
17	Call		CUM 70657	PLATE,Cover	
18	131388		CUM 9333-1	GASKET,Cover Plate	

FIGURE 6406

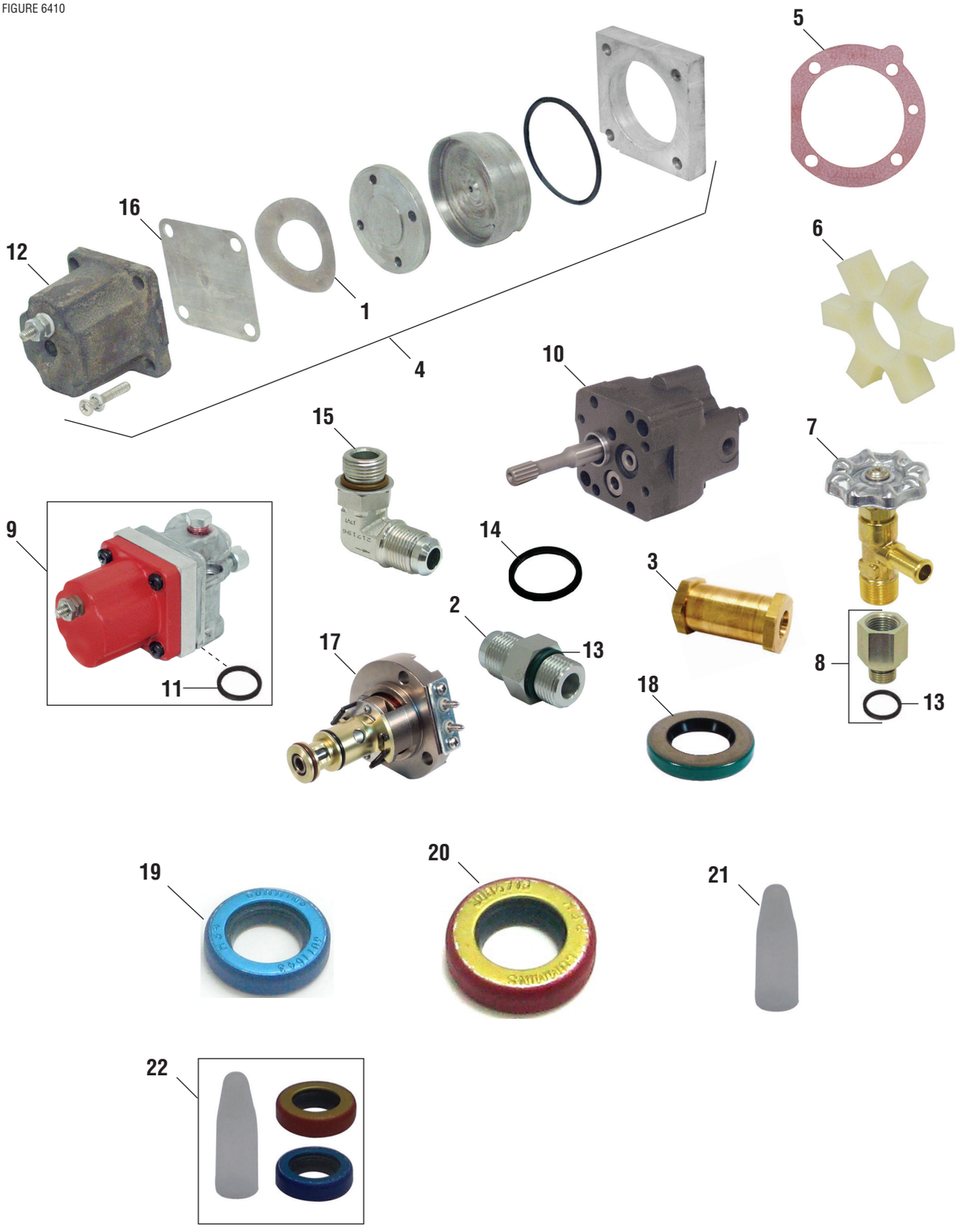


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181812		CUM 3803605	ASSEMBLY,Water Pump(w/ Gaskets)	
1	**181909**		**CUM 3804826**	**KIT,Water Pump** **Includes Assembly (1)181908** **Gaskets (1)131464 (1)131339 (1)131434** **O-Ring (1)EGA-1660**	
2	180903		CUM 3066330	ASSEMBLY,Idler	
3	**181903**		**CUM 3067997**	**PULLEY,Water Pump(6 Groove)**	
4	136013		CUM 3038998	SEAL,Oil	CUM 203101

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
4	**136159**		**CUM 203097**	**RING,Wear**	
5	042060		CUM S-16255	RING,Retaining	
6	EBG-8041	**EM80410**	MAK 46AX58	BEARING,Non-Sealed	CUM 3064406
7	180911		CUM 3064392	ASSEMBLY,Water Pump Shaft Includes Bearings (2)EBG-8041 Seal (1)136051 Slinger (1)180914 Shaft (1)180913 Spacer (1)181846	
8	136051		CUM 3074482	SEAL,Oil	
9	180914		CUM 3064390	SLINGER,Water Pump	
10	050484		CUM 217638	BELT,Serpentine(44-1/8in Lg)	
10	050499		CUM 3095880	BELT,Serpentine(42-1/8in Lg)	
11	040030		CUM 3012468	SCREW,Cap(Water Pump)	
12	181846		CUM 196844	SPACER,Water Pump	
13	Call		CUM 3066207	SCREW,Flanged Cap	
14	131434		CUM 3076522	GASKET,Water Pump	CUM 3068537
15	FNU-0280		MAK 23AX459	NUT,Hex Head(5/8in-11)	CUM S-201
16	040040		CUM 182706	SCREW,Adjusting	
17	Call		CUM 213082	WASHER,Plain(5/8in ID)	
18	181872		CUM 3045801	IMPELLER,Water Pump	
19	181845		CUM 3033677	SEAL,Water Pump	CUM 3071085
20	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
21	Call		CUM S-107	SCREW,Cap(5/16in-18 x 3/4in Lg)	
22	121299		CUM 3102802	SEAL,O-Ring	CUM 145551
23	Call		CUM 3070458	WASHER(1/4in ID)	
24	Call		CUM 3072355	PULLEY,Idler	
25	Call		CUM 3069328	SHAFT,Idler	
26	Call		CUM 3064404	COVER,Idler Pulley	
27	121236		CUM 43463-A	O-RING	
28	181830		CUM 201737	KIT,Thermostat Includes Thermostat (1) Seal (1)EOS-3305	CUM 3076489
28	181831		CUM 3335550	KIT,Thermostat(Non-Vented,180-200 deg) Includes Thermostat (1) Seal (1)136106 (NSS use 181887)	CUM 3335549
28	181887		CUM 4973373	THERMOSTAT(Non-Vented,180 deg)	CUM 4952204
29	131289		CUM 186780	SEAL,Thermostat (Interchangeable w/ EOS-3305 Seal)	
29	136106		CUM 3335548	SEAL,Thermostat	
30	181847		CUM 3803362	KIT,Water Pump Repair(Minor) Includes Retaining Ring (1)042060 O-Ring (1)EGA-1660 Seal (1)181845 Gaskets (1)131339 (1)131434	
31	181854		CUM 3803363	KIT,Water Pump Repair(Major) Includes Water Pump Kit (1)181847 Impeller (1)181872 Shaft Assembly (1)180911	
32	131339		CUM 3024960	GASKET	CUM 208132
32	131466		CUM 3066285	GASKET,Thermostat Housing(Celect Engine)	
33	131464		CUM 3064313	GASKET,Thermostat	
34	180913		CUM 3064389	SHAFT,Water Pump	
35	131485		CUM 3865236	GASKET,Thermostat Housing Cover	
36	131484		CUM 3865195	GASKET,Thermostat Housing	
37	121250		CUM 3073966	O-RING,Water Outlet & Heater Exchanger	
38	181830-001		CUM 201737	THERMOSTAT(NSS) (Used in kit 181830)	CUM 3076489
39	**181919**		**CUM 3084024**	**HOUSING,Pump(Included in 181908 Pump)**	
40	**181908**		**CUM 3098697**	**ASSEMBLY,Water Pump(Use 181909 kit)** **Includes Impeller (1)181872 Pulley (1)181897** **Shaft Assembly (1)180911 Housing (1)181919** **Seals (1)136013 (1)181845 Ring (1)042060** **Plugs (3)EPP-3573**	
41	**181897**		**CUM 3067999**	**PULLEY,Water Pump** **Includes Pulley (1)181903 Wear Ring (1)136159**	
42	**181941**		**CUM 3076491**	**TUBE,Water Transfer**	

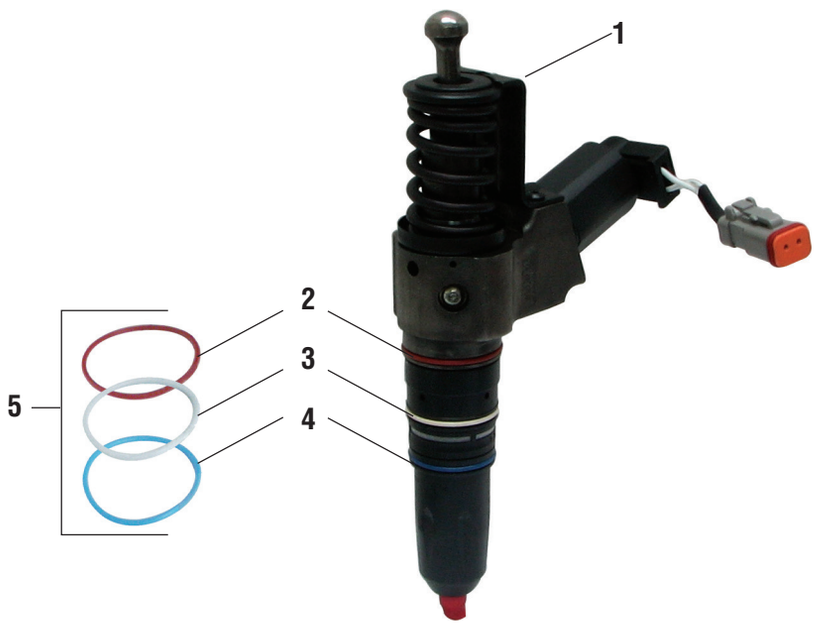
FIGURE 6410



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**180225**		**CUM 129768**	**WASHER,Wave**	
2	**042211**		**CUM 3348332**	**VALVE,Fuel Check** **Includes O-Ring (1)121284**	
3	**042210**		**CUM 3028325**	**VALVE,Fuel Check**	**CUM 216737**
4	180204		CUM 3054608	VALVE,Fuel Shutoff(12V)	
5	131368		CUM 4026171	GASKET,Fuel Pump Mounting	
6	180929		CUM 3046200	SPIDER,Coupling(White)	
7	MSV-4119		MAK 6635-V404P66	VALVE,Shutoff(3/8in Hose)	CUM 179901
8	FAD-4099		MAK 6635-638F50GS	ADAPTER(Use w/ MSV-4119 Shutoff Valve) Includes O-Ring (1)121284	CUM 3087692
9	180206		CUM 3076343	VALVE,Fuel Shutoff(12V) (Single Terminal)(Non-Rapid Start)	
9	180208		CUM 3018453	VALVE,Fuel Shutoff(24V) (Single Terminal)(Rapid Start)	
10	180110		CUM 3034217	PUMP,Fuel Gear(RH)	
10	**180123**		**CUM 4954880**	**PUMP,Fuel Gear**	
11	121278		CUM 154087	RING,Rectangular	
12	180210		CUM 3054610	SOLENOID(24V)(Single Term)	
12	180211		CUM 3054611	SOLENOID(12V)(Single Term)	
13	121284		CUM 3040817	O-RING,Fitting	CUM 129858, MAK 56AX410
14	121358		CUM 213079	O-RING,Remote Fuel Pump	
15	180120		CUM 217196	VALVE,Fuel Check	
15	**180233**		**CUM 3033740**	**VALVE,Fuel Check**	
16	180230		CUM 129839	SHIELD,Valve	
17	**180190**		**CUM 3408324**	**ACTUATOR,Fuel**	**CUM 3080809**
18	**136138**		**CUM 3062678**	**SEAL,Fuel Pump**	**CUM 3045173**
19	**136164**		**CUM 3071643**	**SEAL,Pump**	
20	**136165**		**CUM 3084713**	**SEAL,Pump**	
21	**136166**		**CUM 3823234**	**SLEEVE,Installation Seal**	
22	**136163**		**CUM 3803477**	**KIT,Seal** **Includes Seal Pumps (1)136164 (1)136165 Sleeve (1)136166**	

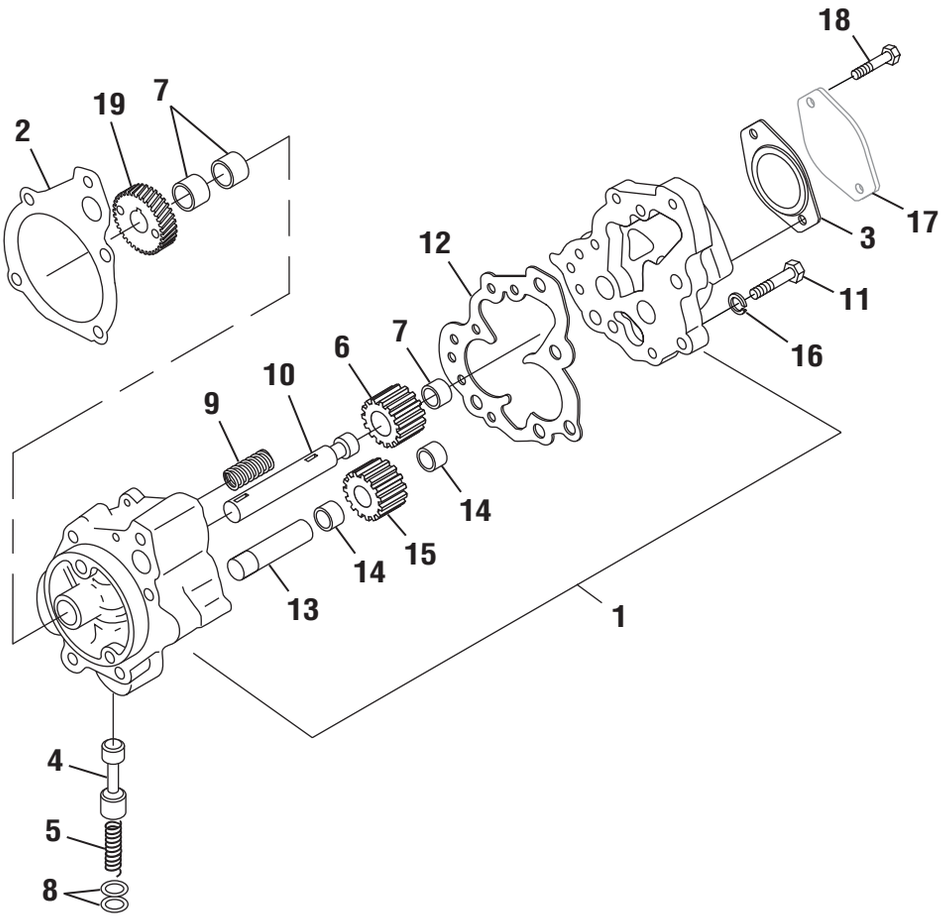
FIGURE 6428



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**209970X**		**CUM 3652542**	**ASSEMBLY,Injector(Reman)**	**CUM 3081315**
1	**209974X**		**CUM 3411759**	**ASSEMBLY,Injector(Reman)**	**CUM 3087560, CUM 3083846**
1	**209982X**		**CUM 3411767**	**ASSEMBLY,Injector(Reman)**	**CUM 3083662**
1	**209987X**		**CUM 3411760**	**ASSEMBLY,Injector(Reman)**	**CUM 3083848, CUM 3087558**
1	**209988X**		**CUM 3411761**	**ASSEMBLY,Injector(Reman)**	**CUM 3087807**
1	**209990X**		**CUM 3411763**	**ASSEMBLY,Injector(Reman)**	**CUM 3087788, CUM 3609796**
1	**209991X**		**CUM 3411764**	**ASSEMBLY,Injector(Reman)**	**CUM 3088178**
1	**209993X**		**CUM 3411766**	**ASSEMBLY,Injector(Reman)**	**CUM 3411691**
2	121197		CUM 3070136	O-RING,Injector Mount(Red)	
3	121198		CUM 3070137	O-RING,Injector Mount(White)	
4	121199		CUM 3070138	O-RING,Injector Mount(Blue)	
5	121190		N/A	KIT,Injector O-Ring Includes O-Rings (6)121197 (6)121198 (6)121199	

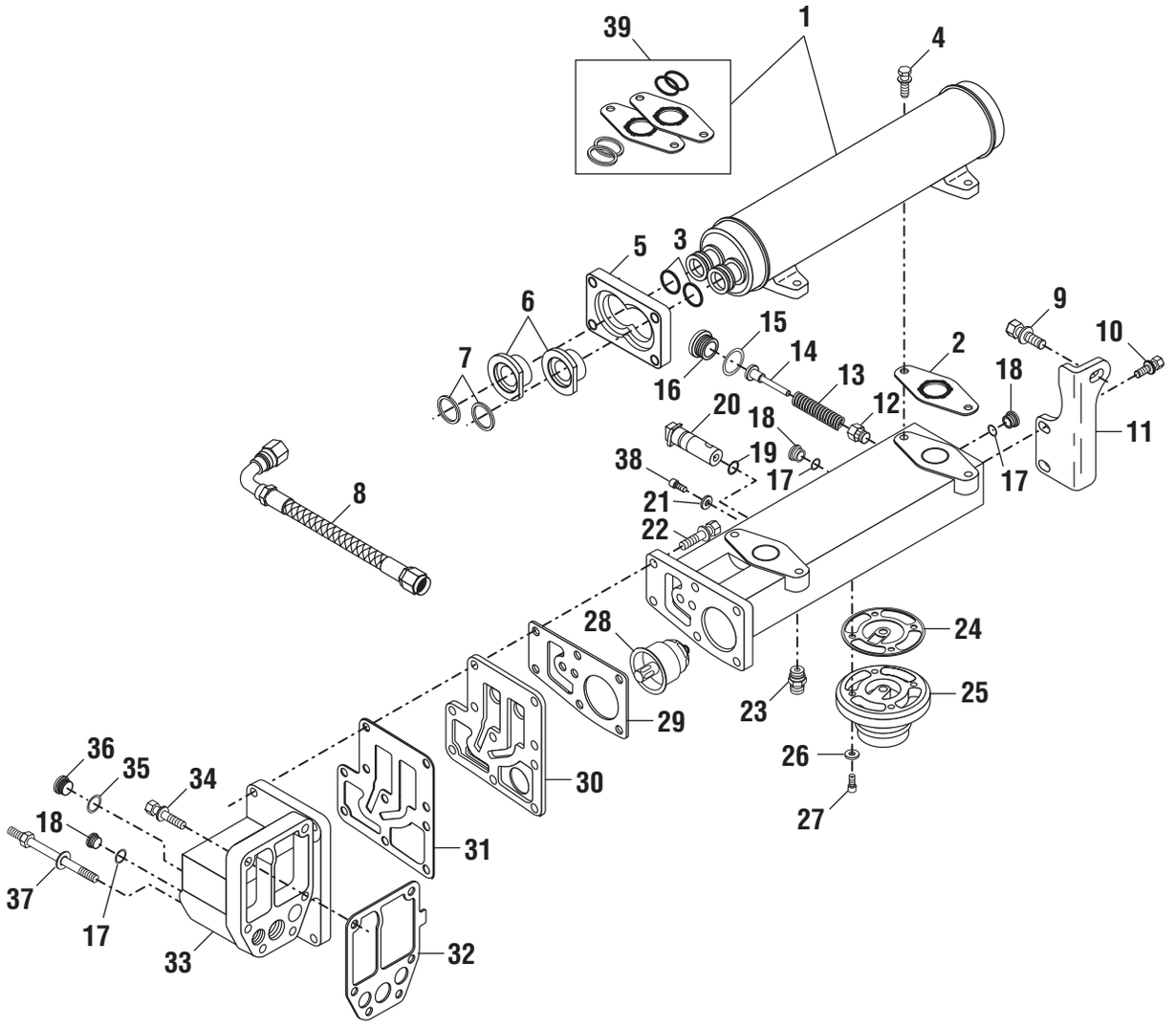
PAI Copyright 2017

FIGURE 6420



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141294		CUM 3803698	ASSEMBLY,Oil Pump(w/ Spur Gear) (Celect Plus Engine) Includes Gasket (1)131361 Oil Pump (1)	
1	141295		CUM 3803369	ASSEMBLY,Oil Pump(w/ Helical Gear) (Celect & STC) Includes Gasket (1)131361 Oil Pump (1)	
2	131361		CUM 3067613	GASKET,Mounting(Pump to Block)	
3	131451		CUM 3558515	GASKET,Hydraulic Cover	
4	141306		CUM 3884126	PLUNGER,Relief	
5	141332		CUM 3010146	SPRING,Relief Plunger	
6	141351		CUM 3045617	GEAR,Pumping	CUM 3014783
7	**151488**		**CUM 69521**	**BUSHING,Oil Pump**	
8	EGA-3877		MAK 446GC1225	O-RING	CUM 145504
9	141335		CUM 3014756	SPRING,Bypass	
10	141350		CUM 3012532	SHAFT,Oil Pump	
11	Call		CUM 3067461	SCREW(7/16in-20 x 4-1/2in)	
12	131322		CUM 3014778	GASKET,Cover	
13	Call		CUM 3012531	SHAFT,Idler	
14	141353		CUM 68365	BUSHING,Gear	
15	141352		CUM 3045622	GEAR,Oil Pump Includes Bushings (2)141353	CUM 3041965
16	BWA-0051		MAK 36AX4	WASHER,Lock	CUM S-610
17	141314		CUM 204048	COVER,Pump	CUM 199593
18	Call		CUM 3010595	BOLT	
19	**141356**		**CUM 3609824**	**GEAR,Lubricating Pump(Spur Gear)**	
19	**141354**		**CUM 3609838**	**GEAR,Lubricating Pump(Helical Gear)**	

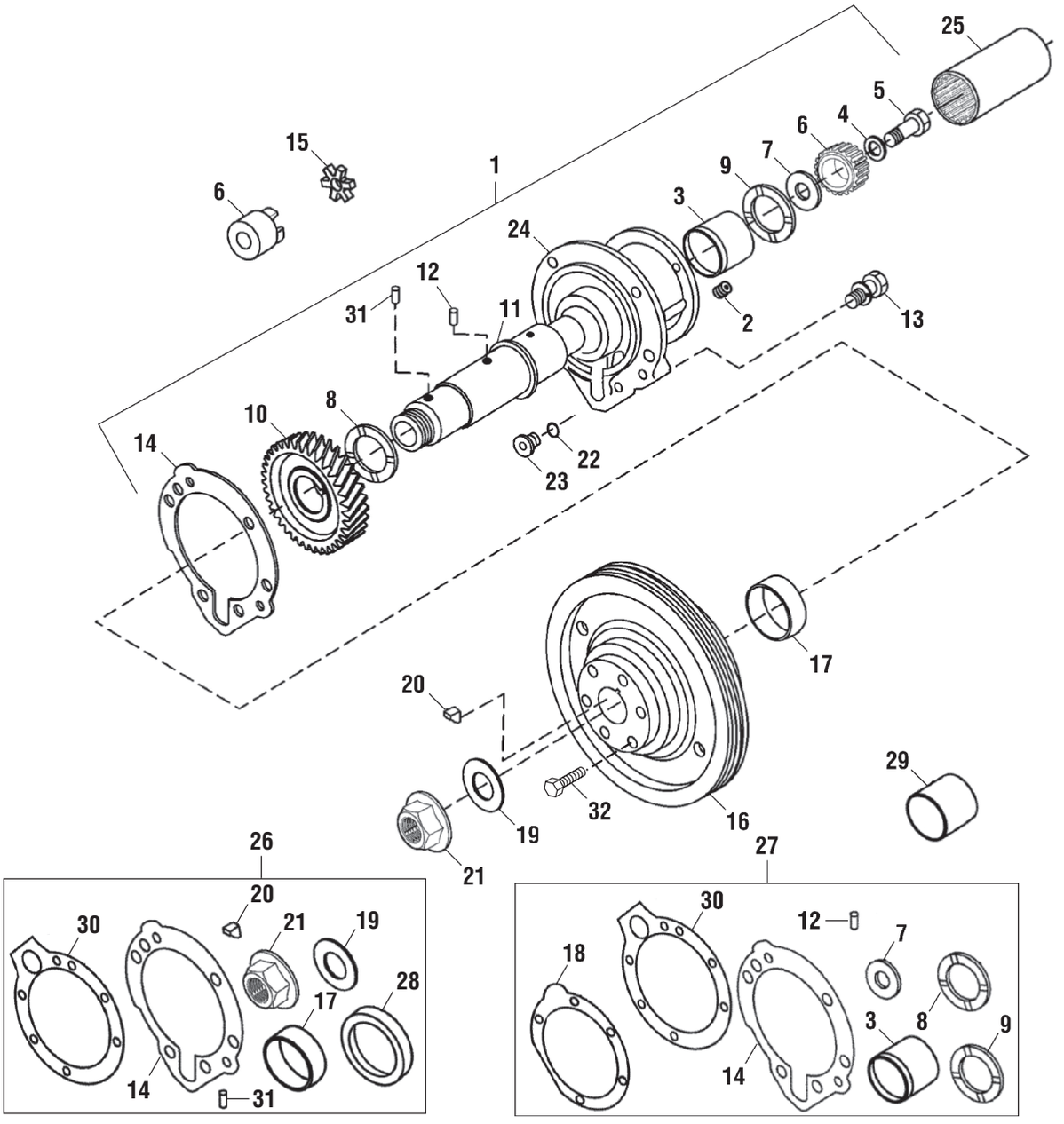
FIGURE 6418



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141404		CUM 3078407	COOLER,Oil(Dual Pass) Includes Cooler (1) O-Rings (2)121211 (2)121257 Gaskets (2)131472	
1	141414		CUM 3413091	COOLER,Oil(Four pass design) Includes Cooler (1) O-Rings (2)121211 (2)121257 Gaskets (2)131472	CUM 3412857
2	131472		CUM 3069678	GASKET,Oil	
3	121211		CUM 109080	O-RING,Seal	
4	Call		CUM 3067655	SCREW,Captive	
5	Call		CUM 3069681	RETAINER,Connection	
6	Call		CUM 3069680	ADAPTER,O-Ring	
7	121257		CUM 3072375	O-RING,Oil(Rectangular)	
8	121085		CUM 3035580	ASSEMBLY,Hose(10in)	
9	Call		CUM 3063567	SCREW,Captive Cap	
10	Call		CUM 3006182	SCREW,Captive Cap	
11	Call		CUM 3070501	BRACKET,Oil Cooler	
12	Call		CUM 3072301	VALVE,Bypass	
13	Call		CUM 3072302	SPRING,Compression	
14	Call		CUM 3072377	PLUNGER,Bypass Valve	
15	121265		CUM 3046943	O-RING,Seal	
16	Call		CUM 3072378	PLUG,Threaded(w/ 121265 Seal)	
17	121227		CUM 3037537	O-RING,Seal(For EXP-3474 Plug)	CUM 118350
18	ECP-3474		MAK 6635-6HP50NS	PLUG,Threaded(9/16in-18 NPT) (w/ 121227 Seal)	CUM 3037536
19	Call		CUM 3072397	SEAL,O-Ring	
20	Call		CUM 3072395	VALVE,Shutoff	
21	Call		CUM 3077620	WASHER,Plain	
22	Call		CUM 3042889	SCREW,Captive Cap	
23	Call		CUM 206963	ADAPTER,Filter Head	
24	Call		CUM 3071736	GASKET,Filter Head	
25	Call		CUM 3058863	HEAD,Lube Oil Filter	
26	Call		CUM 3017915	WASHER,Plain	
27	Call		CUM S-134	SCREW,Cap	
28	181865		CUM 3059408	THERMOSTAT	
28	181886		CUM 4952630	THERMOSTAT(225 deg)	
29	131499		CUM 3072341	GASKET,Oil Connection	
30	Call		CUM 3066277	SPACER,Cooler Support	
31	131498		CUM 3070477	GASKET,Oil Cooler Support	
32	131470		CUM 3066298	GASKET,Oil Cooler Support	
33	Call		CUM 3081177	SUPPORT,Oil Cooler	
34	Call		CUM 3012473	SCREW,Captive Cap	
35	EGA-3061		MAK 8813-154129	O-RING,Seal(For ECP-3475 Plug)	CUM 3046201
36	ECP-3475		MAK 6635-8HP50NS	PLUG,Threaded(3/4in-16 NPT) (w/ EGA-3061 Seal)	CUM 3046202
37	Call		CUM 3067984	SCREW,Captive Cap	
38	Call		CUM 3061400	SCREW,Cap	
39	131594		N/A	KIT,Oil Cooler Mounting Includes Gaskets (2)131472 O-Rings (2)121211 (2)121257	

FIGURE 6419



Please note:

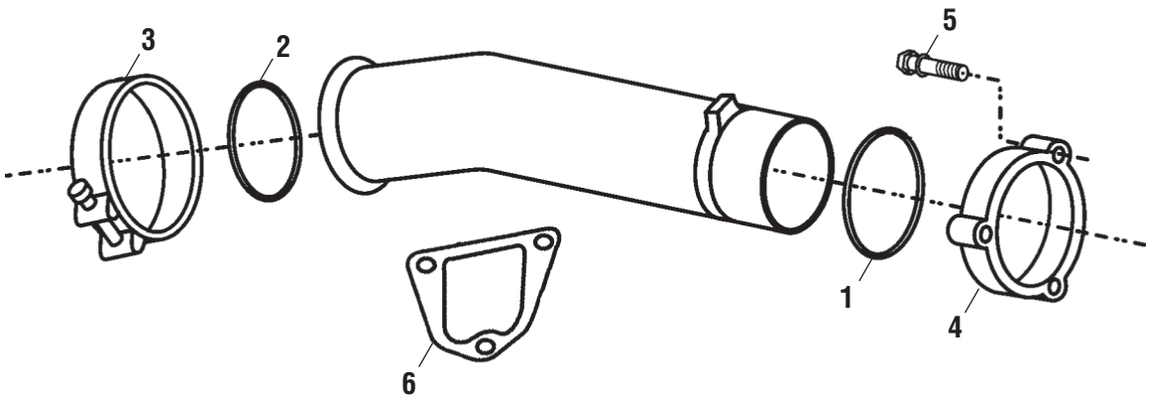
*** Accessory Drive Cast Iron Assembly can replace Accessory Drive Aluminum Assembly.**

PAI Copyright 2017

Cast Iron Housing

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180905		CUM 3005133	DRIVE,Accessory(Small Shaft)(Cast Iron Housing) Includes Washers (1)040022 (1)042020 (1)151521 (1)151522 Shaft (1)180906 Pin (1)045021 (1)045024 Housing Assembly (1)180915 Gasket (1)131366 Screw (1)040025 Coupling (1)180926 Gear (1)180925	CUM 3067988
1	180920		CUM 3078307	DRIVE,Accessory(Large Shaft)(Cast Iron Housing) Includes Housing Assembly (1)180915 Pin (1)045021 (1)045024 Washers (1)040022 (1)042020 (1)151521 (1)151522 Screw (1)040025 Coupling (1)180926 Gear (1)180970 Shaft (1)180921 Gasket (1)131366	
2	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM S-911-B
3	151489		CUM 116391	BUSHING,Accessory Drive	
4	040022		CUM 170664	WASHER(3/8in ID)	
5	040025		CUM 3000173	SCREW(3/8in-16 x 1in)(Drilled)	
6	180926		CUM 3000174	COUPLING,Spline	
6	180930		CUM 3000175	COUPLING(w/o Air Compressor)	
6	Call		CUM 208755	COUPLING,Spider	
7	042020		CUM 3014103	WASHER	
8	151521		CUM 3026556	WASHER,Thrust	
9	151522		CUM 3026557	WASHER,Thrust	
10	180925		CUM 142689	GEAR,Helical	
10	180970		CUM 3078310	GEAR,Spur	
11	180906		CUM 3000171	SHAFT,Accessory Drive (Small Shaft)	
11	180921		CUM 3076500	SHAFT,Accessory Drive (Large Shaft)	
12	045021		CUM 3034438	PIN,Groove	
13	Call		CUM 3010590	SCREW	
14	131366		CUM 3069101	GASKET,Mounting(Paper)	
14	131567		CUM 3076225	GASKET,Mounting(Edge Molded)	
15	180927		CUM 162426	SPIDER,Coupling(Black)	
15	180929		CUM 3046200	SPIDER,Coupling(White)	
16	181895		CUM 3023473	PULLEY,Accessory Drive (Multi-Groove w/ Sleeve)	
17	136022		CUM 190397	SLEEVE,Wear,Pulley	
18	131368		CUM 4026171	GASKET,Fuel Pump Mounting	
19	042021		CUM 193136	WASHER	
20	136019		CUM 3008947	SEAL,Keyway	
21	040061		CUM 3012526	NUT,Flange	
22	121227		CUM 3037537	O-RING,Seal	CUM 118350
23	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded(9/16in-18 NPT) (w/ Seal 121227)	CUM 3040813
24	180915		CUM AR45724	ASSEMBLY,Housing(Cast Iron) Includes Housing (1) Plugs (2)EPP-3573 Bushing (1)151489	
25	180928		CUM 199349	SLEEVE,Spline Coupling	
26	180923		N/A	KIT,Accessory Drive Installation Includes Gaskets (1)131366 (1)131367 Sleeve (1)136022 Nut (1)040061 Seals (1)136006 (1)136019 Washer (1)042021 Pin (1)045021	
27	151540		N/A	KIT,Accessory Drive Repair Includes Bushing (1)151489 Washers (1)042020 (1)151521 (1)151522 Pin (1)045021 Gaskets (1)131366 (1)131367 (1)131368	
28	136006		CUM 3004316	SEAL,Front Cover	
29	151513		CUM 132770	BUSHING,Front,Cover	CUM 121932
30	131367		CUM 3069102	GASKET,Mounting,Air Compressor	
31	045024		CUM 70550	PIN,Dowel	
32	040071		CUM 175833	SCREW(3/8in-16 x 1-1/8in Hex)	CUM 3970500

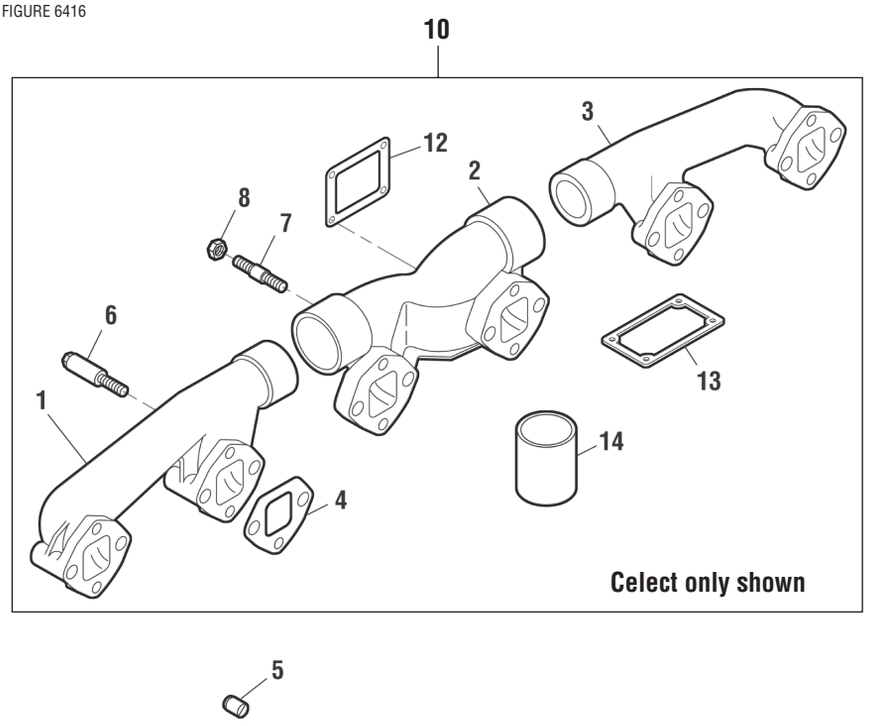
FIGURE 6415

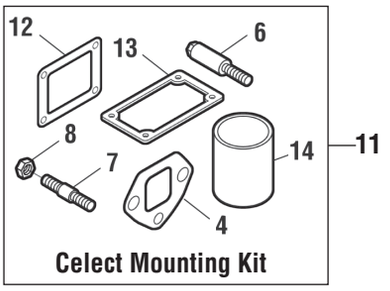


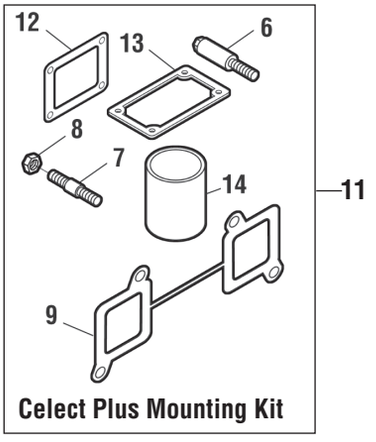
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	121249		CUM 3084848	O-RING,Seal Turbo Inlet	
2	121255		CUM 3066211	O-RING,Seal Turbo Inlet	
3	Call		CUM 3067979	CLAMP,V-Band	
4	Call		CUM 3084603	RETAINER,Seal	
5	Call		CUM 3044413	SCREW,Cap	
6	131312		CUM 3008591	GASKET,Intake Manifold	

PAI Copyright 2017

FIGURE 6416







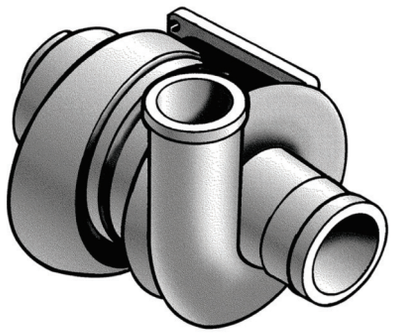
N14 Series

Please note:

*** Manifold Assembly can rotate 180° (Front, Center and Rear Sections) and be used as a High Mount Exhaust Manifold.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181004		CUM 3065024	MANIFOLD,Front Exhaust(Celect)	
1	NSS		CUM 3078322	MANIFOLD,Front Exhaust(Celect Plus)	
2	181003		CUM 3065022	MANIFOLD,Center Exhaust(Celect)	
2	NSS		CUM 3078323	MANIFOLD,Center Exhaust(Celect Plus)	
3	181002		CUM 3062568	MANIFOLD,Rear Exhaust(Celect Plus)	
3	NSS		CUM 3078324	MANIFOLD,Rear Exhaust(Celect Plus)	
4	131324		CUM 3020943	GASKET,Exhaust	
5	045022		CUM 105199	PIN,Drive	
6	040027		CUM 3067930	ASSEMBLY,Screw and Spacer (Use w/ Towerless Exhaust Manifold)	
7	040111		CUM 3056155	STUD,Turbo Mounting	
8	040009		CUM 3010914	NUT(3/8in-24)	
9	131400		CUM 3865235	GASKET,Exhaust Manifold(Graphite)	
10	181005		N/A	KIT,Exhaust Manifold(Celect) (Complete Kit w/ Hardware) Includes Rear Manifold (1)181002 Center Manifold (1)181003 Front Manifold (1)181004 Mounting Kit (1)181010	
10	181006		N/A	KIT,Exhaust Manifold(Celect Plus) (Complete Kit w/ Hardware) Includes Rear Manifold (1) Center Manifold (1) Front Manifold (1) Mounting Kit (1)181011	
11	181010		CUM 3803271	KIT,Exhaust Manifold Mounting(Celect) Includes Gaskets (6)131324 (1)131370 (1)131306 Nuts (4)040009 Hose (1)045001 Studs (4)040111 Screw Assembly (12)040027	
11	181011		N/A	KIT,Exhaust Manifold Mounting(Celect Plus) Includes Gaskets (3)131400 (1)131370 (1)131306 Nuts (4)040009 Hose (1)045001 Studs (4)040111 Screw Assembly (12)040027	
12	131370		CUM 3069177	GASKET,Turbo Mounting	
13	131306		CUM 216487	GASKET,Crossover	
14	045001		CUM 202994	HOSE,Turbo	

FIGURE 6417



Please note:

1. **Check Oil Feed Line for any restrictions.**
2. **Check Oil Return Line for any restrictions that would block the oil from draining back into the Engine.**
3. **Check Air Filter.**
4. **Always prelube Turbocharger before starting Engine.**
5. **The most common failures are due to low oil pressure, contaminated oil and hot shut down.**

CPL #	H1 or H2 TURBO
1309	N/A
1324	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1374	N/A
1380	ETC-9275 CUM 3529628 CUM 3803583 CUM 3531725 CUM 3804800 CUM 3538395 SCH 172033 CUM 3803426
1384	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1385	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1386	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1389	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1390	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1391	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1392	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1393	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1394	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1395	ETC-9275 CUM 3529628 CUM 3803583 CUM 3531725 CUM 3804800 CUM 3538395 SCH 172033 CUM 3803426
1405	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1426	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1445	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1507	ETC-9275 CUM 3529628 CUM 3803583 CUM 3531725 CUM 3804800 CUM 3538395 SCH 172033 CUM 3803426
1529	N/A
1530	N/A
1532	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1534	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1535	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1536	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1537	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034

PAI Copyright 2017

CPL #	H1 or H2 TURBO
1538	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1540	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1548	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1572	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1573	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1574	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1575	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1580	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1583	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1607	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1611	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1649	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1652	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1807	**181209** **CUM 3803722 CUM 3804641** **CUM 3804805**
1809	**181196** CUM 3800419 CUM 3804309 CUM 3591182 CUM 3538400 CUM 3534501 CUM 3804806
1831	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1833	N/A
1844	**181196** CUM 3800419 CUM 3804309 CUM 3591182 CUM 3538400 CUM 3534501 CUM 3804806
1852	N/A
1878	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034
1896	**181196** CUM 3800419 CUM 3804309 CUM 3591182 CUM 3538400 CUM 3534501 CUM 3804806
1944	ETC-9259 CUM 3529629 CUM 3803584 CUM 3531728 CUM 3804801 CUM 3538396 SCH 170359 CUM 3803399 SCH 172034 OR ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
1956	ETC-9275 CUM 3529628 CUM 3803583 CUM 3531725 CUM 3804800 CUM 3538395 SCH 172033 CUM 3803426
1987	**181196** CUM 3800419 CUM 3804309 CUM 3591182 CUM 3538400 CUM 3534501 CUM 3804806
2003	**181196** CUM 3800419 CUM 3804309 CUM 3591182 CUM 3538400 CUM 3534501 CUM 3804806
2025	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
2026	ETC-9278 **(X)** CUM 3531267 CUM 3803553 CUM 3531733 CUM 3803585 CUM 3536095 CUM 3804308 CUM 3536263 CUM 3804502 CUM 3537074 SCH 172035
2027	N/A
2033	N/A
2038	N/A

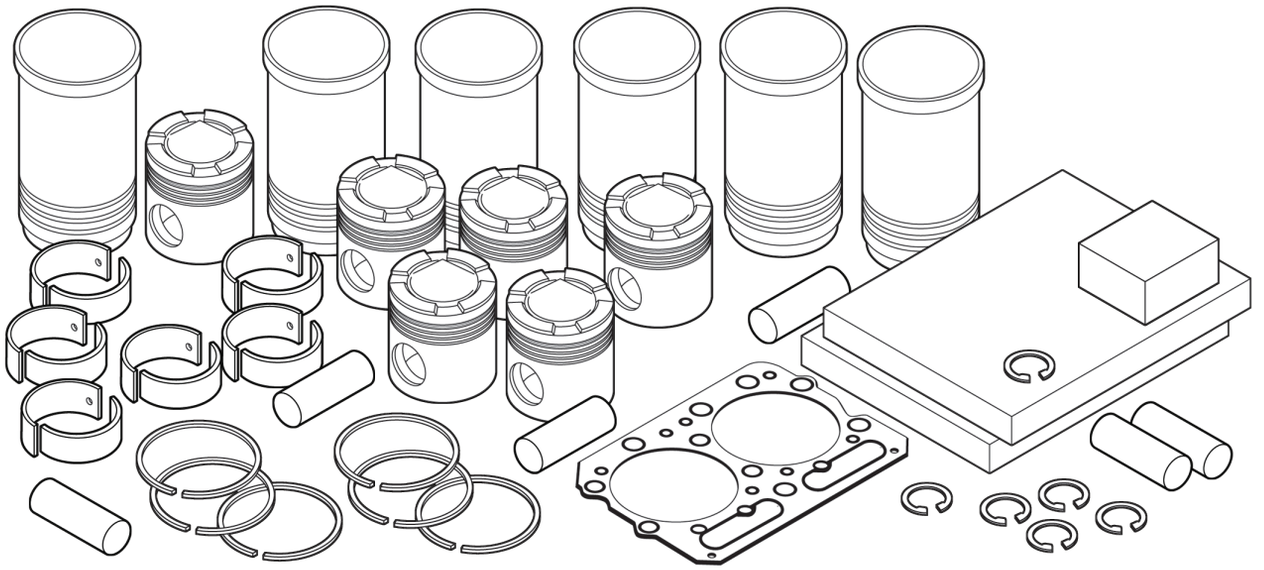
(X) = Reman Available

Turbocharger Repair Kit

PAI REFERENCE	OEM REFERENCE
EKT-9244	SCH 173736

(Used for Turbocharger ETC-9259)

FIGURE 6425



CPL NUMBER	KIT with NON-ANODIZED PISTON	KIT with ANODIZED PISTON		LOWER GASKET SET SEE NOTE 4
1309	—	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1324	—	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1374	—	N14102-(*) Includes: CUM 3081269 Piston		131273 CUM 3803613
1380	N14101-(*) Includes: CUM 3081267 Piston	N14102-(*) Includes: CUM 3081269 Piston		131273 CUM 3803613
1384	—	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1385	—	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1386	—	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1389	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1390	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1391	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1392	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1393	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1394	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston		131273 CUM 3803613
1395	N14101-(*) Includes: CUM 3081267 Piston	N14102-(*) Includes: CUM 3081269 Piston		131273 CUM 3803613
1405	—	N14102-(*) Includes: CUM 3081269 Piston		131273 CUM 3803613

PAI Copyright 2017

CPL NUMBER	KIT with NON-ANODIZED PISTON	KIT with ANODIZED PISTON	LOWER GASKET SET SEE NOTE 4
1426	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1445	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1507	N14101-(*) Includes: CUM 3081267 Piston	N14102-(*) Includes: CUM 3081269 Piston	131273 CUM 3803613
1529	—	N14102-(*) Includes: CUM 3081269 Piston	131273 CUM 3803613
1530	N14101-(*) Includes: CUM 3081267 Piston	N14102-(*) Includes: CUM 3081269 Piston	131273 CUM 3803613
1532	N14101-(*) Includes: CUM 3081267 Piston	N14102-(*) Includes: CUM 3081269 Piston	131273 CUM 3803613
1533	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1534	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1535	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1536	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1537	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1538	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1540	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1548	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1572	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1573	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1574	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1575	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1580	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1583	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1607	—	N14102-(*) Includes: CUM 3081269 Piston	131273 CUM 3803613
1611	—	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1649	N14103-(*) Includes: CUM 3081266 Piston	N14104-(*) Includes: CUM 3081268 Piston	131273 CUM 3803613
1652	—	N14102-(*) Includes: CUM 3081269 Piston	131273 CUM 3803613
1807	—	N14222-(*) Includes: CUM 3087635 Piston	131539 CUM 3804635

CPL NUMBER	KIT with NON-ANODIZED PISTON	KIT with ANODIZED PISTON	LOWER GASKET SET SEE NOTE 4
1809	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
1831	—	N14104-(*) Includes: CUM 3081268 Piston	131539 CUM 3804635
1833	—	N14222-(*) Includes: CUM 3087635 Piston	131539 CUM 3804635
1844	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
1852	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
1878	—	N/A CUM 3072324 Piston	131539 CUM 3804635
1896	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
1921	—	N14221-(*) Includes: CUM 3087634 Piston † *Includes Upper Gasket set 131272*	131273 CUM 3803613
1924	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
1944	—	N14104-(*) Includes: CUM 3081268 Piston	131539 CUM 3804635
1956	N14101-(*) Includes: CUM 3081267 Piston	N14102-(*) Includes: CUM 3081269 Piston	131539 CUM 3804635
1987	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2003	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2025	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2026	—	N14223-(*) Includes: CUM 3865113 Piston	131539 CUM 3804635
2027	—	N14222-(*) Includes CUM 3087635 Piston	131539 CUM 3804635
2033	—	N14221-(*) Includes: CUM 3087634 Piston † *Includes Upper Gasket set 131272*	131273 CUM 3803613
2038	—	N14222-(*) Includes: CUM 3087635 Piston † *Includes Upper Gasket set 131272*	131273 CUM 3803613
2143	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2261	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2287	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2306	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2330	—	N14222-(*) Includes: CUM 3087635 Piston	131539 CUM 3804635
2388	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635

PAI Copyright 2017

CPL NUMBER	KIT with NON-ANODIZED PISTON	KIT with ANODIZED PISTON	LOWER GASKET SET SEE NOTE 4
2389	—	N14222-(*) Includes: CUM 3087635 Piston	131539 CUM 3804635
2390	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2391	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2398	—	N14223-(*) Includes: CUM 3865113 Piston	131539 CUM 3804635
2403	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2453	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2492	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2529	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2575	—	N14222-(*) Includes: CUM 3087635 Piston	131539 CUM 3804635
2590	—	N14222-(*) Includes: CUM 3087635 Piston	131539 CUM 3804635
2591	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2592	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635
2659	—	N14221-(*) Includes: CUM 3087634 Piston	131539 CUM 3804635

Please note:

(*) Specify Ring type and size of Sleeves, Rods and Mains when ordering Inframe kits.

† Includes Upper Gasket set 131272

1. **N14101 and N14102 are for STC Engines only.**
2. **N14103 and N14104 are for Celect Engines only.**
3. **All Engines using the one piece Piston over 370HP, must have an Anodized Piston.**
4. **Lower Gasket Kits are for reference only and are not included with the Inframe Kits. Lower Gasket Kits are sold separately.**

Inframe Kit Breakdown

PAI PART NUMBER	ENGINE TYPE	PISTON KIT PART NUMBER (6)	RING SET PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)
N14101-(*)	STC	111157 Includes: CUM 3081267 Piston	505064 CUM 4089489	161601 ** CUM 3801826
N14102-(*)	STC	111167 Includes: CUM 3081269 Piston	505064 CUM 4089489	161601 ** CUM 3801826
N14103-(*)	CELECT	111156 Includes: CUM 3081266 Piston	505064 CUM 4089489	161601 ** CUM 3801826
N14104-(*)	CELECT	111166 Includes: CUM 3081268 Piston	505064 CUM 4089489	161601 ** CUM 3801826
N14124-(*)	CELECT PLUS w/o PISTON	—	505064 CUM 4089489	161601 ** CUM 3801826
N14221-(*)	CELECT PLUS	111477 (Bushing-less Crown) N/A	505057 N/A	161601 ** CUM 3801826
N14222-(*)	**CELECT PLUS**	**111489 (Bushing-less Crown) N/A**	**505057 N/A**	**161601 ** CUM 3801826**
N14223-(*)	**CELECT PLUS**	**111483 (Bushing-less Crown) N/A**	**505057 N/A**	**161601 ** CUM 3801826**

FIGURE 6401

Please note:

(*) Specify size of Sleeves, Rod and Main Bearings when ordering Inframe Kits.

** **Part number for standard sizes are shown in chart. Part numbers (and kit Dash numbers) will change if Non-Standard components are requested.**

† **CPL's 1921, 2033 and 2038 are STC Engines and require Upper Gasket set 131272 included in kits N14221-(145 thru 160) for CPL's 1921 and 2033; and N14122-(113 thru 128) for CPL 2038.**

1. **To ensure correct parts for application, please have CPL and Engine Serial number available.**
2. **Piston Kits include Pins and Retainers.**

Pistonless Overhaul Kit Breakdown

PAI PART NUMBER	ENGINE TYPE	RETAINERS PART NUMBER (6)	RING SET PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)
N14125-(*)	**CELECT PLUS w/o PISTON**	**111171 CUM 3064305**	**505064 CUM 4089489**	**161601 ** CUM 3801826**

FIGURE 6429

PAI Copyright 2017

Inframe Kit Breakdown

ROD BEARING PART NUMBER (12 Pieces)	MAIN BEARING NUMBER (1 Set)	PAN GASKET KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)
171784 ** CUM 3055145	171720 ** CUM 3801260	131394 CUM 3804303	131272 CUM 3804286
171784 ** CUM 3055145	171720 ** CUM 3801260	131394 CUM 3804303	131272 CUM 3804286
171784 ** CUM 3055145	171720 ** CUM 3801260	131394 CUM 3804303	131271 CUM 3804287
171784 ** CUM 3055145	171720 ** CUM 3801260	131394 CUM 3804303	131271 CUM 3804287
171784 ** CUM 3055145	171720 ** CUM 3801260	131394 CUM 3804303	131264 CUM 4024928
171784 ** CUM 3055145	171720 ** CUM 3801260	131394 CUM 3804303	131264 CUM 4024928
171784 ** CUM 3055145	**171720 ** CUM 3801260**	**131394 CUM 3804303**	**131264 CUM 4024928**
171784 ** CUM 3055145	**171720 ** CUM 3801260**	**131394 CUM 3804303**	**131264 CUM 4024928**

Pistonless Overhaul Kit Breakdown

ROD BEARING PART NUMBER (12 Pieces)	MAIN BEARING NUMBER (1 Set)	LOWER GASKET KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)
171784 ** CUM 3055145	**171720 ** CUM 3801260**	**131273 CUM 3803613**	**131264 CUM 4024928**

FIGURE 6430

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	CPL2025-001		N/A	ENGINE,Complete	

Miscellaneous Gaskets

FIGURE 6426

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131298		CUM 201048	GASKET,Connection	
2	131309		CUM 3005592	GASKET,Fan Spacer	
3	131662		CUM 65399	GASKET,Water Inlet	
4	131727		CUM 3801594	KIT,Aftercooler Gasket(Industrial Units) Includes Gaskets (1)131304 (1)131306 (1)131665 (3)131312 (1)131342 (2)131410 O-Rings (4)121206	

Miscellaneous Components

FIGURE 6423

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042002		CUM 8078	WASHER,Plain(1/4in)	
2	121177		CUM 3068510	SEAL,Inlet(Rectangular)	
3	121178		CUM 3042401	GROMMET	
4	121179		CUM 3033898	SEAL,Sensor	
5	121229		CUM 3050667	O-RING	
5	121307		CUM 3014435	O-RING	
6	121240		CUM 3909397	O-RING	
7	121254		CUM 3001340	O-RING,Oil	
8	136004		CUM 200307	SEAL,Oil	

PAI Copyright 2017

Upper Gasket Sets

FIGURE 6421

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131264		CUM 4089371	SET,Upper Gasket(Celect Plus) (Current kit w/ Edge Molded Gasket)	
1	131271		CUM 3804287	SET,Upper Gasket(Celect) (Early kit w/ Std. Grommet Head Gasket)	
1	131272		CUM 3804286	SET,Upper Gasket(STC) (Early kit w/ Std. Grommet Head Gasket	
1	131561		CUM 4024925	SET,Upper Gasket(Celect) (Current kit w/ Edge Molded Gasket)	

Upper Gasket Sets
Single Cylinder Head

FIGURE 6414

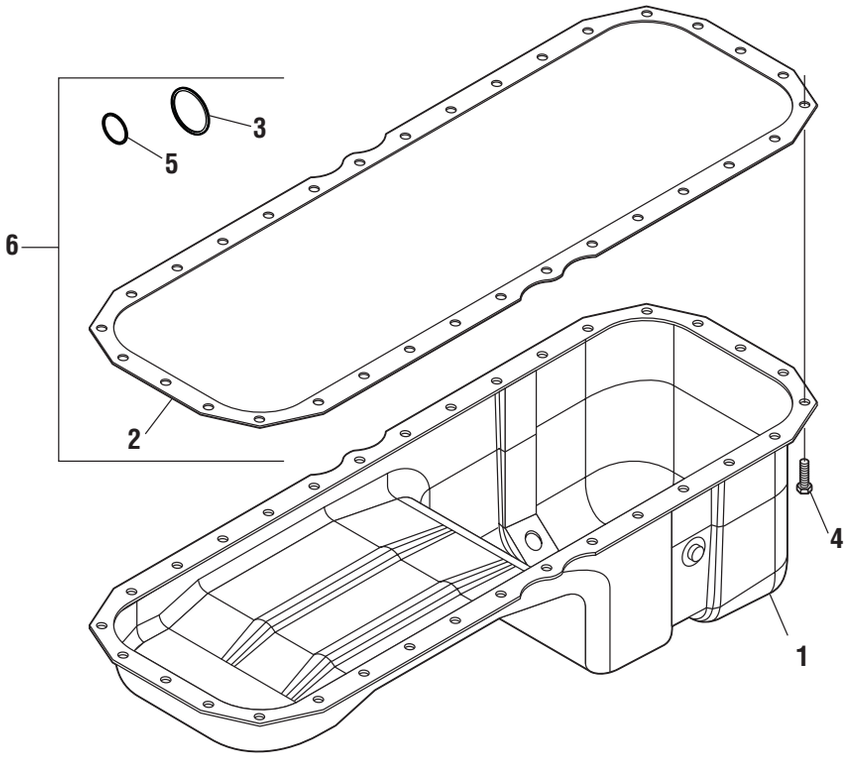
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131274		CUM 3803715	SET,Single Upper Gasket(Celect) (Early kit w/ Std. Grommet Head Gasket)	
1	131614		CUM 4089370	SET,Single Upper Gasket(Celect) (Current kit w/ Edge Molded Head Gasket)	
1	131720		CUM 4089372	SET,Single Upper Gasket(Celect Plus) (w/ Edge Molded Head Gasket)	CUM 4024929
1	**131886**		**CUM 4089369**	**KIT,Single Upper Gasket(Celect) (w/ Edge Molded Head Gasket)**	**CUM 3803445**

Lower Gasket Sets

FIGURE 6413

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131273		CUM 3803613	SET,Lower Gasket (Small Accessory Drive)	
1	131539		CUM 3804635	SET,Lower Gasket(Celect Plus) (Large Accessory Drive)	CUM 3800618 CUM 4025068

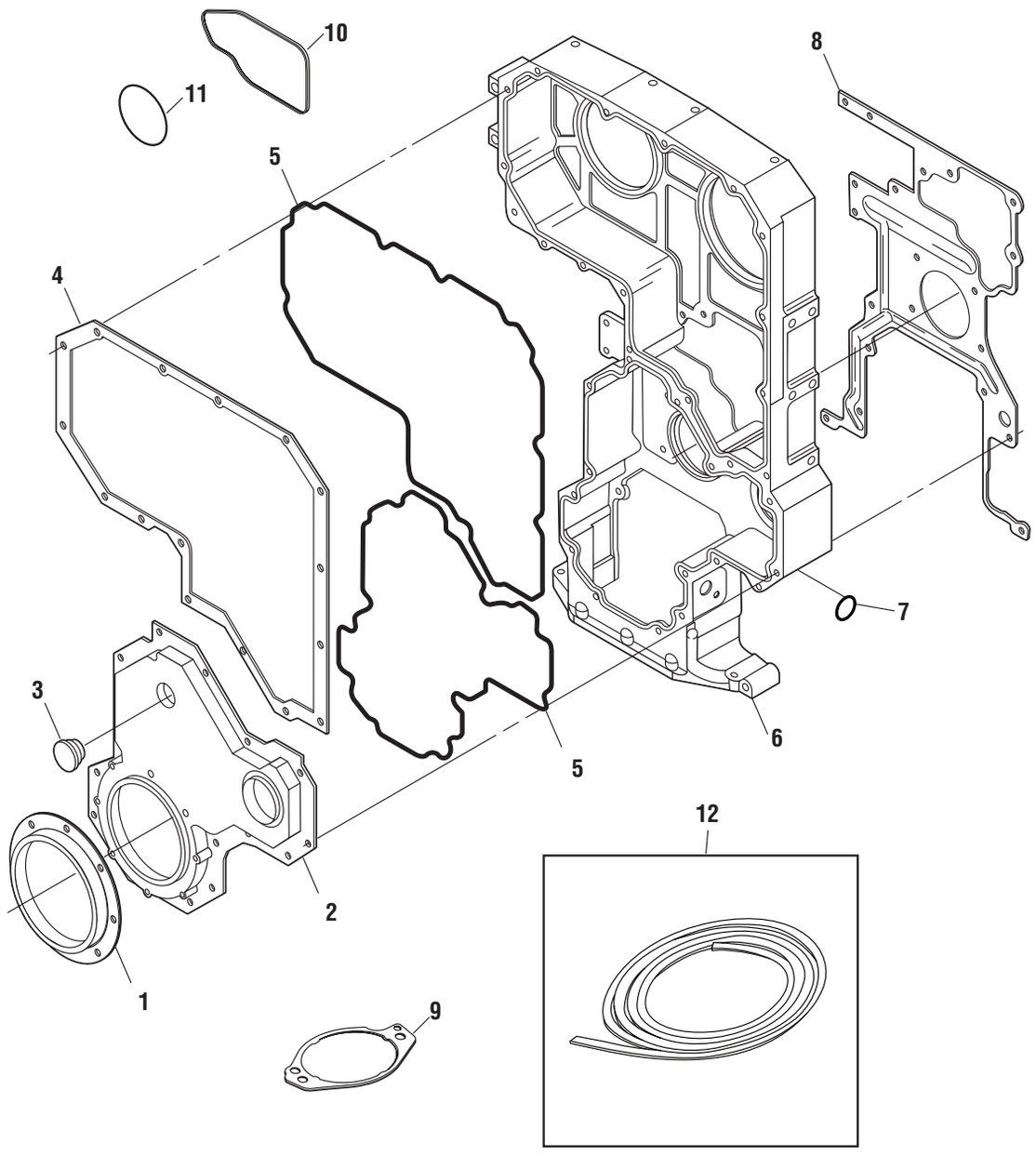
FIGURE 6450



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141283		CUM 4952540	PAN,Oil(Stamped Steel,Rear Sump)	CUM 3680531, CUM 3679945
2	131656		CUM 4026684	GASKET,Oil Pan	CUM 3679943
3	121308		CUM 3678756	O-RING,Seal	
4	**040128**		**CUM 3903112**	**SCREW,Hex Flange Head Cap(M10 x 1.50 x 30)**	
5	**121366**		**CUM 3678606**	**O-RING,Seal**	
6	**131838**		**N/A**	**KIT,Oil Pan Gasket** **Includes Gasket (1)131656** **O-Rings (1)121308 (2)121366**	

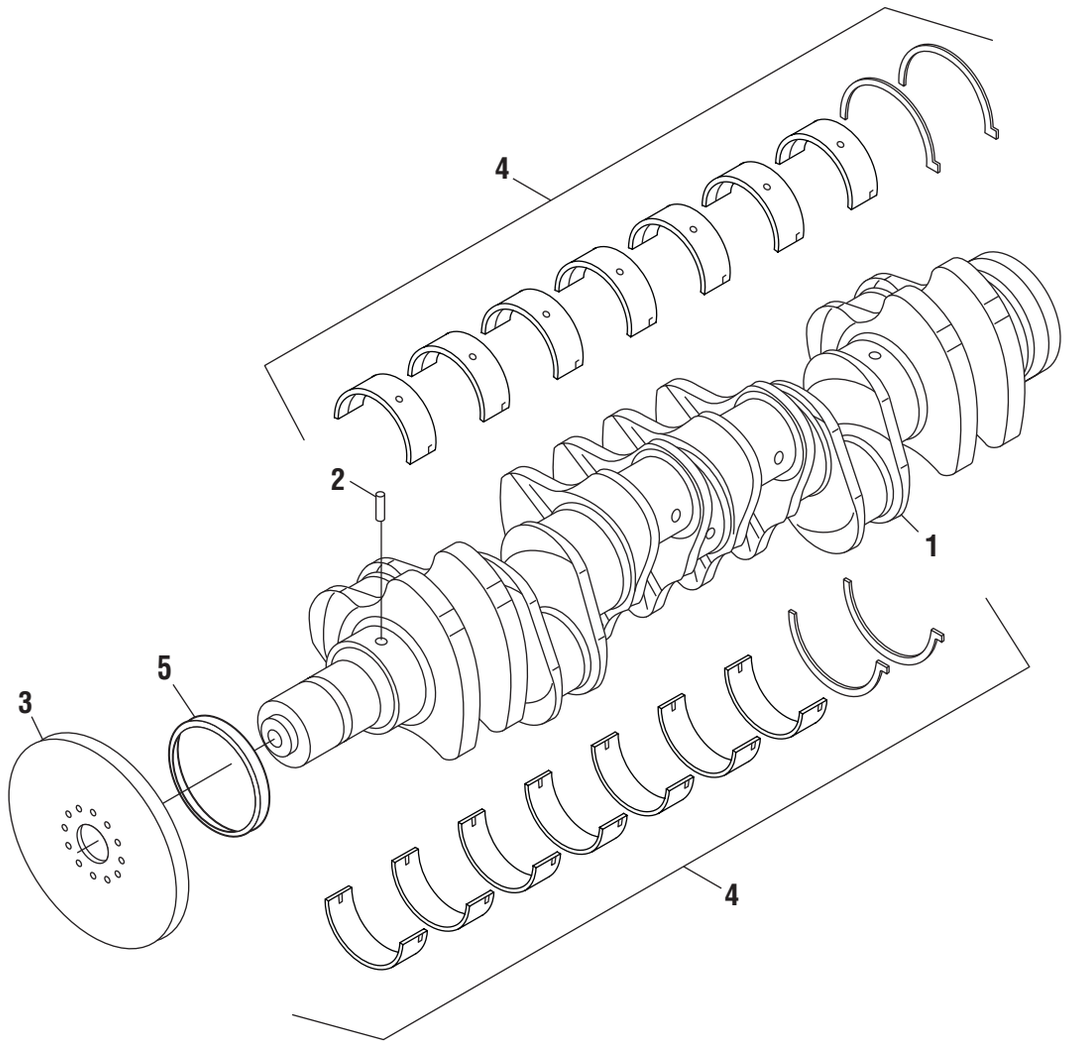
PAI Copyright 2017

FIGURE 6451



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	136130		CUM 4955383	KIT,Seal,Oil	CUM 3104263
1	**136139**		**CUM 3685173**	**SEAL,Front(ISX 15)(Press in type)**	
2	Call		CUM 4973081	COVER,Gear	
3	Call		CUM 4082974	PLUG,Gear Cover	
4	Call		CUM 3102912	COVER,Gear	
5	131660		CUM 4962722	GASKET,Timing Cover	
5	**131853**		**CUM 3687007**	**GASKET,Timing Cover(ISX 15)**	**CUM 3686589**
6	Call		CUM 4059393	HOUSING,Gear	
7	121298		CUM 3678786	O-RING	
8	131655		CUM 4089757	GASKET,Gear Housing	CUM 3680876
8	**131959**		**CUM 3685510**	**GASKET,Gear Housing(ISX 15)**	
9	**131852**		**CUM 3685614**	**GASKET,Compressor Mounting**	
10	**131903**		**CUM 3686368**	**GASKET,Front Cover(ISX 15)**	
11	621252		CUM 4299124	O-RING(ISX 15)	
12	**132024**		**CUM 3101569**	**GASKET,Cover Gear,Non-Belt Driven Fan Drive**	

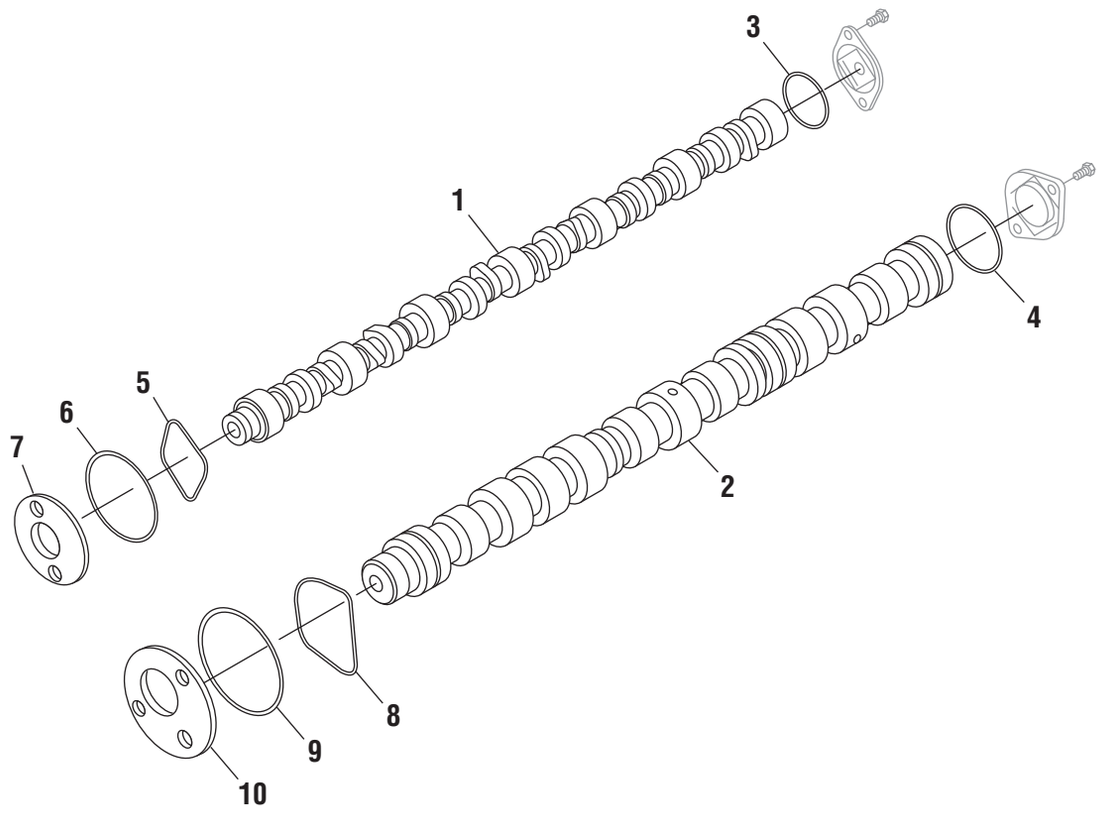
FIGURE 6465



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**171658**		**CUM 4925762**	**CRANKSHAFT** **Includes Crankshaft (1) Gear (1) Adapter (1) Speed Indicator Ring (1) Dowel Pins (2)** **Note: CUM 3681910 supersedes to 4925762**	**CUM 3681911**
2	Call		CUM 3068935	DOWEL,Pin	
3	**202007**		**CUM 4101884**	**DAMPER,Crankshaft**	**CUM 4026799**
4	171980		CUM 3800298	KIT,Main Bearing(STD) Includes Bearings (7)171981 (7)171982 (4)171983	
4	171984		CUM 4089845	KIT,Main Bearing(.010in)	
4	171987		CUM 4089846	KIT,Main Bearing(.020in)	
5	**136139**		**CUM 3685173**	**SEAL,Front(ISX 15)(Press in type)**	

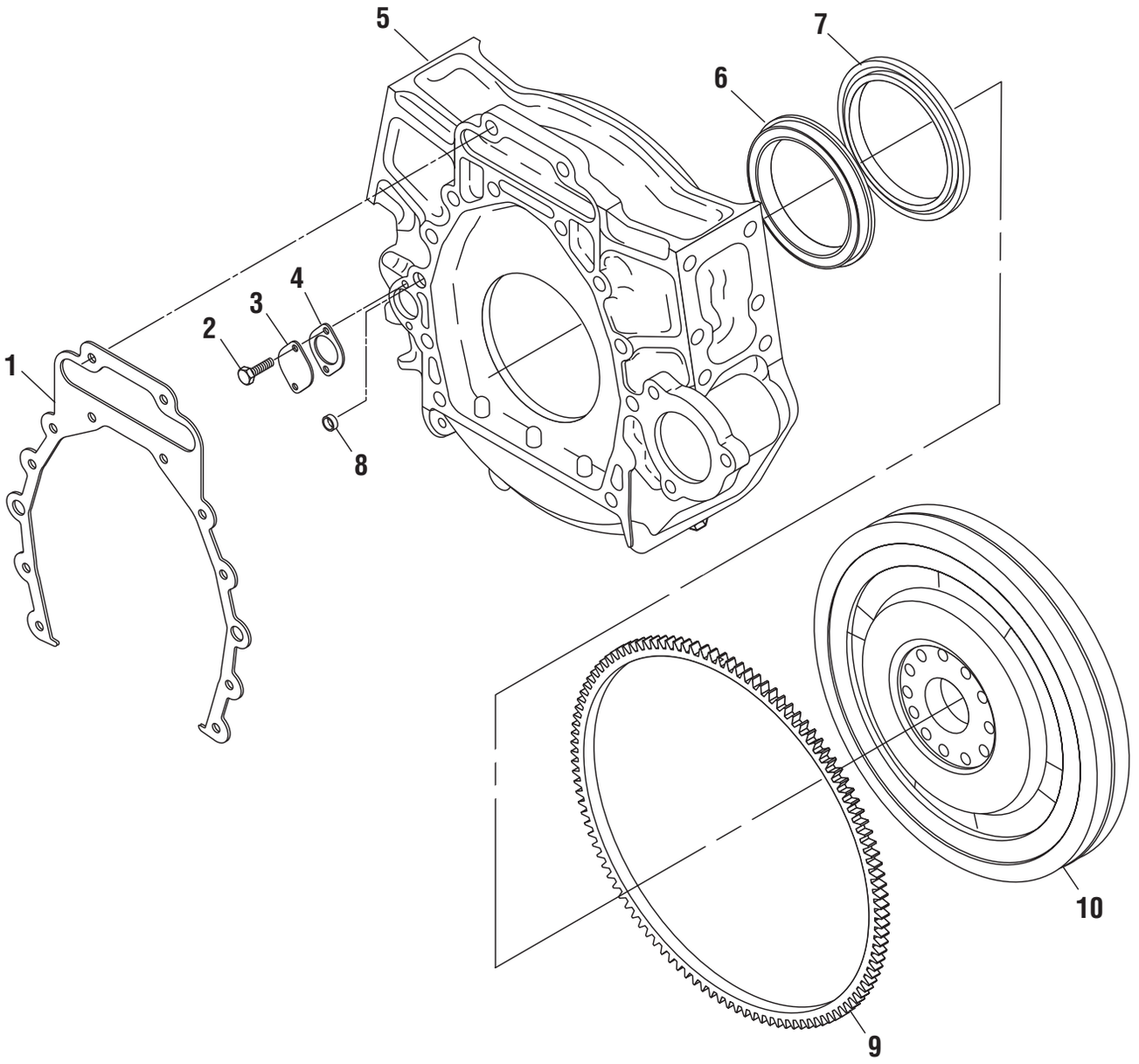
PAI Copyright 2017

FIGURE 6466



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**191894**		**CUM 4059333**	**CAMSHAFT,Valve**	**CUM 3680780**
1	191937		CUM 4059331	CAMSHAFT,Valve	
2	**191889**		**CUM 4101476**	**CAMSHAFT,Injector**	**CUM 3681710**
2	**191938**		**CUM 4101432**	**CAMSHAFT,Injector**	**CUM 3682142**
3	121338		CUM 4985660	RING,Rectangular	CUM 4101881
4	121347		CUM 4101882	RING,Rectangular	
5	131643		CUM 3679932	GASKET,Cover	
6	121221		CUM 3007713	O-RING	CUM 3679934
6	**121423**		**CUM 4299125**	**O-RING**	
7	Call		CUM 3679930	SUPPORT,Camshaft Thrust	
8	131642		CUM 3679931	GASKET,Cover	
9	621252		DDC 23527273	O-RING(ISX 15)	CUM 4299124
9	GGA-2941		MAK 56AX347	O-RING	CUM 3679933
10	Call		CUM 3679929	SUPPORT,Camshaft Thrust	

FIGURE 6454

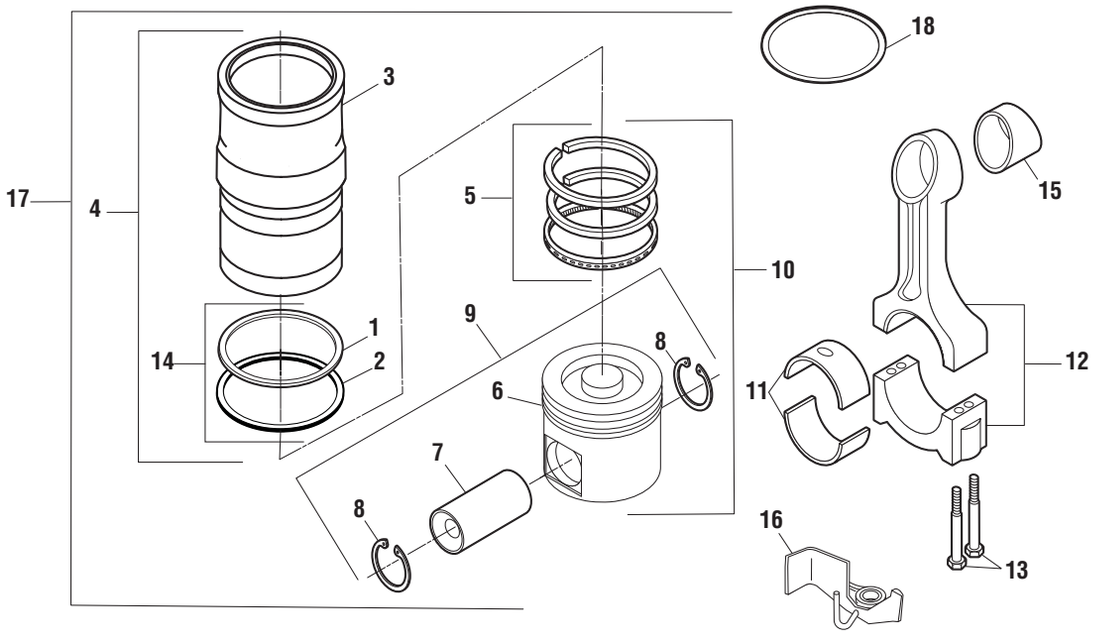


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131657		CUM 4965688	GASKET,Flywheel Housing	CUM 4026695
2	Call		CUM 3052198	SCREW,Self Tapping Metal (M8 x 1.25 x 30)	
3	Call		CUM 3026135	COVER,Access Hole	
4	131625		CUM 3026134	GASKET,Cover Plate	
5	060009	060009E	CUM 3680063	HOUSING,Flywheel(ISX)	CUM 3103584
6	136131		CUM 4965569	KIT,Seal,Oil	CUM 4962603
7	Call		CUM 4918688	SPACER	
8	Call		CUM 3678871	DOWEL,Ring	
9	**060069**		**CUM 3680913**	**GEAR,Flywheel**	
10	**060055**		**CUM 3680922**	**ASSEMBLY,Flywheel(15.5in)**	**CUM 3680348**

PAI Copyright 2017

One Piece Piston

FIGURE 6460



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	121310		CUM 3678737	SEAL,Liner	
2	121311		CUM 3678738	SEAL,Liner	
2	**121400**		**CUM 3685234**	**SEAL,Liner(ISX 15)**	
3	161648		CUM 4101507	LINER(Flat Top)	
3	**161650**		**CUM 3685235**	**LINER**	
3	**161653**		**CUM 4311632**	**LINER(150mm OD w/o Shim)(NSS)**	
4	161647		CUM 4089153	KIT,Liner(Flat Top) Includes Liner (1)161648 Seal (1)121311	CUM 4025311
4	**161649**		**CUM 2881719**	**KIT,Liner** **Includes Liner (1)161650 Seal (1)121400**	
4	**161651**		**CUM 4309389**	**KIT,Liner** **Includes Liner (1)161652 Seal (1)121311** **(Not Sold Seperately - Use 161651)**	
4	**161652**		**CUM 4311633**	**KIT,Liner** **Includes Liner (1)161653 Shim (1)162031**	
5	505125		CUM 4089406	SET,Piston Ring	
5	**505175**		**CUM 4309441**	**SET,Ring**	**CUM 2881682**
6	111550		CUM 4923745	PISTON	CUM 4920308, CUM 4101877
6	111560		CUM 4923743	PISTON	CUM 4920306
6	111563		CUM 4923744	PISTON	CUM 4920307
6	111566		CUM 4923746	PISTON	CUM 4920309
6	111569		CUM 4923747	PISTON	CUM 4920310
6	**111650**		**CUM 2882635**	**PISTON**	
6	**111653**		**CUM 2882636**	**PISTON**	
6	**111656**		**CUM 2882631**	**PISTON**	
6	**111659**		**CUM 2882630**	**PISTON**	
6	**111730**		**CUM 3687897**	**PISTON**	
7	111089		CUM 4923748	PIN,Piston	CUM 4059363
8	111171		CUM 3064305	RETAINER,Piston Pin	
9	111551		N/A	KIT,Piston Includes Piston (1)111550 Pin (1)111089 Retainers (2)111171	
9	111561		N/A	KIT,Piston Includes Piston (1)111560 Pin (1)111089 Retainers (2)111171	
9	111564		N/A	KIT,Piston Includes Piston (1)111563 Pin (1)111089 Retainers (2)111171	
9	111567		N/A	KIT,Piston Includes Piston (1)111566 Pin (1)111089 Retainers (2)111171	
9	111570		N/A	KIT,Piston Includes Piston (1)111569 Pin (1)111089 Retainers (2)111171	

One Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
9	**111651**		**N/A**	**KIT,Piston** **Includes Piston (1)111650 Pin (1)111089 Retainers (2)111171**	
9	**111654**		**N/A**	**KIT,Piston** **Includes Piston (1)111653 Pin (1)111089 Retainers (2)111171**	
9	**111657**		**N/A**	**KIT,Piston** **Includes Piston (1)111656 Pin (1)111089 Retainers (2)111171**	
9	**111660**		**N/A**	**KIT,Piston** **Includes Piston (1)111659 Pin (1)111089 Retainers (2)111171**	
9	**111731**		**N/A**	**KIT,Piston(ISX)** **Includes Piston (1)111730 Pin (1)111089 Retainers (2)111171**	
10	111552		CUM 4089896	KIT,Piston(w/ Ring Set) Includes Piston kit (1)111551 Ring Set (1)505175	CUM 4089586, CUM 4089411
10	111562		CUM 4089894	KIT,Piston(w/ Ring Set) Includes Piston kit (1)111561 Ring Set (1)505125	CUM 4089584
10	111565		CUM 4089895	KIT,Piston(w/ Ring Set) Includes Piston kit (1)111564 Ring Set (1)505125	CUM 4089585
10	111568		CUM 4089897	KIT,Piston(w/ Ring Set) Includes Piston kit (1)111567 Ring Set (1)505125	CUM 4089587
10	111571		CUM 4089898	KIT,Piston(w/ Ring Set) Includes Piston kit (1)111570 Ring Set (1)505125	CUM 4089407
10	**111652**		**CUM 2881873**	**KIT,Piston(w/ Ring Set)** **Includes Piston kit (1)111651 Ring Set (1)505175**	
10	**111655**		**CUM 2881876**	**KIT,Piston(w/ Ring Set)** **Includes Piston kit (1)111654 Ring Set (1)505175**	
10	**111658**		**CUM 2881878**	**KIT,Piston(w/ Ring Set)** **Includes Piston kit (1)111657 Ring Set (1)505175**	
10	**111661**		**CUM 2881879**	**KIT,Piston(w/ Ring Set)** **Includes Piston kit (1)111660 Ring Set (1)505175**	
10	**111732**		**CUM 3687897**	**KIT,Piston(w/ Ring Set)** **Includes Piston kit (1)111731 Ring Set (1)505175**	
11	171990		CUM 4089405	KIT,Rod Bearing(STD)(Drilled) Includes 1-Upper 1-Lower	
11	**172045**		**CUM 2882087**	**KIT,Rod Bearing(STD)** **Includes 1-Upper 1-Lower**	
11	171992		CUM 4090016	KIT,Rod Bearing(.25mm)(Drilled) Includes 1-Upper 1-Lower	
11	**172048**		**CUM 4376360**	**KIT,Rod Bearing(.25mm)** **Includes 1-Upper 1-Lower**	
11	171994		CUM 4090017	KIT,Rod Bearing(.50mm)(Drilled) Includes 1-Upper 1-Lower	
11	**172051**		**CUM 4376361**	**KIT,Rod Bearing(.50mm)** **Includes 1-Upper 1-Lower**	
12	171634		CUM 4059429	ROD,Connecting(Drilled)	CUM 4059449
13	040076		CUM 3678574	BOLT,Connecting Rod(M12 x 1.25 x 100mm)	
14	121202		N/A	KIT,Cylinder O-Ring Includes O-Ring (1)121310 Seal (1)121311	
15	**151539**		**CUM 4059448**	**BUSHING**	
16	045056		CUM 3687058	NOZZLE,Cooling	
17	**101165**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111552 Liner kit (1)161647**	
17	**101166**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111571 Liner kit (1)161647**	
17	**101167**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111562 Liner kit (1)161647**	
17	**101169**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111565 Liner kit (1)161647**	
17	**101171**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111658 Liner kit (1)161647**	
17	**101172**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111652 Liner kit (1)161647**	
17	**101173**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111652 Liner kit (1)161649**	
17	**101174**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111652 Liner kit (1)161651**	

Keys 17-18 are on the following page.

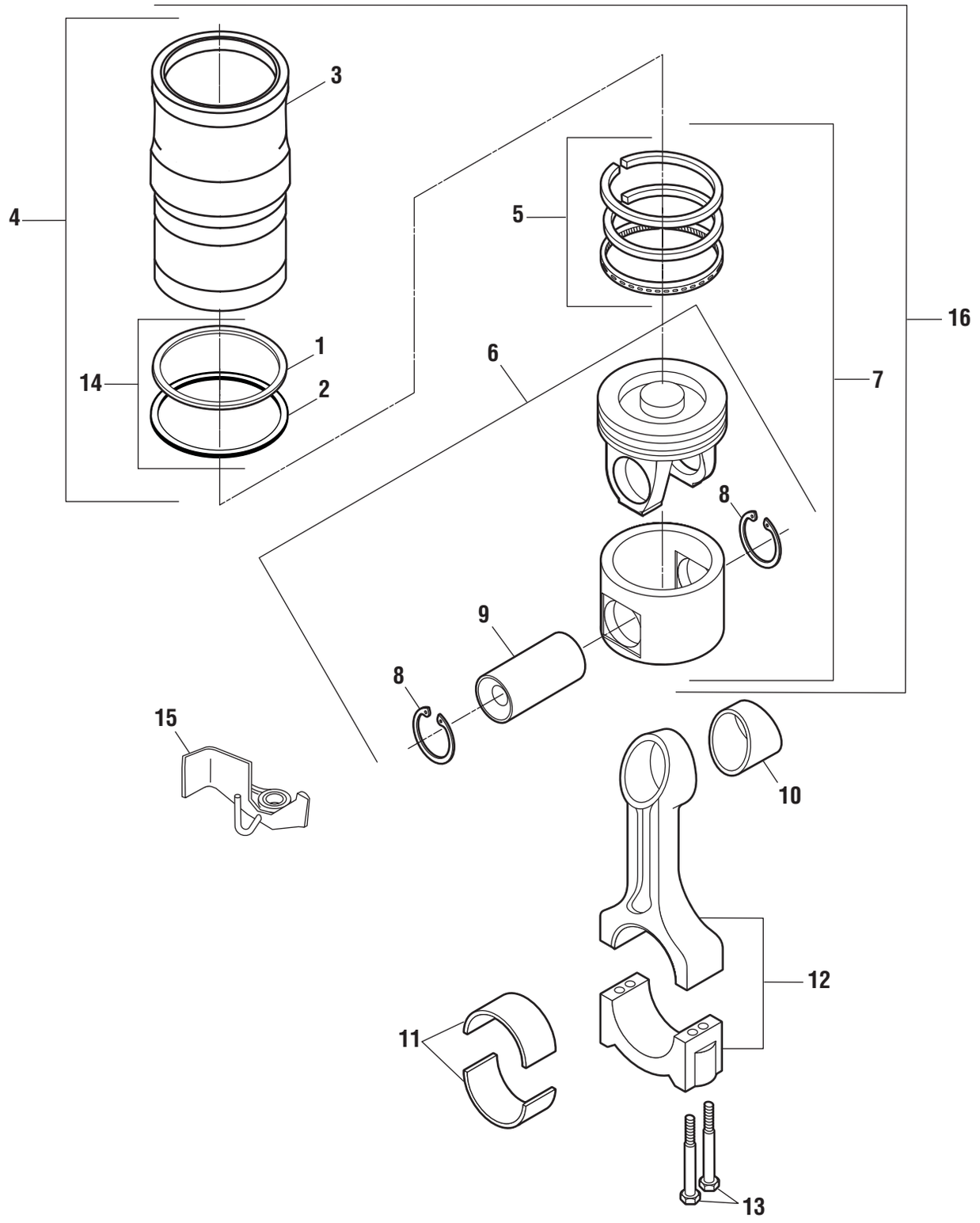
 PAI Copyright 2017

One Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
17	101175		N/A	KIT,Cylinder Includes Piston kit (1)111565 Liner kit (1)161649	
17	101176		N/A	KIT,Cylinder Includes Piston kit (1)111561 Liner kit (1)161651	
17	101177		N/A	KIT,Cylinder Includes Piston kit (1)111661 Liner kit (1)161647	
17	101178		N/A	KIT,Cylinder Includes Piston kit (1)111661 Liner kit (1)161649	
17	101179		N/A	KIT,Cylinder Includes Piston kit (1)111651 Liner kit (1)161651	
17	101181		N/A	KIT,Cylinder Includes Piston kit (1)111658 Liner kit (1)161651	
17	101164		N/A	KIT,Cylinder(ISX) Includes Piston Kit (1)111732 Liner Kit (1)161649	
18	162029		CUM 5298564	SHIM,Liner(.020in)	
18	162030		CUM 5298565	SHIM,Liner(.032in)	
18	162031		CUM 4311637	SHIM,Liner	

Two Piece Piston

FIGURE 6452



PAI Copyright 2017

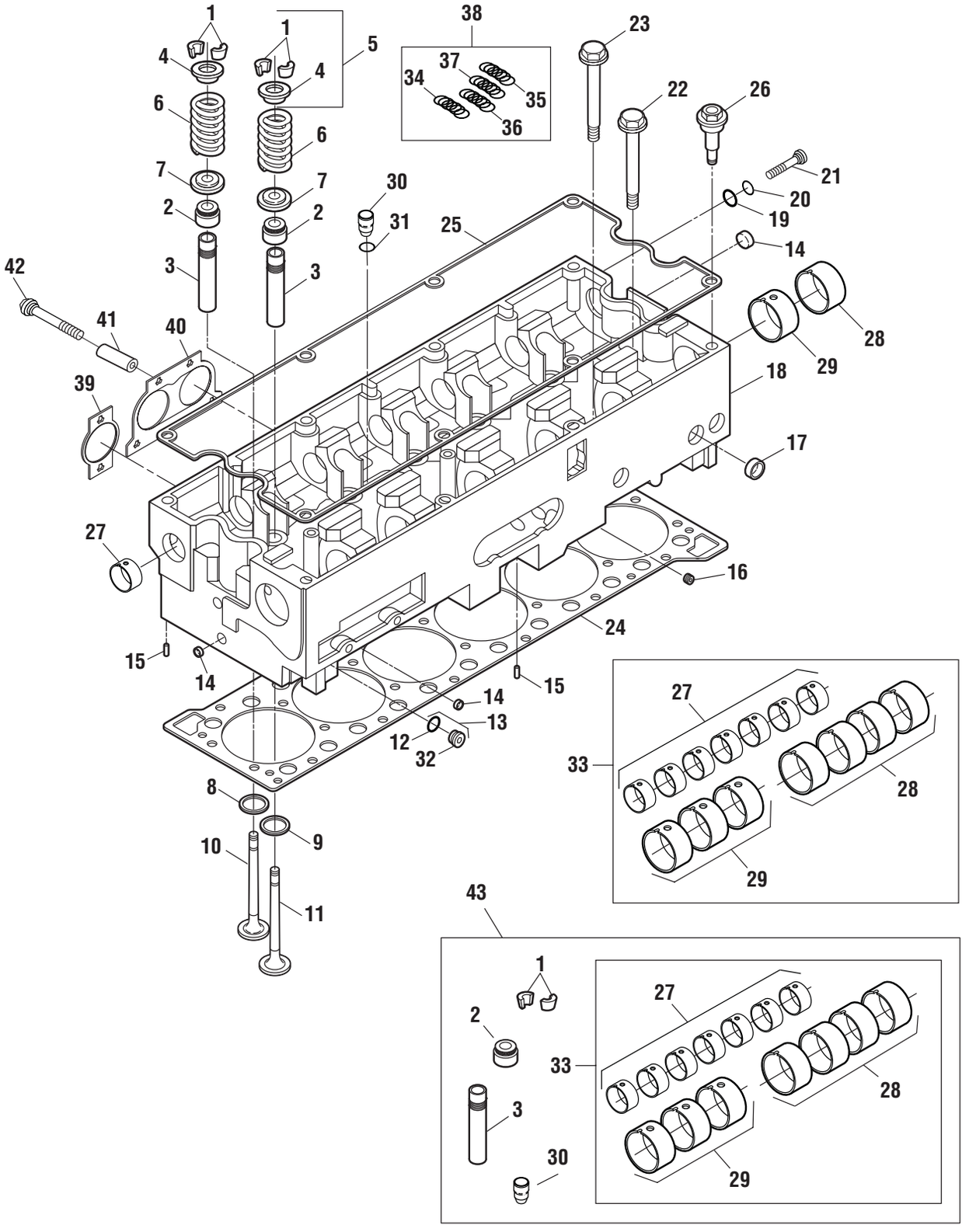
Two Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	121310		CUM 3678737	SEAL,Liner	
2	121311		CUM 3678738	SEAL,Liner	
3	161646		CUM 3682025	LINER(Groove Top)	
3	161648		CUM 4101507	LINER(Flat Top)	
4	161645		CUM 3800453	KIT,Liner(Groove Top) Includes Liner (1)161646 Seals (1)121310(1)121311	
4	161647		CUM 4089153	KIT,Liner(Flat Top) Includes Liner (1)161648 Seal (1)121311	
5	505120		CUM 4089154	SET,Piston Ring	CUM 3800609
6	111491		N/A	KIT,Piston Includes Piston (1)111490 Retainers (2)111171 Pin (1)111090	
7	111492		CUM 4089608	KIT,Piston Includes Piston (1)111490 Retainers (2)111171 Ring Set (1)505120	
8	111171		CUM 3064305	RETAINER,Piston Pin	
9	111090		CUM 3678590	PIN,Piston	CUM 3680582
10	Call		CUM 3680054	BUSHING	
11	171970		CUM 4089139	KIT,Rod Bearing(STD) Includes 1-Upper 1-Lower	
11	171990		CUM 4089405	KIT,Rod Bearing(STD)(Drilled) Includes 1-Upper 1-Lower	
11	171992		CUM 4090016	KIT,Rod Bearing(.25mm)(Drilled) Includes 1-Upper 1-Lower	
11	171994		CUM 4090017	KIT,Rod Bearing(.50mm)(Drilled) Includes 1-Upper 1-Lower	
12	171634		CUM 4059429	ROD,Connecting(Drilled)	CUM 4059449
12	Call		CUM 3681343	ROD,Connecting(Non-Drilled)	
13	040076		CUM 3678574	BOLT,Connecting Rod (M12 x 1.25 x 100mm)	
14	121202		N/A	KIT,Cylinder O-Ring(Groove Top only) Includes O-Ring (1)121310 Seal (1)121311	
15	045056		CUM 3687058	NOZZLE,Cooling	**CUM 3412860**
16	**101168**		**N/A**	**KIT,Cylinder** **Includes Piston kit (1)111492 Liner kit (1)161647** **Pin (1)111090**	

Please note:

*** Groove top Liners have been replaced with flat top Liners. Engines can be updated when all liners are replaced with flat top Liners.**

FIGURE 6453



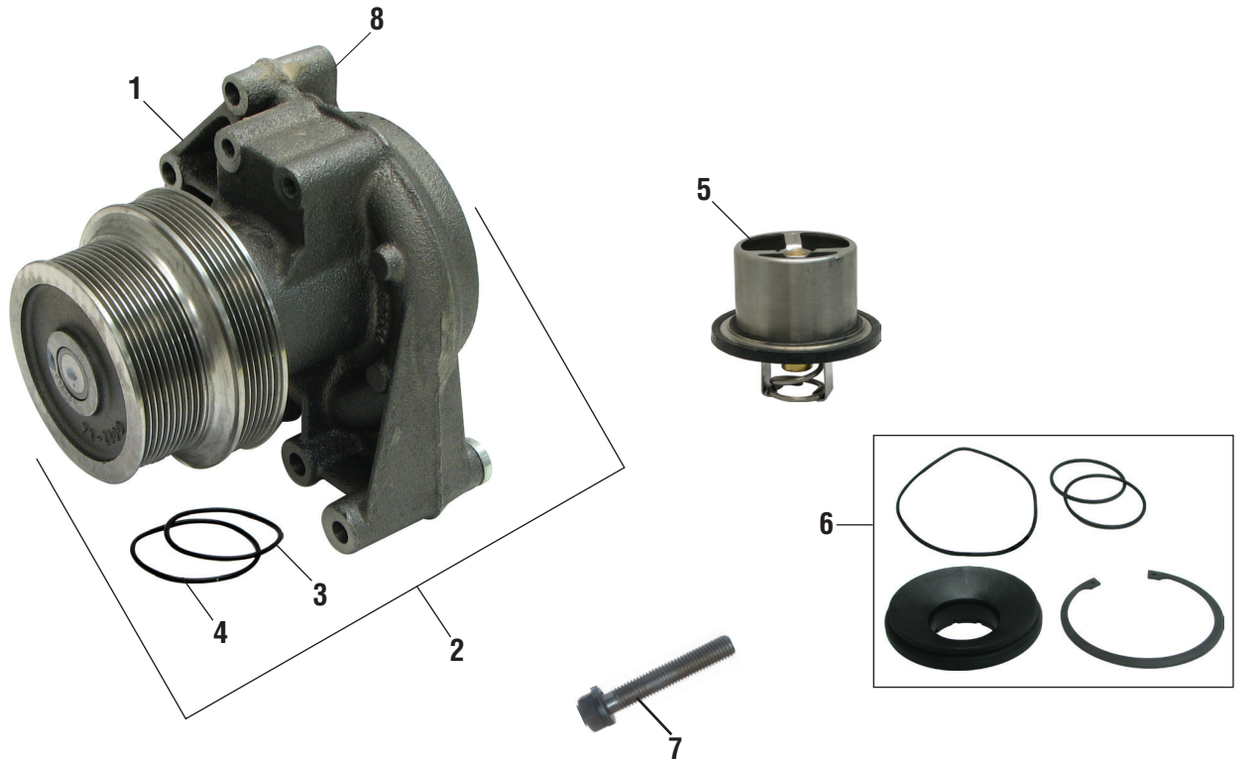
ISX Series

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	492062		NAV 1824644C1	LOCK,Collet Valve	CUM 3680883
2	192119		CUM 4026791	SEAL,Valve Stem	
2	**192161**		**CUM 4356366**	**SEAL,Valve Stem**	
3	192126	**192126E**	CUM 4026657	GUIDE,Valve Stem**(Finished)**	CUM 3680867
4	192103		CUM 3680884	RETAINER,Valve Spring	
5	192104		CUM 3412895	KIT,Retainer & Collet Includes Retainer (1)192103 Collets (2)492062	
6	192155		CUM 3679551	SPRING,Valve	CUM 3681001
7	Call		CUM 3680318	GUIDE,Valve Spring	
8	192165		CUM 3679659	INSERT,Exhaust Valve	
8	Call		CUM 3683349	INSERT,Exhaust Valve	
9	192160		CUM 3104445	INSERT,Intake Valve	CUM 4059215, CUM 3681071
10	192147		CUM 4101454	VALVE,Exhaust	CUM 3680759
11	192145		CUM 4965868	VALVE,Intake	CUM 3680760
11	Call		CUM 3680760	VALVE,Intake	
12	121366		CUM 3678606	O-RING,Seal	
13	050580		CUM 3678611	PLUG,Threaded Includes Plug (1)050581 O-Ring (1)121366	CUM 4926565
14	Call		CUM 3813247	PLUG,Expansion	
15	Call		CUM 3901846	PIN,Dowel	
16	Call		CUM 3911678	DOWEL,Ring	
17	**340082**		**CUM 3015865**	**PLUG,Expansion**	
18	**060163X***		**CUM 4962732**	**HEAD,Cylinder(ISX)(Reman)**	**CUM 3683002** **CUM 3683986**
19	121289		CUM 3678603	O-RING,Seal	
20	Call		CUM 3679122	SEAL,O-Ring	
21	Call		CUM 4920470	PLUG,Threaded	CUM 3679354
22	**040136**		**CUM 3678506**	**SCREW,Hex Flange Head Cap**	
23	**040137**		**CUM 3678804**	**SCREW,Hex Flange Head Cap**	
24	131653		CUM 4926316	GASKET,Cylinder Head	
24	**131860**		**CUM 3685639**	**GASKET,Cylinder Head(ISX 15)**	
25	**131668**		**CUM 4026507**	**GASKET,Valve Cover(Plastic)**	
25	**131840**		**CUM 3104392**	**GASKET,Valve Cover(Rubber)**	
25	**131901**		**CUM 3679937**	**GASKET,Valve Cover(ISX 15)**	
26	040055		CUM 3100895	ASSEMBLY,Isolater	
26	**042149**		**CUM 4026511**	**ISOLATOR,Valve Cover**	
27	151558		CUM 4026423	BEARING,Cam(For Valve Camshaft) (7 Bearings required)	CUM 3680579
28	151559		CUM 3680580	BEARING,Cam(For Injector Camshaft) (Requires 4 Bearings - #2, 3, 4 and 6)	
29	151560		CUM 3680581	BEARING,Cam(For Injector Camshaft) (Requires 3 Bearings - #1, 5 and 7)	
30	192123		CUM 3412352	TUBE,Injector	CUM 3680873
31	121353		CUM 3678536	SEAL,Injector Sleeve	
32	050581		CUM 3678605	PLUG,Threaded	CUM 4926564
33	151557		N/A	KIT,Cam Bearing Includes Bearings (7)151558 (4)151559 (3)151560	
34	121312		CUM 3347937	O-RING,Injector	
35	121313		CUM 3330538	O-RING,Injector	
36	121314		CUM 3330537	O-RING,Injector	
37	121336		CUM 3347939	O-RING,Injector	
38	121309		N/A	KIT,Injector O-Ring Includes O-Rings (6)121312 (6)121313 (6)121314 (6)121336	
39	131671		CUM 3682710	GASKET,Exhaust	
40	131672		CUM 3682940	GASKET,Exhaust	
41	**040083**		**CUM 3679445**	**SPACER,Exhaust Bolt**	**CUM 4003603**
42	**FSU-0373**		**CUM 4965698**	**SCREW(M10 x 1.50 x 100)**	**CUM 3818121**
43	**151570**		**N/A**	**KIT,Head Repair** **Includes Cam Bearing Kit (1)151557** **Injector Tube (6)192123 Valve Locks (48)492062** **Valve Guides (24)192126 Valve Seals (24)192119**	

*** Please Note - Part numbers with an X at the end are Remanufactured Products.**

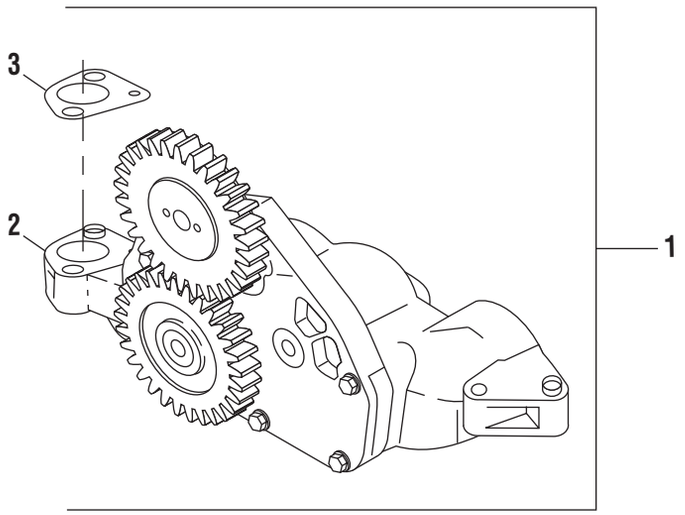
FIGURE 6459



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181875		CUM 4920465	PUMP,Water w/Housing(12 Rib Pulley)	CUM 3682311
1	181876		CUM 4923759	PUMP,Water w/Housing(10 Rib Pulley)	CUM 3681106, CUM 4059254
1	181881		CUM 4920464	PUMP,Water w/Housing(Low Fan Mount)	CUM 3681580
1	**181914**		**CUM 3684450**	**PUMP,Water w/o Housing(12 Rib Pulley) (Core only)**	**CUM 3683651**
1	**181933**		**CUM 3687130**	**PUMP,Water w/o Housing(12 Rib Pulley)**	
2	181877		CUM 4089908	KIT,Water Pump Assembly(6 & 10 Rib Pulley) Includes Pump (1)181876 O-Rings (1)121315 (1)121316	CUM 3800495, CUM 4025097
2	181879		CUM 4089910	KIT,Water Pump Assembly(6 & 12 Rib Pulley) Includes Pump (1)181875 O-Rings (1)121315 (1)121316	CUM 4089158
2	181882		CUM 4089909	KIT,Water Pump Assembly(Low Fan Mount) (6 & 12 Rib Pulley) Includes Pump (1)181881 O-Rings (1)121315 (1)121316	CUM 4024886
2	**181904**		**CUM 3684449**	**KIT,Water Pump(6 & 12 Rib Pulley) Includes Pump (1)181914 Housing (1)181911 O-Ring (1)121384 Screws (4)840005**	**CUM 3683652**
2	**181929**		**N/A**	**KIT,Water Pump(ISX)**	
3	121315		CUM 4059172	O-RING(Inlet Connection)	
3	**121384**		**CUM 3684284**	**O-Ring**	
4	121316		CUM 3678724	O-RING(Pump to Block)	
5	181887		CUM 4973373	**THERMOSTAT(Non-Vented)(180 deg)**	CUM 4952204
5	**181930**		**CUM 4318947**	**THERMOSTAT(Non-Vented)(180 deg)**	
6	181902		CUM 4090022	KIT,Cover Includes Cover (1)181917 O-Rings (1)121315 (1)121316 (1)321337 Ring (1)GRI-2798	
7	040134		CUM 3896408	SCREW,Hex Head(M10 x 1.5 x 80)	
7	**840005**		**CUM 3093805**	**SCREW,Hex Head(M10 x 1.5 x 35)**	
8	**181911**		**CUM 3683653**	**HOUSING,Water Pump**	

PAI Copyright 2017

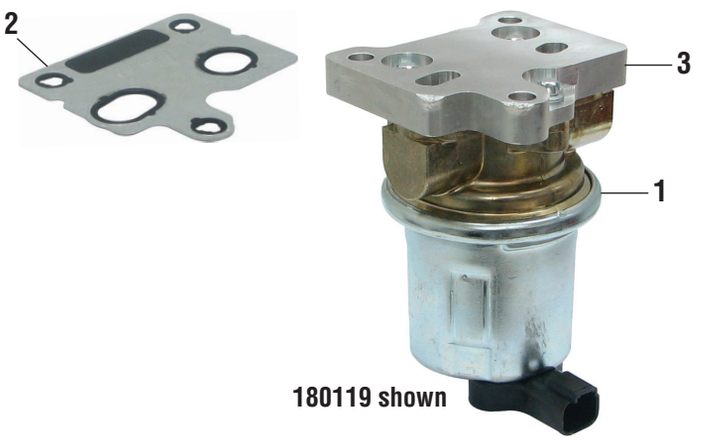
FIGURE 6463



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141313		CUM 2881757	KIT,Oil Pump(Aluminum) Includes Pump (1)141312 Shim Kit (1)	CUM 2864072
2	141312		CUM 3686938	PUMP,Oil(Aluminum)	CUM 3686938
3	162017		CUM 3800751	KIT,Shim Includes Shims (12)	

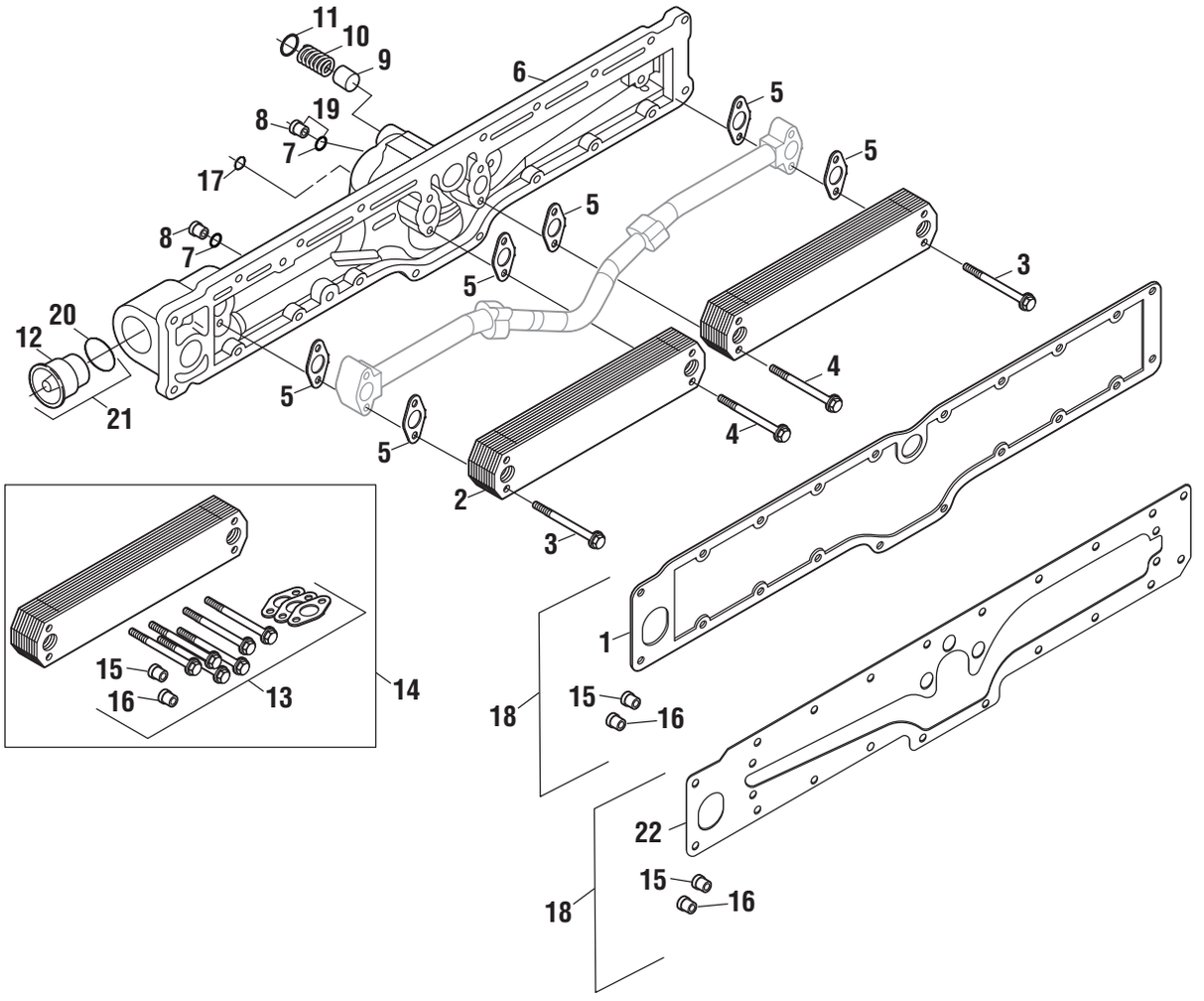
Fuel Pump

FIGURE 6468



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**180116**		**CUM 4935014**	**PUMP,Fuel Transfer(24 vdc) Includes Gasket only**	**CUM 3964382**
1	**180117**		**CUM 4935092**	**PUMP,Fuel Transfer(12 vdc)**	**CUM 4088507**
1	**180118**		**CUM 4935093**	**PUMP,Fuel Transfer(24 vdc) Includes Gasket only**	**CUM 4088508, CUM 4077281**
1	**180119**		**CUM 4935094**	**PUMP,Fuel Transfer(12 vdc)**	**CUM 4076580**
2	**131929**		**CUM 4954474**	**GASKET,Fuel Pump(ISX 15)**	**CUM 4076848**
2	**131930**		**CUM 4954473**	**GASKET,Fuel Pump**	**CUM 4076586**
3	**131931**		**CUM 2872195**	**GASKET,Support**	**CUM 2872195**

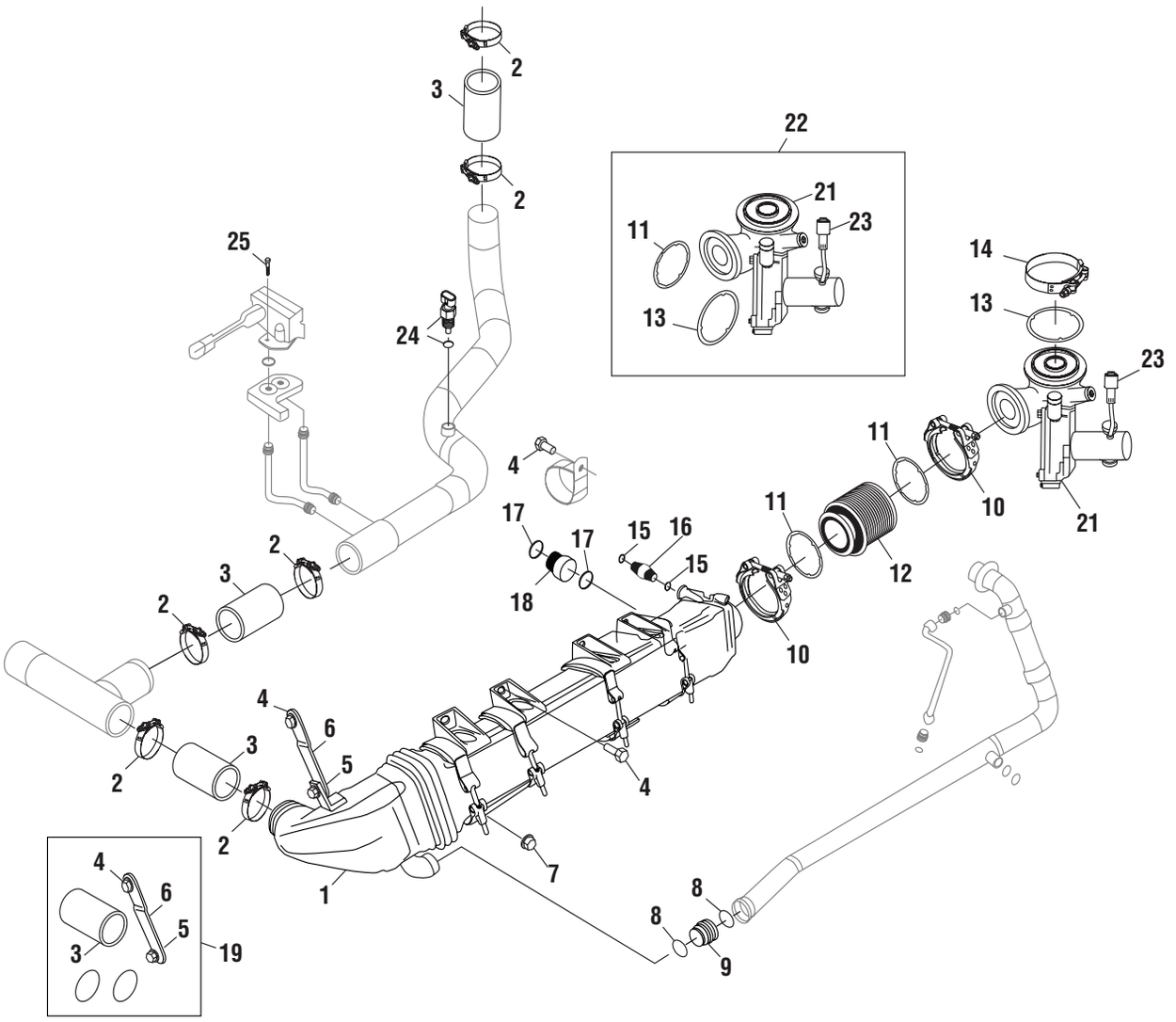
FIGURE 6412



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131667		CUM 3104232	GASKET,Cooler	
2	**141400**		**CUM 2892304**	**COOLER,Oil Core** **Includes O-Rings (2)131360**	
2	141402		CUM 4059460	COOLER,Core	
2	**141431**		**CUM 4965487**	**COOLER,Core(QSX)**	
3	040057		CUM 4101868	SCREW,12 pt Cap	CUM 4059464
4	040056		CUM 4101867	SCREW,12 pt Cap	CUM 4059463, CUM 3681689
5	131641		CUM 4973532	GASKET,Oil Cooler Core	CUM 3680714, CUM 4059387
6	Call		CUM 4952508	HEAD,Oil Filter Cooler	
7	121210		CUM 3678912	O-RING,Sensor	CUM 3330202
8	050573		CUM 3680419	PLUG	CUM 3678922
9	141307		CUM 3820320	PLUNGER,Bypass	
10	**141333**		**CUM 3882586**	**SPRING,Relief Plunger**	**CUM 3883524**
11	121366		CUM 3678606	O-RING,Seal	
12	181925		CUM 4952629	THERMOSTAT(235 deg)	CUM 3680453
13	141401		CUM 4089900	KIT,Installation Includes Plugs (1)042015 (1)042016 Screws (4)040056 (2)040057 Gaskets (3)131641	
14	141422		CUM 4089583	KIT,Cooler Oil Includes Cooler (1)141402 Kit (1)141401	CUM 4089344, CUM 4059252
15	042015		CUM 4026420	PLUG,Protective	
16	042016		CUM 4058956	PLUG,Protective	
17	321239		CAT 3J7354	O-RING,Seal	CUM 3922794
18	131654		CUM 4955592	SET,Oil Cooler Gasket Includes Gasket (1)131667 Plugs (1)042015 (1)042016	CUM 3404232, CUM 3680712
18	**132000**		**CUM 4089103**	**KIT,Gasket Cooler** **Includes Oil Cooler Gasket (1)132001** **Plugs (1)042015 (1)042016**	
19	050572		CUM 3680420	PLUG w/ O-Ring Includes Plug (1)050573 O-Ring (1)121210	
20	**121385**		**CUM 3089025**	**O-RING,Thermostat**	
21	**181926**		**N/A**	**KIT,Thermostat** **Includes Thermostat (1)181925 O-Ring (1)121385**	
22	**132001**		**CUM 3680713**	**GASKET,Oil Cooler**	

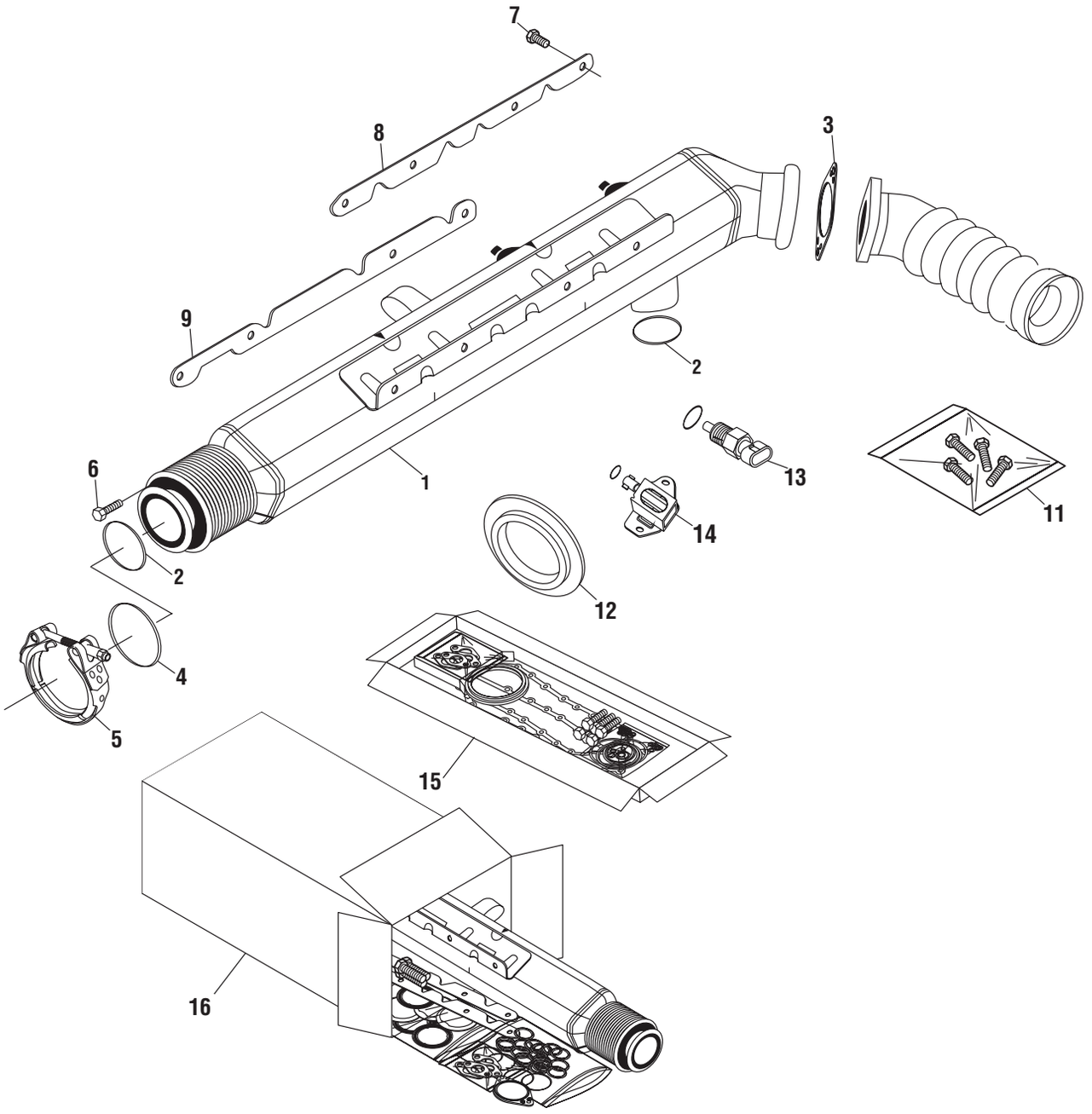
FIGURE 6469



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**141437**		**CUM 2878071**	**COOLER,EGR**	**CUM 4952490**
2	Call		CUM 3683357	CLAMP,Hose	
3	121070		CUM 4952644	HOSE,Inlet	
4	ESC-0365		CUM 3903990	SCREW	
5	**040138**		**CUM 3896723**	**SCREW,Flanged Hex Head**	
6	**045102**		**CUM 4962476**	**BRACKET,Cooler Mounting**	
7	Call		CUM 3682798	NUT,Hexagon Flange	
8	121228		CUM 3049221	O-RING,Seal	
9	Call		CUM 3683067	COUPLING	
10	**042029**		**CUM 3683144**	**CLAMP,V-Band**	**CUM 3682554**
11	131675		CUM 3104230	GASKET,EGR Valve	
12	Call		CUM 3682553	TUBE,Flexible	
13	131674		CUM 3104229	GASKET,EGR Valve	
14	**042030**		**CUM 3683145**	**CLAMP,V-Band**	
15	121318		CUM 3682076	O-RING	
16	Call		CUM 3682539	TUBE,Vent	
17	121211		CUM 109080	O-RING	
18	Call		CUM 3682541	COUPLING	
19	**141439**		**CUM 2881921**	**KIT,Installation** **Includes Bracket (1)045102** **O-Rings (1)121417 (1)121217 Hose (1)121071** **Screws (1)040138 (1)ESC-0365**	
20	**141438**		**CUM 4309434**	**KIT,EGR Cooler** **Includes Cooler (1)141437 Installation Kit (1)141439**	
21	**141453**		**CUM 3104874**	**VALVE,EGR**	
22	**141451**		**CUM 4955422**	**KIT,EGR Valve** **Includes Valve (1)141453 Sensor kit (1)050707** **Gaskets (1)131674 (1)131675**	**CUM 4089833**
23	**050707**		**CUM 4956084**	**KIT,Sensor(NSS)**	
24	**050641**		**CUM 4088712**	**SENSOR,Temperature**	
25	**040048**		**CUM 3900629**	**SCREW(M8 x 1.25 x 16)**	

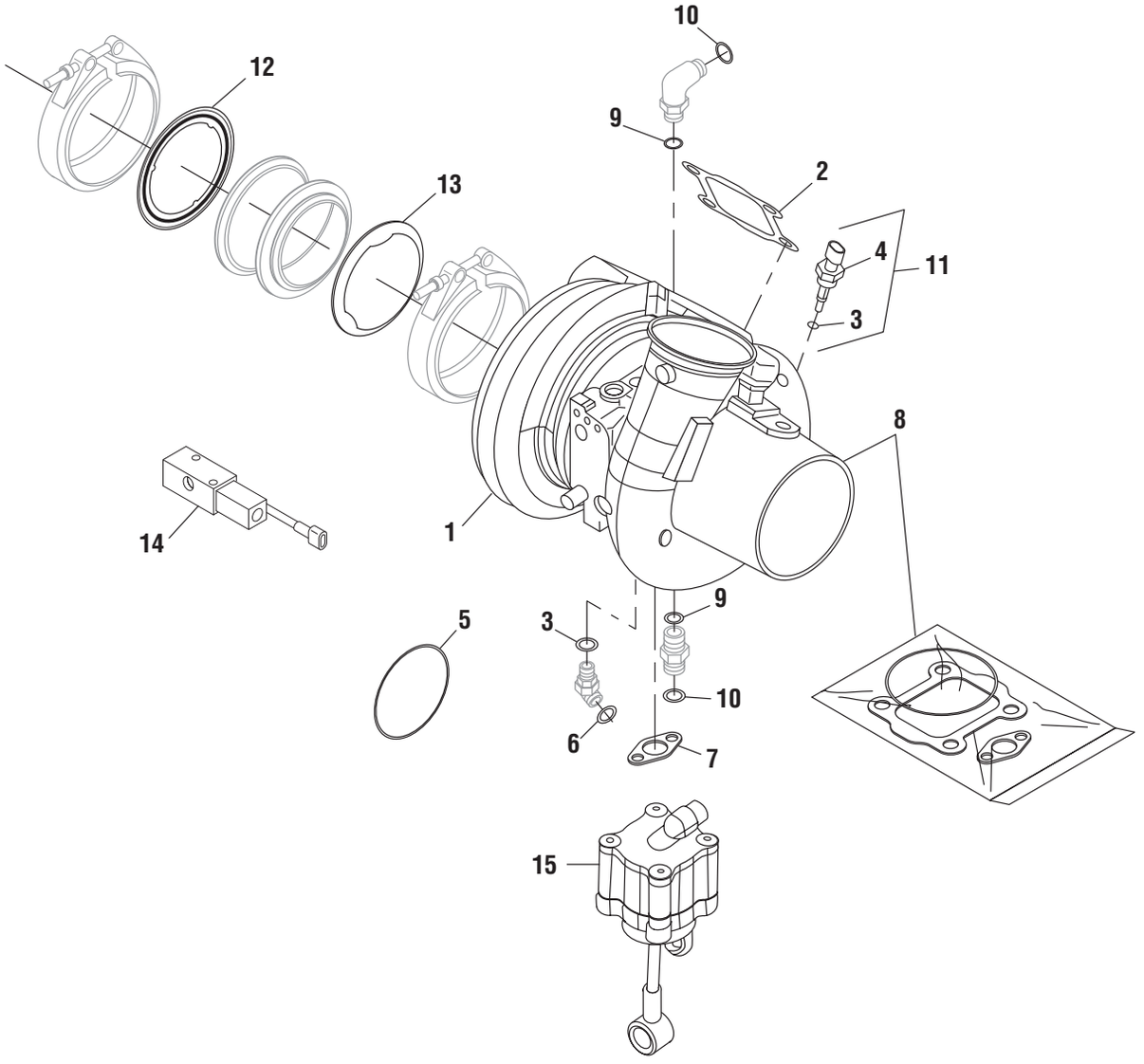
FIGURE 6470



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141441		CUM 3689035	COOLER,EGR	CUM 3684718
2	121422		CUM 3683814	O-RING	
3	131894		CUM 3683537	GASKET,EGR	
4	131675		CUM 3104230	GASKET,EGR Valve	
5	042029		CUM 3683144	CLAMP,V-Band	
6	040048		CUM 4070462	SCREW(M8 x 1.25 x 16)	CUM 3900629
7	ESC-0365		CUM 3903990	SCREW(M10 x 1.50 x 20)	
8	141490		CUM 3684320	PLATE,Clamping	
9	141491		CUM 3684322	PLATE,Clamping	
10	131897		CUM 3683607	GASKET,Connection	
11	040128		CUM 3903112	CAPSCREW(M10 x 1.50 x 30)	
12	136161		CUM 3684360	SEAL,Grommet	
13	050741		CUM 4921728	KIT,Pressure Sensor Includes Rings (2) 121402	
14	050659		CUM 4928594	KIT,EGR Pressure Sensor Includes O-Ring (1)121210	
15	141440		CUM 2881920	KIT,EGR Cooler Installation Includes Plates (1)141490 (1)141491 Gaskets (1)131895 (1)131878 (1)131841 (1)131670 (1)131673 (1)131675 (2)131894 (1)131897 Seals (1)136161 (2)136101 (2)136102 (2)136160 (2)136143 Screws (2)040144 O-Rings (2)121321 (2)121331 (2)121297 (2)121393 (5)121422 (2)121214 (2)321241 (2)321239 Isolator (1)131956	
16	141442		CUM 4309398NX	KIT,EGR Cooler Includes EGR Cooler (1)141441 Installation kit (1)141440	

FIGURE 6461



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181198		CUM 4040844	TURBOCHARGER	CUM 3592545
1	181201		CUM 4043226	TURBOCHARGER	CUM 3598821
1	**181204**	**181204E**	**CUM 4955305**	**TURBOCHARGER**	**CUM 4089713**
1	**181193**		**CUM 3792786**	**TURBOCHARGER**	**CUM 4309076**
1	**181210**		**CUM 2881998**	**TURBOCHARGER**	**CUM 2881786**
2	131648		CUM 4026884	GASKET,Mounting	
2	131673		CUM 3102314	GASKET,Mounting	
2	**131904**		**CUM 3685535**	**GASKET,Mounting**	
3	121210		CUM 3678912	O-RING,Sensor	CUM 4921574
4	**050677**		**CUM 4088833**	**SENSOR,Temperature**	
5	GGA-2947		MAK 56AX534	O-RING	CUM 3682177
6	Call		CUM 3089392	O-RING	
7	131670		CUM 3101268	GASKET,Drain	
8	181199		CUM 4090042	KIT,Turbocharger Includes Turbocharger (1)181198 O-Rings (1)121321 (1)321239 Gasket (1)131494 (1)131648	CUM 4036758
8	181202		CUM 4955306	KIT,Turbocharger Includes Turbocharger (1)181201 O-Ring (1)GGA-2947 Gaskets (1)131673 (1)131670	CUM 4089551, CUM 4089398
9	121298		CUM 3678786	O-RING	
10	121297		CUM 3627695	O-RING	
11	**050676**		**CUM 4088832**	**Kit,Temperature Sensor Includes Sensor (1)050677 O-Ring (1)121210**	
12	**131876**		**CUM 4966441**	**GASKET,Exhaust Outlet Connection(ISX 15)**	
12	**131895**		**CUM 3684355**	**GASKET,Exhaust Outlet Connection**	**CUM 3684256**
13	**131878**		**CUM 3684359**	**GASKET,Exhaust Outlet Connection(ISX 15)**	**CUM 3684255**
14	**181170**		**CUM 3770742**	**VALVE,Air Control**	
15	**181169**		**CUM 3599755**	**ACTUATOR,Turbocharger**	

Inframe Kits - w/ Pistons

PAI PART NUMBER	PISTON KIT PART NUMBER (6)	RING SET PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)
ISX101-(017 thru -032) EGR Engine	111551 Includes: CUM 4923745 Piston	505175 CUM 4309441	161647 CUM 4089153
-(033 thru -048) Pre-EGR Engine			
ISX102-(017 thru -032) EGR Engine	111570 Includes: CUM 4923747 Piston	505125 CUM 4089406	161647 CUM 4089153
-(033 thru -048) Pre-EGR Engine			
ISX103-(017 thru -032) EGR Engine	111561 Includes: CUM 4923743 Piston	505125 CUM 4089406	161647 CUM 4089153
-(033 thru -048) Pre-EGR Engine			
ISX104-(033 thru -048)	111564 Includes: CUM 4923744 Piston	505125 CUM 4089406	161647 CUM 4089153
ISX105-(017 thru -032)	111652 Includes: CUM 2882635 Piston	505175 CUM 4309441	161647 CUM 4089153
-(033 thru -048)			
-(049 thru -064)			161649 CUM 2881719
-(065 thru -080)			
-(081 thru -096)			161651 CUM 4309389
-(097 thru -112)			
ISX106-(017 thru -032)	111656 Includes: CUM 2882631 Piston	505175 CUM 4309441	161647 CUM 4089153
ISX107-(017 thru -032)	111661 Includes: CUM 2882630 Piston	505175 CUM 4309441	161647 CUM 4089153
-(033 thru -048)			
-(049 thru -064)			161649 CUM 2881719
-(065 thru -080)			
-(081 thru -096)			161651 CUM 4309389
-(097 thru -112)			
ISX108-(017 thru -032)	111732 Includes: CUM 3687897 Piston	505175 CUM 4309441	161649 CUM 2881719
ISX121-(033 thru -048)	111492 Includes: CUM 4059344 Piston	505120 CUM 4089154	161647 CUM 4089153
-(049 thru -064)			

FIGURE 6467

Please note:

** **Part number for Standard sizes are shown in chart. Part numbers and kit dash numbers will change if non-standard components are requested.**

1. **To ensure correct parts application, please have CPL and Engine Serial number available.**

PAI Copyright 2017

UPPER GASKET SET (1)	OIL PAN GASKET (1)	ROD BEARINGS KIT (6 pair)	MAIN BEARING KIT (1)
131638 CUM 4955596	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595			
131638 CUM 4955596	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595			
131638 CUM 4955596	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595			
131637 CUM 4955595	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131638 CUM 4955596	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595			
131638 CUM 4955596			
131637 CUM 4955595			
131638 CUM 4955596			
131637 CUM 4955595			
131638 CUM 4955596	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131638 CUM 4955596	131656 CUM 4026684	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595			
131638 CUM 4955596			
131637 CUM 4955595			
131638 CUM 4955596			
131637 CUM 4955595			
131906 CUM 2881767	131838 N/A	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595	1318	171970 ** CUM 4089139	171980 ** CUM 3800298
		171990 ** CUM 4089405	

PAI PART NUMBER	PIN PART NUMBER (6)	RETAINERS PART NUMBER (12)	RING SET PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)
ISX140-(017 thru -032)	111089 CUM 4923748	111171 CUM 3064305	505125 CUM 4089406	161647 CUM 4089153
-(033 thru -048)	111090 CUM 3678590		505120 CUM 4089154	
-(049 thru -064)				
-(065 thru -080)				
ISX141-(017 thru -032) EGR Engine	111089 CUM 4923748	111171 CUM 3064305	505125 CUM 4089406	161647 CUM 4089153
-(033 thru -048) Pre-EGR Engine				

FIGURE 6462

Please note:

**** Part number for Standard sizes are shown in chart. Part numbers and kit dash numbers will change if non-standard components are requested.**

1. To ensure correct parts application, please have CPL and Engine Serial number available.

Upper Gasket Sets

FIGURE 6455

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131636		CUM 4955594	SET,Upper Gasket(Before 8/27/01) (For Groove top Liners)	CUM 4025287
1	131637		CUM 4955595	SET,Upper Gasket(After 8/27/01) (For Flat top Liners)	CUM 4025300
1	131638		CUM 4955596	SET,Upper Gasket(EGR Engines) (For Flat top Liners)	CUM 4089169
1	**131906**		**CUM 2881767**	**SET,Upper Gasket(ISX 15)**	

PAI Copyright 2017

Inframe Kits - w/o Pistons

UPPER GASKET SET (1)	OIL PAN GASKET (1)	OIL PAN O-RING (1)	ROD BEARINGS KIT (6 pair)	MAIN BEARING KIT (1)
131637 CUM 4955595	131656 CUM 4026684	121308 CUM 3678756	171970 ** CUM 4089139	171980 ** CUM 3800298
131638 CUM 4955596			171990 ** CUM 4089405	
131638 CUM 4955596	131656 CUM 4026684	121308 CUM 3678756	171990 ** CUM 4089405	171980 ** CUM 3800298
131637 CUM 4955595				

Lower Gasket Sets

FIGURE 6456

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131639		CUM 4955590	SET,Lower Gasket(Early)	CUM 3102234
1	131640		CUM 4955591	SET,Lower Gasket(Late)	CUM 4089170
1	**131851**		**CUM 2881766**	**KIT,Lower Gasket(ISX 15)**	

Miscellaneous Gaskets

FIGURE 6457

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131666		CUM 3011876	GASKET,Turbo,Exhaust	
2	131644		CUM 3678770	GASKET,Inlet	
3	131645		CUM 3680284	GASKET,ECU	
4	131646		CUM 3680602	GASKET,Housing Thermostat	
4	131647		CUM 3684336	GASKET,Housing Thermostat	
4	131676		CUM 3682673	GASKET,Housing Thermostat	
5	**131841**		**CUM 4963857**	**GASKET,Doser Injector**	
6	131649		CUM 4965689	GASKET,Housing Fuel	
7	131650		CUM 4907446	GASKET,Manifold Exhaust	
7	131651		CUM 4907447	GASKET,Manifold Exhaust	
7	131652		CUM 4907448	GASKET,Manifold Exhaust	
8	131658		CUM 3684338	GASKET,Inlet,Water	
9	131659		CUM 4965690	GASKET,Drive Accessory	
10	131669		CUM 3019227	GASKET,Manifold Intake	
10	**131905**		**CUM 3688347**	**GASKET,Intake Manifold**	
11	131677		CUM 3682577	GASKET,ECM	
12	**131877**		**CUM 3683940**	**GASKET,Exhaust(Manifold Connection ISX 15)**	
13	**131897**		**CUM 3683607**	**GASKET,Connection Water(ISX 15)**	
13	**131898**		**CUM 3685456**	**GASKET,Connection Water(ISX 15)**	
14	**131842**		**CUM 3686758**	**GASKET,Fuel Pump**	
15	**121394**		**CUM 3686525**	**GASKET,Electrical Connector**	
16	**131972**		**CUM 2871453**	**GASKET,After Treatment**	

Miscellaneous Components

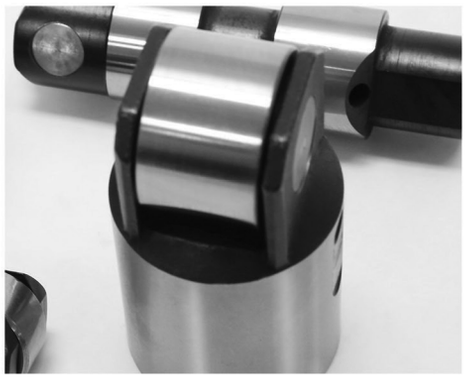
FIGURE 6458

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	121317		CUM 4010600	O-RING,Sensor	
1	**121422**		**CUM 3683814**	**O-RING,Coolant(ISX 15)**	
1	**121424**		**CUM 3685124**	**O-RING,Exhaust**	
1	**121425**		**CUM 3949708**	**O-RING,Oil Gauge(.86in x .605in)**	
1	**121431**		**CUM 3867481**	**O-RING,Fuel Pump**	
2	042014		CUM 4089255	PLUG,Protective	
3	136109		CUM 3678762	SEAL,Drain,Turbo	
3	136143		CUM 3684284	SEAL,Fitting(ISX, QSX)	
3	**136144**		**CUM 3687051**	**SEAL,Tube(EGR)**	
3	**192143**		**CUM 2872717**	**SEAL,Injector(ISX 15)**	**CUM 2872057**
4	**121071**		**CUM 4919970**	**HOSE,Inlet**	
5	**121417**		**CUM 3348319**	**O-RING**	
6	**121393**		**CUM 3682826**	**RING,Sealing(ISX 15)**	
7	**042029**		**CUM 3683144**	**CLAMP,V-Band(EGR)**	**CUM 3682552**
8	**209983X**		**CUM 4088327**	**ASSEMBLY,Injector(ISX 15, QSX)**	
8	**209984X**		**CUM 4088665**	**ASSEMBLY,Injector(ISX 15, QSX)**	**CUM 4076902**
9	**040142**		**CUM 3679102**	**SCREW,Injector Hold down(M10 x 1.5 x 70)**	
9	**040127**		**CUM 3900630**	**CAPSCREW**	
9	**040143**		**CUM 3684014**	**SCREW,Socket**	
10	**141450**		**CUM 4955421**	**KIT,EGR Valve** **Includes EGR Valve (1)141452** **Sensor Kit (1)050707 EGR Gasket (1)131675** **EGR Valve Gasket (1)131955**	
11	**141452**		**CUM 3104875**	**VALVE,EGR**	
12	**131900**		**CUM 3102392**	**GASKET,EGR**	
12	**131955**		**CUM 3103077**	**GASKET,Valve EGR**	
13	**131975**		**CUM 136995**	**GASKET,Cover**	
14	**220040**		**CUM 4089238**	**KIT,Compressor Head Repair**	

PAI Copyright 2017

ISO 9001
CERTIFIED







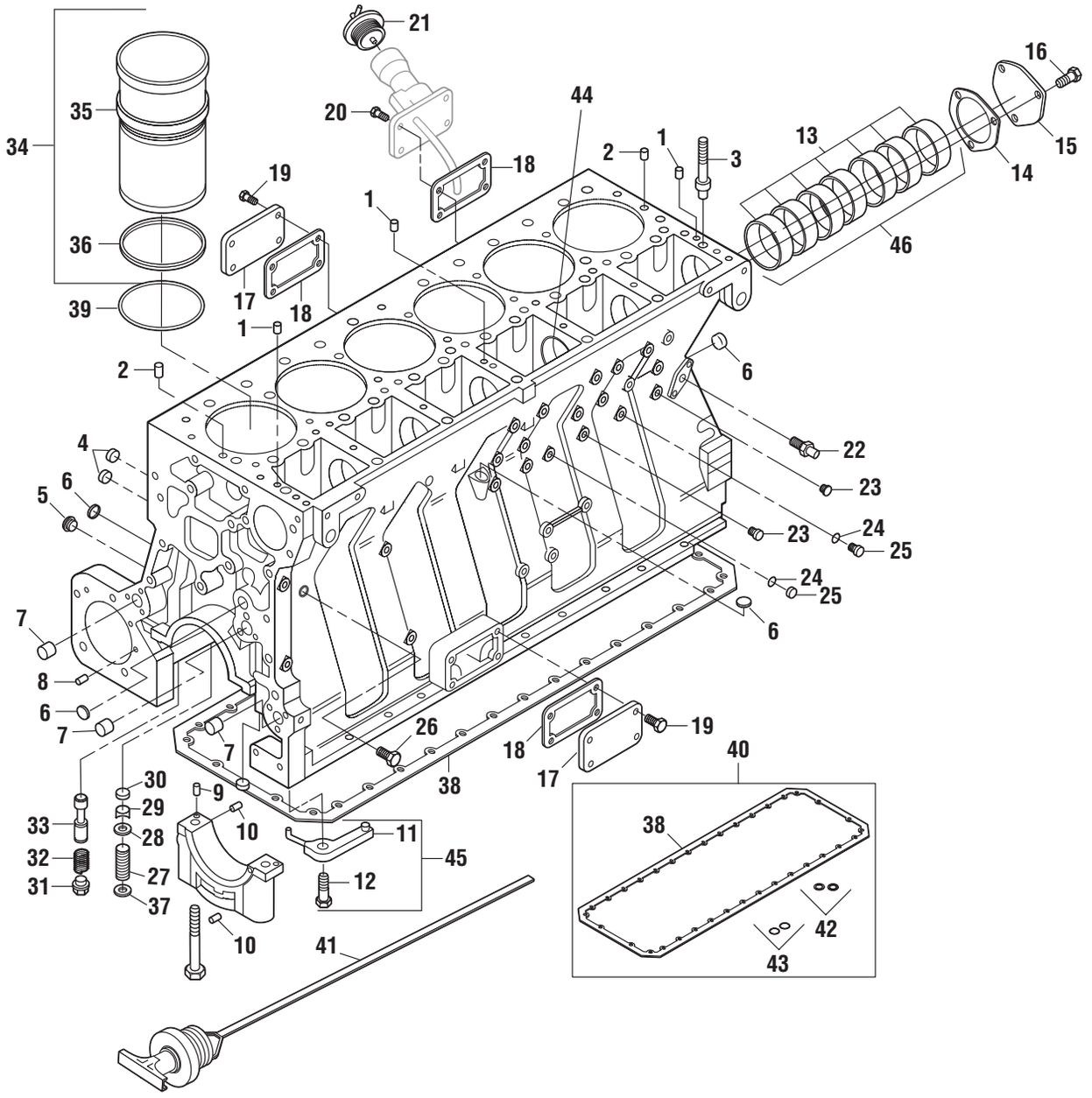


MACK • CUMMINS • INTERNATIONAL • DETROIT DIESEL
CATERPILLAR • FULLER • ROCKWELL • EATON • BENDIX
TIMKEN • SCHWITZER • GENUINE HENDRICKSON

ENGINE PARTS • BODY PARTS • ELECTRICAL COMPONENTS • OIL & WATER PUMPS • CHASSIS •
DRIVELINE REPLACEMENT PARTS • POWER STEERING COMPONENTS • TAPPETS • SENSORS

For more information about PAI's complete product line and services please visit,**www.paiindustries.com** or call us at 770.822.1000.

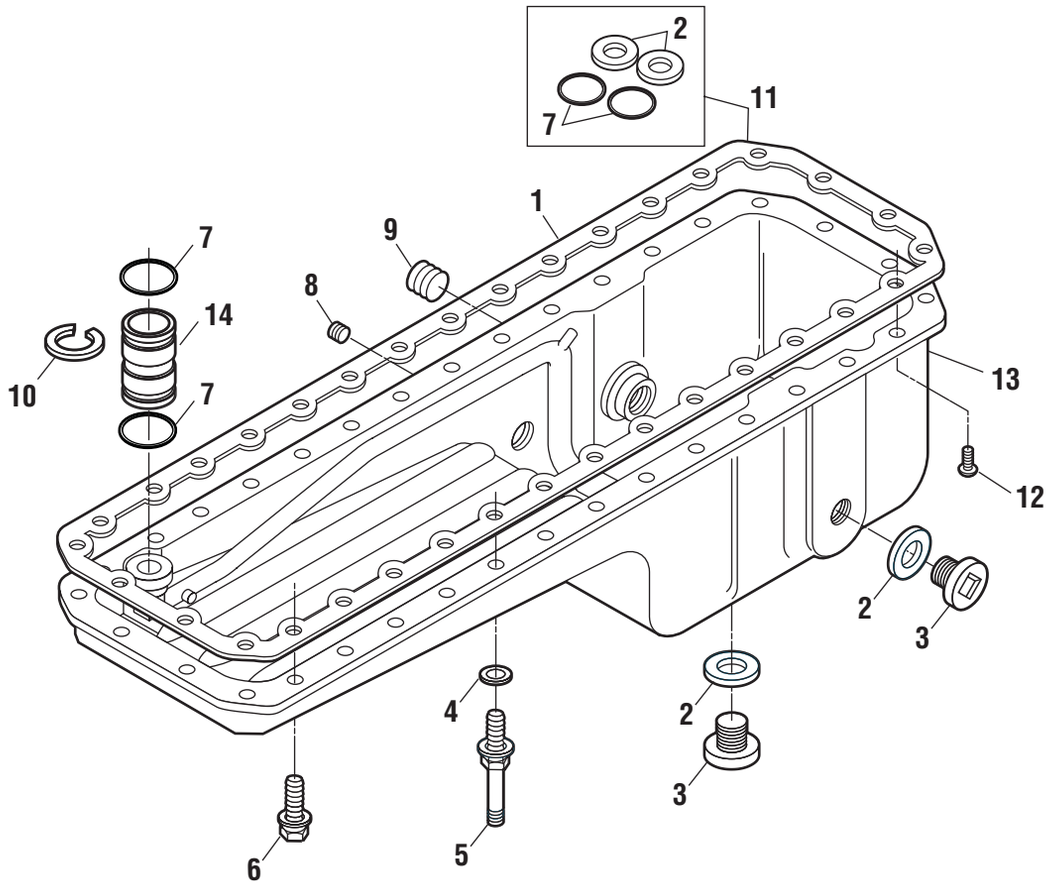
FIGURE 6202



 PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 3008446	PIN,Dowel(Cam Follower)(M6.0 x 12mm)	
2	Call		CUM 142207	PIN,Dowel	
3	Call		CUM 3031921	STUD(M10 x 1.50 x 50mm Lg)	
4	040089		CUM 3007632	PLUG,Expansion	
5	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
6	040086		CUM 3007635	PLUG,Expansion(1in)	
7	Call		CUM 3026231	RING,Dowel(w/Hydraulic Drive)	
7	Call		CUM 3053349	RING,Dowel(w/o Hydraulic Drive)	
8	045021		CUM 3034438	PIN,Dowel(Groove)	
9	Call		CUM 148555	PIN,Dowel(#4 Main Cap Only)	
10	Call		CUM 3028252	PIN,Roll	
11	045035		CUM 3080708	NOZZLE,Piston Cooling(M11 & ISM) (For Steel Piston)	
11	045055		CUM 3071032	NOZZLE,Piston Cooling(L10)	CUM 3026310
11	**045061**		**CUM 3070218**	**NOZZLE,Piston Cooling(L10)**	
12	042182		CUM 3070393	SCREW,Captive(M10-1.50 x 25mm Lg)	CUM 3025479, CUM 3819957
13	151506		CUM 3820566	BEARING,Camshaft	
14	131621		CUM 3025296	GASKET,Cover Plate	
15	Call		CUM 3025295	COVER,Camshaft	
16	Call		CUM 3009887	SCREW,Cap(M10-1.50 x 22mm Lg)	
17	Call		CUM 3028684	COVER,Hand Hole	
18	131622		CUM 3883472	GASKET,Hand Hole	CUM 3025153, CUM 3818845
19	Call		CUM 3036230	SCREW,Cap(M10-1.50 x 20mm Lg)	
20	040052		CUM 3335044	SCREW,Cap(M10-1.50 x 25mm Lg)	
21	EFC-8552		MAK 222GB27A	CAP,Filler	CUM 101322
22	Call		CUM 3042619	NIPPLE,Coupling	
23	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4in NPT)	CUM 3008466
24	121227		CUM 3037537	SEAL,Plug	CUM 118350
25	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded(9/16in-18 NPT) (w/ Seal 121227)	CUM 3037536
26	Call		CUM 3049145	ADAPTER,Probe	
27	141335		CUM 3014756	SPRING,Bypass Valve	
28	Call		CUM 3014754	WASHER,Plain(3/4in)	
29	Call		CUM 3014755	DISC,Valve	
30	Call		CUM 3026758	SEAT,Pressure Regulator Valve	
31	Call		CUM 3821725	PLUG,Retainer	
32	141332		CUM 3010146	SPRING,Pressure Regulator	
33	141305		CUM 3012529	PLUNGER,Pressure Regulator	
34	161626		CUM 3803703	KIT,Liner Includes Liner (1)161625 Seal (1)121203	
34	161628		CUM 4089388	KIT,Liner(ISM)(EGR Engine) Includes Liner (1)161627 Seal (1)121203	
35	161625		CUM 3080760	LINER	
35	161627		CUM 3102423	LINER(ISM)(EGR Engine)	
36	121203		CUM 3047188	SEAL,Liner	
37	Call		CUM 179063	PLUG,Retainer	
38	131269		CUM 3882433	GASKET,Oil Pan(Fits Internal Dampening)	
38	131270		CUM 3882733	GASKET,Oil Pan(Fits External Dampening)	
39	162010		CUM 3032623	SHIM,Liner(.13mm)(.005in)	
39	162011		CUM 3034663	SHIM,Liner(.20mm)(.008in)	
40	131492		N/A	KIT,Oil Pan Gasket(Internal Dampening) Includes Gasket (1)131269 Washers (2)131391 O-Rings (2)121256	
40	131493		N/A	KIT,Oil Pan Gasket(External Dampening) Includes Gasket (1)131270 Washers (2)131391 O-Rings (2)121256	
41	141290		CUM 216484	DIPSTICK,Universal	
42	131391		CUM 67946	WASHER	
43	121256		CUM 3032787	O-RING	
44	151487		CUM 3824894	SLEEVE,Repair	
45	045017		CUM 3803495	NOZZLE,Piston Cooling(L10) (For Aluminum Piston) Includes Nozzle (1)045055 Screw (1)042182	
46	**151565**		**N/A**	**KIT,Camshaft Bearing** **Includes Bearings (7)151506**	

FIGURE 6213

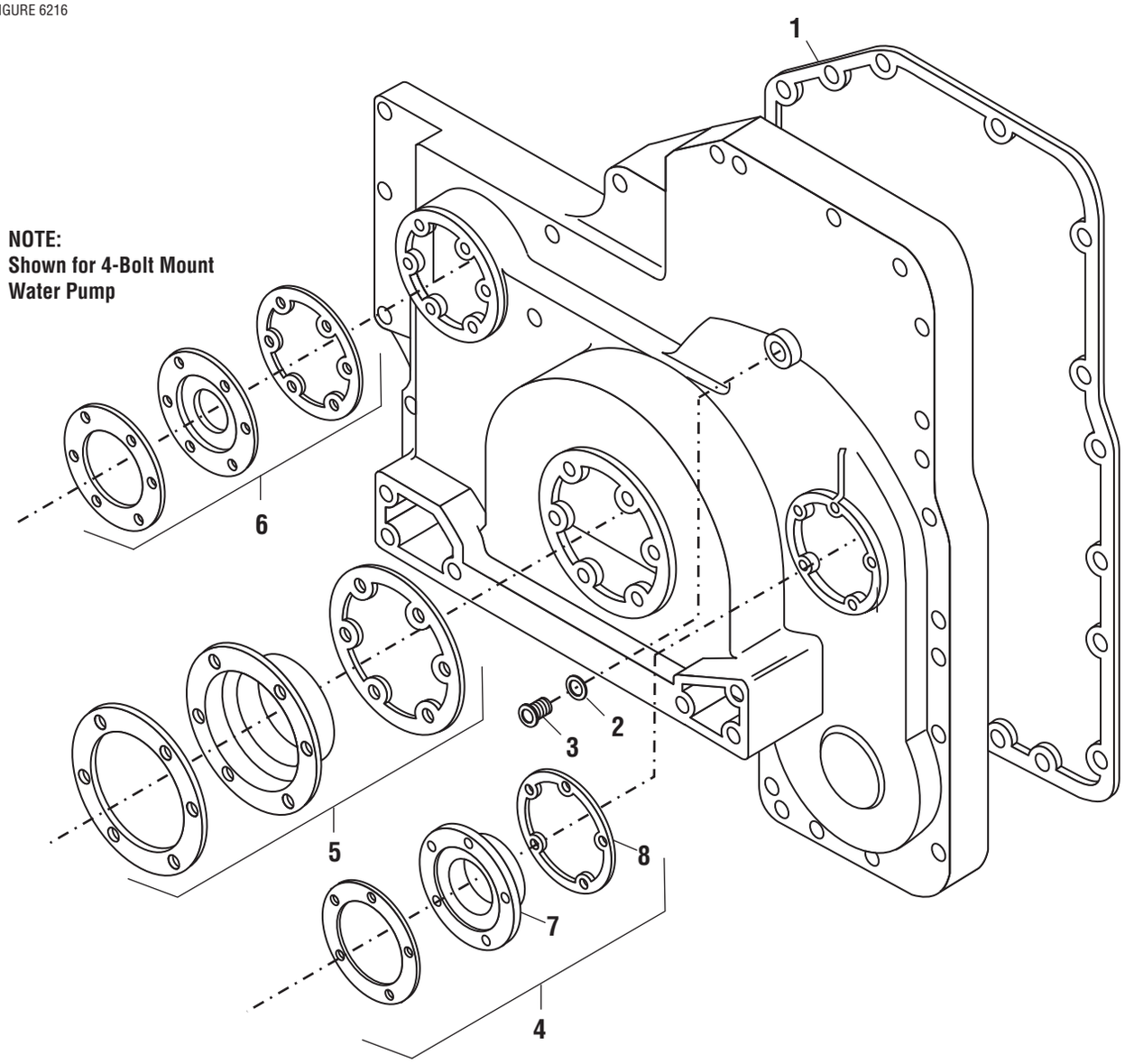


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131269		CUM 3882433	GASKET,Oil Pan(Internal Dampening)	
1	131270		CUM 3882733	GASKET,Oil Pan(External Dampening)	CUM 3401290
2	131391		CUM 67946	WASHER,Copper	
3	042010		CUM 3055069	PLUG,Threaded(Magnetic)(1in-18)	
4	040034		CUM 3009330	WASHER,Plain	
5	Call		CUM 3052881	SCREW,Cap	
6	040033		CUM 3818060	BOLT,Oil Pan(M10-1.50 x 25mm Lg)	
7	121256		CUM 3032787	O-RING,Pick Up Tube	
8	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
9	EPP-3566		MAK 49AX226	PLUG,Pipe(1in NPT)	CUM 3008470, CUM S-962
10	Call		CUM 3033073	RING,Retaining	
11	131492		N/A	KIT,Oil Pan Gasket(Internal Dampening) Includes O-Rings (2)121256 Gasket (1)131269 Washers (2)131391	
11	131493		N/A	KIT,Oil Pan Gasket(External Dampening) Includes O-Rings (2)121256 Gasket (1)131270 Washers (2)131391	
12	040053		CUM 4082772	SCREW(M10 x 1.50 x 20)(M11/ISM)	CUM 3401290
13	**141285**		**CUM 4952785**	**PAN,Oil(M11/ISM)(Stamp Steel Front Sump)**	**CUM 4004588, CUM 3896253**
13	**141286**		**CUM 4952780**	**PAN,Oil(M11/ISM)(Stamp Steel Rear Sump)**	**CUM 4905352**
14	**141326**		**CUM 3882346**	**TUBE,Oil Transfer(Rear Sump Pan w/o Stiffner Plate)**	
14	**141327**		**CUM 4082897**	**TUBE,Oil Transfer(Rear Sump Pan w/ Block Stiffner Plate)**	

PAI Copyright 2017

Internal Dampening

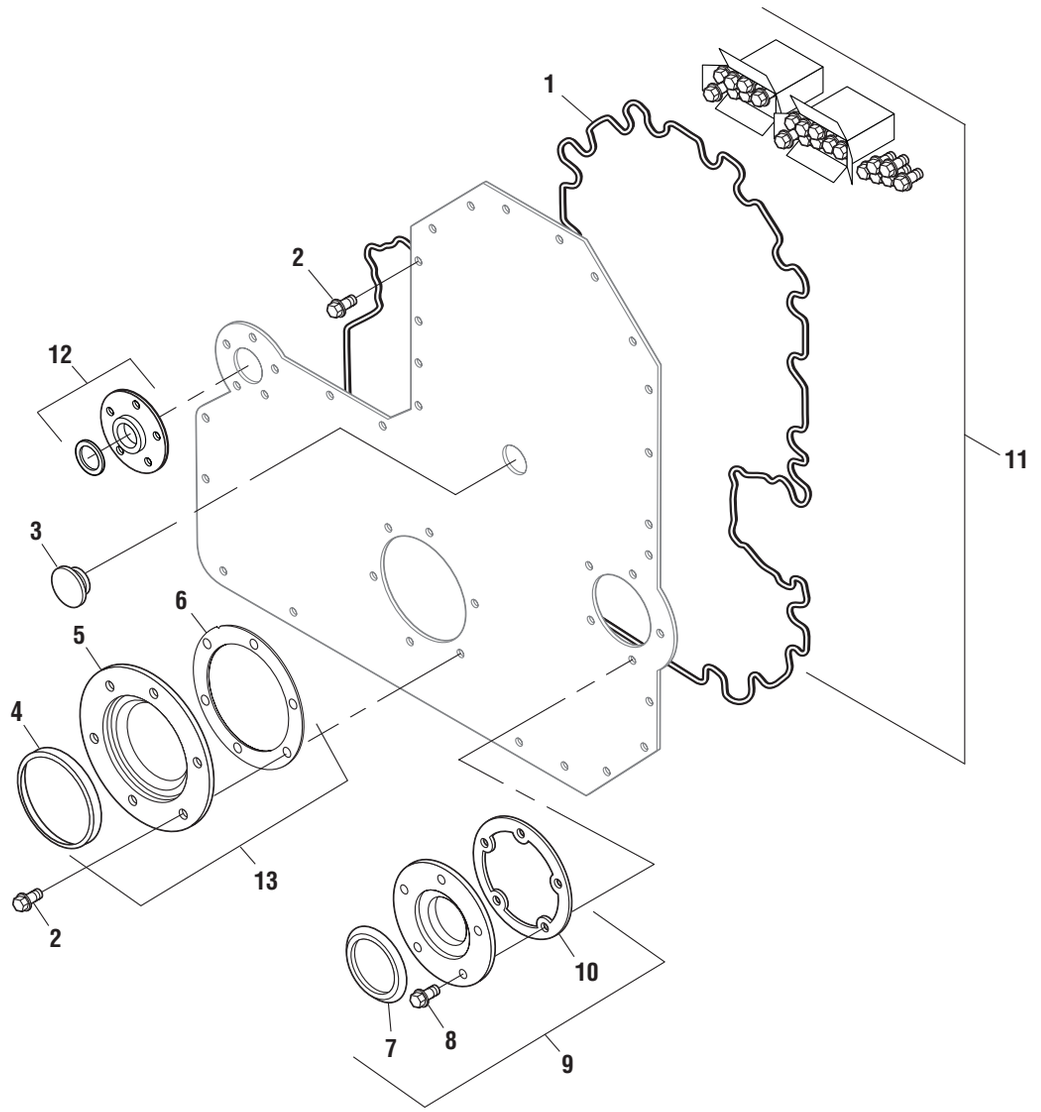
FIGURE 6216



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131477		CUM 3058148	GASKET,Gear Cover	CUM 3027714
2	121227		CUM 3037537	SEAL,Plug	CUM 118350
3	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded(9/16in-18 NPT) (w/ 121227 Seal)	CUM 3037536
4	136054		CUM 3803574	KIT,Accessory Drive Seal(L10)	CUM 3801519
4	136081		CUM 3804304	KIT,Accessory Drive Seal(M11)	CUM 3803728
4	**136168**		**CUM 3801136**	**KIT,Accessory Drive Seal(L10 Natural Gas) Includes Seal (1)136167 Gasket (1)131958**	
5	136060		CUM 3803576	KIT,Front Crankshaft Seal (Internal Dampening)	CUM 3027692
5	136087		CUM 3803575	KIT,Front Crankshaft Seal (Internal Dampening)(Low Fan Mount)	CUM 3027660
6	136055		CUM 3803573	KIT,Alternator Drive Seal (6 Hole Mounting) (For 4 Bolt Flange Water Pump)	CUM 3027658
6	136056		CUM 3803894	KIT,Alternator Drive Seal (5 Hole Mounting) (For 3 Bolt Flange Water Pump)	CUM 3161772
7	**136167**		**CUM 3031446**	**SEAL,Cover**	
8	**131958**		**CUM 3328760**	**GASKET,Cover**	**CUM 3600471**

External Dampening

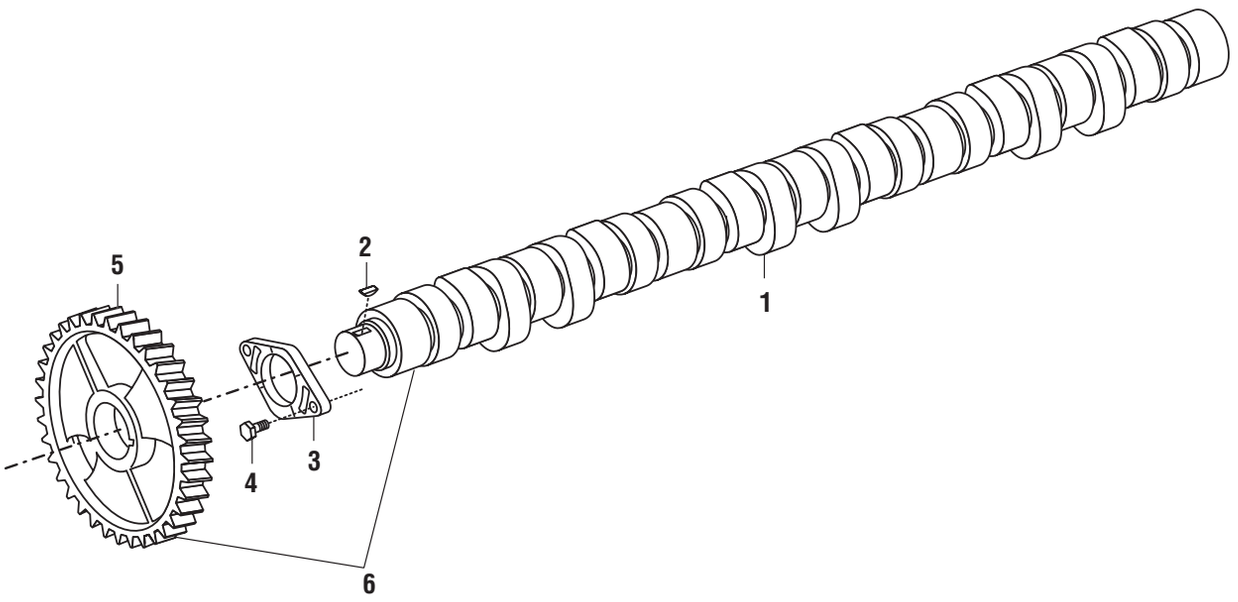
FIGURE 6232



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131592		CUM 4920751	GASKET,Cover	CUM 3893812
2	040048		CUM 4070462	SCREW(M8 x 1.25 x 16)	CUM 3901235
3	Call		CUM 4082974	PLUG,Gear Cover	
4	Call		CUM 3895023	SEAL,Dust	
5	136137		CUM 4962745	SEAL,Front Crank(NSS)	
6	131795		CUM 3328761	GASKET,Carrier	CUM 3882451
7	Call		CUM 3896837	SEAL,Dust	
8	040047		CUM 4070463	SCREW(M8 x 1.25 x 12)	CUM 3093956
9	136081		CUM 3804304	KIT,Accessory Drive Seal	CUM 3803728
10	**131958**		**CUM 3328760**	**GASKET,Cover**	
11	131593		CUM 4089995	KIT,Front Cover Gasket Includes Gasket (1)131592 Screws (5)040047 (38)040048	CUM 4025151
12	136056		CUM 3803894	KIT,Alternator Drive Seal (For 3 Bolt Flange Water Pump)	CUM 3161772
13	136061		CUM 3804744	KIT,Front Crankshaft Seal	CUM 3328698
13	136117		CUM 4955665	KIT,Front Crankshaft Seal	

PAI Copyright 2017

FIGURE 6207

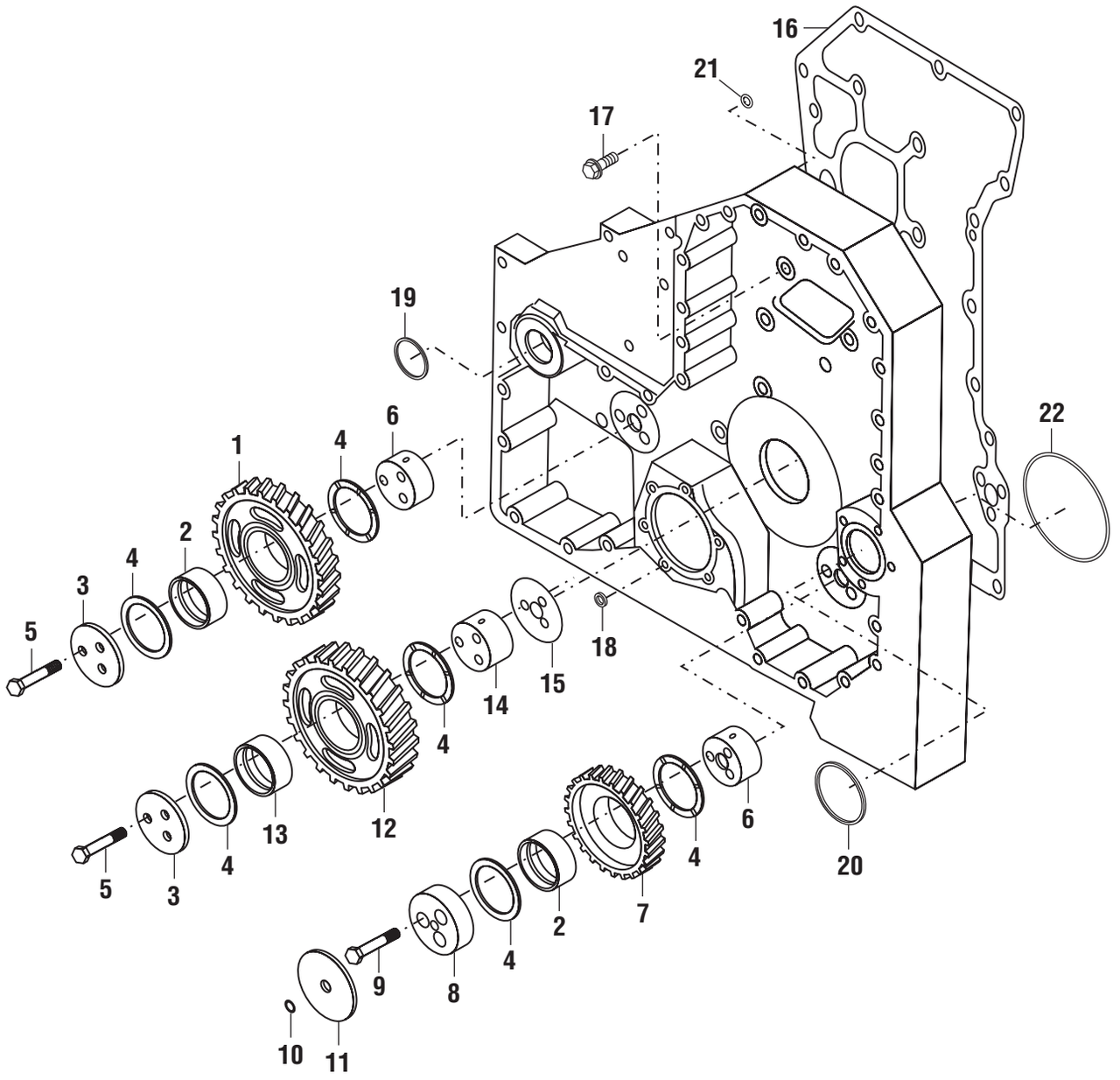


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**191869**		**CUM 4083012**	**CAMSHAFT(M11)**	
1	**191872**		**CUM 3348374**	**CAMSHAFT(M11)**	
1	**191873**		**CUM 4022816**	**CAMSHAFT(M11)**	
1	**191897**		**CUM 3097267**	**CAMSHAFT(ISM)**	
1	**191901**		**CUM 3895801**	**CAMSHAFT(L10)**	**CUM 3895650**
1	191902		CUM 3895679	CAMSHAFT(L10)(Replaces CUM 3036117)	
1	191918	191918E	CUM 3084568	CAMSHAFT(M11)	CUM 3899950, CUM 3084564
1	191919		CUM 4004556	CAMSHAFT(M11/ISM)	CUM 3087856
1	191926		CUM 3037523	CAMSHAFT(L10)	
1	191933		CUM 3895792	CAMSHAFT(L10)	CUM 3895621, CUM 3895638
1	**191841**		**CUM 3102901**	**CAMSHAFT(M11/ISM)**	
2	Call		CUM 3009953	KEY,Woodruff(Plain)	
3	151561		CUM 3896335	THRUSTWASHER,Cam	CUM 3818273
4	Call		CUM 3822067	SCREW,Captive(w/ Washer) (M10-1.50 x 25mm Lg)	
5	**191878**		**CUM 3401439**	**GEAR,Camshaft(ISM)**	**CUM 3417775**
6	**191842**		**CUM 3804821**	**KIT,Camshaft** **Includes Camshaft (1)191933 Gear (1)191878**	**CUM 3803647**

Please note:

*** Must have Engine Serial number to verify correct Cam for application.**

FIGURE 6215

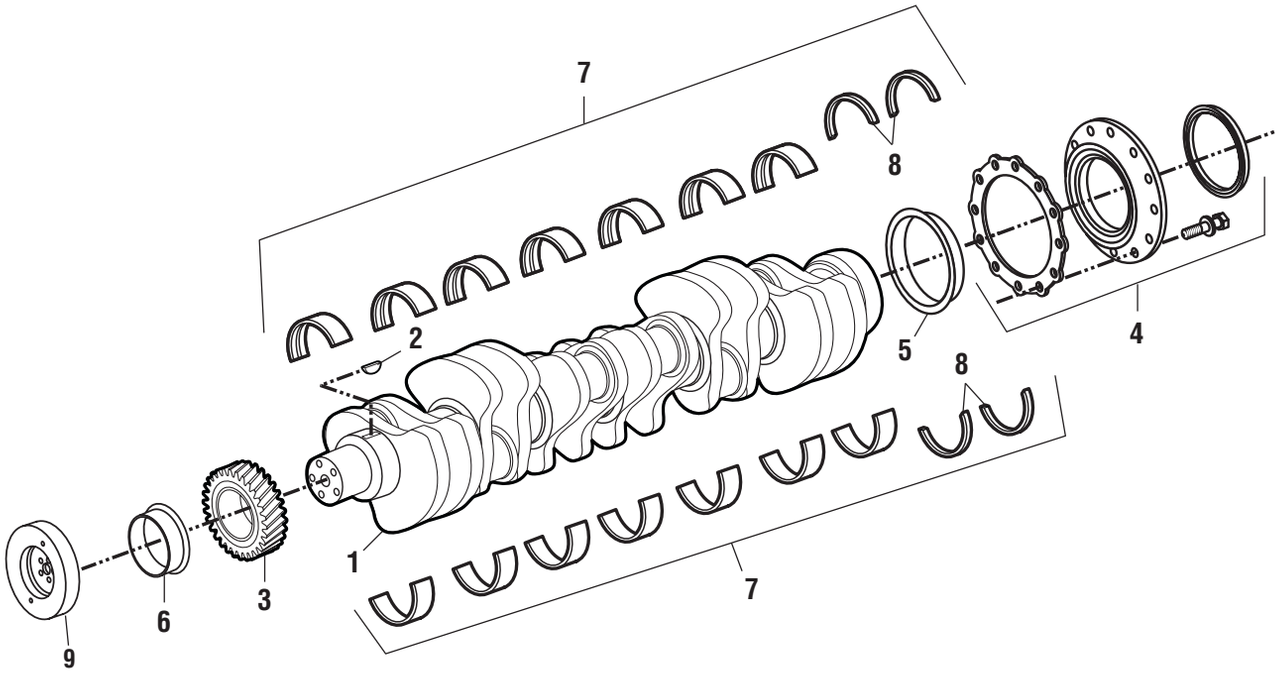


PAI Copyright 2017

Internal Dampening

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 3038987	GEAR,Water Pump Idler	
2	151520		CUM 3026189	BUSHING,Idler(Semi-finished)	
3	Call		CUM 3026233	RETAINER,Gear	
4	151526		CUM 3084899	THRUST,Washer Idler	
5	Call		CUM 3088162	SCREW,Cap(M10-1.50 x 63mm Lg)	
6	Call		CUM 3026167	SHAFT,Idler	
7	Call		CUM 3038995	GEAR,Hydraulic Idler	
8	Call		CUM 3882528	RETAINER,Gear	
9	Call		CUM 3882922	SCREW(12 pt)(M10-1.5 x 60mm Lg)	
10	121342		CUM 3883510	SEAL,Rectangular Ring	
11	Call		CUM 3882513	SPACER,Mounting	
12	Call		CUM 3038985	GEAR,Camshaft Idler	
13	151519		CUM 3026188	BUSHING(Semi-finished)	
14	Call		CUM 3026166	SHAFT,Idler	
15	Call		CUM 3088161	PLATE,Thrust Bearing Wear	
16	131478		CUM 3600925	GASKET,Rear Cover Plate	
17	040033		CUM 3818060	BOLT(M10 x 1.50 x 25)	CUM 3044489
18	121343		CUM 3201659	RING,Rectangular	
19	121346		CUM 3820946	RING,Rectangular	
20	121345		CUM 3820945	RING,Rectangular	
21	121293		CUM 3883150	O-RING,Housing	
22	121294		CUM 3883042	O-RING,Adapter	

FIGURE 6205

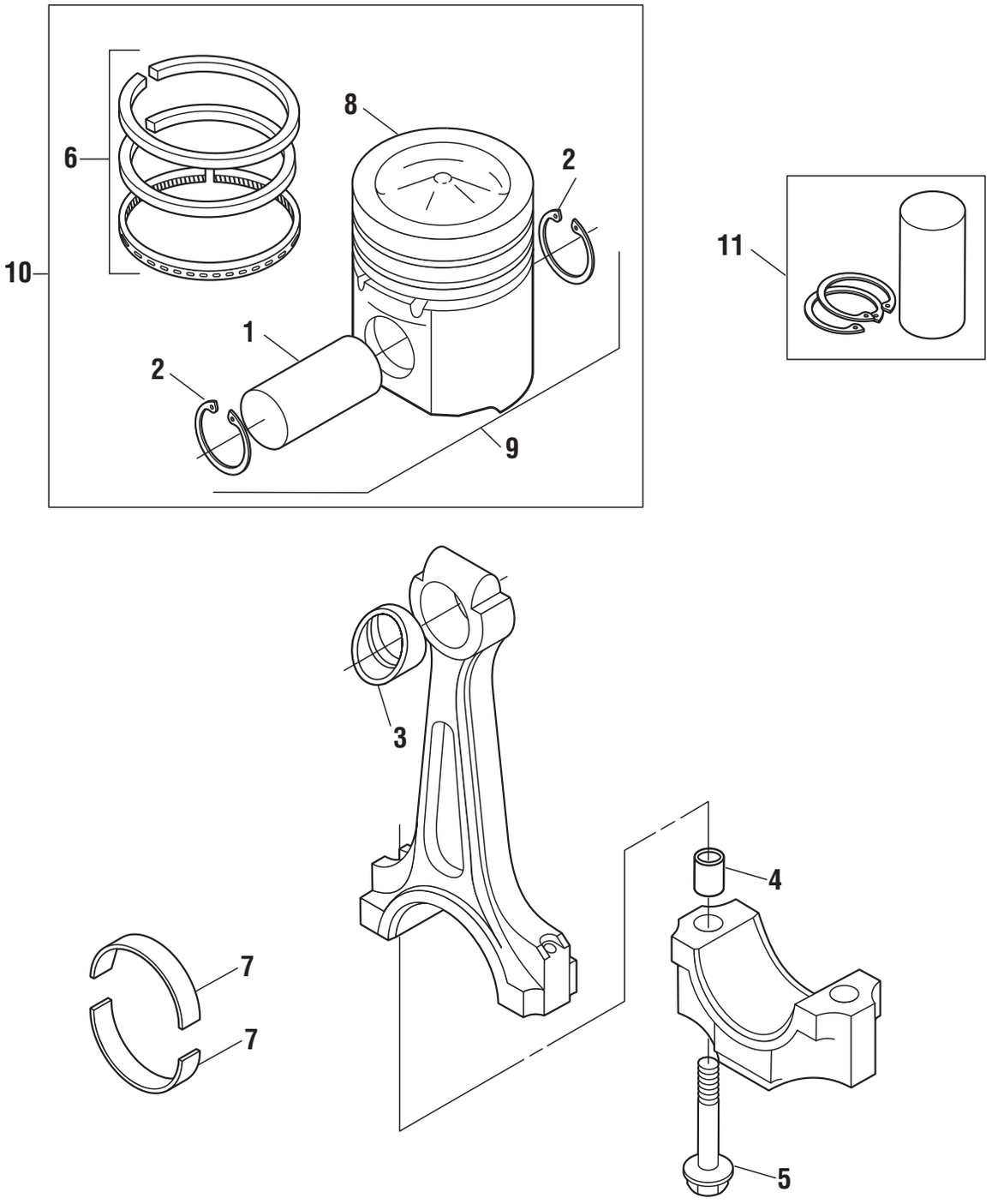


PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171649		CUM 3819624	CRANKSHAFT(L10) (External Dampening)	
1	171650	171650E	CUM 3073707	CRANKSHAFT(M11)	
1	171704		CUM 3819989	CRANKSHAFT(L10) (5 Hole Internal Damper Mounting)	
2	Call		CUM S-300	KEY,Woodruff	
3	Call		CUM 3038984	GEAR,Crankshaft	
3	**171739**		**CUM 3084445**	**GEAR,Crankshaft**	
4	136062		CUM 4089544	KIT,Rear Crankshaft Seal(L10) (Dry Clutch)	CUM 3032012, CUM 3803354
4	136088		CUM 3800969	KIT,Rear Crankshaft Seal(L10)(Wet Clutch) (w/o Wear Ring)	CUM 3883775, CUM 3803355
4	136097		CUM 4089542	KIT,Rear Crankshaft Seal(M11) (Dry Clutch)(w/ Wear Ring)	
5	136042		CUM 3819774	RING,Wear(Rear Crankshaft) (Thin Wall)	CHI 99650
6	136043		CUM 3820918	RING,Wear(Front Crankshaft) (External Dampening)	CHI 99333
6	136044		CUM 3820917	RING,Wear(Front Crankshaft) (Internal Dampening)	CHI 99351
7	171725		CUM 3801150	KIT,Main Bearing(STD) Includes (1)Main Bearing Set (2 pair)Thrust Washers	
7	171726		CUM 3801151	KIT,Main Bearing(.010in/.25mm) Includes (1)Main Bearing Set (2 pair)Thrust Washers	
7	171727		CUM 3801152	KIT,Main Bearing(.020in/.50mm) Includes (1)Main Bearing Set (2 pair)Thrust Washers	
7	171728		CUM 3801153	KIT,Main Bearing(.030in/.75mm) Includes (1)Main Bearing Set (2 pair)Thrust Washers	
7	171729		CUM 3801154	KIT,Main Bearing(.040in/1.00mm) Includes (1)Main Bearing Set (2 pair)Thrust Washers	
7	171866		CUM 4025120	KIT,Main Bearing(STD)(w/ Tab) Includes (1)Main Bearing Set (2 pair)Thrust Washers	CUM 3400710
7	171867		CUM 4025121	KIT,Main Bearing(.010in/.25mm)(w/ Tab) Includes (1)Main Bearing Set (2 pair)Thrust Washers	CUM 3400711
7	171868		CUM 4025122	KIT,Main Bearing(.020in/.50mm)(w/ Tab) Includes (1)Main Bearing Set (2 pair)Thrust Washers	CUM 3400712
7	171869		CUM 4025123	KIT,Main Bearing(.030in/.75mm)(w/ Tab) Includes (1)Main Bearing Set (2 pair)Thrust Washers	CUM 3400713
8	171697		CUM 4023203	WASHER,Thrust (Upper Half for 171698 Washer)	CUM 3161653, CUM 3822062
8	171698		CUM 4023083	WASHER,Thrust (Lower Half for 171697 Washer)(w/ Tab)	CUM 3161520
8	Call		CUM 3050589	WASHER,Thrust(.010in OS)	
9	**202027**		**CUM 3161942**	**DAMPER,Crankshaft(ISM)**	

One Piece Piston

FIGURE 6206



Please note:

*** To ensure correct parts for application, please have CPL and Engine Serial number available.**

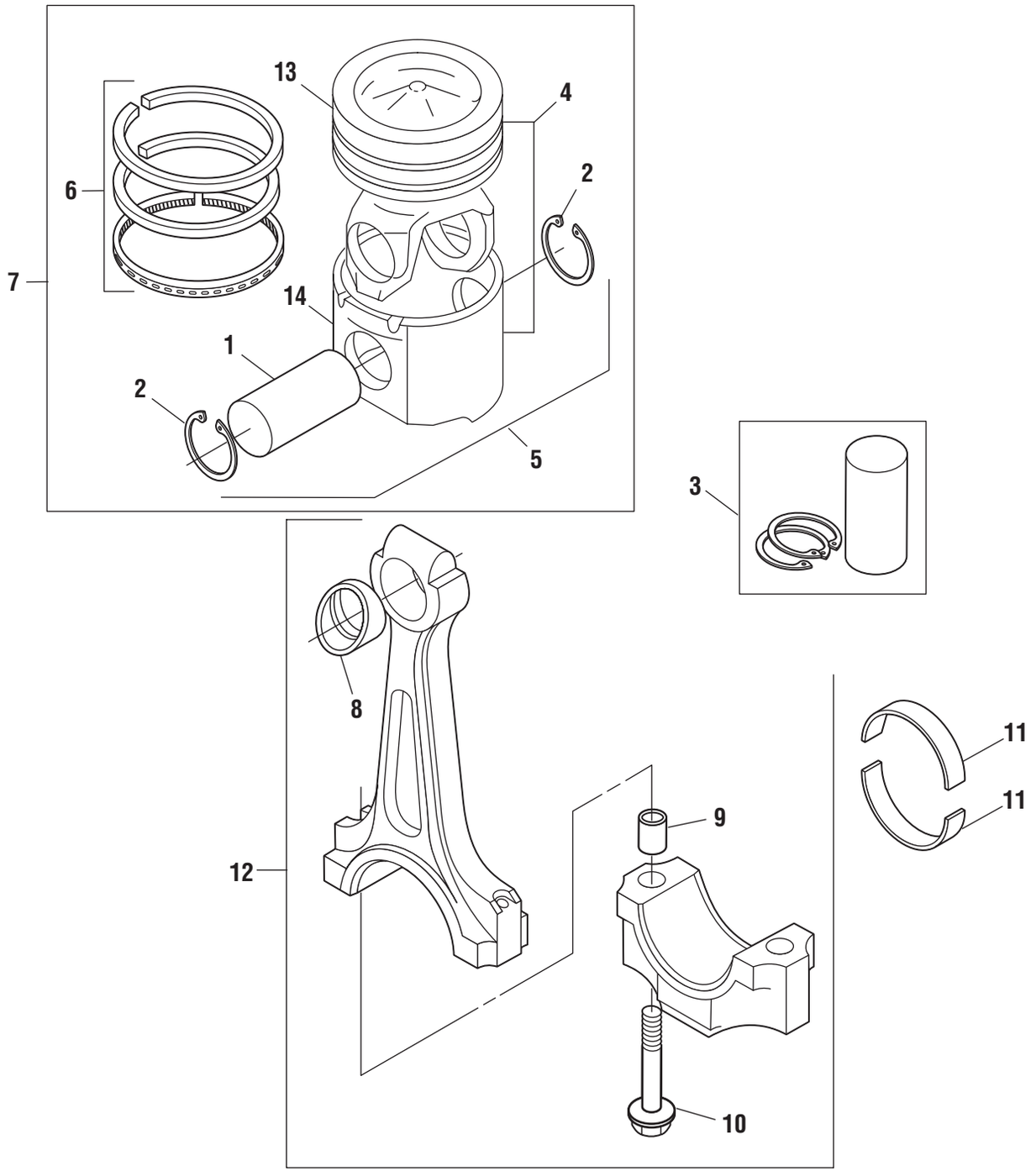
 PAI Copyright 2017

One Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111092		CUM 3063843	PIN,Piston(Long)	
1	111174		CUM 3016650	PIN,Piston(Short)	
2	111178		CUM 3016652	RETAINER,Piston Pin	
3	151511		CUM 3027105	BUSHING,Pin	
4	171693		CUM 3027106	DOWEL,Ring	
5	040017		CUM 3027108	BOLT,Connecting Rod	
6	**505051**		**CUM 3804694**	**SET,Ring(L10 Natural Gas)**	
6	505060		CUM 3803961	SET,Ring	CUM 3070384
7	171780		CUM 3016760	BEARING,Shell(STD)	
7	171781		CUM 3016761	BEARING,Shell(.010in/.25mm)	
7	171782		CUM 3016762	BEARING,Shell(.020in/.50mm)	
7	171783		CUM 3016763	BEARING,Shell(.030in/.75mm)	
8	111175		CUM 3045907	PISTON	
8	111177		CUM 3044448	PISTON	
8	111179		CUM 3055622	PISTON	
8	111361		CUM 3068090	PISTON	
8	111365		CUM 3893751	PISTON	
8	**111598**		**CUM 3606677**	**PISTON(L10 Natural Gas)**	**CUM 3080726**
9	111158		N/A	KIT,Piston Includes Piston (1)111179 Retaining Rings (2)111178 Pin (1)111174	CUM 3055622
9	111159		N/A	KIT,Piston Includes Piston (1)111177 Retaining Rings (2)111178 Pin (1)111174	CUM 3044448
9	111160		N/A	KIT,Piston Includes Piston (1)111175 Retaining Rings (2)111178 Pin (1)111174	CUM 3045907
9	111362		N/A	KIT,Piston Includes Piston (1)111361 Retaining Rings (2)111178 Pin (1)111092	CUM 3068090
9	111366		N/A	KIT,Piston Includes Piston (1)111365 Retaining Rings (2)111178 Pin (1)111092	CUM 3893751
9	**111599**		**N/A**	**KIT,Piston(L10 Natural Gas)** **Includes Piston (1)111598** **Retaining Rings (2)111178 Pln (1)111174**	
10	111172		CUM 3803626	KIT,Piston w/ Ring Set Includes Piston (1)111179 Retaining Rings (2)111178 Pin (1)111174 Ring Set (1)505060	CUM 3055622
10	111173		CUM 3803624	KIT,Piston w/ Ring Set Includes Piston (1)111177 Retaining Rings (2)111178 Pin (1)111174 Ring Set (1)505060	CUM 3044448
10	111176		CUM 3803625	KIT,Piston w/ Ring Set Includes Piston (1)111175 Retaining Rings (2)111178 Pin (1)111174 Ring Set (1)505060	CUM 3045907
10	111363		CUM 3803968	KIT,Piston w/ Ring Set Includes Piston (1)111361 Retaining Rings (2)111178 Pin (1)111092 Ring Set (1)505060	CUM 3068090
10	111367		CUM 3803962	KIT,Piston w/ Ring Set Includes Piston (1)111365 Retaining Rings (2)111178 Pin (1)111092 Ring Set (1)505060	CUM 3893751
10	**111600**		**CUM 3804695**	**KIT,Piston w/ Ring Set(L10 Natural Gas)** **Includes Piston (1)111598** **Retaining Rings (2)111178 Pln (1)111174** **Ring Set (1)505051**	
11	111163		CUM 3800140	KIT,Pin & Retainer Includes Pin (1)111174 Retainers (2)111178	
11	111360		CUM 3800256	KIT,Pin & Retainer Includes Pin (1)111092 Retainers (2)111178	

Two Piece Piston

FIGURE 6235



Please note:

*** To ensure correct parts for application, please have CPL and Engine Serial number available.**

**** Piston Kits without Bushings can be substituted for Piston Kits with Bushings.**

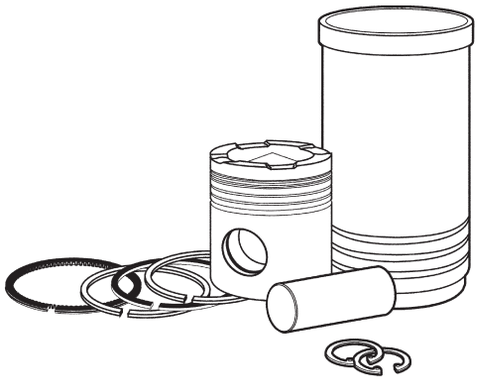
PAI Copyright 2017

Two Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111092		CUM 3063843	PIN,Piston	
2	111178		CUM 3016652	RETAINER,Piston Pin	
3	111360		CUM 3800256	KIT,Pin & Retainer Includes Pin (1)111092 Retainers (2)111178	
4	111584		CUM 3102808	KIT,Piston(ISM - EGR) Includes Crown (1) Skirt (1)	
4	**111696**		**CUM 4059949**	**KIT,Piston(ISM)** **Includes Crown (1)111695 Skirt (1)111391**	
4	**111700**		**CUM 3103752**	**KIT,Piston(ISM)** **Includes Crown (1)111699 Skirt (1)111391**	
5	**111585**		**N/A**	**KIT,Piston(ISM - EGR)** Includes Piston Kit (1)111584 Retainers (2)111178 Pin (1)111092	
5	**111697**		**N/A**	**KIT,Piston(ISM)** **Includes Piston kit (1)111696** **Pin (1)111092 Retainers (2)111178**	
5	**111701**		**N/A**	**KIT,Piston(ISM)** **Includes Piston kit (1)111700** **Pin (1)111092 Retainers (2)111178**	
6	505060		CUM 3803961	SET,Ring(L10)	CUM 3070384
6	505099		CUM 4089385	SET,Ring(ISM - EGR)	
6	505100		CUM 3803977	SET,Ring(M11, Early ISM)	
7	111372		CUM 3803631	KIT,Piston w/ Ring Set(L10) Includes Crown (1)111370 Skirt (1)111371 Retaining Rings (2)111178 Pin (1)111092 Ring Set (1)505060	CUM 3074108, CUM 3067804
7	111393		CUM 4025161	KIT,Piston w/ Ring Set(M11) Includes Crown (1)111390 Skirt (1)111391 Retainers (2)111178 Ring Set (1)505100 Pin (1)111092	
7	111439		CUM 4025158	KIT,Piston w/ Ring Set(ISM) Includes Crown (1)111438 Skirt (1)111391 Ring Set (1)505100 Pin & Retainer Kit (1)111360	
7	111586		CUM 4089386	KIT,Piston w/ Ring Set(ISM - EGR) Includes Piston Kit (1)111585 Ring Set (1)505099	
7	**111698**		**CUM 4024938**	**KIT,Piston w/ Ring Set(ISM)** **Includes Crown (1)111695 Skirt (1)111391** **Retainers (2)111178 Pin (1)111092 Ring Set (1)505100**	
7	**111702**		**CUM 4089865**	**KIT,Piston w/ Ring Set(ISM)** **Includes Crown (1)111699 Skirt (1)111391** **Retainers (2)11178 Pin (1)111092 Ring Set (1)505100**	
8	151511		CUM 3027105	BUSHING,Pin	
9	171693		CUM 3027106	DOWEL,Ring	
10	040017		CUM 3027108	BOLT,Connecting Rod	
11	171780		CUM 3016760	BEARING,Shell(STD)	
11	171781		CUM 3016761	BEARING,Shell(.010in/.25mm)	
11	171782		CUM 3016762	BEARING,Shell(.020in/.50mm)	
11	171783		CUM 3016763	BEARING,Shell(.030in/.75mm)	
12	171636		CUM 4083569	ROD,Connecting Includes Connecting Rod (1) Bushing (1)151511 Dowels (2)171693 Bolts (2)040017	CUM 3073522, CUM 3820302
13	111370		CUM 3074108	CROWN(L10)(NSS)	
13	111390		CUM 4059902	CROWN(M11)(NSS)	
13	111438		CUM 4059898	CROWN(ISM)(NSS)	
13	**111695**		**CUM 4059948**	**CROWN(ISM)(NSS)**	
13	**111699**		**CUM 3103753**	**CROWN(ISM)(NSS)**	
13	**111583**		**CUM 3102807**	**CROWN(ISM-EGR)(NSS)**	
14	111371		CUM 3067804	SKIRT(L10)(NSS)	
14	**111391**		**CUM 4070653**	**SKIRT(M11/ISM)(NSS)**	

L10 Series

FIGURE 6223



CPL #	PISTON	CYLINDER KIT
527	111177 CUM 3044448	101061 CUM 3803632
528	111177 CUM 3044448	101061 CUM 3803632
534	111177 CUM 3044448	101061 CUM 3803632
535	111177 CUM 3044448	101061 CUM 3803632
561	111177 CUM 3044448	101061 CUM 3803632
562	111177 CUM 3044448	101061 CUM 3803632
580	111177 CUM 3044448	101061 CUM 3803632
608	111177 CUM 3044448	101061 CUM 3803632
613	111177 CUM 3044448	101061 CUM 3803632
638	Use CPL 777	—
641	111177 CUM 3044448	101061 CUM 3803632
643	111177 CUM 3044448	101061 CUM 3803632
649	111177 CUM 3044448	101061 CUM 3803632
652	111175 CUM 3045907	101060 CUM 3803633
655	111175 CUM 3045907	101060 CUM 3803633
662 Military	111177 CUM 3044448	101061 CUM 3803632
671	111177 CUM 3044448	101061 CUM 3803632
703	111177 CUM 3044448	101061 CUM 3803632
704	111177 CUM 3044448	101061 CUM 3803632
707	111177 CUM 3044448	101061 CUM 3803632
708	111177 CUM 3044448	101061 CUM 3803632
717	111177 CUM 3044448	101061 CUM 3803632
726	111177 CUM 3044448	101061 CUM 3803632
735	111175 CUM 3045907	101060 CUM 3803633
747	111177 CUM 3044448	101061 CUM 3803632
748	111177 CUM 3044448	101061 CUM 3803632
751	111177 CUM 3044448	101061 CUM 3803632
764	111175 CUM 3045907	101060 CUM 3803633
765	111175 CUM 3045907	101060 CUM 3803633
770	111177 CUM 3044448	101061 CUM 3803632
771	111177 CUM 3044448	101061 CUM 3803632
772	111177 CUM 3044448	101061 CUM 3803632
773	111177 CUM 3044448	101061 CUM 3803632
774	111177 CUM 3044448	101061 CUM 3803632
775	111177 CUM 3044448	101061 CUM 3803632
776	111177 CUM 3044448	101061 CUM 3803632
777	111177 CUM 3044448	101061 CUM 3803632
778	111177 CUM 3044448	101061 CUM 3803632
779	111177 CUM 3044448	101061 CUM 3803632
780	111175 CUM 3045907	101060 CUM 3803633
781	111175 CUM 3045907	101060 CUM 3803633
782 Military	111177 CUM 3044448	101061 CUM 3803632
783	111177 CUM 3044448	101061 CUM 3803632
784	111177 CUM 3044448	101061 CUM 3803632
785	111177 CUM 3044448	101061 CUM 3803632
786	111177 CUM 3044448	101061 CUM 3803632
787	111175 CUM 3045907	101060 CUM 3803633
788	111177 CUM 3044448	101061 CUM 3803632
789	111175 CUM 3045907	101060 CUM 3803633
790	111175 CUM 3045907	101060 CUM 3803633
815	111177 CUM 3044448	101061 CUM 3803632
835	111177 CUM 3044448	101061 CUM 3803632
842	111179 CUM 3055622	101062 CUM 3803629
881	111177 CUM 3044448	101061 CUM 3803632

PAI Copyright 2017

CPL #	PISTON	CYLINDER KIT
894	111177 CUM 3044448	101061 CUM 3803632
939	111179 CUM 3055622	101062 CUM 3803629
956	111179 CUM 3055622	101062 CUM 3803629
958	111177 CUM 3044448	101061 CUM 3803632
978	111177 CUM 3044448	101061 CUM 3803632
979	111177 CUM 3044448	101061 CUM 3803632
980	111179 CUM 3055622	101062 CUM 3803629
995	111179 CUM 3055622	101062 CUM 3803629
996	111179 CUM 3055622	101062 CUM 3803629
1161	‡ 111372 CUM 3803631	101090 CUM 4025167
1164	111177 CUM 3044448	101061 CUM 3803632
1198	111177 CUM 3044448	101061 CUM 3803632
1208	111177 CUM 3044448	101061 CUM 3803632
1223	111179 CUM 3055622	101062 CUM 3803629
1224	111179 CUM 3055622	101062 CUM 3803629
1225	111179 CUM 3055622	101062 CUM 3803629
1226	111179 CUM 3055622	101062 CUM 3803629
1234	111177 CUM 3044448	101061 CUM 3803632
1241	111361 CUM 3068090	101067 CUM 3803623
1346	111179 CUM 3055622	101062 CUM 3803629
1347	111361 CUM 3068090	101067 CUM 3803623
1348	‡ 111372 CUM 3803631	101090 CUM 4025167
1349	111361 CUM 3068090	101067 CUM 3803623
1357	N/A CUM 3068091	—
1359	111177 CUM 3044448	101061 CUM 3803632
1362	111361 CUM 3068090	101067 CUM 3803623
1367	111361 CUM 3068090	101067 CUM 3803623
1373	111361 CUM 3068090	101067 CUM 3803623
1375	N/A CUM 3074032	—
1378	111177 CUM 3044448	101061 CUM 3803632
1379	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1412	111177 CUM 3044448	101061 CUM 3803632
1413	111177 CUM 3044448	101061 CUM 3803632
1414	111177 CUM 3044448	101061 CUM 3803632
1420	111361 CUM 3068090	101067 CUM 3803623
1427	N/A CUM 3077349	—
1428	N/A CUM 3077349	—
1429	111177 CUM 3044448	101061 CUM 3803632
1432	N/A CUM 3074032	—
1441	111179 CUM 3055622	101062 CUM 3803629
1442	111179 CUM 3055622	101062 CUM 3803629
1443	111177 CUM 3044448	101061 CUM 3803632
1444	111177 CUM 3044448	101061 CUM 3803632
1446	111361 CUM 3068090	101067 CUM 3803623
1447	111361 CUM 3068090	101067 CUM 3803623
1448	111361 CUM 3068090	101067 CUM 3803623
1449	111361 CUM 3068090	101067 CUM 3803623
1450	111361 CUM 3068090	101067 CUM 3803623
1453	111177 CUM 3044448	101061 CUM 3803632
1459	111177 CUM 3044448	101061 CUM 3803632
1511	‡ 111372 CUM 3803631	101090 CUM 4025167
1512	‡ 111372 CUM 3803631	101090 CUM 4025167
1513	‡ 111372 CUM 3803631	101090 CUM 4025167
1514	111361 CUM 3068090	101067 CUM 3803623
1555	N/A CUM 3077275	—
1558	111365 CUM 3893751	101068 CUM 3803963
1559	111365 CUM 3893751	101068 CUM 3803963
1560	111365 CUM 3893751	101068 CUM 3803963
1561	111365 CUM 3893751	101068 CUM 3803963
1562	111365 CUM 3893751	101068 CUM 3803963
1587	‡ 111372 CUM 3803631	101090 CUM 4025167
1588	‡ 111372 CUM 3803631	101090 CUM 4025167
1589	111361 CUM 3068090	101067 CUM 3803623
1590	‡ 111372 CUM 3803631	101090 CUM 4025167
1591	‡ 111372 CUM 3803631	101090 CUM 4025167
1592	‡ 111372 CUM 3803631	101090 CUM 4025167
1609	‡ 111372 CUM 3803631	101090 CUM 4025167
1617	‡ 111372 CUM 3803631	101090 CUM 4025167
1619	111179 CUM 3055622	101062 CUM 3803629
1620	111179 CUM 3055622	101062 CUM 3803629
1621	111179 CUM 3055622	101062 CUM 3803629
1622	111179 CUM 3055622	101062 CUM 3803629
1623	111179 CUM 3055622	101062 CUM 3803629
1624	—	—
1625	111179 CUM 3055622	101062 CUM 3803629

PAI Copyright 2017

New Parts are in BOLD text

CPL #	PISTON	CYLINDER KIT
1626	N/A CUM 3074032	—
1634	N/A CUM 3080713	—
1635	N/A CUM 3080713	—
1642	111361 CUM 3068090	101067 CUM 3803623
1644	N/A CUM 3074032	—
1648	111179 CUM 3055622	101062 CUM 3803629
1653	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1654	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1660	111177 CUM 3044448	101061 CUM 3803632
1664	N/A CUM 3081337	—
1665	N/A CUM 3081337	—
1669	‡ 111372 CUM 3803631	101090 CUM 4025167
1674	111177 CUM 3044448	101061 CUM 3803632
1675	111179 CUM 3055622	101062 CUM 3803629
1676	111365 CUM 3893751	101068 CUM 3803963
1678	111179 CUM 3055622	101062 CUM 3803629
1695	111177 CUM 3044448	101061 CUM 3803632
1696	111177 CUM 3044448	101061 CUM 3803632
1697	111177 CUM 3044448	101061 CUM 3803632
1698	111177 CUM 3044448	101061 CUM 3803632
1699	111177 CUM 3044448	101061 CUM 3803632
1800	111177 CUM 3044448	101061 CUM 3803632
1801	N/A CUM 3081337	—
1802	N/A CUM 3081337	—
1805	N/A CUM 3081337	—
1806	N/A CUM 3081337	—
1829	—	—
1830	—	—
1832	111365 CUM 3893751	101068 CUM 3803963
1841	—	—
1842	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1849	111177 CUM 3044448	101061 CUM 3803632
1858	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1865	—	—
1866	111365 CUM 3893751	101068 CUM 3803963
1867	111365 CUM 3893751	101068 CUM 3803963
1868	111365 CUM 3893751	101068 CUM 3803963
1869	111365 CUM 3893751	101068 CUM 3803963
1870	111365 CUM 3893751	101068 CUM 3803963
1871	111365 CUM 3893751	101068 CUM 3803963
1900	111177 CUM 3044448	101061 CUM 3803632
1909	111361 CUM 3068090	101067 CUM 3803623
1910	111361 CUM 3068090	101067 CUM 3803623
1911	111361 CUM 3068090	101067 CUM 3803623
1912	111361 CUM 3068090	101067 CUM 3803623
1913	111361 CUM 3068090	101067 CUM 3803623
1930	111177 CUM 3044448	101061 CUM 3803632
1931	N/A CUM 3074032	—
1935	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1936	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1937	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1938	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1939	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1951	111361 CUM 3068090	101067 CUM 3803623
1952	111361 CUM 3068090	101067 CUM 3803623
1953	111361 CUM 3068090	101067 CUM 3803623
1954	111361 CUM 3068090	101067 CUM 3803623
1958	‡ 111372 CUM 3803631	101090 CUM 4025167
1974	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
1983	‡ 111372 CUM 3803631	101090 CUM 4025167
1984	‡ 111372 CUM 3803631	101090 CUM 4025167
1994	111179 CUM 3055622	101062 CUM 3803629
2045	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2046	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2051	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2066	‡ 111372 CUM 3803631	101090 CUM 4025167
2067	‡ 111372 CUM 3803631	101090 CUM 4025167
2068	N/A CUM 3895864	—
2069	N/A CUM 3895864	—
2110	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2111	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2189	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2190	**111598 (NG)** **CUM 3080726**	**101183** **N/A**
2192	N/A CUM 3895864	—
2637	**111598 (NG)** **CUM 3080726**	**101183** **N/A**

PAI Copyright 2017

CPL #	PISTON	CYLINDER KIT
2639	111598 (NG) CUM 3080726	101183 N/A

Please note:

Cylinder kits with one piece Piston includes: Pin (1)111174, Retainers (2)111178, Ring set (1)505060, Liner -STD (1)161625 and Piston as indicated by part number.

Cylinder kits with two piece Piston includes: Pin (1)111092, Retainers (2)111178, Ring set (1)505060, Liner-STD (1)161625, Seal (1)121203 and Piston as indicated by part number.

‡ Indicates two piece Piston

M11 Series

CPL #	PISTON KIT	CYLINDER KIT
1827	111393 CUM 4025161	101106 CUM 4025162
1828	111393 CUM 4025161	101106 CUM 4025162
1855	111393 CUM 4025161	101106 CUM 4025162
1856	111393 CUM 4025161	101106 CUM 4025162
1857	111393 CUM 4025161	101106 CUM 4025162
1875	111393 CUM 4025161	101106 CUM 4025162
1885	111393 CUM 4025161	101106 CUM 4025162
1973	111393 CUM 4025161	101106 CUM 4025162

CPL #	PISTON KIT	CYLINDER KIT
2036	111393 CUM 4025161	101106 CUM 4025162
2037	111393 CUM 4025161	101106 CUM 4025162
2119	111393 CUM 4025161	101106 CUM 4025162
2140	111393 CUM 4025161	101106 CUM 4025162
2141	111393 CUM 4025161	101106 CUM 4025162
2165	111393 CUM 4025161	101106 CUM 4025162
2178	111393 CUM 4025161	101106 CUM 4025162

CPL #	PISTON KIT	CYLINDER KIT
2336	111393 CUM 4025161	101106 CUM 4025162
2363	111393 CUM 4025161	101106 CUM 4025162
2370	111393 CUM 4025161	101106 CUM 4025162
2371	111393 CUM 4025161	101106 CUM 4025162
2425	111393 CUM 4025161	101106 CUM 4025162
2503	111393 CUM 4025161	101106 CUM 4025162
Not available	Crownless Kit	101150 N/A

FIGURE 6224

ISM Series

FIGURE 6234

CPL #	PISTON KIT	CYLINDER KIT
2199	111439 CUM 4025158	101104 CUM 4025164
2200	111439 CUM 4025158	101104 CUM 4025164
2350	111439 CUM 4025158	101104 CUM 4025164
2607	111439 CUM 4025158	101104 CUM 4025164
2608	111439 CUM 4025158	101104 CUM 4025164
2611	111439 CUM 4025158	101104 CUM 4025164
2828	**111698 CUM 4024938**	**101109 N/A**
2829	**111698 CUM 4024938**	**101109 N/A**
8062	**111698 CUM 4024938**	**101109 N/A**
8409	**111698 CUM 4024938**	**101109 N/A**
8271	111584 CUM 3102808	101107 N/A
8273	111584 CUM 3102808	101107 N/A
8503	111584 CUM 3102808	101107 N/A
8505	111584 CUM 3102808	101107 N/A
8556	111584 CUM 3102808	101107 N/A
8557	111584 CUM 3102808	101107 N/A
8558	111584 CUM 3102808	101107 N/A
8753	**111698 CUM 4024938**	**101109 N/A**

QSM Series

CPL #	PISTON KIT	CYLINDER KIT
8471	**111700 CUM 3103752**	**101108 N/A**
8495	**111700 CUM 3103752**	**101108 N/A**
8543	**111700 CUM 3103752**	**101108 N/A**
8544	**111700 CUM 3103752**	**101108 N/A**
8545	**111700 CUM 3103752**	**101108 N/A**
8546	**111700 CUM 3103752**	**101108 N/A**
8608	**111700 CUM 3103752**	**101108 N/A**

Please note:

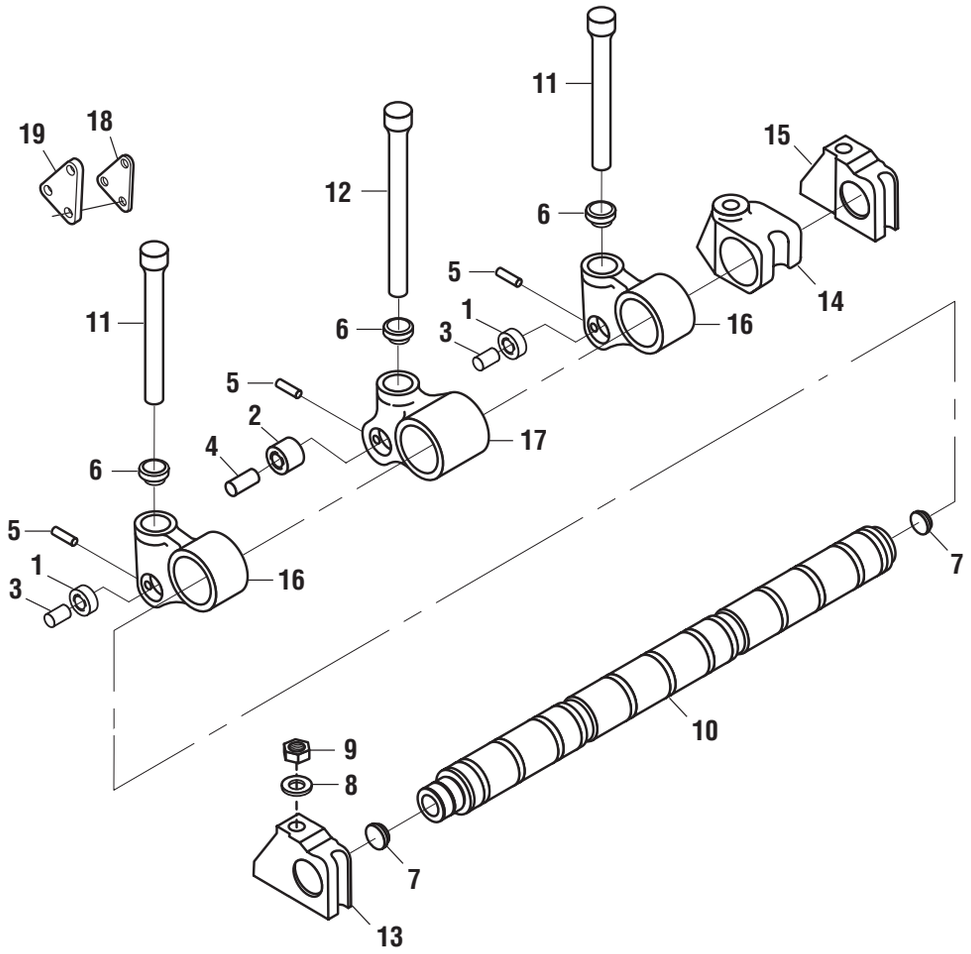
Cylinder kits with one piece Piston includes: Pin (1)111174, Retainers (2)111178, Ring set (1)505060, Liner -STD (1)161625 and Piston as indicated by part number.

Cylinder kits with two piece Piston includes: Pin (1)111092, Retainers (2)111178, Ring set (1)505060, Liner-STD (1)161625, Seal (1)121203 and Piston as indicated by part number.

‡ Indicates two piece Piston

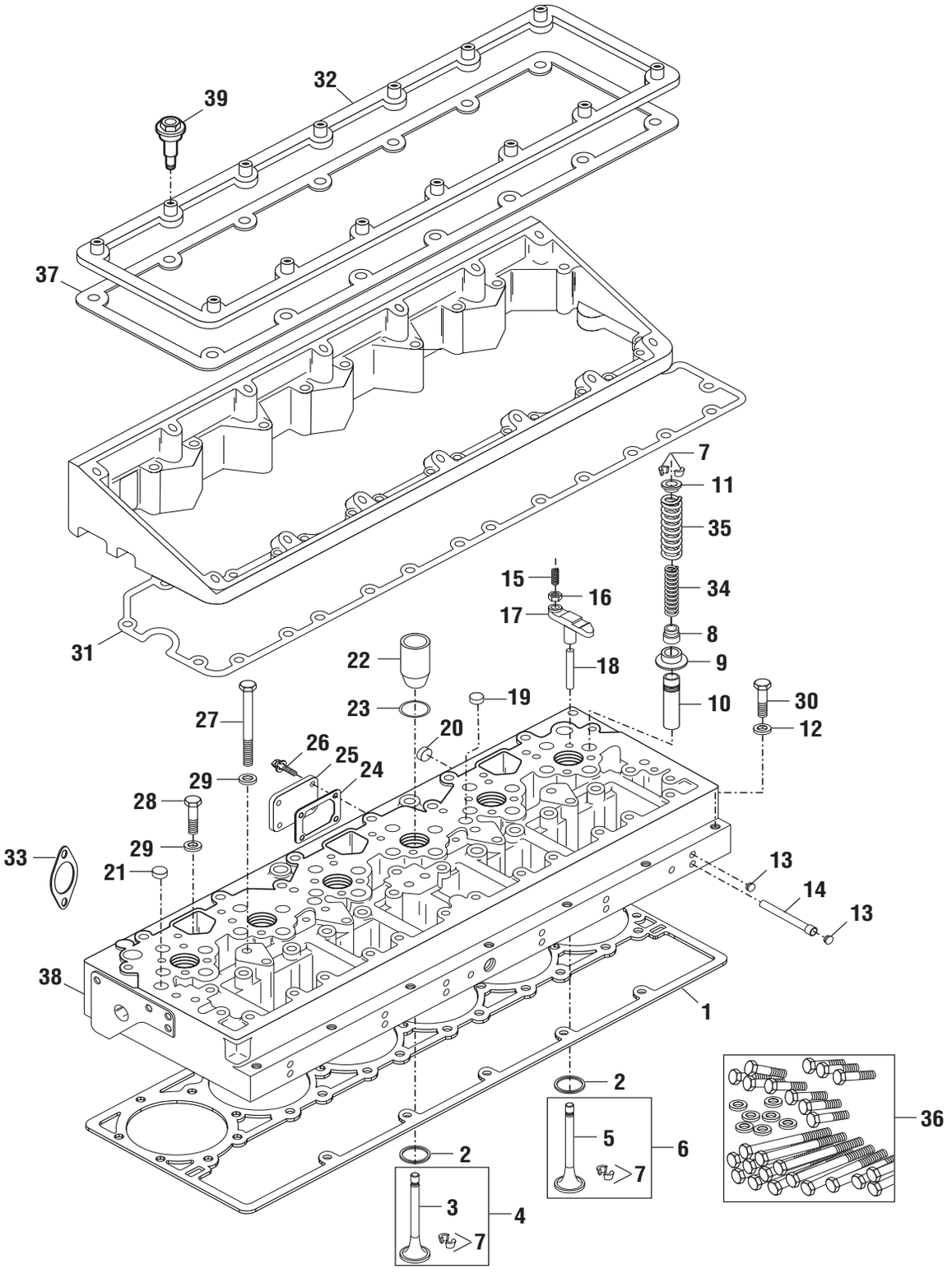
PAI Copyright 2017

FIGURE 6203



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	045051		CUM 3895488	ROLLER,Cam Follower(Valve)	CUM 3038178
2	045012		CUM 3895487	ROLLER,Cam Follower(Injector)	CUM 3899942
2	045027	**045027E**	CUM 3161423	ROLLER,Cam Follower(Injector)(M11)	
3	045042		CUM 3335342	PIN,Cam Follower(Valve)	CUM 3028105
4	045038		CUM 3335343	PIN,Roller(Injector)(M11)	CUM 3073650
4	045041		CUM 3335341	PIN,Cam Follower(Injector)	CUM 3028106
5	045046		CUM 3029920	PIN,Roll	
6	Call		CUM 3033292	SOCKET,Tappet	
7	Call		CUM 3019630	PLUG,Drive	
8	040034		CUM 3009330	WASHER,Flat(M10)	
9	Call		CUM 3009503	NUT,Hex(M10-1.50)	
10	Call		CUM 3895833	SHAFT,Cam Followers	
11	192114		CUM 3892251	PUSHROD,Valve(L10)	
11	192131		CUM 3068390	PUSHROD,Valve(ISM)	
12	192113		CUM 3892170	PUSHROD,Injector(L10)	
12	**192134**		**CUM 3076046**	**PUSHROD,Injector(ISM)**	**CUM 3067830**
13	Call		CUM 3064582	SUPPORT,Cam Follower	CUM 3031918
14	Call		CUM 3895830	SUPPORT,Cam Follower	CUM 3031920
15	Call		CUM 3064583	SUPPORT,Cam Follower	CUM 3031919
16	Call		CUM 3033291	LEVER,Cam Follower(Valve)	
17	Call		CUM 3028096	LEVER,Cam Follower(Injector)	
17	**191858**		**CUM 3417645**	**LEVER,Cam Follower(Injector)**	
18	131626		CUM 3027278	GASKET,Cover Plate	
19	Call		CUM 3028884	COVER	

FIGURE 6208

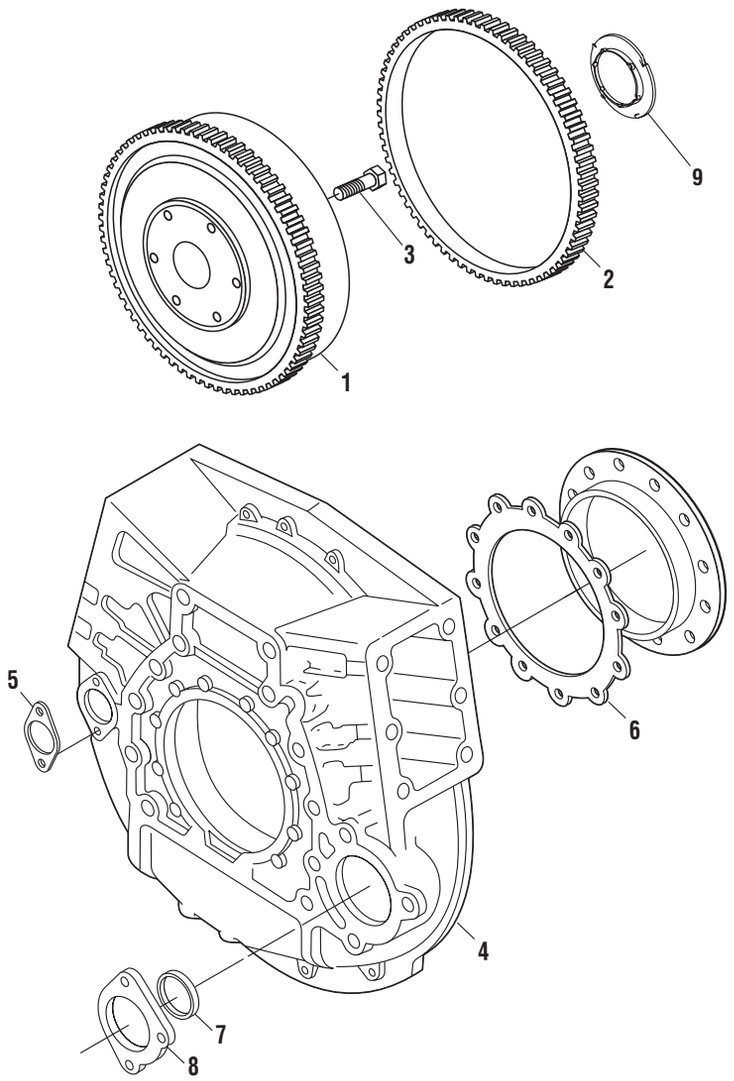


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131267		CUM 2864080	GASKET,Cylinder Head	CUM 3044580, CUM 3328925
2	192011		CUM 3028070	INSERT,Valve(STD)	
2	192097		CUM 3028071	INSERT,Valve(25mm OS)	
2	192098		CUM 3028072	INSERT,Valve(.50mm OS)	
2	192099		CUM 3028073	INSERT,Valve(.75mm OS)	
2	192100		CUM 3028074	INSERT,Valve(1mm OS)	
2	192170		CUM 3088978	INSERT,Valve(Intake,STD)(M11/ISM)	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
2	192175		CUM 3088980	INSERT,Valve(Exhaust,STD)(M11/ISM)	
2	**192229**		**CUM 4004806**	**INSERT,Valve(Intake/Exhast, STD)(L10 Natural Gas)**	
3	191948		CUM 3417778	VALVE,Intake(M11)	
3	191977		CUM 3033234	VALVE,Intake	CUM 3033324
4	191943		CUM 3803310	KIT,Intake Valve(M11) Includes Intake Valve (1)191948 Collets (2)192020	
4	191984		CUM 3801356	KIT,Intake Valve(L10) Includes Intake Valve (1)191977 Collets (2)192020	
5	191949		CUM 3417779	VALVE,Exhaust(M11)	
5	191965		CUM 3818520	VALVE,Exhaust(Up to 250hp)	CUM 3033235
5	191966		CUM 3883287	VALVE,Exhaust(250hp & Up)	CUM 3417713
5	**192148**		**CUM 3606856**	**VALVE,Exhaust(L10 Natural Gas)**	
6	191944		CUM 3803730	KIT,Exhaust Valve(M11) Includes Exhaust Valve (1)191949 Collets (2)192020	
6	191971		CUM 3801357	KIT,Exhaust Valve(Up to 250hp) Includes Exhaust Valve (1)191965 Collets (2)192020	CUM 3803995
6	191972		CUM 3803348	KIT,Exhaust Valve(250hp & Up) Includes Exhaust Valve (1)191966 Collets (2)192020	
7	192020		CUM 3275354	COLLET(2 Per Valve)	
8	192010		CUM 3328781	SEAL,Valve Stem(Use w/Guide 192034)	CUM 3073509
8	192107		CUM 4003966	SEAL,Valve Stem(M11)	
9	**192144**		**CUM 3033230**	**GUIDE,Valve Spring(L10 Natural Gas)**	
10	191947	**191947E**	CUM 3328786	GUIDE,Valve(3.375in Lg)(M11)**(Finished)**	
10	192029		CUM 3033314	GUIDE,Valve(2.934in Lg)(Intake/Exhaust)**(Finished)**	CUM 3033315
10	192034	**192034E**	CUM 3073512	GUIDE,Valve(2.633in Lg)(Intake/Exhaust)**(Finished)** (Use w/Seal 192010)	CUM 3073511
10	192035		CUM 3074118	GUIDE,Valve(.020in O/S)(M11)**(Finished)**	CUM 3821234
11	**192158**		**CUM 3033231**	**RETAINER,Valve Spring(L10 Natural Gas)**	
12	040013		CUM 3882885	WASHER,Plain(L10)	CUM 3028533
12	BWA-0066		MAK 37AX265	WASHER(M11)	CUM 3328328
13	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3008465
14	Call		CUM 3820749	PLUG,Orifice	
15	042004		CUM 147389	SCREW,Crosshead Adjusting	CUM 61629
16	040060		CUM 203131	NUT,Adjusting	
17	**192068**		**CUM 3070175**	**VALVE,Crosshead**	**CUM 3033226**
18	192063		CUM 123558	GUIDE,Valve,Crosshead	CUM 138948
19	040086		CUM 3007635	PLUG,Expansion	CUM 3900957
20	040088		CUM 206741	PLUG,Expansion(2-3/8in x 5/16in)	
21	040089		CUM 3007632	PLUG,Expansion(3/8in x 3/16in)	
22	192085		CUM 3070486	TUBE,Injector	CUM 127475
22	192127		CUM 3417717	TUBE,Injector(M11/ISM)(Stainless)	
23	121373		CUM 3035026	O-RING(M11/ISM)	
24	131509		CUM 3820872	GASKET,Cover Plate	CUM 3027277
25	Call		CUM 3018037	PLATE,Cover	
26	040033		CUM 3818060	BOLT	CUM 3044489
27	040010		CUM 3045850	BOLT,Cylinder Head(M14-1.50 x 140mm Lg)	
28	040011		CUM 3045849	BOLT,Cylinder Head(M14-1.50 x 75mm Lg)	CUM 3161515
29	Call		CUM 3019631	WASHER,Plain(1/2in)	
30	040012		CUM 3028272	BOLT,Cylinder Head(M10-1.50 x 75mm Lg)	CUM 3328379
31	131276		CUM 4070529	GASKET,Rocker Lever Housing	CUM 3027881
32	131268		CUM 3034855	GASKET,Valve Cover(14 Holes)(L10)	
32	131496		CUM 3883220	GASKET,Valve Cover(16 Holes)(L10E,M11 & ISM)	
33	131452		CUM 3819760	GASKET,Exhaust Manifold	
34	192049		CUM 3033233	SPRING,Valve(Inner)	
35	192048		CUM 3033232	SPRING,Valve(Outer)	
35	192105		CUM 3895860	SPRING,Valve(M11)	
36	040065		N/A	KIT,Head Bolt(L10) Includes Bolts (29)040010 (7)040012 (3)040011 Washers (7)040013	
37	131750		CUM 3871472	GASKET,Jake Brake(M11/ISM)	
38	**060176**		**CUM 2864024**	**HEAD,Bare Cylinder(M11)**	**CUM 4952828**
38	**060177**		**CUM 2864028**	**HEAD,Loaded Cylinder Assembly(M11)**	**CUM 4952829**
39	**042151**		**CUM 3883223**	**ISOLATOR,Valve Cover(L10)(14 required)**	**CUM 3034856**

FIGURE 6201

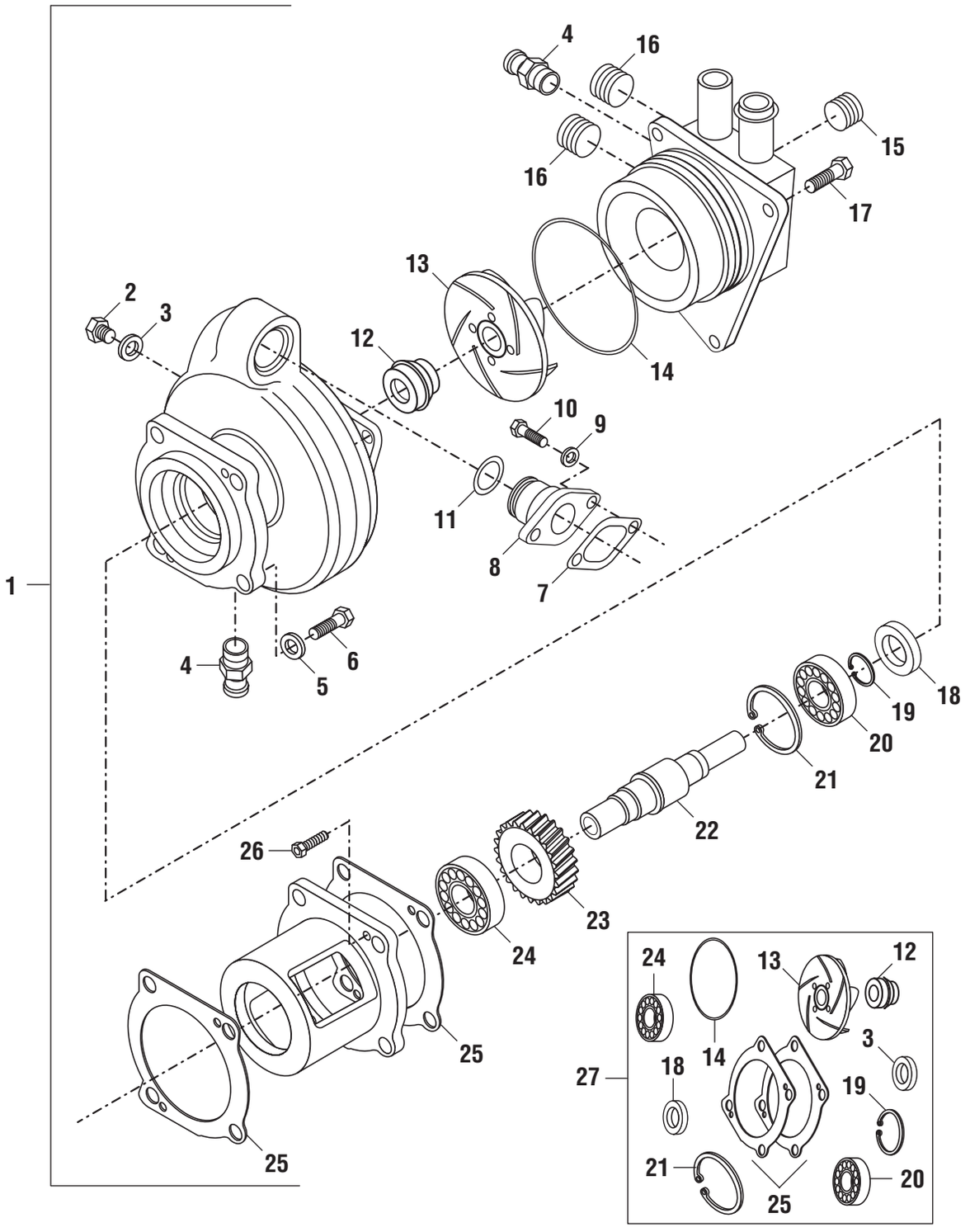


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	060050		CUM 3042787	ASSEMBLY,Flywheel(14in) Includes Ring Gear (1)060070	
1	060051		CUM 3071615	ASSEMBLY,Flywheel(15.5in) Includes Ring Gear (1)060070	CUM 3328689
2	060070		CUM 4797	GEAR,Ring	CUM 3065151
3	Call		CUM 3821676	SCREW(M14 x 1.50 x 35)	
4	060006		CUM 3882591	HOUSING,Flywheel(L10, M11, ISM) (3-5/8in Starter opening only)	CUM 4060483, CUM 3882590
4	**060007**		**CUM 4920517**	**HOUSING,Flywheel**	
5	131625		CUM 3026134	GASKET,Cover Plate	
6	Call		CUM 3600469	GASKET	
7	**060017**		**CUM 3819822**	**SLEEVE,Starter**	
8	**060018**		**CUM 3967057**	**SPACER,Starter**	
8	**060016**		**CUM 9245**	**SPACER,Starter**	
9	**042033**		**CUM 4026528**	**SPACER,Flywheel Bearing**	

PAI Copyright 2017

4 Hole Flange Mount - L10 Series

FIGURE 6211



PAI Copyright 2017

4 Hole Flange Mount - L10 Series

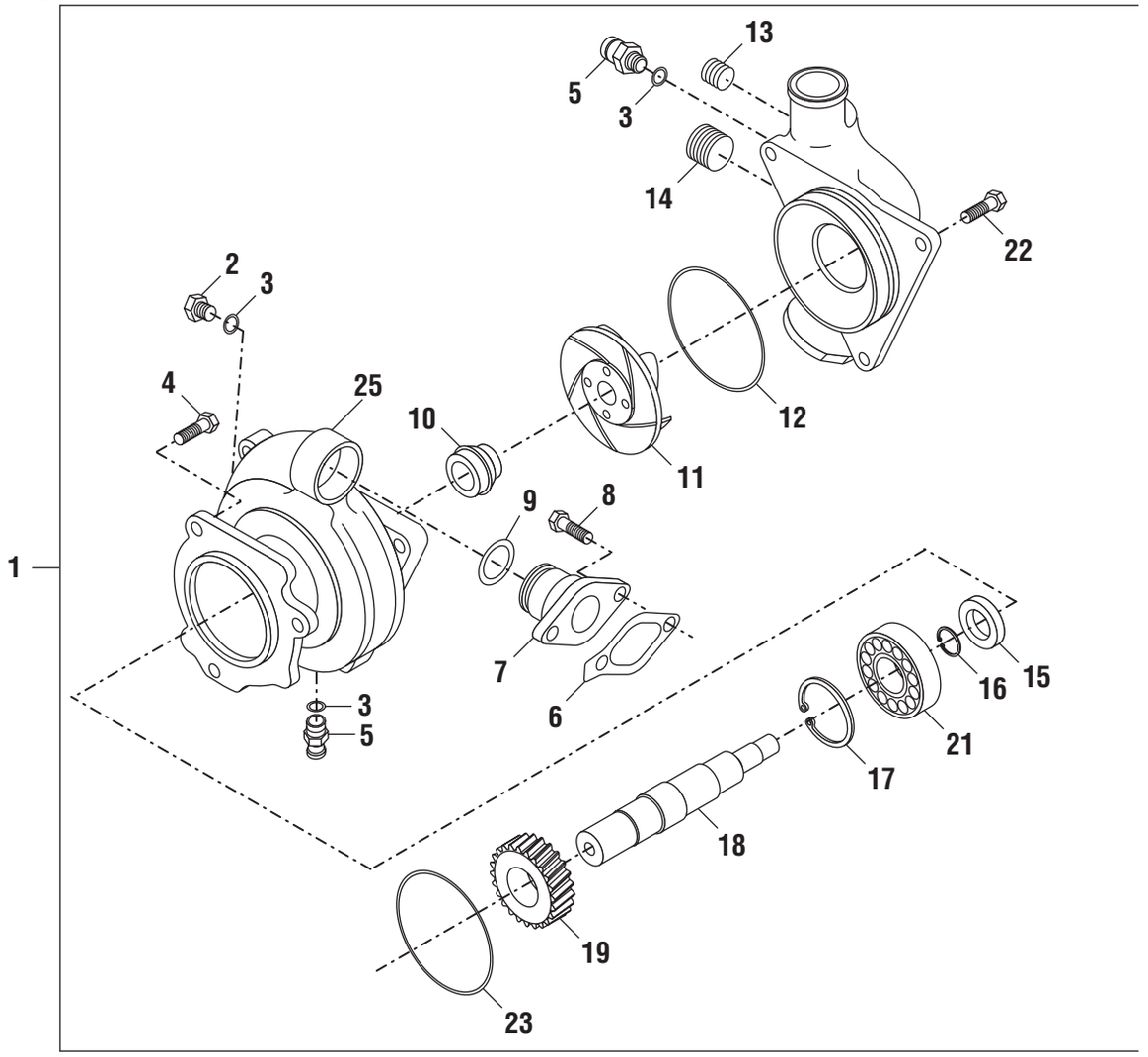
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181820		CUM 3803402	ASSEMBLY,Water Pump Includes Water Pump (1) Gaskets (1)131565 (1)131551 O-Rings (1)121277 (1)121304	
2	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded (9/16in-18 NPT)(w/121227 Seal)	CUM 3037536
3	121227		CUM 3037537	SEAL,Plug	CUM118350
4	Call		CUM 3042619	NIPPLE,Coupling	
5	040013		CUM 3882885	WASHER,Plain(M10)	
6	Call		CUM 3034836	SCREW,Cup(M10-1.50 x 30mm Lg)	
7	131565		CUM 3027924	GASKET,Connection	
8	Call		CUM 3821718	CONNECTION,Water	
9	Call		CUM 3009329	WASHER,Plain(M8)	
10	Call		CUM 3335041	SCREW,Cap(M8-1.25 x 25mm Lg)	
11	121304		CUM 3892095	O-RING	
12	181845		CUM 3033677	SEAL,Water Pump	CUM 3071085
13	181874		CUM 3035679	IMPELLER,Water Pump(Cast)	
13	181874A		CUM 3035679	IMPELLER,Water Pump(Phenolic)	
14	121277		CUM 3820791	O-RING	
15	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
16	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM 3008469
17	040052		CUM 3335044	SCREW,Cap(M10-1.50 x 25mm Lg)	
18	136080		CUM 3019600	SEAL,Oil	
19	042063		CUM 3064634	RING,Retaining	
20	EBG-6163	**EM61630**	MAK 9383-6205LL	BEARING,Ball	CUM S-16002
21	ESR-2831		MAK 325GC120	RING,Retaining	CUM 160586
22	Call		CUM 3040964	SHAFT,Water Pump	
23	181918		CUM 3038991	GEAR,Drive	CUM 3027223
24	GBG-6601	**EM66010**	MAK 46AX64	BEARING,Ball	CUM S-16054
25	131551		CUM 3883365	GASKET,Bearing Support	
26	Call		CUM 3022153	SCREW,Cap(M6-1.00 x 16mm Lg)	
27	181859		CUM 3801179	KIT,Water Pump Repair(Cast Impeller) Includes Bearings (1)EBG-6163 (1)GBG-6601 O-Rings (1)121277 (1)121227 Seals (1)181845 (1)136080 Impeller (1)181874 Gaskets (2)131551 Retaining Rings (1)042063 (1)ESR-2831	
27	181859A		CUM 3801179	KIT,Water Pump Repair(Phenolic Impeller) Includes Bearings (1)EBG-6163 (1)GBG-6601 O-Rings (1)121277 (1)121227 Seals (1)181845 (1)136080 Impeller (1)181874A Gaskets (2)131551 Retaining Rings (1)042063 (1)ESR-2831	

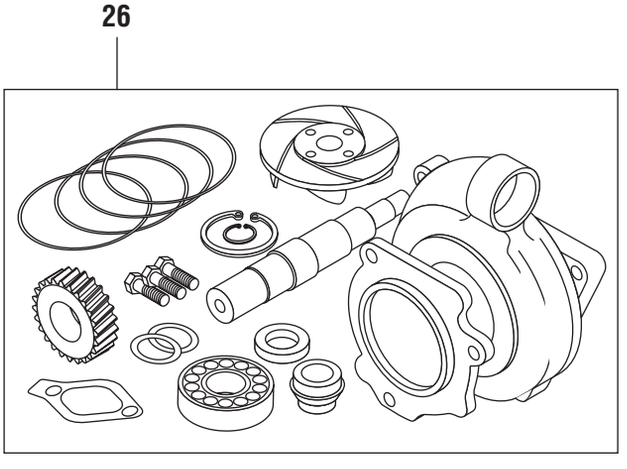
Please note:

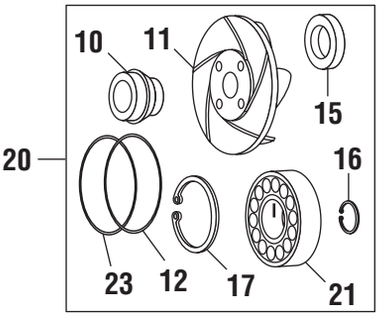
*** Water Pump Repair kit shown on key 27, does not include Shaft.**

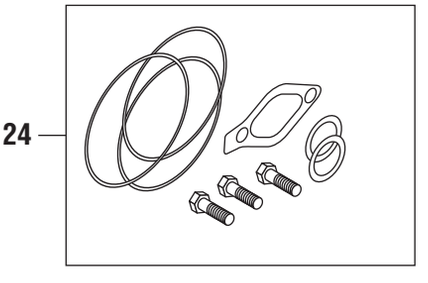
3 Hole Flange Mount
L10E, M11 & ISM Series

FIGURE 6212









PAI Copyright 2017

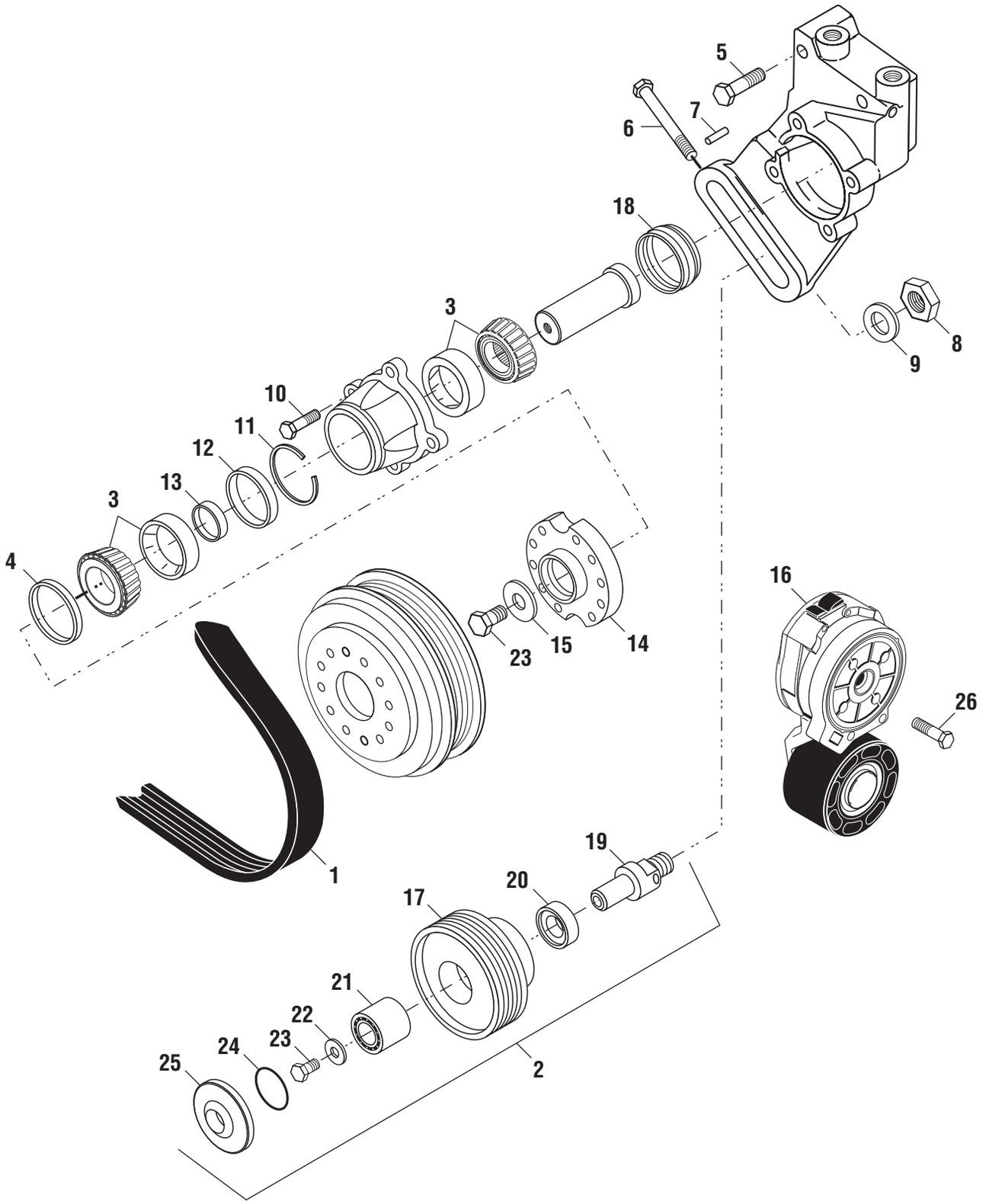
3 Hole Flange Mount
L10E, M11 & ISM Series

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181821	181821E	CUM 3803403	ASSEMBLY,Water Pump Includes Water Pump Assembly (1)181821-100 Gasket (1)131565 O-Rings (2)121277 (1)121304	
1	**181937**		**CUM 4972850**	**ASSEMBLY,Water Pump**	
1	**181936**		**CUM 4955708**	**KIT,Water Pump(ISM)** **Includes Assembly Water Pump (1)181937** **O-Rings (1)121292 (1)121290 (1)121305**	
1	181883	181883E	CUM 4955706	PUMP,Water Assembly(ISM) (Short Shaft) Includes Installation Water Pump Kit (1)131801 Water Pump (1)181893E	CUM 4003929
1		181893E	CUM 4972862	PUMP,Water(ISM) (Short Shaft)	CUM 4965450
2	ECP-3474		MAK 6635-6HP5ONS	PLUG,Threaded(9/16in-18 NPT) (w/ Seal 121227)	CUM 3037536
3	121227		CUM 3037537	SEAL,Plug	CUM 118350
4	Call		CUM 3034836	SCREW,Cap(M10-1.50 x 30mm Lg)	
5	Call		CUM 3042619	NIPPLE,Coupling	
6	131565		CUM 3027924	GASKET,Connection	
7	Call		CUM 3821718	CONNECTION,Water Transfer	
8	**040129**		**CUM 3918109**	**SCREW,Flanged Cap(M8-1.25 x 25mm Lg)**	**CUM 3900631**
9	121290		CUM 3102646	O-RING(M11)	
9	121304		CUM 3892095	O-RING(L10)	
10	181845		CUM 3033677	SEAL,Water Pump	
11	181874		CUM 3035679	IMPELLER,Water Pump(Cast)	
11	181874A		CUM 3035679	IMPELLER,Water Pump(Phenolic)	
12	121277		CUM 3820791	O-RING	
12	121292		CUM 3102500	O-RING(ISM)	
13	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
14	EPP-3566		MAK 49AX226	PLUG,Pipe(1in NPT)	CUM 3008470, CUM S-962
15	136080		CUM 3019600	SEAL,O-Ring	
16	042063		CUM 3064634	RING,Retaining	
17	ESR-2831		MAK 325GC120	RING,Retaining	CUM 160586
18	180917		CUM 3819632	SHAFT,Water Pump	
18	**180922**		**CUM 3400813**	**SHAFT,Water Pump(ISM)(Short Shaft)**	
19	181918		CUM 3038991	GEAR,Drive	CUM 3027223
20	181857		CUM 3803261	KIT,Water Pump Repair(Cast Impeller) Includes Bearing (1)EBG-6163 Seals (1)181845 (1)136080 O-Rings (1)121305 (1)121277 Ring (1)ESR-2831 Retaining Ring (1)042063 Impeller (1)181874	
20	181857A		CUM 3803261	KIT,Water Pump Repair(Phenolic Impeller) Includes Bearing (1)EBG-6163 Seals (1)181845 (1)136080 O-Rings (1)121305 (1)121277 Ring (1)ESR-2831 Retaining Ring (1)042063 Impeller (1)181874A	
21	EBG-6163	**EM61630**	MAK 9383-6205LL	BEARING,Ball	CUM S-16002
22	040052		CUM 3335044	SCREW,Cap(M10-1.50 x 25mm Lg)	
23	121305		CUM 3882774	O-RING	
24	131801		N/A	KIT,Installation(M11 & ISM) Includes O-Rings (2)121304 (1)121305 (1)121277 Gasket (1)131565 Screws (3)040052	
25	181821-001		CUM 3882615	HOUSING,Water Pump(NSS only in 181821)	
26	181821-100	**181821E-100**	CUM 4972861	ASSEMBLY,Water Pump (Sold in Assembly 181821)(Phenolic Impeller) Includes Housing (1)181821-001 Bearing (1)EBG-6163 Rings (1)ESR-2831 (1)042063 Seals (1)181845 (1)136080 Impeller (1)181874A Shaft (1)180917 Gear (1)181918 O-Ring (1)121305	CUM 3073693

Please note:

*** Water Pump Repair kit shown as key 20, does not include Shaft.**

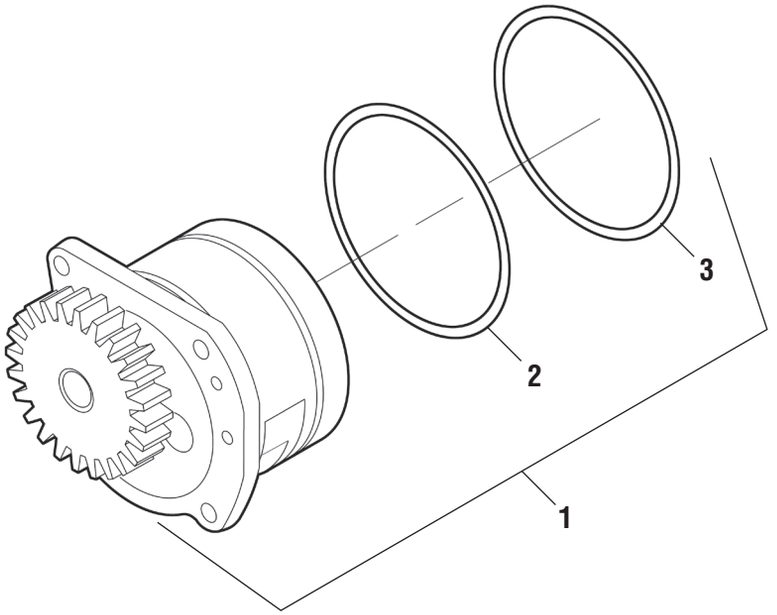
FIGURE 6214



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	050470		CUM 3037425	BELT(Serpentine)(34-5/8in Lg)	
1	050493		CUM 3034348	BELT(Serpentine)(49-1/8in Lg)	
1	050494		CUM 3034946	BELT(Serpentine)(63-1/8in Lg)	
2	180904		CUM 3062602	IDLER,Assembly,Pulley	
3	EBG-3808-TIM		CUM 3001281	BEARING,Roller	
4	Call		CUM 3027675	SEAL,Oil	
5	Call		CUM 3027670	SCREW,Cap(M12-1.75 x 80mm Lg)	
6	Call		CUM 3040245	SCREW,Cap(M10-1.50 x 170mm Lg)	
7	Call		CUM 107695	PIN,Roll	
8	Call		CUM 3034319	NUT(M20-1.50)	
9	Call		CUM 3034320	WASHER(7/8in)	
10	Call		CUM 3034836	SCREW,Cap(M10-1.50 x 30mm Lg)	
11	Call		CUM 3001280	RING,Retaining	
12	Call		CUM 217011	SPACER,Bearing	
13	Call		CUM 217008	SPACER,Bearing	
14	Call		CUM 3027677	FLANGE	
15	Call		CUM 3027686	WASHER(M10)	
16	180894		CUM 3400885	TENSIONER,Belt(M11)	
17	Call		CUM 3060883	PULLEY,Idler	
18	Call		CUM 3063844	COVER,Fan Hub	
19	Call		CUM 3819920	SHAFT,Idler	
20	Call		CUM 3027680	SEAL,Oil	
21	EBG-3807-TIM		CUM 3027681	BEARING,Idler Pulley	
22	Call		CUM 3003163	WASHER(M10)	
23	040052		CUM 3335044	SCREW,Cap(M10-1.50 x 25mm Lg)	
24	Call		CUM 3062601	SEAL,O-Ring	
25	Call		CUM 3060884	COVER,Idler Pulley	
26	040067		CUM 3904446	SCREW,Flanged Hex Head (M10 x 1.50 x 70mm)	

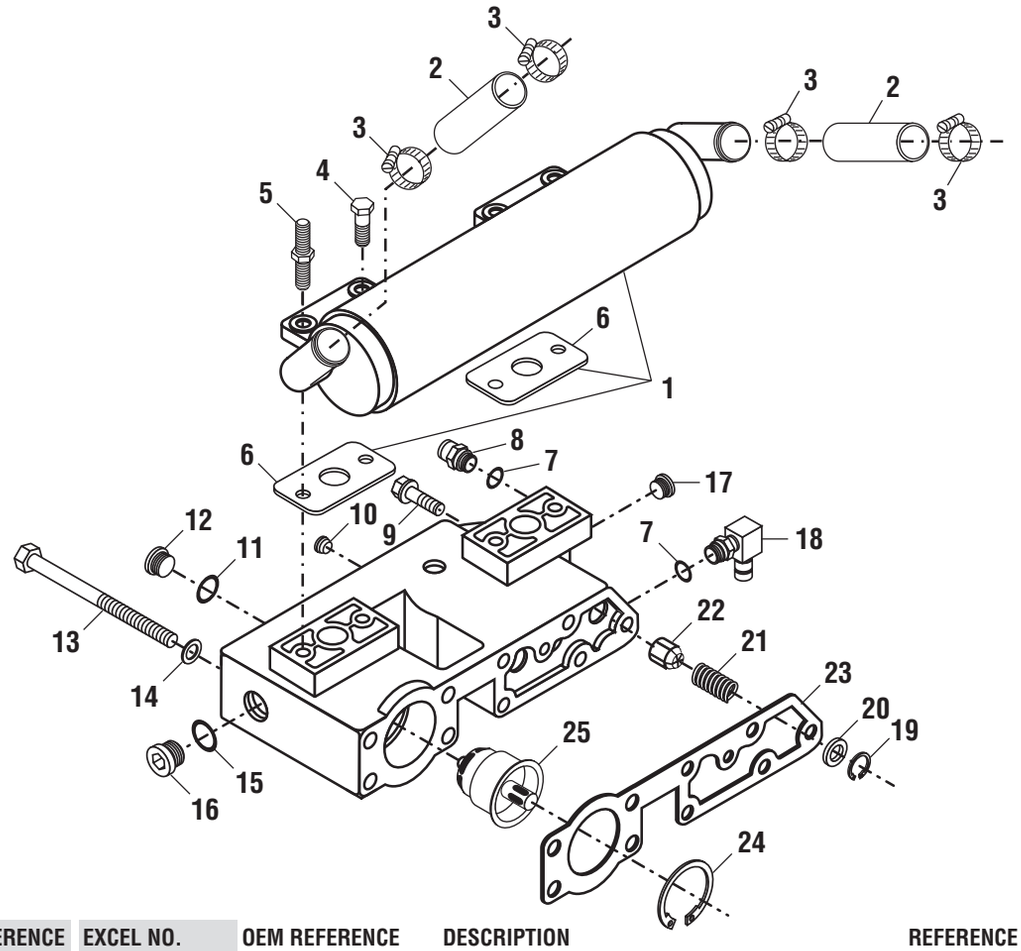
FIGURE 6222



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141296	141296E	CUM 4003950	PUMP,Oil(2in Pump)	CUM 3803330
2	121303		CUM 3033247	O-RING	
3	121291		CUM 3033248	O-RING	CUM 3024469

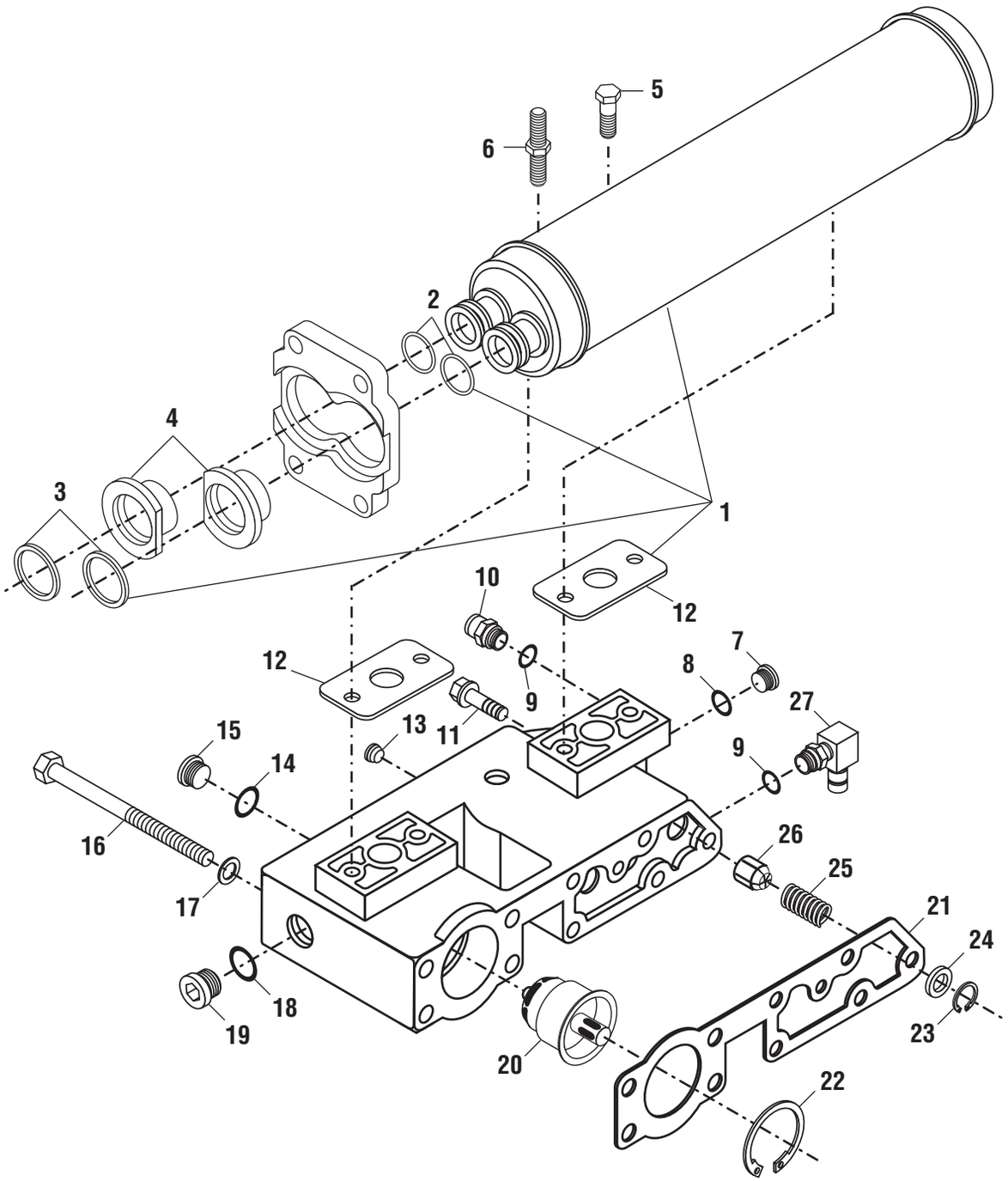
PAI Copyright 2017

FIGURE 6210



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141424		CUM 3600880	COOLER,Oil(L10) Includes Oil Cooler (1) Gaskets (2)131513	CUM 3027297
1	141425		CUM 3882324	COOLER,Oil Includes Oil Cooler (1) Gaskets (2)131513	
2	121053		CUM 3820666	HOSE,Coolant	
3	042124		CUM 3026806	CLAMP,Hose	
4	Call		CUM 3034836	SCREW,Cap(M10-1.50 x 30mm Lg)	
5	Call		CUM 3883394	SCREW,Cap	
6	131513		CUM 3892625	GASKET,Oil Cooler Support	
7	121227		CUM 3037537	O-RING	CUM 118350
8	Call		CUM 3042619	NIPPLE,Coupling	
9	Call		CUM 3819448	SCREW,Captive(M10-1.50 x 30mm Lg)	
10	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4in NPT)	CUM 3008466
11	EGA-3061		MAK 8813-154129	SEAL,Plug	CUM 3046201
12	ECP-3475		MAK 6635-8HP50NS	PLUG,Threaded(3/4in-16 NPT) (w/EGA-3061 Seal)	CUM 3046202
13	Call		CUM 3020093	SCREW,Cap(M10-1.50 x 170mm Lg)	
14	040034		CUM 3009330	WASHER,Plain(M10)	
15	121284		CUM 3040817	O-RING(Use w/CUM 3040815 Plug)	CUM 129858, MAK 56AX410
16	Call		CUM 3040815	PLUG,Threaded(w/CUM 3040817 Seal)	
17	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
18	Call		CUM 3819616	NIPPLE,Coupling	
19	Call		CUM 3820631	RING,Retaining	
20	Call		CUM 3882585	PLUG,Expansion	
21	**141333**		**CUM 3882586**	**SPRING,Relief Plunger**	**CUM 3883524**
22	141307		CUM 3820320	PLUNGER,Bypass Valve	
23	131542		CUM 3820629	GASKET,Filter Head(L10E & M11)	
23	131617		CUM 3024471	GASKET,Filter Head(Early L10)	
24	Call		CUM 3820782	RING,Retaining	
25	181865		CUM 3059408	THERMOSTAT	

FIGURE 6219

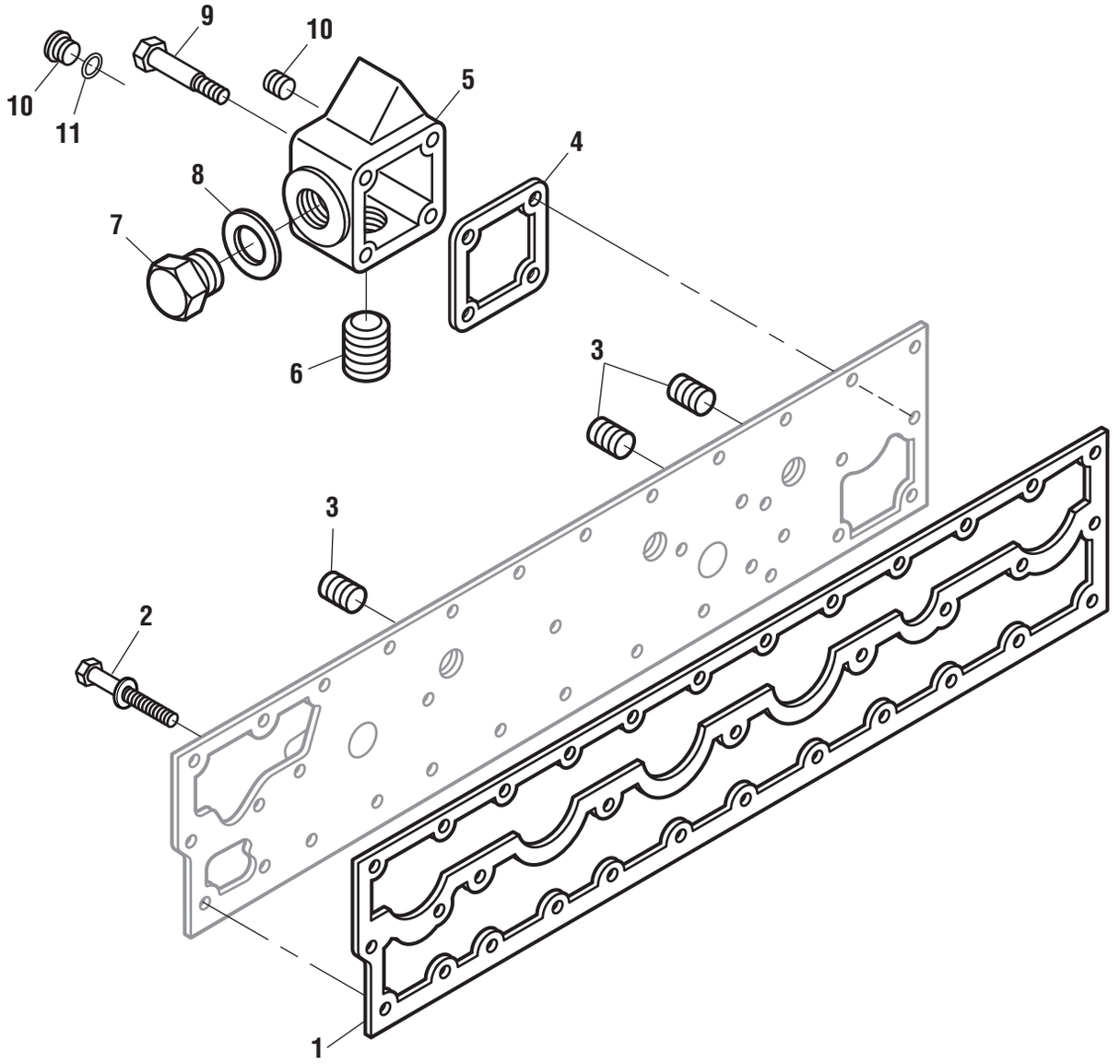


PAI Copyright 2017

M11 Series

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141426		CUM 3081359	COOLER,Lube Oil Includes Cooler (1) O-Rings (2)121211 Rings (2)121285 Gaskets (2)131513	CUM 3161781
2	121211		CUM 109080	O-RING	
3	121285		CUM 3080769	RING,Rectangular Seal	
4	Call		CUM 3080401	ADAPTER,O-Ring	
5	Call		CUM 3034836	SCREW,Cap(M10 x 1.5 x 30)	
6	Call		CUM 3883394	SCREW,Cap	
7	Call		CUM 3202101	PLUG,Threaded(w/ 121265 Seal)	
8	121265		CUM 3046943	SEAL,Plug	
9	121227		CUM 3037537	SEAL,Plug	
10	Call		CUM 3042619	NIPPLE,Coupling	
11	Call		CUM 3819448	SCREW,Captive Washer	
12	131513		CUM 3892625	GASKET,Oil Cooler Support	
13	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4 NPT)	CUM 3008466
14	EGA-3061		MAK 8813-154129	SEAL,Plug	CUM 3046201
15	ECP-3475		MAK 6635-8HP50NS	PLUG,Threaded(3/4in-16 NPT) (w/ EGA-3061 Seal)	CUM 3046202
16	Call		CUM 3020093	SCREW,Cap(M10 x 1.50 x 170)	
17	040034		CUM 3009330	WASHER,Plain(M10)	
18	121284		CUM 3040817	O-RING(Use w/ CUM 3040815 Plug)	CUM 129858, MAK 56AX410
19	Call		CUM 3040815	PLUG,Threaded(w/ CUM 3040817 Seal)	
20	181865		CUM 3059408	THERMOSTAT	
20	181886		CUM 4952630	THERMOSTAT(225 deg)(M11 & ISM)	
21	131542		CUM 3820629	GASKET,Filter Head	
22	Call		CUM 3820782	RING,Retaining	
23	Call		CUM 3820631	RING,Retaining	
24	Call		CUM 3882585	PLUG,Expansion	
25	**141333**		**CUM 3882586**	**SPRING,Relief Plunger**	**CUM 3883524**
26	141307		CUM 3820320	PLUNGER,Bypass Valve	
27	Call		CUM 3819616	NIPPLE,Coupling	

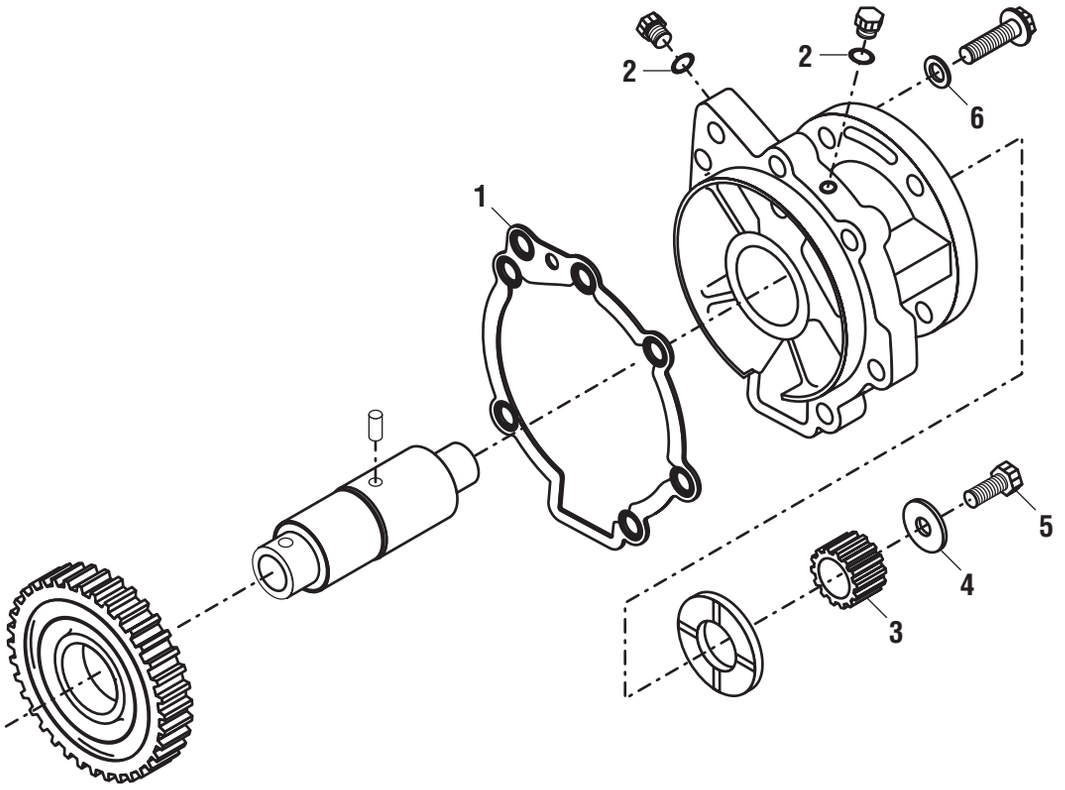
FIGURE 6231



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131627		CUM 3883363	GASKET,Water Header Cover(L10)(Fiber)	CUM 3819452
1	131628		CUM 4083006	GASKET,Water Header Cover(M11/ISM)(Metal)	CUM 3899229
2	040033		CUM 3818060	BOLT	
3	EPP-3575		MAK 49AX234Z	PLUG,Pipe	CUM 3008468
4	**131585**		**CUM 3027445**	**GASKET,Heater Housing(L10)(Fiber)**	
4	131604		CUM 3893690	GASKET,Heater Housing(M11/ISM)(Metal)	
5	Call		CUM 3821854	HOUSING,Engine Heater	
6	EPP-3566		MAK 49AX226	PLUG,Pipe	CUM 3008470
7	Call		CUM 3026195	PLUG,Threaded(M38 x 1.50)	
8	136098		CUM 3026156	WASHER,Plain(M38)	
9	Call		CUM 3027472	SCREW,Hexagon Head Cap(M10 x 1.50 x 90)	
10	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8 NPT)	CUM 3013786
11	121227		CUM 3037537	O-RING	

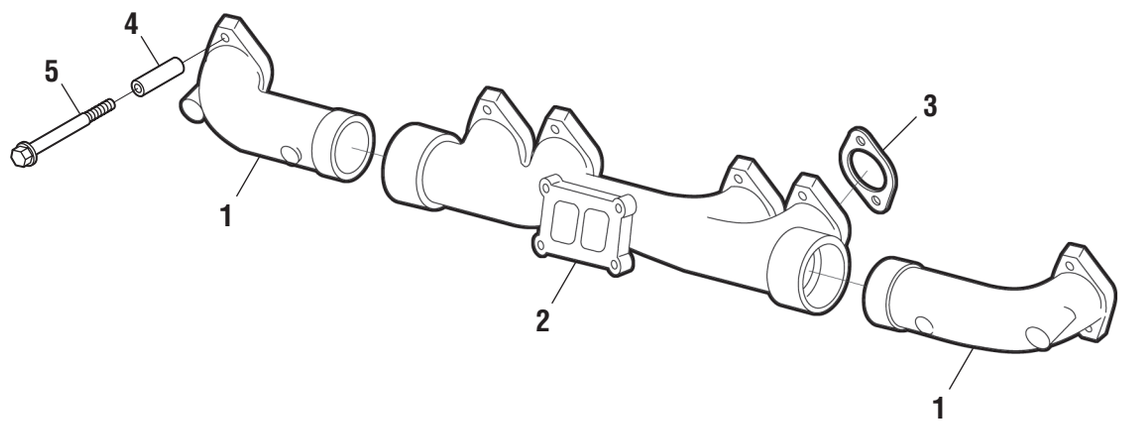
 PAI Copyright 2017

FIGURE 6220



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131471		CUM 3899746	GASKET,Mounting	
2	121251		CUM 3034412	O-RING	
3	180926		CUM 3000174	COUPLING,Hub	
4	040022		CUM 170664	WASHER,Plain(3/8in)	
5	040025		CUM 3000173	SCREW,Cap	
6	040013		CUM 3882885	WASHER,Plain(M10)	

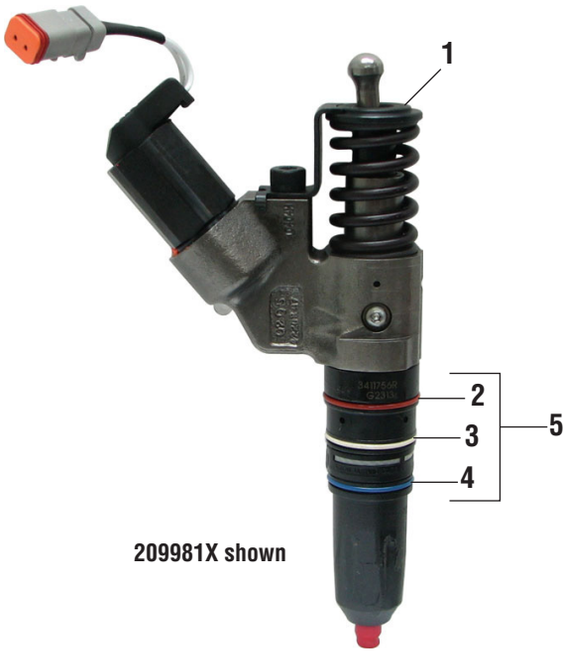
FIGURE 6229



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181018		CUM 4003994	MANIFOLD,Front and Rear Exhaust	
2	181019		CUM 3084656	MANIFOLD,Center Exhaust (Low Mount)	
2	181020		CUM 3896414	MANIFOLD,Center Exhaust (High Mount)	
3	131452		CUM 3819760	GASKET,Exhaust Manifold	
4	040070		CUM 3818124	SPACER,Mounting	
5	**040132**		**CUM 3818122**	**SCREW(M10 x 1.50 x 130)**	**CUM 3349635**
5	FSC-0373		MAK 27AM12	SCREW(M10 x 1.50 x 100)	CUM 3818121
5	**040147**		**CUM 3103086**	**SCREW(M10x1.5 x 102)**	**CUM3103085**

PAI Copyright 2017

FIGURE 6237



209981X shown



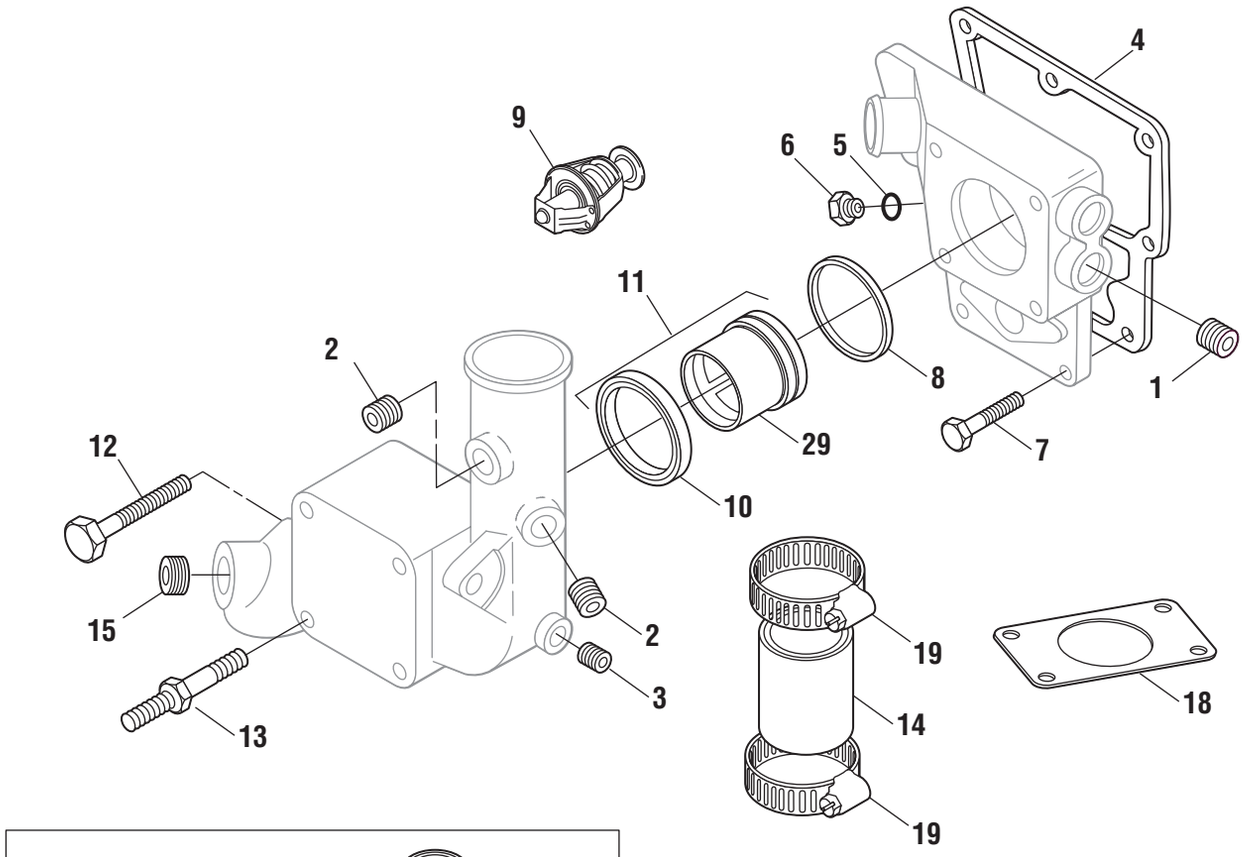
042209 shown

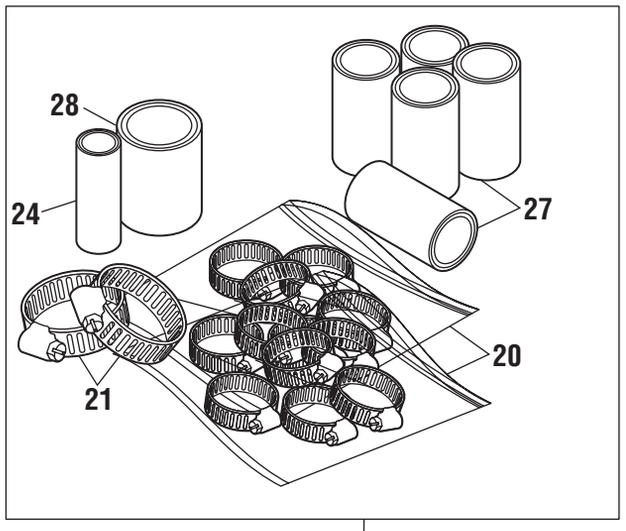


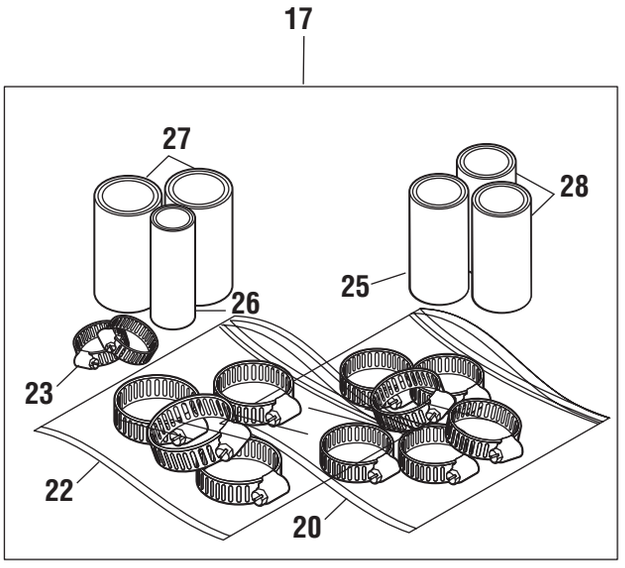


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**209975X**		**CUM 3411752**	**ASSEMBLY,Injector(Reman)**	**CUM 3087557**
1	**209976X**		**CUM 3411753**	**ASSEMBLY,Injector(Reman)**	**CUM 3095040**
1	**209977X**		**CUM 3411758**	**ASSEMBLY,Injector(Reman)**	**CUM 3411401**
1	**209981X**		**CUM 3411756**	**ASSEMBLY,Injector(Reman)(ISM)**	**CUM 3083849**
2	121196		CUM 193736	O-RING,Injector(L10 Mechanical only)	
2	121197		CUM 3070136	O-RING,Injector(Red)	
3	121198		CUM 3070137	O-RING,Injector(White)	
4	121199		CUM 3070138	O-RING,Injector(Blue)	
5	121190		N/A	KIT,Injector O-Ring Includes O-Rings (6)121197 (6)121198 (6)121199	
6	**042209**		**CUM 3028324**	**VALVE,Fuel Check**	
6	**042210**		**CUM 3028325**	**VALVE,Fuel Check**	**CUM 216737**
7	180120		CUM 217196	VALVE,Fuel Check	
8	**050503**		**CUM 146483**	**SCREEN,Fuel**	

FIGURE 6209





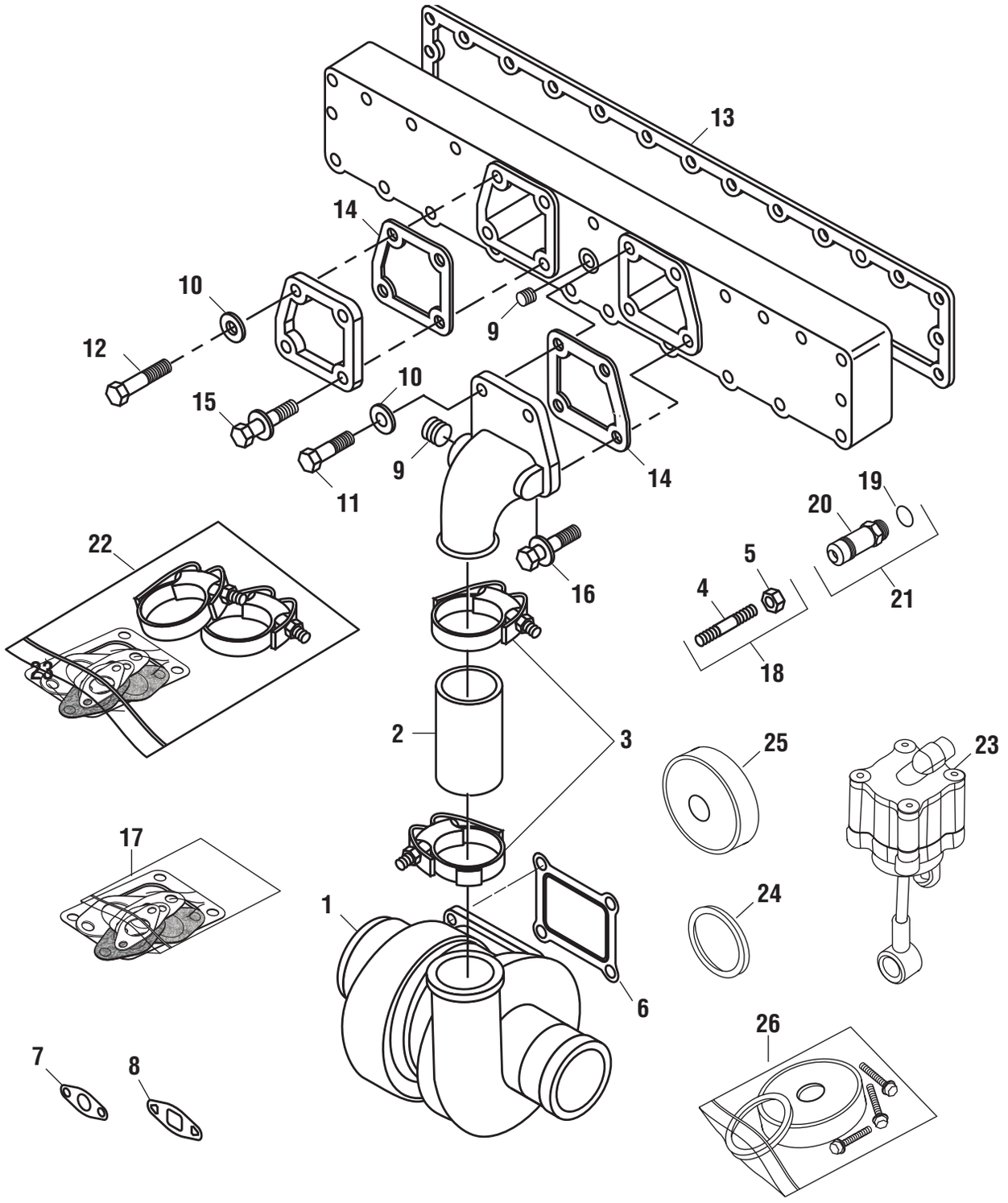


PAI Copyright 2017

L10 Series

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	EPP-3574		MAK 49AX233	PLUG,Pipe(3/8in NPT)	CUM 3013786
2	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
3	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3008465
3	**171739**		**CUM 3084445**	**GEAR,Cran**	
4	131473		CUM 3893691	GASKET,Support(L10)(Metal)	
4	131474		CUM 3893692	GASKET,Support(L10,M11,ISM)(Metal)	
4	131502		CUM 3893774	GASKET,Support(L10)(Paper w/Printoseal)	
5	121227		CUM 3037537	SEAL,Plug	
6	ECP-3474		MAK 6635-6HP50NS	PLUG,Threaded(9/16in-18 NPT) (w/ Seal 121227)	CUM 118350
7	Call		CUM 3820988	SCREW,Cap (M10-1.50 x 35mm Lg)	
8	121341		CUM 3080770	SEAL,Rectangular Ring	CUM 3883458
9	181829		CUM 3045913	THERMOSTAT(175 deg) (Bottom Bypass Type)	
10	131289		CUM 186780	SEAL,Thermostat (Interchangeable w/ EOS-3305 Seal)	
11	181830		CUM 201737	KIT,Thermostat Includes Thermostat(1) Seal (1)EOS-3305	CUM 3076489
11	181833		CUM 204586	KIT,Thermostat(Non-Vented)(175 deg) Includes Thermostat(1) Seal (1)EOS-3305	
11	181887		CUM 4973373	THERMOSTAT(Non-Vented, 180 deg)	CUM 4952204
12	Call		CUM 3022502	SCREW,Cap(M10-1.50 x 145mm Lg)	
13	Call		CUM 3892412	SCREW,Cap(M10-1.50 x 172mm Lg)	
14	121047		CUM 3818272	HOSE,Coolant(1-5/8in ID x 2-3/4 in Lg) (Use w/ECL-1953 Clamp)	
15	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM 3008469
16	121101		CUM 3803157	KIT,Hose Includes Hoses (1)121052 (5)121053 (1)121046 Clamps (2)042123 (12)042124	
17	121100		CUM 3803156	KIT,Hose Includes Hoses (1)121050 (1)121051 (2)121052 (2)121053 Clamps (2)042122 (4)ECL-1962 (6)042124	
18	131495		CUM 3044475	GASKET,Thermostat Housing (LFC Engine Only)	
19	ECL-1953		MAK 83AX452	CLAMP,Hose(Use w/ 121047 Hose)	CUM 3883736, CUM 43828-B
20	042124		CUM 3026806	CLAMP,Hose(w/ Hose Protector) (1in to 1-1/2in)	
21	042123		CUM 3008690	CLAMP,Hose(w/ Hose Protector) (1-3/4in to 2-1/4in)	
22	ECL-1962		MAK 83AX759	CLAMP,Hose (1.06in to 2in)	CUM 3026804
23	042122		CUM 3820672	CLAMP,Hose(w/ Hose Protector) (1/2in to 29/32in)	
24	121046		CUM 3820667	HOSE,Coolant(40mm ID, 72mm Lg)	
25	121051		CUM 3820663	HOSE,Coolant(7/8in ID, 3in Lg)	
26	121050		CUM 3820662	HOSE,Coolant(1/2in ID, 2-1/2in Lg)	
27	121053		CUM 3820666	HOSE,Coolant(1-1/4in ID, 3in Lg)	
28	121052		CUM 3820664	HOSE,Coolant(1in ID, 3in Lg)	
29	181830-001		CUM 201737	THERMOSTAT(NSS) (Used in kit 181830)	CUM 3076489

FIGURE 6217

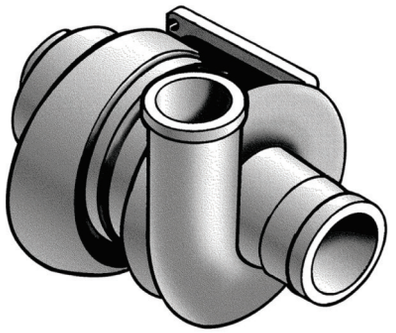


PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181200	181200E	CUM 3800471	TURBOCHARGER(M11)	CUM 3803938
1	**181203**		**CUM 3803710**	**TURBOCHARGER(M11)**	
1	ETC-9229		CUM 4955462	TURBOCHARGER(M11, ISM)	CUM 4035725
1	ETC-9286		MAK 7536-168823	TURBOCHARGER	CUM 3521802, CUM 3519092
1	ETC-9287		MAK 7536-168824	TURBOCHARGER	CUM 3525238, CUM 3525237
1	ETC-9288		MAK 7536-168825	TURBOCHARGER	CUM 3532054, CUM 3532053
1	**181197**		**CUM 3803389**	**TURBOCHARGER(L10)**	**CUM 3529257**
2	EIH-1979		MAK 744GB310	HOSE,Turbo Connection	CUM 3025152
3	042121		CUM 3892347	CLAMP (w/ Hose Protector)(3in to 3-1/4in)	CUM 200844
4	040110		CUM 3818823	STUD,Turbo Mounting	
5	040062		CUM 3818824	NUT,Turbo Mounting (M10 x 1.55 SS)	
6	131479		CUM 3072919	GASKET,Turbo Mounting	
6	131552		CUM 3088984	GASKET,Turbo Mounting(M11)	
7	EGS-2861		MAK 56AX356	GASKET,Oil Inlet	CUM 3519762
8	131480		CUM 3937706	GASKET,Oil Return	
8	131494		CUM 3899343	GASKET,Oil Return	
9	Call		CUM 3031511	PLUG,Pipe(1/8in NPT)	
9	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3008465
10	040034		CUM 3009330	WASHER,Plain(M10)	
10	042090		CUM S-684	WASHER,Copper	CUM 69615
11	Call		CUM 3017503	SCREW,Cap(M10 x 1.50 x 75)	
12	Call		CUM 3820317	SCREW,Cap(M8 x 1.25 x 25)	
12	Call		CUM 3017506	SCREW,Cap(M10 x 1.50 x 70)	
13	131506		CUM 3818843	GASKET,Intake Manifold Cover (Non-Aftercooler)	CUM 3017730
13	131524		CUM 3069786	GASKET,Intake Manifold Cover (Aftercooler)	CUM 3066369
14	131507		CUM 3818844	GASKET,Connection (Aftercooler)	CUM 3028385, CUM 3600883
14	131508		CUM 3818846	GASKET,Connection (Non-Aftercooler)	CUM 3028539
14	131584		CUM 3070100	GASKET,Connection(Celect Engine)	
15	040052		CUM 3335044	SCREW,Cap(M10 x 1.50 x 25)	
16	Call		CUM 3335045	SCREW,Cap(M10 x 1.50 x 35)	
17	EKT-2663		SCH 318418	KIT,Turbo Mounting Includes Gaskets (1)131605 (1)131480 (1)331308 (1)EGS-2863 (1)131494 O-Rings (1)121297 (1)121298	
18	**040109**		**CUM 3801888**	**KIT,Turbo Mounting Stud Includes Stud (1)040110 Nut (1)040062**	**CUM 3034375**
19	**121432**		**CUM 3076042**	**O-RING**	
20	**050545**		**CUM 3077507**	**FITTING,Male Connector**	**CUM 3076706**
21	**050546**		**CUM 3077508**	**FITTING,Connector Includes Fitting (1)050545 O-Ring (1)121432**	
22	**219933**		**CUM 3804557**	**KIT,Repair(L10, M11)**	
23	**181169**		**CUM 3599755**	**ACTUATOR,Turbocharger(ISM)**	
24	**042058**		**CUM 3594521**	**RING,Retaining(M11, ISM)**	
25	**040099**		**CUM 3595782**	**COVER,Actuator(M11, ISM)**	
26	**219934**		**CUM 4042571**	**KIT,Actuator Fitting(M11,ISM) Includes Cover(1)040099 Ring (1)042058 Screws (3)FSC-0326**	**CUM 4027996**

Please see the following pages for Turbocharger Applications by CPL.

FIGURE 6204



Please note:

1. **Check Oil Feed line for any restrictions.**
2. **Check Oil Return line for any restrictions that would block the oil from draining back into the Engine.**
3. **Check Air filter.**
4. **Always relube Turbocharger before starting Engine.**
5. **The most common failures are due to low oil pressure, contaminated oil and hot shut down.**

CPL #	H1 or H2 TURBO
528	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
535	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
561	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
562	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
580	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
608	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
613	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803

CPL #	H1 or H2 TURBO
638	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
641	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
643	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
649	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
652	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
655	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
662 Military	N/A
671	N/A

CPL #	H1 or H2 TURBO
707	N/A
708	N/A
726	N/A
735	N/A
747	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
748	N/A
751	N/A
764	N/A
765	N/A
773	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
774	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
775	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
776	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803

PAI Copyright 2017

CPL #	H1 or H2 TURBO
777	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
778	ETC-9286 CUM 3504696 CUM 3519092 CUM 3521802 CUM 3801133 CUM 3801489 SCH 168823
779	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
780	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
781	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
782 Military	ETC-9286 CUM 3504696 CUM 3519092 CUM 3521802 CUM 3801133 CUM 3801489 SCH 168823
783	N/A
784	N/A
785	N/A
786	N/A
787	N/A
788	N/A
789	N/A
790	N/A
835	N/A
842	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
894	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
939	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824

CPL #	H1 or H2 TURBO
956	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
958	ETC-9286 CUM 3504696 CUM 3519092 CUM 3521802 CUM 3801133 CUM 3801489 SCH 168823
978	N/A
979	N/A
980	N/A
995	N/A
996	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
1161	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1164	N/A
1198	N/A
1208	N/A
1223	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
1224	ETC-9285 CUM 3518103 CUM 3518301 CUM 3519095 CUM 3521803 CUM 3801490 CUM 3803109 SCH 169417
1225	N/A
1226	N/A
1234	N/A
1241	N/A
1346	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
1347	N/A
1348	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1349	N/A
1357	N/A
1359	N/A
1362	N/A

CPL #	H1 or H2 TURBO
1367	N/A
1373	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1375	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1378	N/A
1412	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
1413	N/A
1414	N/A
1420	N/A
1427	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1428	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1429	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
1432	N/A
1441	N/A
1442	ETC-9287 CUM 3525237 CUM 3525238 CUM 3803024 SCH 168824
1443	N/A
1444	N/A
1446	N/A
1447	N/A
1448	ETC-9288 CUM 3528124 CUM 3532053 CUM 3532054 CUM 3803586 SCH 168825
1449	N/A
1450	N/A
1453	N/A
1459	ETC-9286 CUM 3504696 CUM 3519092 CUM 3521802 CUM 3801133 CUM 3801489 SCH 168823
1511	N/A

PAI Copyright 2017

New Parts are in BOLD text

CPL #	H1 or H2 TURBO
1512	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1513	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1514	N/A
1555	N/A
1558	N/A
1559	N/A
1560	N/A
1561	N/A
1562	N/A
1587	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1588	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1589	N/A
1609	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1617	N/A
1619	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
1620	N/A
1621	N/A
1622	N/A
1623	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
1624	N/A
1625	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
1626	N/A
1634	N/A
1642	N/A
1644	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1648	N/A
1653	N/A
1654	N/A
1660	N/A
1664	N/A
1669	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1674	N/A
1675	N/A
1676	N/A
1678	N/A
1695	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
1696	ETC-9285 CUM 3518103 CUM 3801490 CUM 3518301 CUM 3803109 CUM 3519095 SCH 169417 CUM 3521803
1697	ETC-9286 CUM 3504696 CUM 3801133 CUM 3519092 CUM 3801489 CUM 3521802 SCH 168823
1698	N/A
1699	N/A
1800	N/A
1801	N/A
1802	N/A
1805	N/A
1806	N/A
1827	N/A
1828	N/A
1829	N/A
1830	N/A
1832	N/A
1841	N/A
1842	N/A
1849	N/A
1855	N/A
1856	**181203** **CUM 3803710**
1857	N/A
1858	N/A
1865	N/A
1866	N/A
1867	N/A
1868	N/A
1869	N/A
1870	N/A
1871	N/A
1875	N/A
1885	N/A
1900	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
1909	N/A
1910	N/A
1911	N/A
1912	N/A
1913	N/A
1930	N/A
1931	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
1939	N/A
1946	N/A
1951	N/A
1952	N/A
1953	N/A
1954	ETC-9288 CUM 3528124 CUM 3803586 CUM 3532053 SCH 168825 CUM 3532054
1958	N/A
1973	N/A
1974	N/A
1983	N/A
1984	N/A
1991	N/A
1992	N/A
1993	N/A
1994	N/A

New Parts are in BOLD text
PAI Copyright 2017

CPL #	H1 or H2 TURBO
2036	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503
2037	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503
2045	N/A
2046	N/A
2051	N/A
2066	N/A
2067	N/A
2068	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
2069	N/A
2110	N/A
2119	N/A
2140	N/A
2141	N/A
2165	N/A
2178	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503
2189	N/A
2190	N/A
2192	ETC-9287 CUM 3525237 CUM 3803024 CUM 3525238 SCH 168824
2199	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503
2200	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503
2370	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503
2371	181200 / 181200E CUM 3536149 CUM 3536995 CUM 3590044 CUM 3800471 CUM 3803938 CUM 3804503

L10 Series

CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2
527	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
528	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
534	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
535	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
561	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
562	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
608	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
613	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
638	Use CPL 777	131266 CUM 3803404
641	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
643	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
649	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
655	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
671	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
703	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
704	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
707	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
708	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
717	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
726	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
735	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
747	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
748	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
751	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
764	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
765	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
770	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
771	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
772	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
773	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
774	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
775	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
776	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
777	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
778	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
779	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
780	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
781	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
782	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
783	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
784	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
785	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
786	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
787	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
788	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
789	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
790	L10102-(*) Includes: CUM 3045907 Piston	131266 CUM 3803404
799	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
815	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
835	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404

FIGURE 6226

Please note:

(*) Specify size of Rod Bearings and Main Bearings when ordering Inframe Kits.

1. **All Inframe Kits include a Pan Gasket.**
2. **Lower Gasket Kits are for reference only and are not included with inframe kits. Lower Gasket Kits are sold separately.**
3. **Rocker Cover Gasket is included with Inframe Kits.**

PAI Copyright 2017

L10 Series

CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2
842	L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
881	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
894	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
939	L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
956	L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
958	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
978	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
979	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
980	L10103-(*) Includes: CUM 3055662 Piston	131266 CUM 3803404
995	L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
996	L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
1161	L10126-(*) Includes: CUM 3074108 Piston	131266 CUM 3803404
1164	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
1198	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
1208	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
1223	L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
1224 †	L10123(*) or L10103-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
1225	L10123-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
1226	L10123-(*) Includes: CUM 3055622 Piston	131266 CUM 3803404
1234	L10101-(*) Includes: CUM 3044448 Piston	131266 CUM 3803404
1241	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1318	N/A CUM 3068029 Piston	N/A
1346	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1347	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1348	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1349	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1357	N/A CUM 3068091 Piston	N/A
1359	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1362	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1367	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1373	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1375	N/A CUM 3074032 Piston	131597 CUM 4089998
1378	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1379	**L10128-(*) Includes: CUM 3080726 Piston**	131597 CUM 4089998
1412	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1413	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1414	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1420	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1427	N/A CUM 3077349 Piston	N/A
1428	N/A CUM 3077349 Piston	N/A
1429	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1432	N/A CUM 3074032 Piston	N/A
1441	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1442	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1443	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1444	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1446	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1447	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1448	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1449	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998

† Please verify Internal Dampening (use L10103-(*) or External Dampening (use L10123-(*).

Please note:

(*) Specify size of Rod Bearings and Main Bearings when ordering Inframe Kits.

1. **All Inframe Kits include a Pan Gasket.**
2. **Lower Gasket Kits are for reference only and are not included with inframe kits. Lower Gasket Kits are sold separately.**
3. **Rocker Cover Gasket is included with Inframe Kits.**

Engine kits are continued on the following pages.

L10 Series

CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2
1450	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1453	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1459	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1511	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1512	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1513	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1514	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1555	N/A CUM 3077275 Piston	N/A
1558	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1559	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1560	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1561	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1562	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1587	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1588	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1589	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1590	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1591	N/A CUM 3077506 Piston	N/A
1592	N/A CUM 3077349 Piston	N/A
1609	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1617	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1619	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1620	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1621	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1622	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1623	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1625	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1626	N/A CUM 3074032 Piston	N/A
1634	N/A CUM 3080713 Piston	N/A
1635	N/A CUM 3080713 Piston	N/A
1642	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1644	N/A CUM 3074032 Piston	N/A
1648	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1653	**L10128-(*) Includes: CUM 3080726 Piston**	131597 CUM 4089998
1654	**L10128-(*) Includes: CUM 3080726 Piston**	131597 CUM 4089998
1660	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1664	N/A CUM 3081337 Piston	N/A
1665	N/A CUM 3081337 Piston	N/A
1669	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1674	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1675	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1676	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1678	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
1695	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1696	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1697	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1698	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1699	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1800	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1801	N/A CUM 3081337 Piston	N/A

Please note:

(*) Specify size of Rod Bearings and Main Bearings when ordering Inframe Kits.

1. **All Inframe Kits include a Pan Gasket.**
2. **Lower Gasket Kits are for reference only and are not included with inframe kits. Lower Gasket Kits are sold separately.**
3. **Rocker Cover Gasket is included with Inframe Kits.**

PAI Copyright 2017

L10 Series

CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2
1802	N/A CUM 3081337 Piston	N/A
1805	N/A CUM 3081337 Piston	N/A
1806	N/A CUM 3081337 Piston	N/A
1832	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1842	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1849	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1858	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1866	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1867	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1868	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1869	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1870	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1871	L10125-(*) Includes: CUM 3893751 Piston	131597 CUM 4089998
1900	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1909	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1910	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1911	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1912	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1913	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1930	L10101-(*) Includes: CUM 3044448 Piston	131597 CUM 4089998
1931	N/A CUM 3074032 Piston	N/A
1935	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1936	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1937	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1938	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1939	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1951	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1952	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1953	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1954	L10124-(*) Includes: CUM 3068090 Piston	131597 CUM 4089998
1958	N/A Includes: CUM 3074032 Piston	N/A
1974	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
1983	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1984	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
1994	L10123-(*) Includes: CUM 3055622 Piston	131597 CUM 4089998
2045	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2046	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2051	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2066	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
2067	L10126-(*) Includes: CUM 3074108 Piston	131597 CUM 4089998
2068	N/A CUM 3895864 Piston	N/A
2069	N/A CUM 3895864 Piston	N/A
2110	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2111	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2189	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2190	**L10128-(*)** **Includes: CUM 3080726 Piston**	131597 CUM 4089998
2192	N/A CUM 3895864 Piston	N/A

Please note:

(*) Specify size of Rod Bearings and Main Bearings when ordering Inframe Kits.

1. **All Inframe Kits include a Pan Gasket.**
2. **Lower Gasket Kits are for reference only and are not included with inframe kits. Lower Gasket Kits are sold separately.**
3. **Rocker Cover Gasket is included with Inframe Kits.**

M11 Series

CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2	CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2
1827	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2140	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1828	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2141	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1855	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2165	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1856	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2178	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1857	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2200	N/A	N/A
1875	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2336	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1885	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2363	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1897	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2370	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
1973	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2371	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
2036	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2425	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
2037	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2503	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998
2119	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998	2918	M11201-(*) Includes: CUM 4059902 Piston	131597 CUM 4089998

FIGURE 6227

Please note:

(*) Specify size of Rod Bearings and Main Bearings when ordering Inframe Kits.

1. **All Inframe kits include a Pan Gasket.**
2. **Lower Gasket Kits are for reference only and are not included with Inframe Kits. Lower Gasket Kits are sold separately.**

PAI Copyright 2017

ISM Series

CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2	CPL #	KIT w/ PISTON	LOWER GASKET SET SEE NOTE 2
2199	ISM101-(*) Includes: CUM 4025158 Piston	131597 CUM 4089998	8273	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998
2350	ISM101-(*) Includes: CUM 4025158 Piston	131597 CUM 4089998	8503	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998
2607	ISM101-(*) Includes: CUM 4025158 Piston	131597 CUM 4089998	8505	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998
2608	ISM101-(*) Includes: CUM 4025158 Piston	131597 CUM 4089998	8556	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998
2611	ISM101-(*) Includes: CUM 4025158 Piston	N/A	8557	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998
8271	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998	8558	ISM102-(*) Includes: CUM 3102808 Piston	131597 CUM 4089998

FIGURE 6236

Please note:

(*) Specify size of Rod Bearings and Main Bearings when ordering Inframe Kits.

1. **All Inframe kits include a Pan Gasket.**
2. **Lower Gasket Kits are for reference only and are not included with Inframe Kits. Lower Gasket Kits are sold separately.**

L10 Series

PAI PART NUMBER	PISTON KIT PART NUMBER (6)	RING SET PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)	ROD BEARING PART NUMBER (12 pieces)
L10101-(001 thru 016)	111159 Includes: CUM 3044448 Piston	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
-(033 thru 048)				
-(049 thru 064)				
L10102-(001 thru 016)	111160 Includes: CUM 3045907 Piston	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
L10103-(001 thru 016)	111158 Includes: CUM 3055622 Piston	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
L10123-(001 thru 016)	111158 Includes: CUM 3055622 Piston	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
-(033 thru 048)				
-(049 thru 064)				
L10124-(001 thru 016)	111362 Includes: CUM 3068090 Piston	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
-(033 thru 048)				
-(049 thru 064)				
L10125-(001 thru 016)	111366 Includes: CUM 3893751 Piston	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
-(033 thru 048)				
-(049 thru 064)				
L10126-(001 thru 016)	111372 Includes: CUM 3074108 Piston	505060 *** CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
L10127-(001 thru 016)	N/A Crownless	505060 CUM 3803961	161626 w/ Seal CUM 3803703	171780 ** CUM 3016760
-(017 thru 032)				
L10128-(001 thru 016)	**111599 Includes: CUM 3804696 Piston**	**505051 CUM 3804694**	**161626 w/ Seal CUM 3803703**	**171780 ** CUM 3016760**
-(017 thru 032)				
-(033 thru 048)				
-(049 thru 064)				

FIGURE 6200

Please note:

(*) Specify size of Rod and Main Bearings when ordering Inframe Kits.

**** Part number for standard sizes are shown in chart. Part numbers (and kit dash numbers) will change if non-standard components are requested.**

PAI Copyright 2017

L10 Series

MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)	VALVE COVER GASKET (1)	PAN GASKET KIT NUMBER (1)	APPLICATION INFORMATION
171725 ** CUM 3801150 171866 ** CUM 4025120	131265 CUM 4025155	131268 CUM 3034855	131492 N/A	Internal Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120	131482 CUM 4089478	131496 CUM 3883220 (Included in Upper Gasket set)	131493 N/A	
171725 ** CUM 3801150 171866 ** CUM 4025120	131265 CUM 4025155	131268 CUM 3034855	131492 N/A	Internal Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120	131265 CUM 4025155	131268 CUM 3034855	131492 N/A	Internal Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120	131540 N/A	131268 CUM 3034855	131493 N/A	External Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120		131496 CUM 3883220		
171725 ** CUM 3801150 171866 ** CUM 4025120	131540 N/A	131268 CUM 3034855	131493 N/A	External Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120		131496 CUM 3883220		
171725 ** CUM 3801150 171866 ** CUM 4025120	131540 N/A	131268 CUM 3034855	131493 N/A	External Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120		131496 CUM 3883220		
171725 ** CUM 3801150 171866 ** CUM 4025120	131482 CUM 4025157	—	131493 N/A	External Dampening Engine
171725 ** CUM 3801150 171866 ** CUM 4025120	131482 CUM 4025157	—	131493 N/A	External Dampening Engine Pistonless
171725 ** CUM 3801150 171866 ** CUM 4025120	**131265 CUM 4025155**	**131268 CUM 3034855**	**131492 N/A**	**Internal Dampening Engine**
171725 ** CUM 3801150 171866 ** CUM 4025120	**131482 CUM 4089478**	**131496 CUM 3883220 (Included in Upper Gasket set)**	**131493 N/A**	

1. **To ensure correct parts for application, please have CPL and Engine Serial number available.**
2. **Piston kits include Pins and Retainers.**
3. ***** Included in Piston kit 111372.**

M11 Series

PAI PART NUMBER	PISTON KIT PART NUMBER (6)	RING KIT PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)
M11127-(001 thru 016)	N/A Crownless	505100 CUM 3803977	161626 w/ Seal CUM 3803703
-(017 thru 032)			
M11201-(001 thru 016) PAI Crown & Skirt	111393 Includes: CUM 4025161 Piston	505100*** CUM 3803977	161626 w/ Seal CUM 3803703
-(017 thru 032)			

FIGURE 6228

Please note:

(*) Specify size of Rod and Main Bearings when ordering Inframe Kits.

**** Part number for standard sizes are shown in chart. Part numbers (and kit dash numbers) will change if non-standard components are requested.**

1. To ensure correct parts for application, please have CPL and Engine Serial number available.

2. Piston kits include Pins and Retainers.

3. * Included in Piston kit 111393.**

ISM Series

PAI PART NUMBER	PISTON KIT PART NUMBER (6)	RING KIT PART NUMBER (6)	SLEEVE KIT PART NUMBER (6)
ISM101-(*)	111439 CUM 4025158	505100 *** CUM 3803977	161626 w/ Seal CUM 3803703
ISM102-(*)	111586 CUM 4089386	505099 *** CUM 4089385	161628 w/ Seal CUM 4089388
ISM103-(*)	**111702 CUM 4089865**	**505100 *** CUM 3803977**	**161628 w/ Seal CUM 4089388**
ISM104-(*)	**111698 CUM 4024938**	**505100 *** CUM 3803977**	**161628 w/ Seal CUM 4089388**
ISM139-(017 thru 032)	**Crownless Skirt (1)111391 CUM 4070653 Pin (1)111092 CUM 3063843 Retainers (2)111178 CUM 3016652**	**505099 CUM 4089385**	**161628 w/ Seal CUM 4089388**
ISM140-(017 thru 032)	N/A Pistonless	505100 CUM 3803977	161626 w/ Seal CUM 3803703
-(033 thru 048)		505099 CUM 4089385	161628 w/ Seal CUM 4089388

FIGURE 6233

Please note:

(*) Specify size of Rod and Main Bearings when ordering Inframe Kits.

**** Part number for standard sizes are shown in chart. Part numbers (and kit dash numbers) will change if non-standard components are requested.**

1. To ensure correct parts for application, please have CPL and Engine Serial number available.

2. Piston kits include Pins and Retainers.

3. * Ring kits included in Piston kits.**

PAI Copyright 2017

M11 Series

ROD BEARING PART NUMBER (12 pieces)	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)	PAN GASKET KIT NUMBER (1)	APPLICATION INFORMATION
171780 CUM 3016760	171725 ** CUM 3801150	131482 CUM 4025157	131493 CUM N/A	Crownless
	171866 CUM 4025120			
171780 CUM 3016760	171725 ** CUM 3801150	131482 CUM 4025157	131493 CUM N/A	—
	171866 CUM 4025120			

ISM Series

ROD BEARING PART NUMBER (12 pieces)	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)	PAN GASKET KIT NUMBER (1)	APPLICATION INFORMATION
171780 CUM 3016760	171866 CUM 4025120	131482 CUM 4025157	131493 N/A	
171780 CUM 3016760	171866 CUM 4025120	131482 CUM 4025157	131493 N/A	EGR Engines
171780 CUM 3016760	171866 CUM 4025120	**131482 CUM 4089478**	**131493 N/A**	
171780 CUM 3016760	**171866 CUM 4025120**	**131888 CUM 3800861**	**131493 N/A**	
171780 CUM 3016760	**171866 CUM 4025120**	**131482 CUM 4025157**	**131493 N/A**	**Crownless**
171780 CUM 3016760	171866 CUM 4025120	131482 CUM 4025157	131493 N/A	Pistonless

Upper Gasket Sets

FIGURE 6218

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131265		CUM 4025155	SET,Upper Gasket(L10)(Pre 1991)	CUM 3804843, CUM 3803463
1	131482		CUM 4025157	SET,Upper Gasket(L10E, M11 & ISM)	
1	131540		N/A	SET,Upper Gasket(L10 & L10E)	
1	**131888**		**CUM 3800861**	**KIT,Upper Gasket(QSM11)**	

Please note:

- *** A variety of loose Upper Gaskets are available for purchase. Please call to check availability of specific part numbers.**
- *** Rocker Cover Gasket is not included in L10 or M11 Series Upper Gasket Sets. Rocker Cover Gaskets are sold separately.**

Lower Gasket Sets

FIGURE 6225

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131266		CUM 3803404	SET,Lower Gasket (L10 Pre 1991)	CUM 3801676, CUM 3803242
1	131597		CUM 4089998	SET,Lower Gasket (L10 after 1991, L10E, M11 & ISM)	CUM 4089479

Miscellaneous Components

FIGURE 6230

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	121295		CUM 3819724	RING,Rectangular	
1	121340		CUM 3328740	RING,Rectangular	CUM 3819751
1	121344		CUM 3028295	RING,Rectangular	
2	121296		CUM 3032850	O-RING	
2	121299		CUM 3102802	O-RING(M11/ISM)	
2	121300		CUM 3163713	O-RING	
2	121301		CUM 3163714	O-RING	
2	121302		CUM 3163715	O-RING	
2	**121387**		**CUM 145583**	**O-RING(QSM)**	**CUM 3349417**
2	**121388**		**CUM 145582**	**O-RING**	**CUM 3349504**
2	**121389**		**CUM 4019274**	**O-RING**	**CUM 3349744**
2	**121420**		**CUM 4019275**	**O-RING**	**CUM 3349503**
3	131616		CUM 3028196	GASKET,Transfer	
4	131620		CUM 3027718	GASKET,Fan Clutch Housing	
5	131702		CUM 3063053	GASKET,Pump Fuel Injector(L10/M11/K)	CUM 3053805
6	**131900**		**CUM 3102392**	**GASKET,EGR(M11, ISM)**	**CUM 3102933**
7	131623		CUM 3025130	GASKET,Cover,Pump	
8	131619		CUM 3818847	GASKET,Pump,Hydraulic	CUM 3027641
9	131618		CUM 3031007	GASKET,Starter Mount (For M11/ISM Wet Clutch)	CUM 114123
10	131629		CUM 3102361	GASKET,Air	
11	131624		CUM 3882536	GASKET,Connection	
11	**131887**		**CUM 3349541**	**GASKET,Connection(Intercooler)**	
12	**050547**		**CUM 129859**	**FITTING,Elbow**	
13	**132023**		**N/A**	**KIT,Gasket Cooler(EGR)**	
14	**131955**		**CUM 3103077**	**GASKET,EGR Valve(ISM)**	

PAI Copyright 2017

http:// www.paiindustries.com

GENUINE PAI®

WORLD TESTED • PERFORMANCE PROVEN

Online Login/Registration



1

PAI HOMEPAGE

Customer "Login" and "Register" links are located to the upper right corner of our homepage. Select Login if you have already registered *(Skip to Step 4)*. To register, select the "Register" link which will take you to PAI's registration form.



2

PAI ONLINE REGISTRATION FORM

Fill in all required fields of the registration form. After the form is completed, read our Terms and Conditions then click "Sign-Up". A confirmation "Thank You" page will appear once all required fields are filled in. (* Required Fields)

3

CONFIRMATION EMAIL

A confirmation email will be sent to the email address provided. This email will include your new PAI "Username" and "Password".

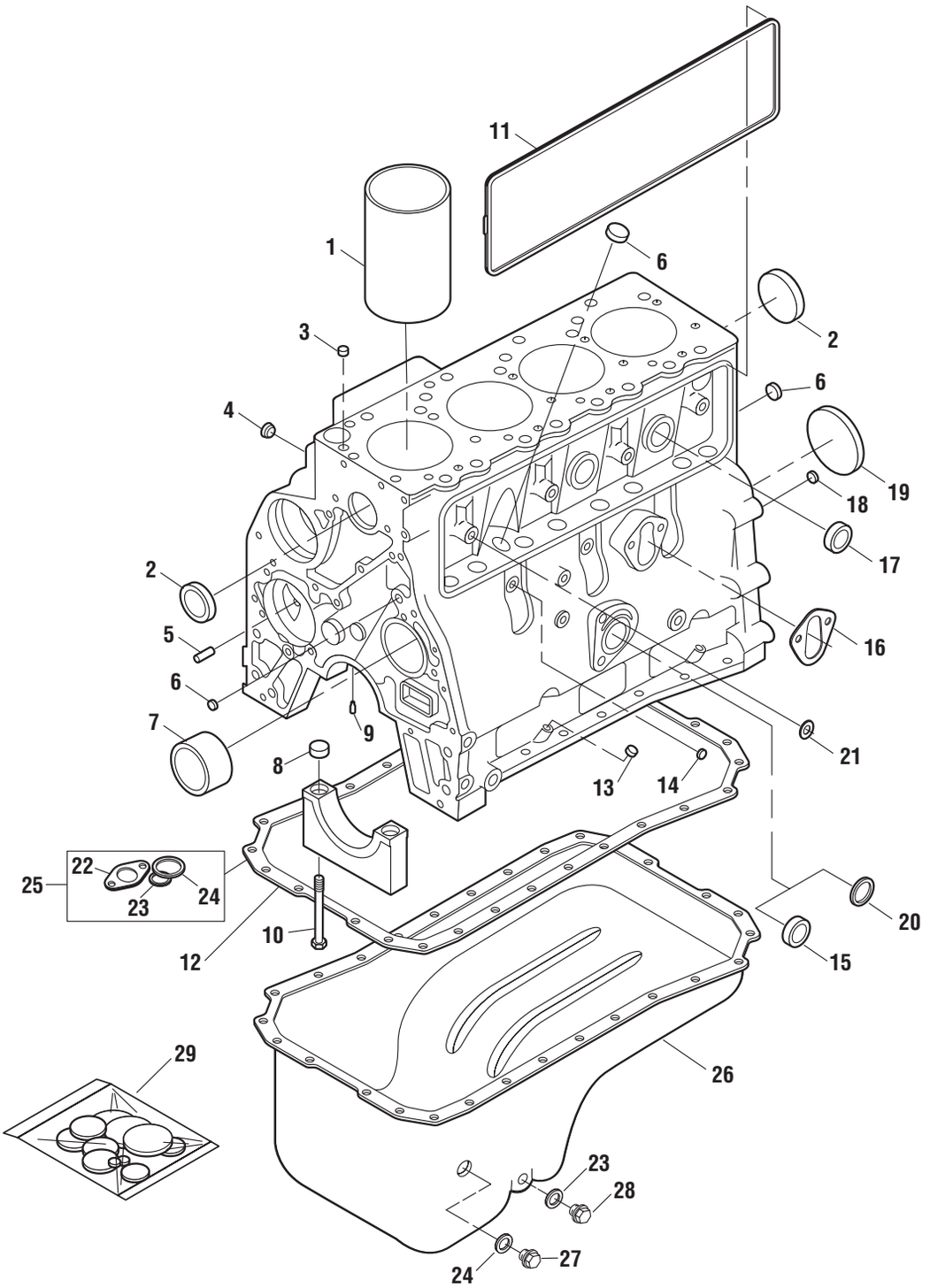


4

PAI SECURE LOGIN PAGE

To login, use the "Existing Member" box and enter your PAI "Username" and "Password" then click "Sign-In".

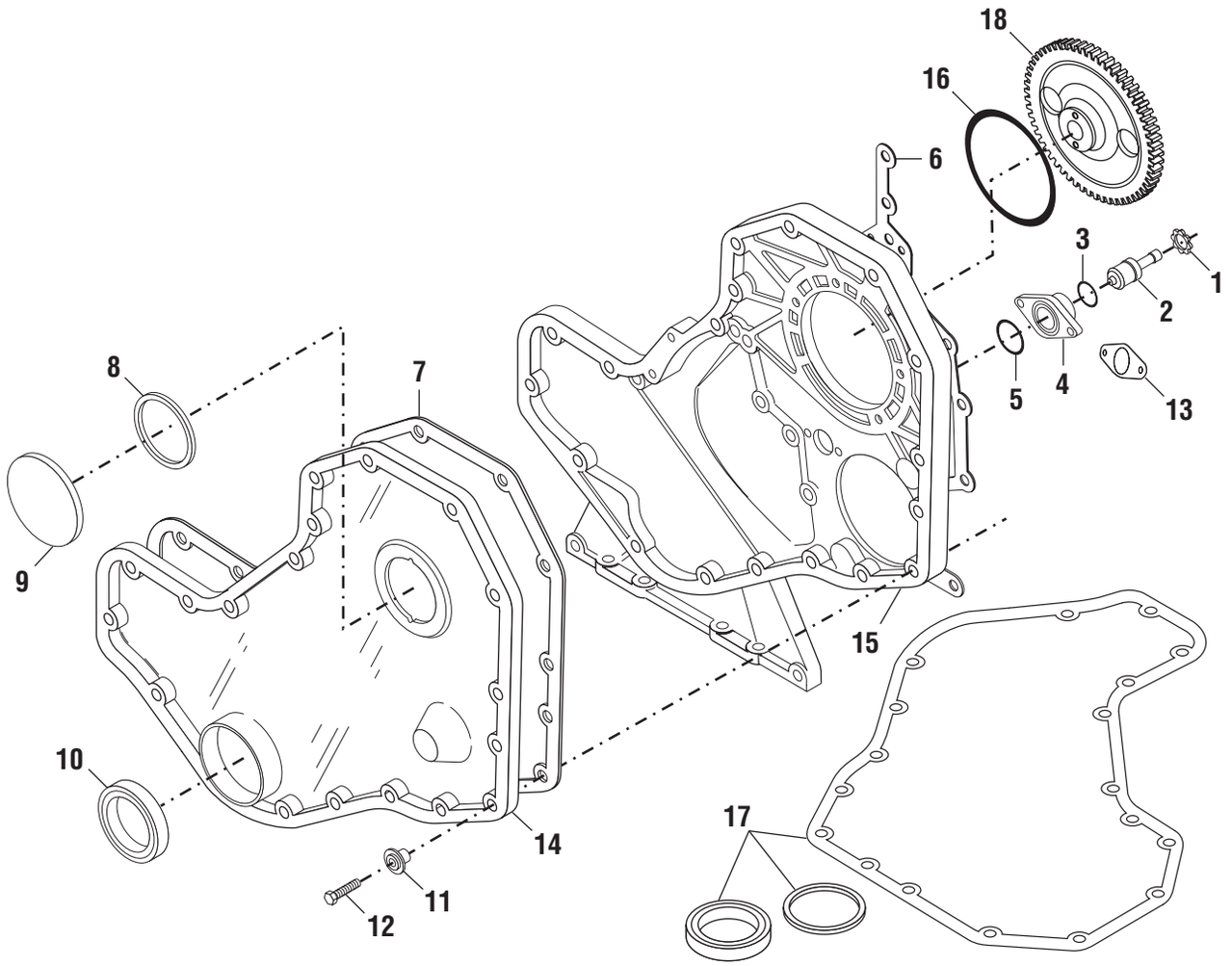
FIGURE 6100



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	161630		CUM 3904166	SLEEVE,Repair	
2	040093		CUM 3922072	PLUG,Expansion	
3	**045067**		**CUM 3902343**	**RING,Dowel**	
4	EPP-3575		MAK 49AX234Z	PLUG,Pipe	CUM 3008468
5	**045066**		**CUM 3900257**	**PIN,Dowel**	
6	040084		CUM 3900956	PLUG,Expansion	
7	151508		CUM 3901306	BEARING,Cam(#1 Only)	
7	151528		CUM 3940059	BEARING,Cam(Storm Block)	
7	151555		CUM 3904369	BEARING,Cam(Oversize)(#1) (Early Block Only)	
7	151556		CUM 3903242	BEARING,Cam(Oversize)(#2-5) (Early Block Only)	
8	Call		CUM 3900068	RING,Dowel	
9	045032		CUM 3901020	NOZZLE,Piston Cooling	
10	040038		CUM 3904217	BOLT,Main Cap(M14 x 2.00 x 119)	
10	**040133**		**CUM 3927948**	**BOLT,Main Cap(M12 x 1.50 x 119)**	
10	**040145**		**CUM 3907860**	**BOLT,Flanged Hex Head(M8 x 1.25 x 25)**	
11	131549		CUM 3283767	GASKET,Side Cover	
12	131403		CUM 3911535	GASKET,Oil Pan	
13	040089		CUM 3007632	PLUG,Expansion	
14	EPP-3573		MAK 49AX230	PLUG,Pipe	CUM 3906619
15	GCP-3495		MAK 79AX71	PLUG,Expansion	CUM 3900958
16	131532		CUM 3939258	GASKET,Fuel Pump	
17	040086		CUM 3007635	PLUG,Expansion	CUM 3900957
18	Call		CUM 3900068	RING,Dowel	
19	040090		CUM 3900687	PLUG,Expansion Cam	
20	121268		CUM 3906696	O-RING,Rectangular	
21	136069		CUM 3928759	SEAL,Side Cover (Current)	
21	431215		NAV 677692C2	SEAL,Side Cover (Early)	CUM 3900267
22	131446		CUM 3931349	GASKET,Oil Pickup Tube	
23	136071		CUM 3920773	SEAL,Drain	
24	136057		CUM 3902425	SEAL,Oil Pan	
25	131611		N/A	KIT,Pan Gasket Includes Gaskets (1)131403 (1)131446 Seals (1)136071 (1)136057	
26	**141287**		**CUM 3901049**	**PAN,Oil**	
27	**042026**		**CUM 3924148**	**PLUG,Drain(M22 x 1.50 x 14)**	
28	**042024**		**CUM 3924147**	**PLUG,Drain(M18 x 1.25 x 20)**	
29	**040095**		**N/A**	**KIT,Block Plug Includes Plugs (4)040093 (2)040086 (3)040084 (2)GCP-3484 (1)040090 (1)040089 (1)GCP-3495**	

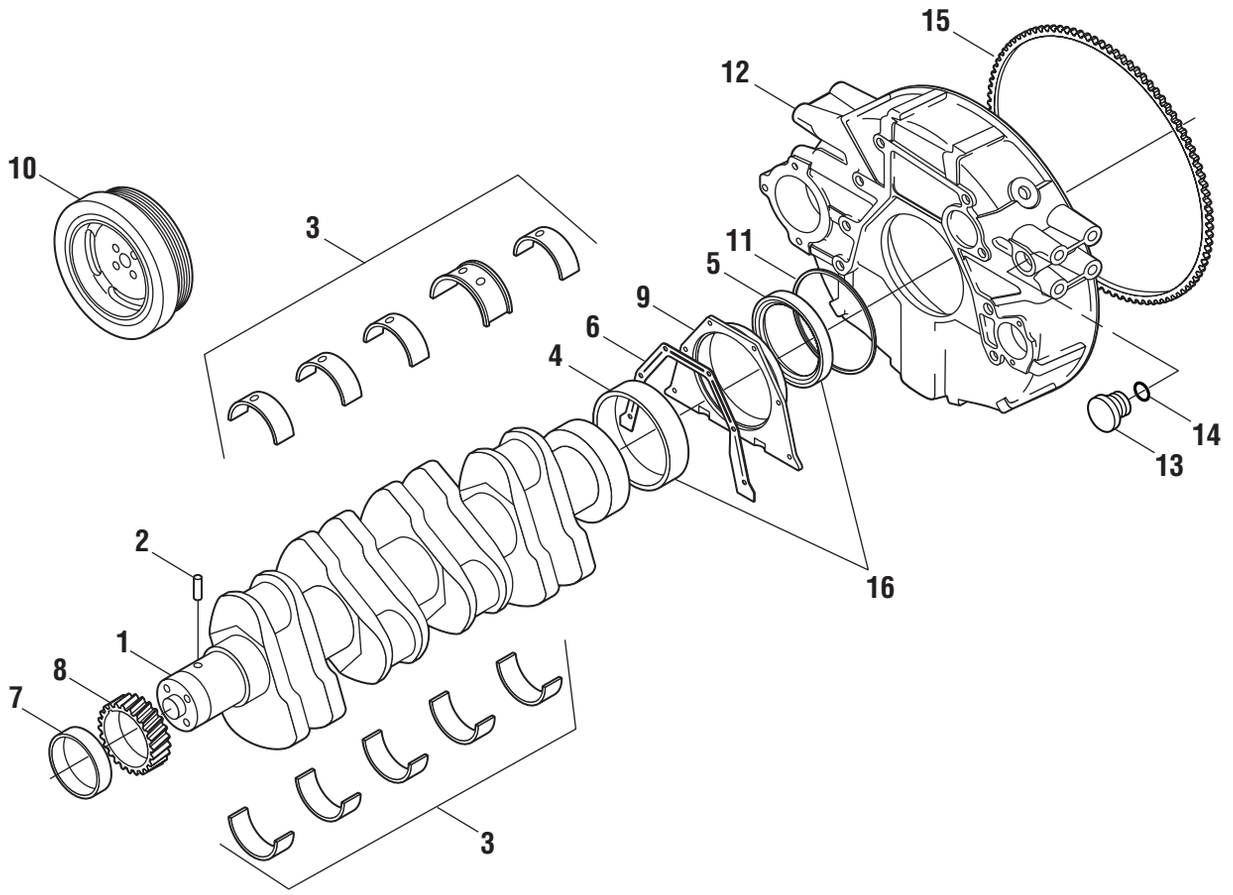
FIGURE 6101



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042064		CUM 3904849	RING,Retaining	CUM 3902628, CUM 3903925
2	042013		CUM 3903924	PIN,Timing	CUM 3902627
3	121244		CUM 3913994	O-RING	
4	Call		CUM 3905933	HOUSING,Timing Pin	
5	121266		CUM 3915772	RING,Rectangular Retaining	
6	131440		CUM 3931351	GASKET,Gear Housing	CUM 3914384
7	131441		CUM 3914385	GASKET,Gear Cover(Rotary Pump)	
7	131481		CUM 3918673	GASKET,Gear Cover(Inline Pump)	
8	136030		CUM 3903475	RING,Rectangular Retaining	
9	042018		CUM 3903463	COVER,Access	
10	136084		CUM 3802820	SEAL,Front(Current) (w/ Heavy Wear Ring)	
10	136105		CUM 3937111	SEAL,Front(Use w/ Wear Ring 136035 or Can be used w/o Wear Ring)	
11	042045		CUM 3912772	RETAINER,Belt	
12	Call		CUM 3901446	SCREW,Cap	
13	131534		CUM 3905595	GASKET,Timing Housing	
14	060091		CUM 3923898	COVER,Gear(Inline Pump)	
14	060093		CUM 3903794	COVER,Gear(Engines w/o Mechanical Tach.)	CUM 3286312
15	060090		CUM 3936256	HOUSING,Gear(Inline Pump)	
16	**121415**		**CUM 3969698**	**O-RING,Internal Dampening**	
17	**131724**		**N/A**	**SET,Gear Cover Gasket Includes Gasket (1)131481 Seal Kit (1)136084 Seal (1)13603018**	
18	**180130**		**CUM 3931380**	**GEAR,Fuel Pump**	**CUM 3923578**

PAI Copyright 2017

FIGURE 6102



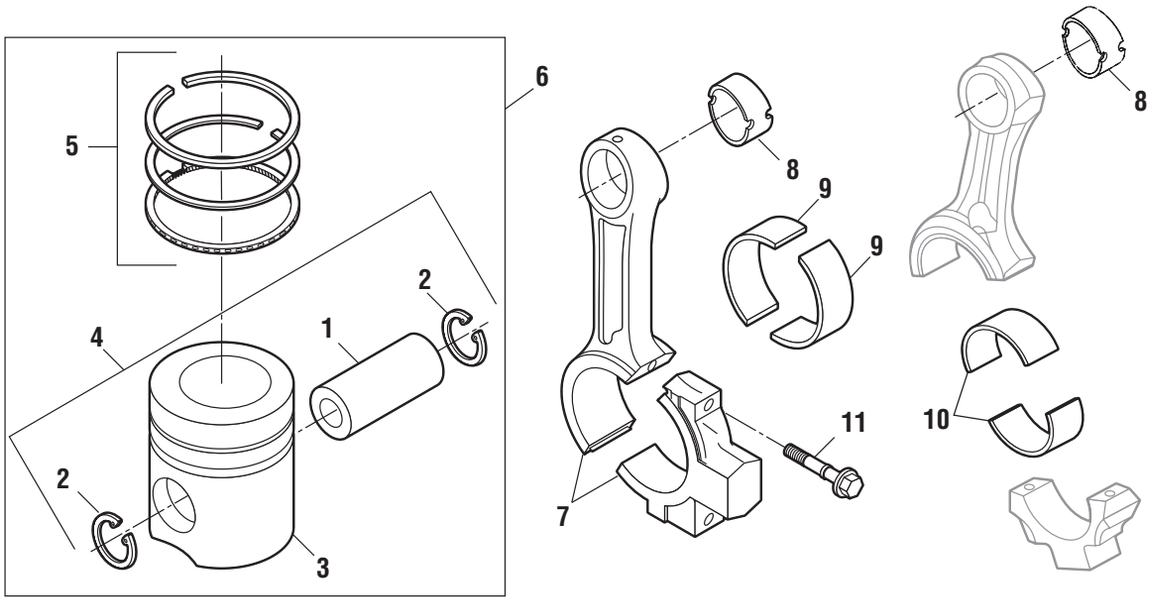
Please note:

*** For Front Seal, please see Gear Cover on previous page.**

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171736		CUM 3929036	CRANKSHAFT(w/o Gear)	CUM 3907803
1	171737		CUM 3908031	CRANKSHAFT(w/ Gear)	
2	171717		CUM 3904483	PIN,Dowel(M6 x 8)	
3	171806		CUM 3802010	KIT,Main Bearing(STD) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
3	171807		CUM 3802011	KIT,Main Bearing(.010in/.25mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
3	171808		CUM 3802012	KIT,Main Bearing(.020in/.50mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
3	171809		CUM 3802013	KIT,Main Bearing(.030in/.75mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
3	171810		CUM 3802014	KIT,Main Bearing(.040in/1.00mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
4	136040		CUM 3906081	RING,Wear(Speedi-Sleeve) (Use w/ Seal 136026)	
4	136128		CUM 3925532	RING,Wear(Heavy Sleeve) (Use w/ Seal 136127)	
5	136026		CUM 3909410	SEAL,Rear Crankshaft(Dry Only)(Speedi-Sleeve) (Use w/ Wear Ring 136040 or Kit 136116)	
5	136127		CUM 3925530	SEAL,Rear Crankshaft(Heavy Sleeve) (Use w/ Wear Ring 136128 or Kit 136126)	
5	**136158**		**CUM 5259499**	**SEAL,Rear Crankshaft(Dry Seal)**	
6	131463		CUM 3938159	GASKET,Rear Cover	CUM 3928493
7	136035		CUM 3906080	RING,Wear(Front Crankshaft) (Use w/ Seal 136105)(Thin)	
7	136099		CUM 3922599	RING,Wear(Front Crankshaft)(Thick)	
8	171716		CUM 3929027	GEAR,Crankshaft	
9	060101		CUM 3921043	COVER,Rear Seal	
10	202021		CUM 3914454	DAMPER	
11	136031		CUM 3912473	O-RING	
12	060000		CUM 3931716	HOUSING,Flywheel	
13	042019		CUM 3910248	PLUG	CUM 3904470
14	121233		CUM 3058653	SEAL	
15	060071		CUM 3901774	GEAR,Flywheel	
16	136116		CUM 3927683	KIT,Seal(Rear)(Speedi-Sleeve) Includes Seal (1)136026 Wear Ring (1)136040	
16	136126		CUM 3926126	KIT,Seal(Rear)(Heavy Wear Sleeve) Includes Seal (1)136127 Wear Ring (1)136128	

FIGURE 6103



Straight Cut Rod **Fractured Rod**

Please note:
*** To ensure correct parts for application, please have CPL and Engine Serial number available.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111208		CUM 3901793	PIN,Piston(Short 2-31/32in)	
1	111213		CUM 3934047	PIN,Piston(Long 3-1/4in)	
2	111209		CUM 3901706	RETAINER,Piston Pin	
3	111215		CUM 3906223	PISTON(STD)(17.3:1 CR)	
3	111210		CUM 3906209	PISTON(.020in/.50mm)(17.3:1 CR)	
3	111205		CUM 3906208	PISTON(.040in/1.00mm)(17.3:1 CR)	
3	111220		CUM 3907156	PISTON(STD)(16.5:1 CR)	
3	111225		CUM 3907157	PISTON(.020in/.50mm)(16.5:1 CR)	
3	111230		CUM 3907158	PISTON(.040in/1.00mm)(16.5:1 CR)	
3	111235		CUM 3907163	PISTON(STD)(17.5:1 CR)	
3	111240		CUM 3908815	PISTON(.020in/.50mm)(17.5:1 CR)	
3	111245		CUM 3908816	PISTON(.040in/1.00mm)(17.5:1 CR)	
3	111310		CUM 3919041	PISTON(STD)	
3	111313		CUM 3919044	PISTON(.020in/.50mm)	CUM 3926634, CUM 3928674
3	111316		CUM 3919045	PISTON(.040in/1.00mm)	
3	111341		CUM 3921880	PISTON(STD)	
3	111344		CUM 3921882	PISTON(.020in/.50mm)	
3	111347		CUM 3921881	PISTON(.040in/1.00mm)	
3	111395		CUM 3930187	PISTON(STD)	
3	111397		CUM 3930188	PISTON(.020in/.50mm)	
3	111399		CUM 3930189	PISTON(.040in/1.00mm)	
3	111422		CUM 3926631	PISTON(STD)	
3	111426		CUM 3926634	PISTON(.020in/.50mm)	
3	111430		CUM 3926635	PISTON(.040in/1.00mm)	
4	111206		N/A	KIT,Piston(1.00mm) Includes Piston (1)111205 Pin (1)111208 Retainers (2)111209	
4	111211		N/A	KIT,Piston(.50mm) Includes Piston (1)111210 Pin (1)111208 Retainers (2)111209	
4	111216		N/A	KIT,Piston(STD) Includes Piston (1)111215 Pin (1)111208 Retainers (2)111209	

 PAI Copyright 2017

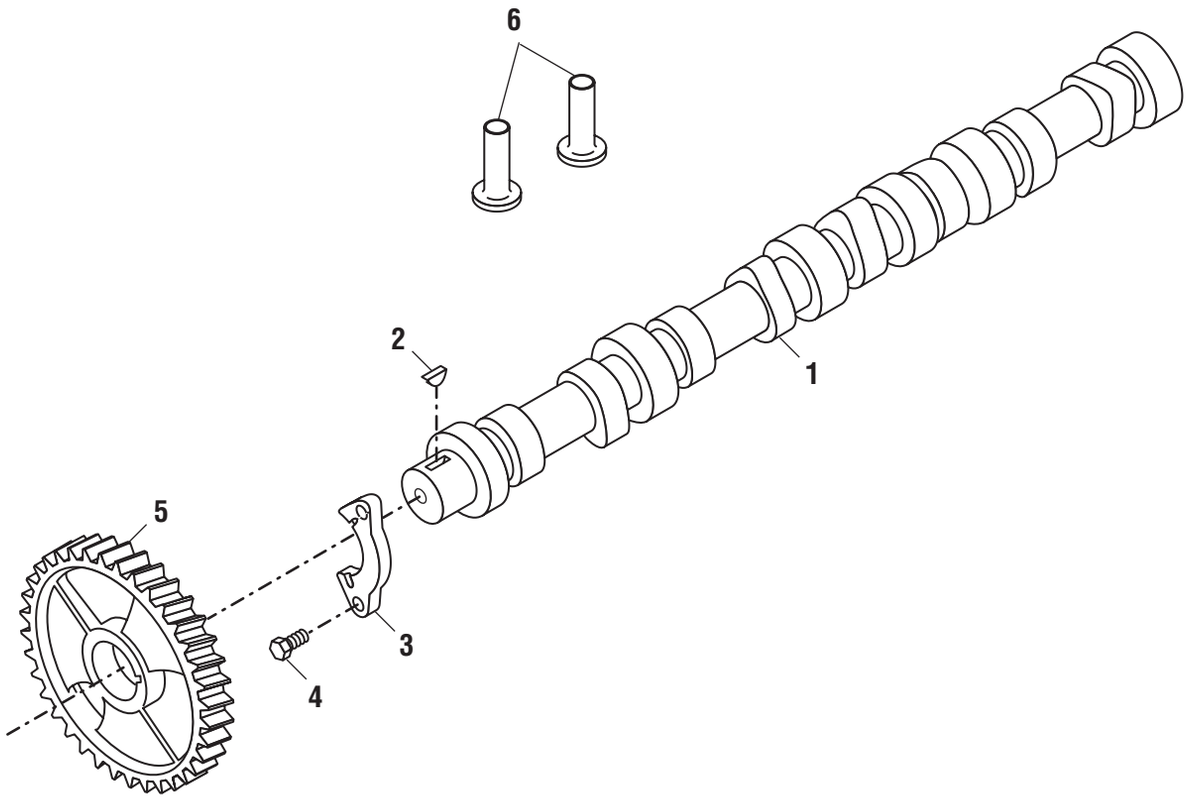
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
4	111221		N/A	KIT,Piston(STD) Includes Piston (1)111220 Pin (1)111208 Retainers (2)111209	
4	111226		N/A	KIT,Piston(.50mm) Includes Piston (1)111225 Pin (1)111208 Retainers (2)111209	
4	111231		N/A	KIT,Piston(1.00mm) Includes Piston (1)111230 Pin (1)111208 Retainers (2)111209	
4	111236		N/A	KIT,Piston(STD) Includes Piston (1)111235 Pin (1)111208 Retainers (2)111209	
4	111241		N/A	KIT,Piston(.50mm) Includes Piston (1)111240 Pin (1)111208 Retainers (2)111209	
4	111246		N/A	KIT,Piston(1.00mm) Includes Piston (1)111245 Pin (1)111208 Retainers (2)111209	
4	111311		N/A	KIT,Piston(STD) Includes Piston (1)111310 Pin (1)111213 Retainers (2)111209	
4	111314		N/A	KIT,Piston(.50mm) Includes Piston (1)111313 Pin (1)111213 Retainers (2)111209	
4	111317		N/A	KIT,Piston(1.00mm) Includes Piston (1)111316 Pin (1)111213 Retainers (2)111209	
4	111342		N/A	KIT,Piston(STD) Includes Piston (1)111341 Pin (1)111213 Retainers (2)111209	
4	111345		N/A	KIT,Piston(.50mm) Includes Piston (1)111344 Pin (1)111213 Retainers (2)111209	
4	111348		N/A	KIT,Piston(1.00mm) Includes Piston (1)111347 Pin (1)111213 Retainers (2)111209	
4	111423		N/A	KIT,Piston(STD) Includes Piston (1)111422 Retainers (2)111209 Pin (1)111213	
4	111427		N/A	KIT,Piston(.020in/.50mm) Includes Piston (1)111426 Retainers (2)111209 Pin (1)111213	
4	111431		N/A	KIT,Piston(.040in/1.00mm) Includes Piston (1)111430 Retainers (2)111209 Pin (1)111213	
5	505075		CUM 3802750	SET,Ring(STD)(Double Keystone)	
5	505076		CUM 3802863	SET,Ring(.020in/.50mm)(Double Keystone)	
5	505077		CUM 3802864	SET,Ring(.040in/1.00mm)(Double Keystone)	
5	505080		CUM 3802230	SET,Ring(STD)(Turbo Engine)	
5	505081		CUM 3802232	SET,Ring(.020in/.50mm)(Turbo Engine)	
5	505082		CUM 3802234	SET,Ring(.040in/1.00mm)(Turbo Engine)	
5	505083		CUM 3802040	SET,Ring(STD)(Non-Turbo Engine)	
5	505084		CUM 3802042	SET,Ring(.020/.50mm)(Non-Turbo Engine)	
5	505085		CUM 3802044	SET,Ring(.040in/1.00mm)(Non-Turbo Engine)	
5	505154		CUM 3802951	SET,Ring(STD)	CUM 3802790
5	505160		CUM 4955251	SET,Ring(STD)	
6	111217		CUM 3802060	KIT,Piston(STD) Includes Piston (1)111215 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505083	
6	111212		CUM 3802062	KIT,Piston(.020in/.50mm) Includes Piston (1)111210 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505084	
6	111207		CUM 3802064	KIT,Piston(.040in/1.00mm) Includes Piston (1)111205 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505085	

Keys 6-11 are on the following page.

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
6	111222		CUM 3802100	KIT,Piston(STD) Includes Piston (1)111220 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505080	
6	111227		CUM 3802102	KIT,Piston(.020in/.50mm) Includes Piston (1)111225 Retaining Rings (2)111209 Pin (1)111208 ring Set (1)505081	
6	111232		CUM 3802104	KIT,Piston(.040in/1.00mm) Includes Piston (1)111230 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505082	
6	111237		CUM 3802160	KIT,Piston(STD) Includes Piston (1)111235 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505080	
6	111242		CUM 3802132	KIT,Piston(.020in/.50mm) Includes Piston (1)111240 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505081	
6	111247		CUM 3802134	KIT,Piston(.040in/1.00mm) Includes Piston (1)111245 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505082	
6	111312		CUM 3802248	KIT,Piston(STD) Includes Piston (1)111310 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505080	
6	111315		CUM 3802249	KIT,Piston(.020in/.50mm) Includes Piston (1)111313 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505081	
6	111318		CUM 3802250	KIT,Piston(.040in/1.00mm) Includes Piston (1)111316 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505082	
6	111343		CUM 3802773	KIT,Piston(STD) Includes Piston (1)111341 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505083	
6	111346		CUM 3802776	KIT,Piston(.020in/.50mm) Includes Piston (1)111344 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505084	
6	111349		CUM 3802775	KIT,Piston(.040in/1.00mm) Includes Piston (1)111347 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505085	
6	111396		CUM 3802757	KIT,Piston(STD) Includes Piston (1)111395 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505075	
6	111398		CUM 3802758	KIT,Piston(.020in/.50mm) Includes Piston (1)111397 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505076	
6	111400		CUM 3802759	KIT,Piston(.040in/1.00mm) Includes Piston (1)111399 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505077	
6	111424		CUM 3802561	KIT,Piston(STD) Includes Piston Kit (1)111423 Ring Set (1)505080	
6	111428		CUM 3802564	KIT,Piston(.020in/.50mm) Includes Piston Kit (1)111427 Ring Set (1)505081	
6	111432		CUM 3802565	KIT,Piston(.040in/1.00mm) Includes Piston Kit (1)111431 Ring Set (1)505082	
7	171631		CUM 3942581	ROD,Connecting(Straight Cut)	
8	151514		CUM 3901085	BUSHING,Rod	CUM 4891178
9	171801		CUM 3901170	BEARING,Shell(STD)	*Straight Cut Rod Bearing Shells are identical and can be installed in upper or lower postions.
9	171802		CUM 3901171	BEARING,Shell(.010in/.25mm)	
9	171803		CUM 3901172	BEARING,Shell(.020in/.50mm)	
9	171804		CUM 3901173	BEARING,Shell(.030in/.75mm)	
9	171805		CUM 3901174	BEARING,Shell(.040in/1.00mm)	
10	171952		N/A	KIT,Rod Bearing(STD)(Fractured Rod)	*Fractured Rod Bearing kits contain different upper and lower Shells that are not interchangeable.
10	171955		N/A	KIT,Rod Bearing(.010in/.25mm)(Fractured Rod)	
10	171958		N/A	KIT,Rod Bearing(.020in/.50mm)(Fractured Rod)	
10	171961		N/A	KIT,Rod Bearing(.030in/.75mm)(Fractured Rod)	
10	171964		N/A	KIT,Rod Bearing(.040in/1.00mm)(Fractured Rod)	
11	040035		CUM 3900919	BOLT,Connecting Rod	

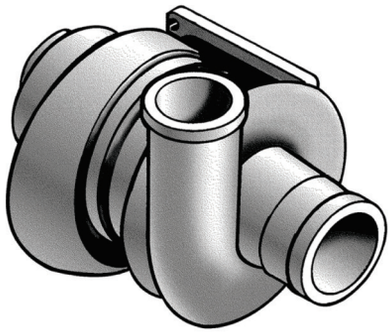
PAI Copyright 2017

FIGURE 6104



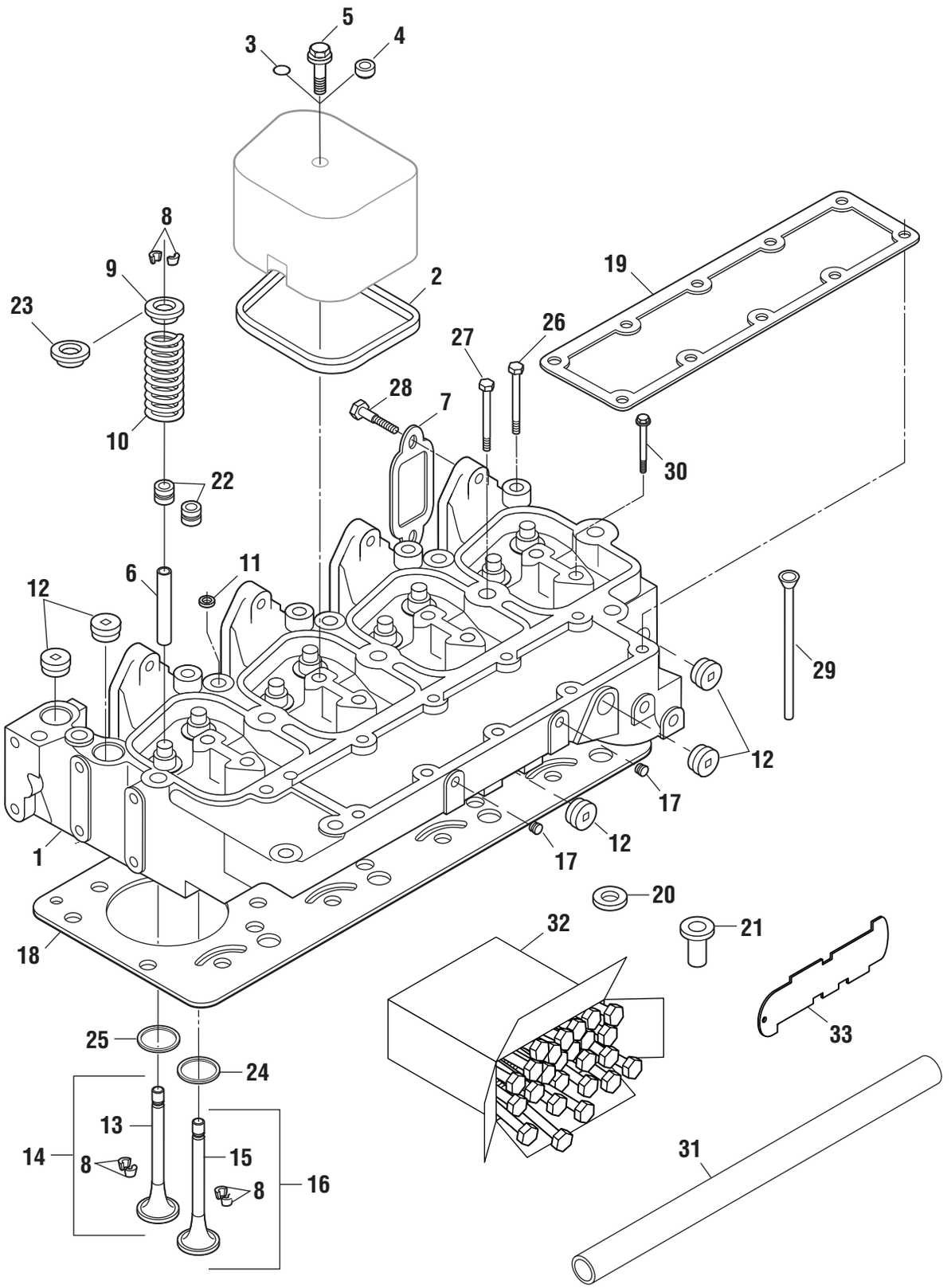
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	191898		CUM 3929885	CAMSHAFT	CUM 3929038
1	191914	191914E	CUM 3929039	CAMSHAFT	CUM 3925582, CUM 3914638
2	191830		CUM 3902332	KEY,Camshaft	
3	151527		CUM 3927155	SUPPORT	
4	**040075**		**CUM 3900227**	**SCREW,Camshaft**	
5	Call		CUM 3907431	GEAR,Camshaft	
6	191860	191860E	CUM 3925031	TAPPET	CUM 3931623

Turbochargers



Please see pages 304-306 for all B Series Turbochargers by CPL.

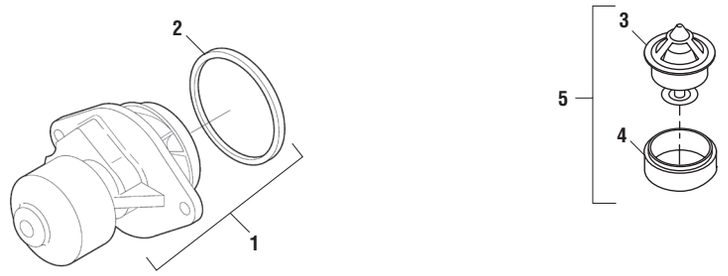
FIGURE 6105



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	060165		CUM 3920611	ASSEMBLY,Cylinder Head(2 VH) (w/ 7mm Injector holes)	CUM 3913389
2	131419		CUM 3902666	GASKET,Rocker Cover(Silicone)(2 VH)	
3		EF30130	FUL 13653	O-RING,Rocker Bolt Cover	CUM 3910824
4	136041		CUM 3935449	SEAL,Isolator(Rocker Cover)	
5	Call		CUM 3907049	SCREW,Valve Cover	
6	192039	**192039E**	CUM 3904408	GUIDE,Valve(60.50mm Lg)(Intake)(2 VH) **(Finished)**	
6	192040	**192040E**	CUM 3904409	GUIDE,Valve(51.75mm Lg)(Exhaust)(2 VH)**(Semi-Finished)**	
6	192041	**192041E**	CUM 3906206	GUIDE,Valve(Thin Wall)**(Finished)** (Intake and Exhaust)(2 VH)	
7	131467		CUM 3927154	GASKET,Exhaust Manifold	
7	131600		CUM 3929881	GASKET,Exhaust Manifold(Late)	
8	192022		CUM 3900250	COLLET	
9	192059		CUM 3900299	RETAINER,Valve Spring	
10	192054		CUM 3900276	SPRING,Valve(2 VH)	
10	192128		CUM 3926700	SPRING,Valve(2 VH - 36 psi)	
10	**192135**		**CUM 3932453**	**SPRING,Valve(2 VH)**	
10	**192184**		**CUM 3925667**	**SPRING,Valve(Natural Gas)**	
11	ECP-3485		MAK 79AX63	PLUG,Expansion	CUM 3902606
12	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
13	191968	**191968E**	CUM 3920868	VALVE,Exhaust(2 VH)	CUM 3901607
13	**192213**		**CUM 3922714**	**VALVE,Exhaust(Natural Gas)**	
14	191970		CUM 3802356	KIT,Exhaust Valve(2 VH) Includes Exhaust Valve (1)191968 Collets (2)192022	CUM 3802006
14	**192214**		**CUM 3802659**	**KIT,Exhaust Valve(Natural Gas) Includes Exhaust Valve (1)192213 Collets (2)192022**	
15	191980	**191980E**	CUM 3920867	VALVE,Intake(2 VH)	CUM 3901117
15	**192219**		**CUM 3922713**	**VALVE,Intake(Natural Gas)**	
16	191983		CUM 3802355	KIT,Intake Valve(2 VH) Includes Intake Valve (1)191980 Collets (2)192022	CUM 3802005
16	**192220**		**CUM 3802658**	**KIT,Intake Valve(Natural Gas) Includes Intake Valve (1)192219 Collets (2)192022**	
17	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3008465
18	131417		CUM 3283333	GASKET,Head(STD)(2 VH)	CUM 3921394
18	131577		CUM 3283336	GASKET,Head(.25mm OS)(2 VH)	
19	131448		CUM 3931605	GASKET,Intake	
20	042092		CUM 3906659	SEAL,Injector(For 7mm Head)(1.6mm)	
20	042093		CUM 3923261	SEAL,Injector(For 7mm Head)(2.45mm)	
20	042094		CUM 3930324	SEAL,Injector(For 7mm Head)(.55mm)	
21	042081		CUM 3919358	SLEEVE,Copper(For 9mm Head)	
22	192005		CUM 3921640	SEAL,Valve Stem(Red)	
23	192101		CUM 3957914	ROTATOR,Valve(ISB Engine)	
24	192015	**192015E**	CUM 3904105	INSERT,Exhaust(2 VH)	
24	**192225**		**CUM 3922716**	**INSERT,Exhaust(STD-Natural Gas)**	**CUM 3395612**
25	192003	**192003E**	CUM 3906854	INSERT,Intake(2 VH)	
25	**192221**		**CUM 3922715**	**INSERT,Intake(STD-Natural Gas)**	**CUM 3020211**
26	040045		CUM 3920779	BOLT,Cylinder Head(4 req) (M12 x 1.75 x 70mm)	CUM 3900046, CUM 3903938
27	040046		CUM 3920780	BOLT,Cylinder Head(10 req) (M12 x 1.75 x 120mm)	CUM 3901220
28	040028		CUM 3901448	SCREW,Exhaust Manifold	
28	**040146**		**CUM 3930249**	**SCREW(10M x 1.5 x 65 Hex-Head w/ Flange) (Stainless)(Carbon)**	
29	192122		CUM 3284377	PUSHROD(Intake & Exhaust)(2 VH)	CUM 3901898
30	040050		CUM 3920781	BOLT,Cylinder Head(4 req) (M12 x 1.75 x 180mm)	
31	045081		CUM 3918614	HOSE,Breather(17in x 3/4in)	CUM 3908049
32	040073		N/A	KIT,Cylinder Head Bolts Includes Bolts (4)040045 (10)040046 (4)040050	
33	042025		CUM 3823921	GAUGE,Head Bolt	

FIGURE 6106

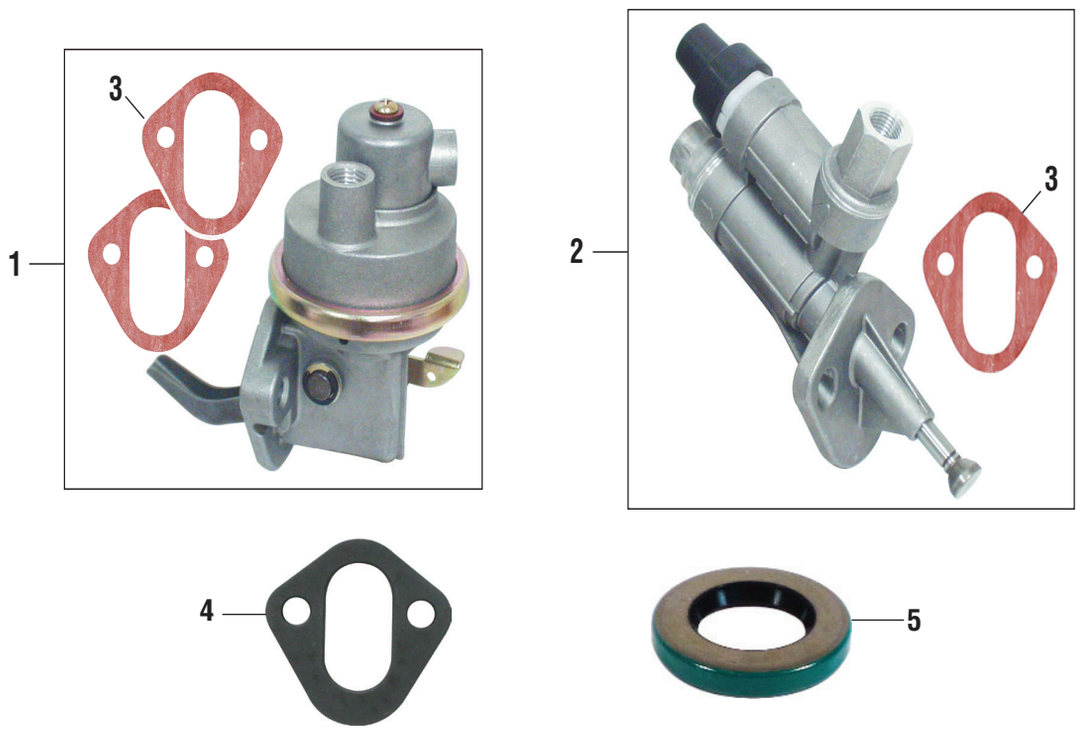


***Note: Please have Engine Serial number for correct Thermostat.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181815		CUM 3802970	KIT,Water Pump(Hardened Pulley)(2VH)	
2	121258		CUM 3906698	O-RING,Rectangular	
3	181843	181843E	CUM 3917324	THERMOSTAT (Used in Kit 181844)	
4	136028		CUM 3923331	SEAL,Thermostat	
5	181844		CUM 3802968	KIT,Thermostat Includes Thermostat (1)181843 Seal (1)136028	

Fuel Transfer Pumps

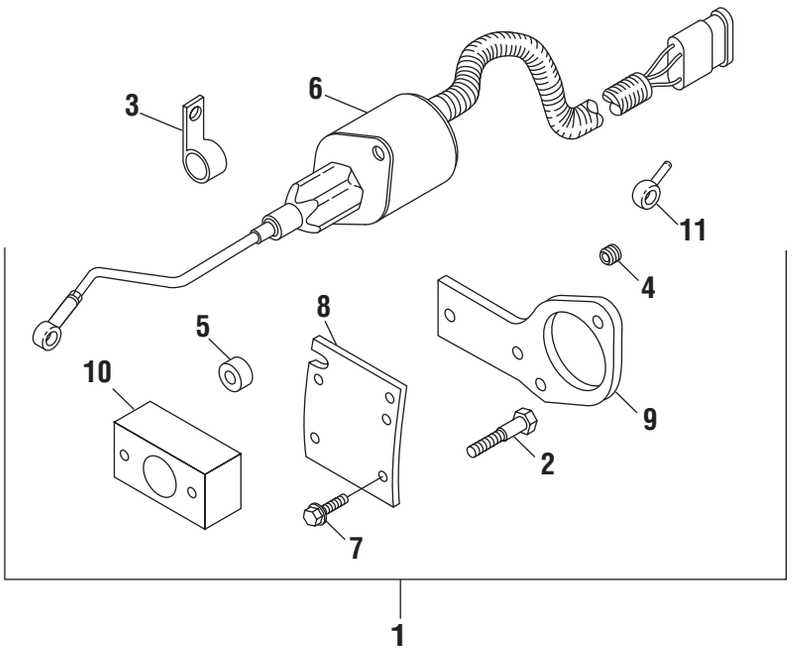
FIGURE 6107



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180102		CUM 3928143	PUMP,Fuel Transfer(w/ Primer) Includes Gasket (2)131532	
1	**180108**		**CUM 4988769**	**PUMP,Fuel Transfer**	**CUM 3928144**
2	180103		CUM 3918076	PUMP,Fuel Transfer Includes Gasket (1)131532	
3	131532		CUM 3939258	GASKET	
4	**180121**		**CUM 3914284**	**SPACER,Fuel Pump**	
5	**136138**		**CUM 3062676**	**SEAL,Fuel Pump**	**CUM 3045173**

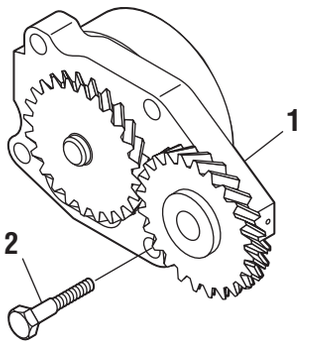
PAI Copyright 2017

FIGURE 6116



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180221		CUM 3800687	SOLENOID Assembly Includes Solenoid (1)180217 Brackets (1)180251 (1)180252 (1)180253 Clamp (1)121125 Fitting (1)042171 Seal (2)136103 Spacer (1)040140 Screws (1)040079 (2)040080 (4)040077 Nuts (3)FNU-0436	
2	040080		CUM 3901937	SCREW(M6 x 1.00 x 45mm)	
3	121125		CUM 3907741	CLAMP	
4	FNU-0436		MAK 154AM5001	NUT,Lock	CUM 3910959
5	040140		CUM 3933393	SPACER	
6	180217		CUM 3935458	SOLENOID,Shutoff	
7	040077		CUM 3936683	SCREW	
8	180251		CUM 3937234	BRACKET,Solenoid	
9	180252		CUM 3937235	BRACKET,Solenoid	CUM 3935802
10	180253		CUM 3937236	BRACKET,Solenoid	
11	042171		CUM 3911447	FITTING,Banjo	CUM 3355095

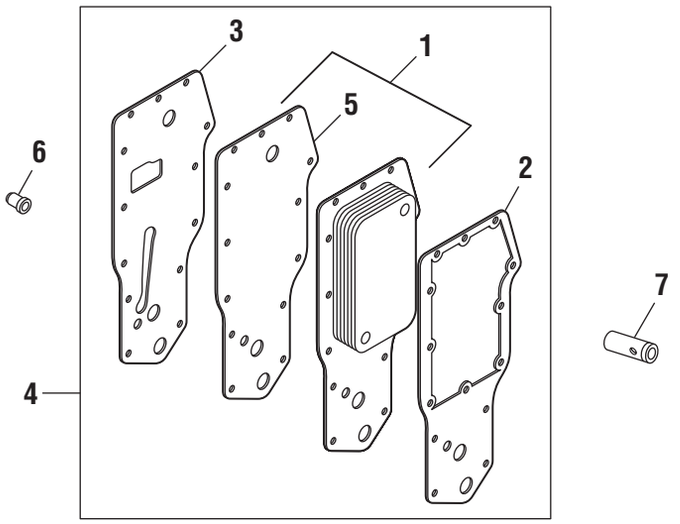
FIGURE 6108



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141298		CUM 3937027	PUMP,Lube	
2	040049		CUM 3900677	SCREW(M8 x 1.25 x 30)	

Oil Cooler

FIGURE 6109



***Note: Please have Engine Serial number for correct Gasket or order 141416 (key 4) for Oil Cooler and all applicable gaskets.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141421		CUM 3957543	COOLER,Oil	
2	131443		CUM 3942914	GASKET,Oil Cooler Mounting	CUM 3926760
3	131536		CUM 3942915	GASKET,Oil Cooler Mounting	
4	141416		N/A	KIT,Oil Cooler Includes Oil Cooler (1)141421 Gaskets (1)131443 (1)131536	
5	131445		CUM 3929792	GASKET,Oil Cooler Mounting	
6	141433		CUM 3936365	VALVE,Pressure Relief	CUM 3927622
7	**141434**		**CUM 3918428**	**PLUNGER,Relief**	**CUM 3909376**

PAI Copyright 2017

Upper Gasket Sets

FIGURE 6112

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131401		CUM 3804896	SET,Upper Gasket(2VH)	
1	131602		CUM 4089648	SET,Upper Gasket(w/Top Hat Valve Seal 2VH)	
1	131613		CUM 3802362	SET,Upper Gasket(2VH Early) (w/ .25mm OS Head Gasket)	CUM 3802017, CUM 3802241

Lower Gasket Sets

FIGURE 6113

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131402		CUM 3802375	SET,Lower Gasket(2VH)	

Miscellaneous Gaskets

FIGURE 6114

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131461		CUM 3931607	GASKET,Fuel Injection Mounting(VE Pump)	
2	131444		CUM 3008400	GASKET,Compressor Drive Hydraulic Pump Mounting	
3	131446		CUM 3931349	GASKET,Oil Pickup Tube	
4	131447		CUM 3901356	GASKET,Turbo Mounting	
5	131511		CUM 3931604	GASKET,Inlet Connection	
6	131480		CUM 3937706	GASKET,Turbo Drain Line	

Miscellaneous Components

FIGURE 6115

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180935		CUM 3910739	BEARING,Fan Drive(4B/6B/6C)	
2	121264		CUM 3883284	O-RING	
3	136047		CUM 3902363	SEAL,Oil Fill Cap	
4	136059		CUM 3935172	SEAL,Fuel Fitting	
5	136065		CUM 3906773	SEAL,Plug	
6	042155		CUM 3917747	INSULATOR	
7	042125		CUM 3026396	CLAMP,Hose(2-1/6in to 3in)	
7	**042126**		**CUM 3937613**	**CLAMP,Hose**	
8	121286		CUM 3910530	RING,Rectangular(Water Connector)	
9	042023		CUM 3069053	CLAMP,V-Band(3in)	CUM 3923060
10	**042091**		**CUM 4891385**	**WASHER,Copper**	
11	**042179**		**CUM 3905307**	**SCREW,Banjo(6mm)**	
12	**132022**		**CUM 4089240**	**KIT,Compressor Head Repair(15.2CFM)**	

PAI PART NUMBER	PISTON PART NUMBER (4)	RING SET PART NUMBER (4)
4BS101-(001 thru 025)	111215 CUM 3906223 (Standard)	505083 CUM 3802040 (Standard)
-(026 thru 050)	111210 CUM 3906209 (.50 mm)	505084 CUM 3802042 (.50 mm)
-(051 thru 075)	111205 CUM 3906208 (1.00 mm)	505085 CUM 3802044 (1.00 mm)
4BS102-(001 thru 025)	111220 CUM 3907156 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	111225 CUM 3907157 (.50 mm)	505081 CUM 3907157 (.50 mm)
-(051 thru 075)	111230 CUM 3907158 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
4BS103-(001 thru 025)	111235 CUM 3907163 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	111240 CUM 3908815 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	111245 CUM 3908816 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
4BS104-(001 thru 025)	**111250 CUM 3911400 (Standard)**	**505080 CUM 3802230 (Standard)**
-(026 thru 050)	**111255 CUM 3912049 (.50 mm)**	**505081 CUM 3802232 (.50 mm)**
-(051 thru 075)	**111260 CUM 3912050 (1.00 mm)**	**505082 CUM 3802234 (1.00 mm)**
4BS107-(001 thru 025)	111310 CUM 3919041 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	111313 CUM 3919044 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	111316 CUM 3919045 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
-(076 thru 100) Fractured Rod	111310 CUM 3919041 (Standard)	505080 CUM 3802230 (Standard)
-(101 thru 125) Fractured Rod	111313 CUM 3919044 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(126 thru 150) Fractured Rod	111316 CUM 3919045 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
4BS108-(001 thru 025)	111341 CUM 3921880 (Standard)	505083 CUM 3802040 (Standard)
-(026 thru 050)	111344 CUM 3921882 (.50 mm)	505084 CUM 3802042 (.50 mm)
-(051 thru 075)	111347 CUM 3921881 (1.00 mm)	505085 CUM 3802044 (1.00 mm)
4BS109-(001 thru 025)	111395 CUM 3930187 (Standard)	505075 CUM 3802750 (Standard)
-(026 thru 050)	111397 CUM 3930188 (.50 mm)	505076 CUM 3802863 (.50 mm)
-(051 thru 075)	111399 CUM 3930189 (1.00 mm)	505077 CUM 3802864 (1.00 mm)
-(076 thru 100) Fractured Rod	111395 CUM 3930187 (Standard)	505075 CUM 3802750 (Standard)
-(101 thru 125) Fractured Rod	111397 CUM 3930188 (.50 mm)	505076 CUM 3802863 (.50 mm)
-(126 thru 150) Fractured Rod	111399 CUM 3930189 (1.00 mm)	505077 CUM 3802864 (1.00 mm)
4BS110-(001 thru 025)	111422 CUM 3926631 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	111426 CUM 3926634 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	111430 CUM 3926635 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
4BS111-Kit series should be superseded to	111410 CUM 3928673 (Standard)	505080 CUM 3802230 (Standard)
4BS107 series	111414 CUM 3928674 (.50 mm)	505081 CUM 3802232 (.50 mm)
	111418 CUM 3928675 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
4BS112-(001 thru 025)	**111591 CUM 3957795 (Standard)**	**505150 CUM 4089460 (Standard)**
-(026 thru 050)	**111592 CUM 3957798 (.50 mm)**	**505076 CUM 4089614 (.50 mm)**
-(051 thru 075)	**111597 CUM 3957801 (1.00 mm)**	**505077 CUM 4089615 (1.00 mm)**
-(076 thru 100) Fractured Rod	**111591 CUM 3957795 (Standard)**	**505150 CUM 4089460 (Standard)**
-(101 thru 125) Fractured Rod	**111592 CUM 3957798 (.50 mm)**	**505076 CUM 4089614 (.50 mm)**
-(126 thru 150) Fractured Rod	**111597 CUM 3957801 (1.00 mm)**	**505077 CUM 4089615 (1.00 mm)**
4BS113-(001 thru 025)	**111626 CUM 3935591 (Standard)**	**505180 CUM 3802831 (Standard)**
-(026 thru 050)	**111630 CUM 3935594 (.50 mm)**	**505181 CUM 3806229 (.50 mm)**
-(051 thru 075)	**111634 CUM 3935595 (1.00 mm)**	**505182 CUM 3806230 (1.00 mm)**
-(076 thru 100) Fractured Rod	**111626 CUM 3935591 (Standard)**	**505180 CUM 3802831 (Standard)**
-(101 thru 125) Fractured Rod	**111630 CUM 3935594 (.50 mm)**	**505181 CUM 3806229 (.50 mm)**
-(126 thru 150) Fractured Rod	**111634 CUM 3935595 (1.00 mm)**	**505182 CUM 3806230 (1.00 mm)**

FIGURE 6110

Please note:

(*) Specify size of Piston, Rings, Rod and Main Bearings when ordering rebuild kits.

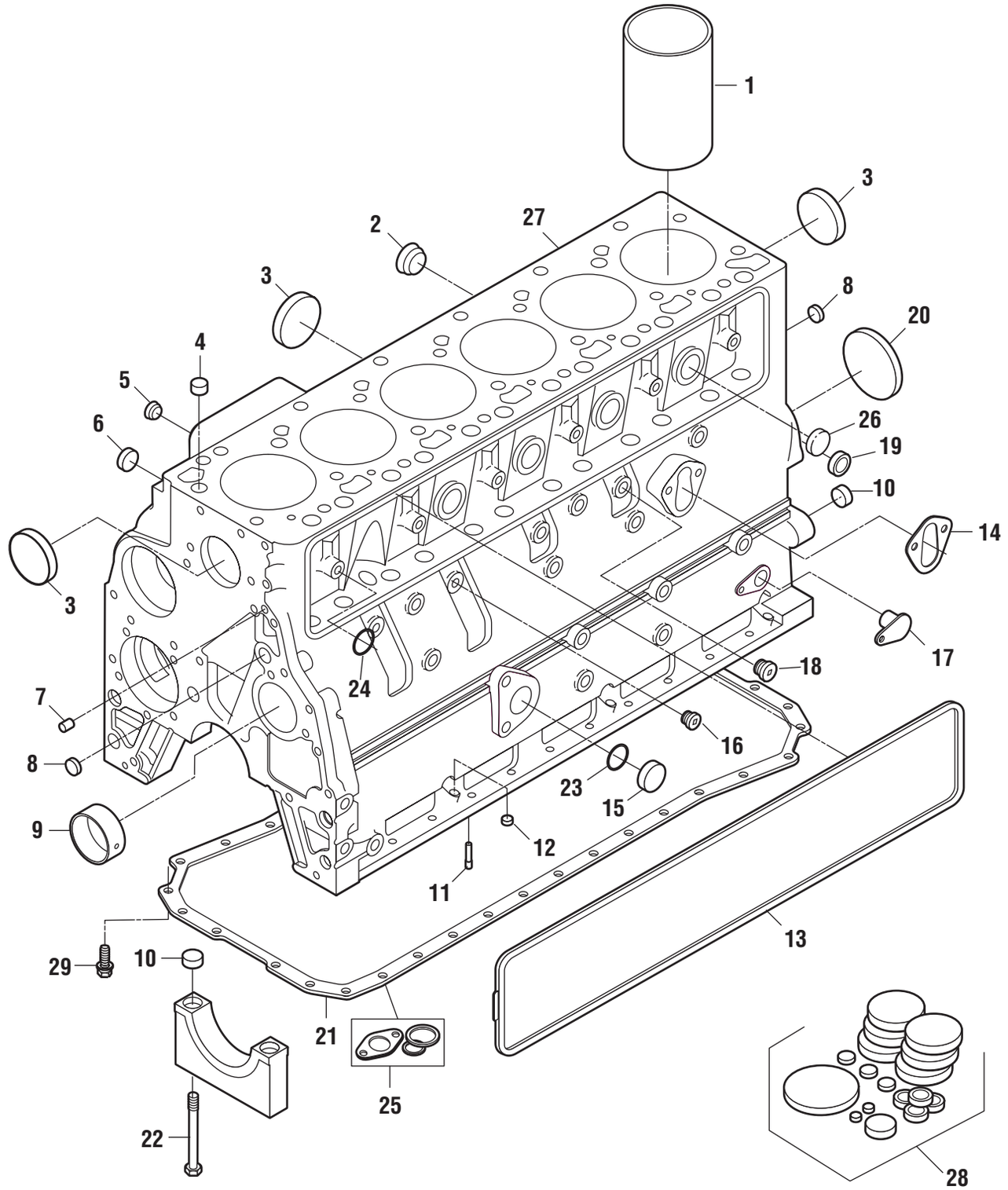
**** Part number standard sizes are shown in chart. Part numbers (and kit Dash numbers) will change if nonstandard components are requested.**

PAI Copyright 2017

ROD BEARING NUMBER (8 Pieces)	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)	LOWER GASKET SET NUMBER (1)
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171801 ** CUM 3901170	**171806 ** CUM 3802010**	**131401 CUM 3804896**	**131402 CUM 3802375**
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171952 ** (4 pair) CUM N/A Fractured Rod			
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171952 **(4 pair) CUM N/A Fractured Rod			
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171801 ** CUM 3901170	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
171801 ** CUM 3901170	**171806 ** CUM 3802010**	**131602 CUM 4089648**	**131402 CUM 3802375**
171952 **(4 pair) CUM N/A Fractured Rod			
171801 ** CUM 3901170	**171806 ** CUM 3802010**	**131883 CUM 3802242**	**131402 CUM 3802375**
171952 **(4 pair) CUM N/A Fractured Rod			

1. **To ensure correct parts application, please have CPL and Engine Serial number available.**
2. **Piston kits include Pins and Retainers.**

FIGURE 6500

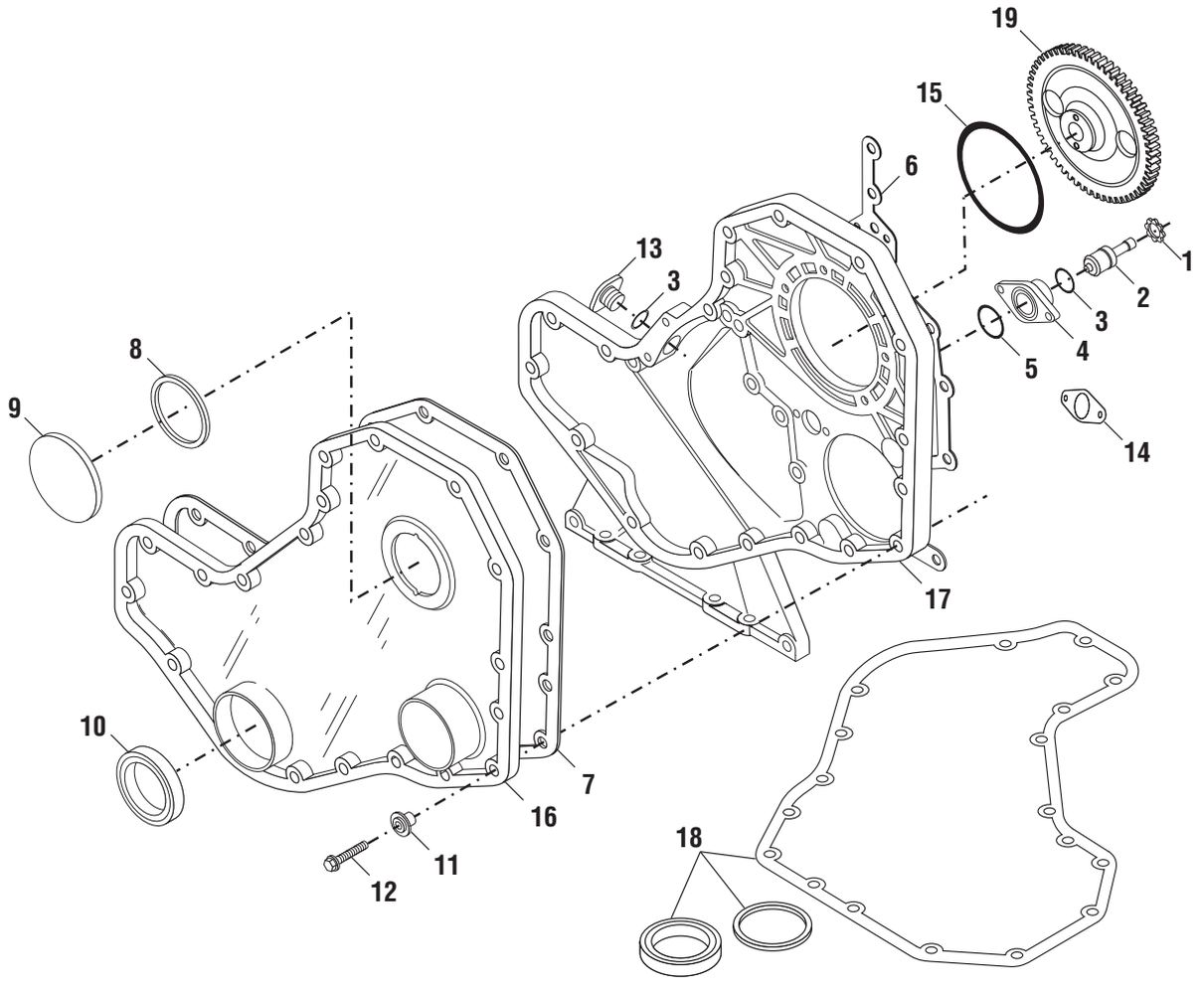


New Parts are in BOLD text

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	161630		CUM 3904166	SLEEVE,Repair(5.9 L)	
2	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM 3008469
3	040093		CUM 3922072	PLUG,Expansion(2-1/4in x 5/16in)	CUM 3812090
4	**045067**		**CUM 3902343**	**DOWEL,Ring(Head Alignment)**	
5	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
6	GCP-3484		MAK 79AX57X	PLUG,Expansion	CUM 3920706
7	**045066**		**CUM 3900257**	**PIN,Dowel**	
8	040084		CUM 3900956	PLUG,Expansion	
9	151508		CUM 3901306	BEARING,Cam(#1 Only)	
9	151528		CUM 3940059	BEARING,Cam(Storm Block)	
9	151555		CUM 3904369	BEARING,Cam(Oversize)(#1) (Early Block Only)	
9	151556		CUM 3903242	BEARING,Cam(Oversize)(#2-7) (Early Block Only)	
10	Call		CUM 3900068	DOWEL,Ring	
11	045033		CUM 3937214	NOZZLE,Piston Cooling	CUM 3930139
12	040089		CUM 3007632	PLUG,Expansion	CUM 3900955
13	131538		CUM 3284623	GASKET,Side Cover	
14	131532		CUM 3939258	GASKET,Fuel Pump	
15	GCP-3495		MAK 79AX71	PLUG,Expansion	CUM 3900958
16	Call		CUM 3678923	PLUG,Threaded	
17	Call		CUM 3932296	PLUG,O-Ring	
18	050572		CUM 3680420	PLUG,Threaded	CUM 3678921
19	040086		CUM 3007635	PLUG,Expansion	
20	040090		CUM 3900687	PLUG,Expansion	
21	131406		CUM 3911536	GASKET,Oil Pan	
21	131589		CUM 3938161	GASKET,Oil Pan(Marine)	CUM 3931601, CUM 3911410
22	040038		CUM 3904217	BOLT,Main Cap(M14 x 2.00 x 119)	
22	**040133**		**CUM 3927948**	**BOLT,Main Cap(M12 x 1.50 x 119)**	
23	121268		CUM 3906696	O-RING,Rectangular	
24	136069		CUM 3928759	SEAL,Side Plate(Current)	
24	431215		NAV 677692C2	GROMMET(Seal),Side Plate (Early Engine)	CUM 3900267
25	131610		N/A	KIT,Pan Gasket Includes Gaskets (1)131406 (1)131446 Seals (1)136071 (1)136057	
26	ECP-3487		MAK 79AX67	PLUG	CUM 3905401
27	060020		CUM 3903797	ASSEMBLY,Cylinder Block	
28	**040096**		**N/A**	**KIT,Block Plug Includes Plugs (6)040093 (4)040086 (3)040084 (1)GCP-3495 (1)040090 (2)040089**	
29	**040145**		**CUM 3907860**	**BOLT,Flanged Hex Head(M8 x 1.25 x 25)**	

FIGURE 6501

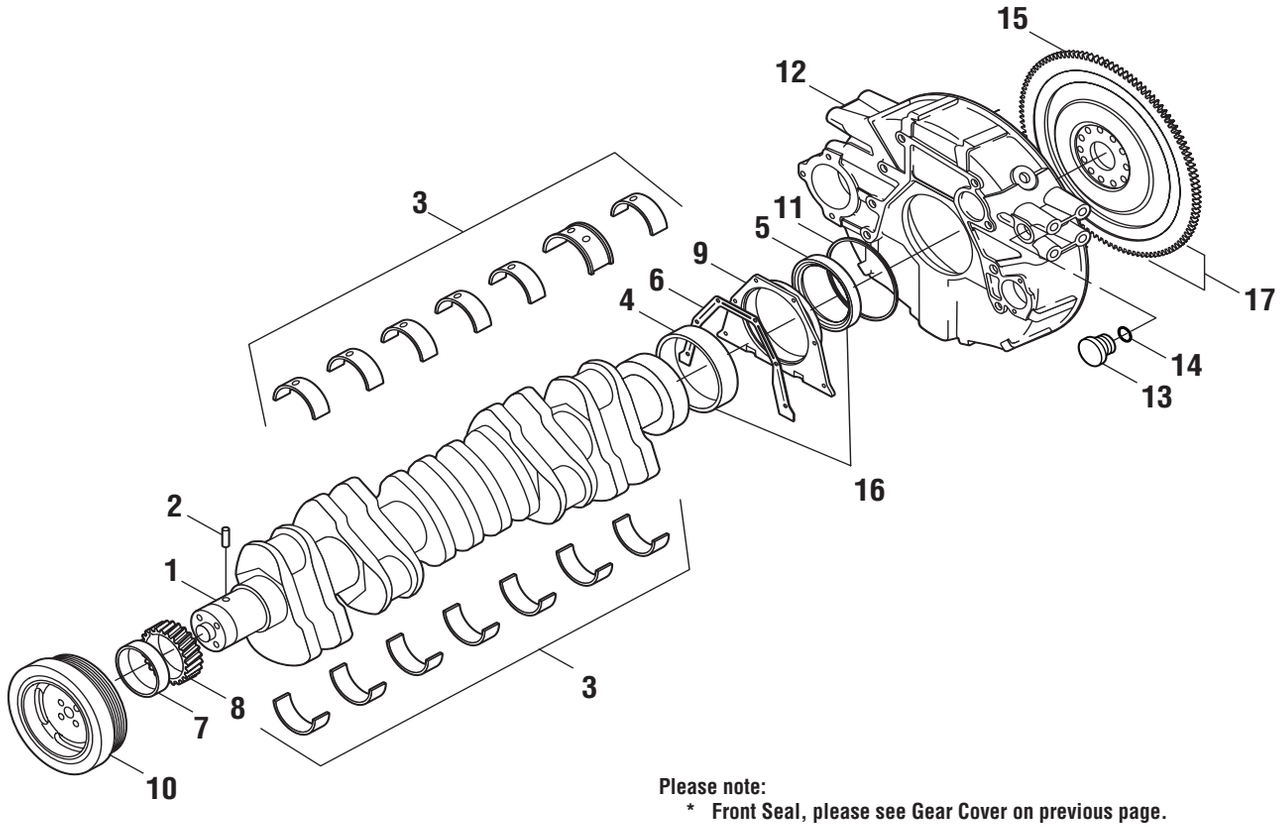


New Parts are in BOLD text

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042064		CUM 3904849	RING,Retaining	
2	042013		CUM 3903924	PIN,Timing	CUM 3902627
3	121244		CUM 3913994	SEAL,O-Ring	
4	Call		CUM 3905933	HOUSING,Timing Pin	
5	121266		CUM 3915772	SEAL,Rectangular Ring	
6	131440		CUM 3931351	GASKET,Gear Housing	CUM 3914384
7	131441		CUM 3914385	GASKET,Gear Cover(Rotary Pump)	
7	131481		CUM 3918673	GASKET,Gear Cover(Inline Pump)	
8	136030		CUM 3903475	SEAL,Rectangular Ring	
9	042018		CUM 3903463	COVER,Access	
10	136084		CUM 3802820	SEAL,Front(Current) (Use w/ Heavy Wear Ring)	
10	136105		CUM 3937111	SEAL,Front (Use w/ Wear Ring 136035 or can be used w/o Wear Ring)	
11	042045		CUM 3912772	RETAINER,Belt	
12	Call		CUM 3901446	SCREW,Cap	
13	Call		CUM 3918179	COVER,Plate	
14	131534		CUM 3905595	GASKET,Timing Housing	
15	**121415**		**CUM 3969698**	**O-RING,Internal Dampening**	
16	060091		CUM 3923898	COVER,Gear(Inline Pump)	
16	060093		CUM 3903794	COVER,Gear(Engines w/o Mechanical Tach)	CUM 3286312
17	**060089**		**CUM 3920758**	**HOUSING,Gear**	**CUM 3920518, CUM 3918872**
17	060090		CUM 3936256	HOUSING,Gear(Inline Pump)	
18	**131724**		**N/A**	**SET,Gear Cover Gasket Includes Gasket (1)131481 Seal Kit (1)136084 Seal (1)136030**	
19	**180131**		**CUM 3931382**	**GEAR,Fuel Pump**	**CUM 3929031**

FIGURE 6502



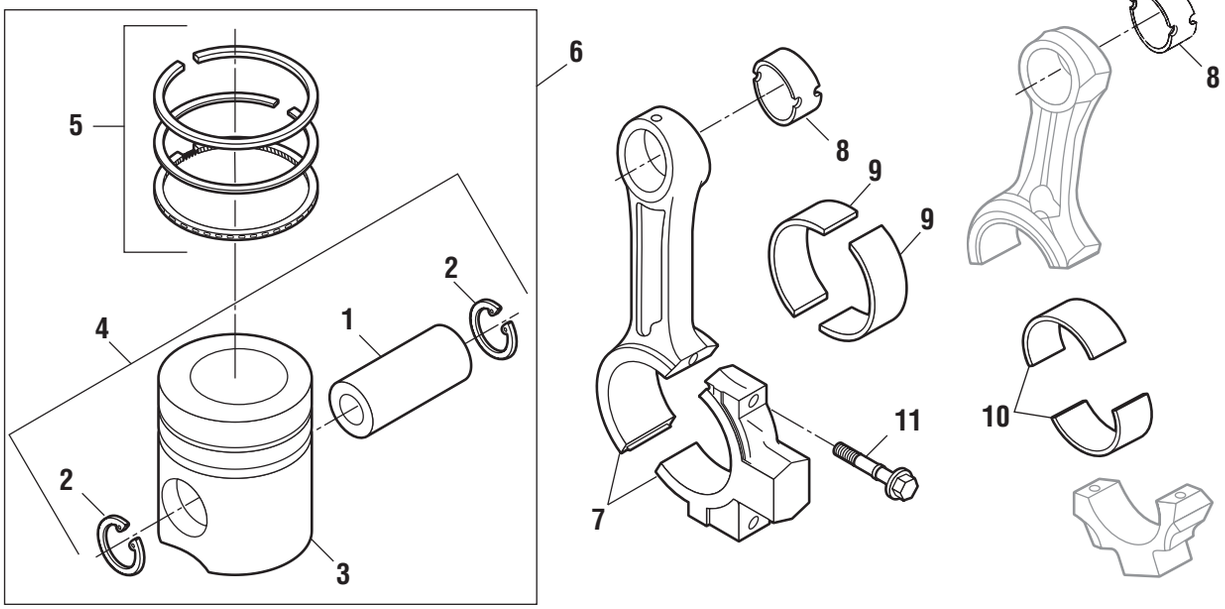
Please note:

*** Front Seal, please see Gear Cover on previous page.**

 PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171711	171711E	CUM 3929037	CRANKSHAFT(w/o Gear)	CUM 3905619
1	171713		CUM 3908032	CRANKSHAFT(w/ Gear)	CUM 3905730
2	171717		CUM 3904483	PIN,Dowel	
3	171811		CUM 3802070	KIT,Main Bearing(STD) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171812		CUM 3802071	KIT,Main Bearing(.010in/.25mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171813		CUM 3802072	KIT,Main Bearing(.020in/.50mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171814		CUM 3802073	KIT,Main Bearing(.030in/.75mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171815		CUM 3802074	KIT,Main Bearing(.040in/ 1.00mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
4	136040		CUM 3906081	RING,Wear(Speedi-Sleeve) (Use w/ Seal 136026)	
4	136128		CUM 3925532	RING,Wear(Heavy Sleeve)(Use w/ Seal 136127)	
5	136026		CUM 3909410	SEAL,Rear Crankshaft(Dry only)(Speedi-Sleeve) (Use w/ Wear Ring 136040 or Kit 136116)	
5	136127		CUM 3925530	SEAL,Rear Crankshaft(Heavy Sleeve) (Use w/ Wear Ring 136128 or Kit 136126)	
5	**136158**		**CUM 5259499**	**SEAL,Rear Crankshaft(Dry Seal)**	
6	131463		CUM 3938159	GASKET,Rear Cover	CUM 3928493
7	136035		CUM 3906080	RING,Wear(Front Crankshaft) (Use w/ Seal 136105)(Thin)	
7	136099		CUM 3922599	RING,Wear(Front Crankshaft)(Thick)	
8	171716		CUM 3929027	GEAR,Crankshaft	
9	060101		CUM 3921043	COVER,Rear Seal	
10	**202012**		**CUM 3957297**	**DAMPER**	
10	**202013**		**CUM 3924435**	**DAMPER**	
10	202021		CUM 3914454	DAMPER	
10	202022		CUM 3918999	DAMPER	
11	136031		CUM 3912473	O-RING	
12	060000		CUM 3931716	HOUSING,Flywheel	
13	042019		CUM 3910248	PLUG,Flywheel Housing	CUM 3904470
14	121233		CUM 3058653	SEAL	
15	060071		CUM 3901774	GEAR,Flywheel(159 Tooth Ring Gear)	
15	**060072**		**CUM 3903309**	**GEAR,Flywheel(173 Tooth Ring Gear)**	
16	136116		CUM 3927683	KIT,Crank Seal(Rear)(Speedi-Sleeve) Includes Seal (1)136026 Wear Ring (1)136040	
16	136126		CUM 3926126	KIT,Seal(Rear)(Heavy Wear Sleeve) Includes Seal (1)136127 Wear Ring (1)136128	
17	060053		CUM 4933458	ASSEMBLY,Flywheel(173 Tooth Ring Gear) Includes Gear (1)060072	

FIGURE 6503



Straight Cut Rod

Fractured Rod

Please note:

*** To ensure correct parts application, please have CPL and Engine Serial number available.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	111208		CUM 3901793	PIN,Piston(Short,2-31/32in)	
1	111213		CUM 3934047	PIN,Piston(Long,3.25in)	
2	111209		CUM 3901706	RING,Retaining	
3	111205		CUM 3906208	PISTON(.040in/1.00mm)(17.3:1)	
3	111210		CUM 3906209	PISTON(.020in/.50mm)(17.3:1)	
3	111215		CUM 3906223	PISTON(STD)(17.3:1)	
3	111220		CUM 3907156	PISTON(STD)(16.5:1)	
3	111225		CUM 3907157	PISTON(.020in/.50mm)(16.5:1)	
3	111230		CUM 3907158	PISTON(.040in/1.00mm)(16.5:1)	
3	111235		CUM 3907163	PISTON(STD)(17.5:1)	
3	111240		CUM 3908815	PISTON(.020in/.50mm)(17.5:1)	
3	111245		CUM 3908816	PISTON(.040in/1.00mm)(17.5:1)	
3	111250		CUM 3911400	PISTON(STD)(17.5:1)	
3	111255		CUM 3912049	PISTON(.020in/.50mm)(17.5:1)	
3	111260		CUM 3912050	PISTON(.040in/1.00mm)(17.5:1)	
3	111310		CUM 3919041	PISTON(STD)	
3	111313		CUM 3919044	PISTON(.020in/.50mm)	
3	111316		CUM 3919045	PISTON(.040in/1.00mm)	
3	111321		CUM 3917619	PISTON(STD)	
3	111324		CUM 3919047	PISTON(.020in/.50mm)	
3	111327		CUM 3919048	PISTON(.040in/1.00mm)	
3	111331		CUM 3922577	PISTON(STD)	
3	111334		CUM 3922580	PISTON(.020in/.50mm)	
3	111337		CUM 3922581	PISTON(.040in/1.00mm)	
3	111341		CUM 3921880	PISTON(STD)	
3	111344		CUM 3921882	PISTON(.020in/.50mm)	
3	111347		CUM 3921881	PISTON(.040in/1.00mm)	
3	111395		CUM 3930187	PISTON(STD)	
3	111397		CUM 3930188	PISTON(.020in/.50mm)	
3	111399		CUM 3930189	PISTON(.040in/1.00mm)	
3	111589		CUM 3957795	PISTON(STD)	CUM 3957802
3	111592		CUM 3957798	PISTON(.020in/.50mm)	
3	111595		CUM 3957800	PISTON(.040in/1.00mm)	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
3	**111677**		**CUM 3922687**	**PISTON(STD-Natural Gas)**	
3	**111680**		**CUM 3930489**	**PISTON(.50mm-Natural Gas)**	
3	**111683**		**CUM 3930490**	**PISTON(1.00mm-Natural Gas)**	
3	**111686**		**CUM 3930503**	**PISTON(STD-Natural Gas)**	
3	**111689**		**CUM 3930504**	**PISTON(.50mm-Natural Gas)**	
3	**111692**		**CUM 3930505**	**PISTON(1.00mm-Natural Gas)**	
4	111206		N/A	KIT,Piston(1.00mm) Includes Piston (1)111205 Pin (1)111208 Retainers (2)111209	
4	111211		N/A	KIT,Piston(.50mm) Includes Piston (1)111210 Pin (1)111208 Retainers (2)111209	
4	111216		N/A	KIT,Piston(STD) Includes Piston (1)111215 Pin (1)111208 Retainers (2)111209	
4	111221		N/A	KIT,Piston(STD) Includes Piston (1)111220 Pin (1)111208 Retainers (2)111209	
4	111226		N/A	KIT,Piston(.50mm) Includes Piston (1)111225 Pin (1)111208 Retainers (2)111209	
4	111231		N/A	KIT,Piston(1.00mm) Includes Piston (1)111230 Pin (1)111208 Retainers (1)111209	
4	111236		N/A	KIT,Piston(STD) Includes Piston (1)111235 Pin (1)111208 Retainers (2)111209	
4	111241		N/A	KIT,Piston(.50mm) Includes Piston (1)111240 Pin (1)111208 Retainers (2)111209	
4	111246		N/A	KIT,Piston(1.00mm) Includes Piston (1)111245 Pin (1)111208 Retainers (2)111209	
4	111251		N/A	KIT,Piston(STD) Includes Piston (1)111250 Pin (1)111208 Retainers (2)111209	
4	111256		N/A	KIT,Piston(.50mm) Includes Piston (1)111255 Pin (1)111208 Retainers (2)111209	
4	111261		N/A	KIT,Piston(1.00mm) Includes Piston (1)111260 Pin (1)111208 Retainers (2)111209	
4	111311		N/A	KIT,Piston(STD) Includes Piston (1)111310 Pin (1)111213 Retainers (2)111209	
4	111314		N/A	KIT,Piston(.50mm) Includes Piston (1)111313 Pin (1)111213 Retainers (2)111209	
4	111317		N/A	KIT,Piston(1.00mm) Includes Piston (1)111316 Pin (1)111213 Retainers (2)111209	
4	111322		N/A	KIT,Piston(STD) Includes Piston (1)111321 Pin (1)111213 Retainers (2)111209	
4	111325		N/A	KIT,Piston(.50mm) Includes Piston (1)111324 Pin (1)111213 Retainers (2)111209	
4	111328		N/A	KIT,Piston(1.00mm) Includes Piston (1)111327 Pin (1)111213 Retainers (1)111209	
4	111332		N/A	KIT,Piston(STD) Includes Piston (1)111331 Pin (1)111213 Retainers (2)111209	
4	111335		N/A	KIT,Piston(.50mm) Includes Piston (1)111334 Pin (1)111213 Retainers (2)111209	
4	111338		N/A	KIT,Piston(1.00mm) Includes Piston (1)111337 Pin (1)111213 Retainers (2)111209	

***Key 5-11 continued on following page.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
4	111342		N/A	KIT,Piston(STD) Includes Piston (1)111341 Pin (1)111213 Retainers (2)111209	
4	111345		N/A	KIT,Piston(.50mm) Includes Piston (1)111344 Pin (1)111213 Retainers (2)111209	
4	111348		N/A	KIT,Piston(1.00mm) Includes Piston (1)111347 Pin (1)111213 Retainers (2)111209	
4	111401		N/A	KIT,Piston(STD) Includes Piston (1)111395 Pin (1)111213 Retainers (2)111209	
4	111402		N/A	KIT,Piston(.20in/.50mm) Includes Piston (1)111397 Pin (1)111213 Retainers (2)111209	
4	111403		N/A	KIT,Piston(.040in/1.00mm) Includes Piston (1)111399 Pin (1)111213 Retainers (2)111209	
4	**111590**		**N/A**	**KIT,Piston(STD) Includes Piston (1)111589 Pin (1)111213 Retainers (2)111209**	
4	**111593**		**N/A**	**KIT,Piston(.50mm) Includes Piston (1)111592 Pin (1)111213 Retainers (2)111209**	
4	**111596**		**N/A**	**KIT,Piston(1.00mm) Includes Piston (1)111595 Pin (1)111213 Retainers (2)111209**	
4	**111678**		**N/A**	**KIT,Piston(STD-Natural Gas) Includes Piston (1)111677 Pin (1)111213 Retainers (2)111209**	
4	**111681**		**N/A**	**KIT,Piston(.50mm-Natural Gas) Includes Piston (1)111680 Pin (1)111213 Retainers (2)111209**	
4	**111684**		**N/A**	**KIT,Piston(1.00mm-Natural Gas) Includes Piston (1)111683 Pin (1)111213 Retainers (2)111209**	
4	**111687**		**N/A**	**KIT,Piston(STD-Natural Gas) Includes Piston (1)111686 Pin (1)111213 Retainers (2)111209**	
4	**111690**		**N/A**	**KIT,Piston(.50mm-Natural Gas) Includes Piston (1)111689 Pin (1)111213 Retainers (2)111209**	
4	**111693**		**N/A**	**KIT,Piston(1.00mm-Natural Gas) Includes Piston (1)111692 Pin (1)111213 Retainers (2)111209**	
5	505075		CUM 3802750	SET,Ring(STD)(Double Keystone)	
5	505076		CUM 3802863	SET,Ring(.020in/.50mm)(Double Keystone)	
5	505077		CUM 3802864	SET,Ring(.040in/1.00mm)(Double Keystone)	
5	505080		CUM 3802230	SET,Ring(STD)(Turbo Engine)	
5	505081		CUM 3802232	SET,Ring(.020in/.50mm)(Turbo Engine)	
5	505082		CUM 3802234	SET,Ring(.040in/1.00mm)(Turbo Engine)	
5	505083		CUM 3802040	SET,Ring(STD)(Non-Turbo Engine)	
5	505084		CUM 3802042	SET,Ring(.020in/.50mm)(Non-Turbo Engine)	
5	505085		CUM 3802044	SET,Ring(.040in/1.00mm)(Non-Turbo Engine)	
5	**505154**		**CUM 3802951**	**SET,Ring(STD)**	**CUM 3802790**
5	**505160**		**CUM 4955251**	**SET,Ring(STD)**	
6	111207		CUM 3802064	KIT,Piston(.040in/1.00mm) Includes Piston (1)111205 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505085	
6	111212		CUM 3802062	KIT,Piston(.020in/.50mm) Includes Piston (1)111210 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505084	
6	111217		CUM 3802060	KIT,Piston(STD) Includes Piston (1)111215 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505083	
6	111222		CUM 3802100	KIT,Piston(STD) Includes Piston (1)111220 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505080	

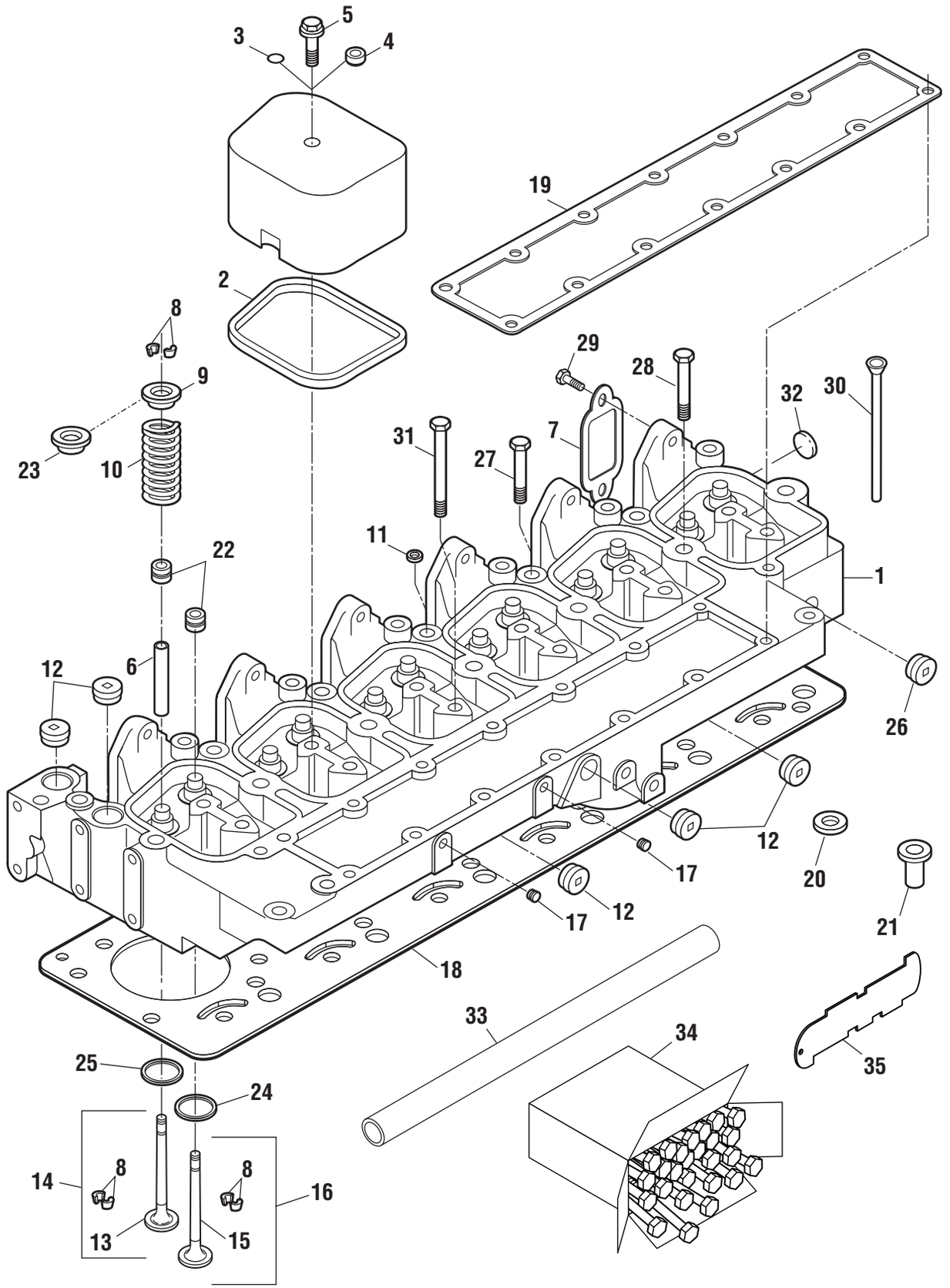
PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
6	111227		CUM 3802102	KIT,Piston(.020in/.50mm) Includes Piston (1)111225 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505081	
6	111232		CUM 3802104	KIT,Piston(.040in/1.00mm) Includes Piston (1)111230 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505082	
6	111237		CUM 3802160	KIT,Piston(STD) Includes Piston (1)111235 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505080	
6	111242		CUM 3802132	KIT,Piston(.020in/.50mm) Includes Piston (1)111240 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505081	
6	111247		CUM 3802134	KIT,Piston(.040in/1.00mm) Includes Piston (1)111245 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505082	
6	111252		CUM 3802170	KIT,Piston(STD) Includes Piston (1)111250 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505080	
6	111257		CUM 3802172	KIT,Piston(.020in/.50mm) Includes Piston (1)111255 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505081	
6	111262		CUM 3802174	KIT,Piston(.040in/1.00mm) Includes Piston (1)111260 Retaining Rings (2)111209 Pin (1)111208 Ring Set (1)505082	
6	111312		CUM 3802248	KIT,Piston(STD) Includes Piston (1)111310 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505080	
6	111315		CUM 3802249	KIT,Piston(.020in/.50mm) Includes Piston (1)111313 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505081	
6	111318		CUM 3802250	KIT,Piston(.040in/1.00mm) Includes Piston (1)111316 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505082	
6	111323		CUM 3802251	KIT,Piston(STD) Includes Piston (1)111321 Retaining Rings (2)111209 Pin (1)111213 Ring Set(1)505080	
6	111326		CUM 3802252	KIT,Piston(.020in/.50mm) Includes Piston (1)111324 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505081	
6	111329		CUM 3802253	KIT,Piston(.040in/1.00mm) Includes Piston (1)111327 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505082	
6	111333		CUM 3802488	KIT,Piston(STD) Includes Piston (1)111331 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505080	
6	111336		CUM 3802494	KIT,Piston(STD) Includes Piston (1)111334 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505081	
6	111339		CUM 3802496	KIT,Piston(.040in/1.00mm) Includes Piston (1)111337 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505082	
6	111343		CUM 3802773	KIT,Piston(STD) Includes Piston (1)111341 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505083	
6	111346		CUM 3802776	KIT,Piston(.020in/.50mm) Includes Piston (1)111344 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505084	
6	111349		CUM 3802775	KIT,Piston(.040in/1.00mm) Includes Piston (1)111347 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505085	
6	111396		CUM 3802757	KIT,Piston(STD) Includes Piston (1)111395 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505075	
6	111398		CUM 3802758	KIT,Piston(.020in/.50mm) Includes Piston (1)111397 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505076	

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
6	111400		CUM 3802759	KIT,Piston(.040in/1.00mm) Includes Piston (1)111399 Retaining Rings (2)111209 Pin (1)111213 Ring Set (1)505077	
6	**111591**		**CUM 3957797**	**KIT,Piston(STD)** **Includes Piston (1)111589 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505150**	
6	**111594**		**CUM 3957799**	**KIT,Piston(.020in/.50mm)** **Includes Piston (1)111592 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505151**	
6	**111597**		**CUM 3957801**	**KIT,Piston(.040in/1.00mm)** **Includes Piston (1)111595 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505152**	
6	**111679**		**CUM 3802630**	**KIT,Piston(STD-Natural Gas)** **Includes Piston (1)111677 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505154**	
6	**111682**		**CUM 3806239**	**KIT,Piston(.50mm-Natural Gas)** **Includes Piston (1)111680 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505084**	
6	**111685**		**CUM 3806240**	**KIT,Piston(1.00mm-Natural Gas)** **Includes Piston (1)111683 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505085**	
6	**111688**		**CUM 3802952**	**KIT,Piston(STD-Natural Gas)** **Includes Piston (1)111686 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505154**	
6	**111691**		**CUM 3806249**	**KIT,Piston(.50mm-Natural Gas)** **Includes Piston (1)111689 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505084**	
6	**111694**		**CUM 3806250**	**KIT,Piston(1.00mm-Natural Gas)** **Includes Piston (1)111692 Retaining Rings (2)111209** **Pin (1)111213 Ring Set (1)505085**	
7	171631		CUM 3942581	ROD,Connecting(Straight Cut)	
8	151514		CUM 3901085	BUSHING,Rod	
9	171801		CUM 3901170	BEARING,Shell(STD)	*Straight Cut Rod Bearing Shells are identical and can be installed in upper or lower postions.
9	171802		CUM 3901171	BEARING,Shell(.010in/.25mm)	
9	171803		CUM 3901172	BEARING,Shell(.020in/.50mm)	
9	171804		CUM 3901173	BEARING,Shell(.030in/.75mm)	
9	171805		CUM 3901174	BEARING,Shell(.040in/1.00mm)	
10	171952		N/A	KIT,Rod Bearing(STD)(Fractured Rod)	*Fractured Rod Bearing kits contain different upper and lower Shells that are not interchangeable.
10	171955		N/A	KIT,Rod Bearing(.010in/.25mm)(Fractured Rod)	
10	171958		N/A	KIT,Rod Bearing(.020in/.50mm)(Fractured Rod)	
10	171961		N/A	KIT,Rod Bearing(.030in/.75mm)(Fractured Rod)	
10	171964		N/A	KIT,Rod Bearing(.040in/1.00mm)(Fractured Rod)	
11	040035		CUM 3900919	BOLT,Rod	

PAI Copyright 2017

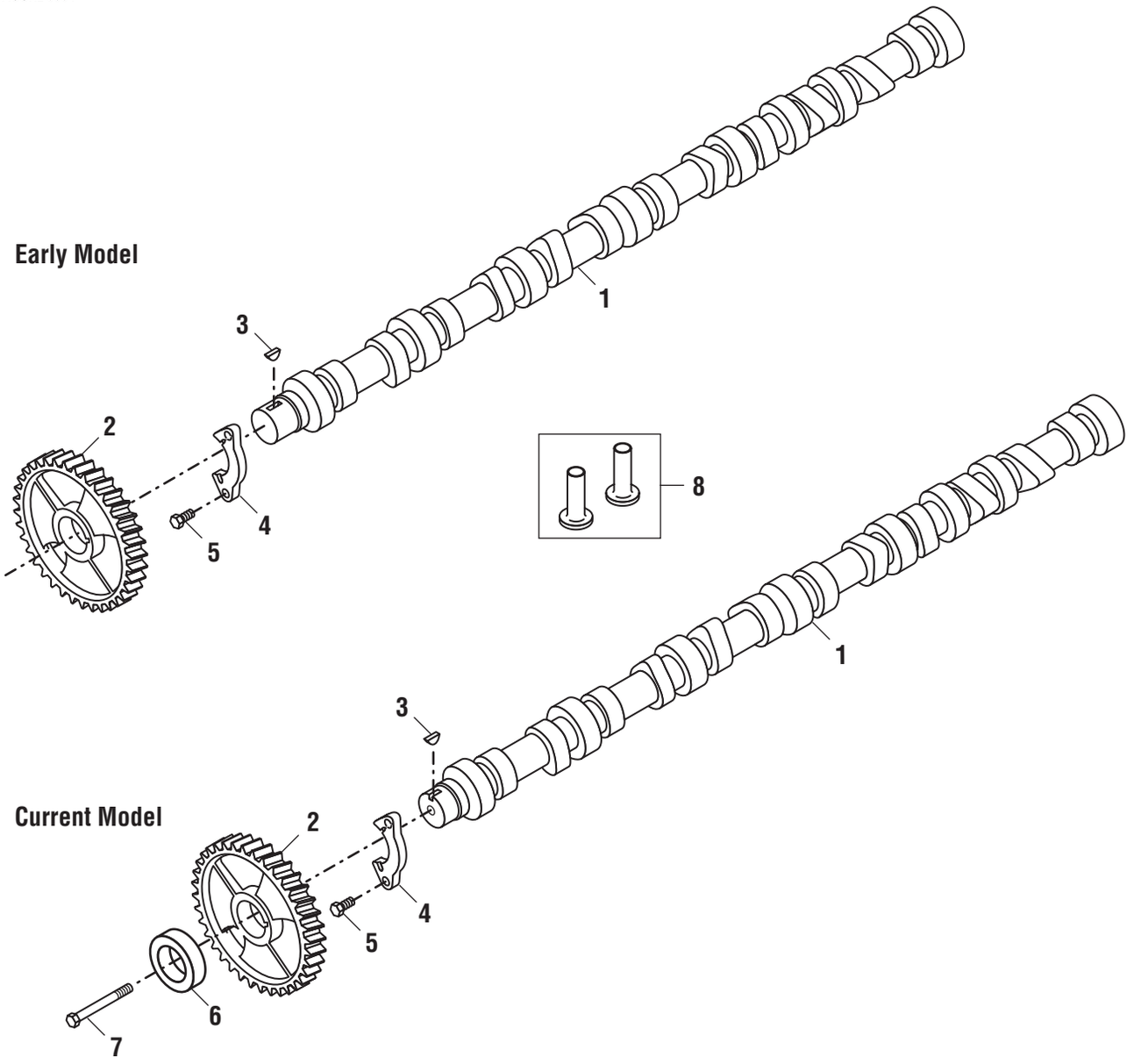
FIGURE 6505



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	060169		CUM 3920612	ASSEMBLY,Cylinder Head(Bare)(2 VH) (w/ 7mm Injector holes)	
1	060170		CUM 3802340	ASSEMBLY,Cylinder Head(Loaded)(2 VH) (w/ 7mm Injector holes)	CUM 3913391
2	131419		CUM 3930906	GASKET,Rocker Cover(Silicone)(2 VH)	CUM 3902666
3		EF30130	FUL 13653	O-RING,Rocker Bolt Cover	CUM 3910824
4	136041		CUM 3935449	SEAL,Isolator(Rocker Cover)	
5	Call		CUM 3907049	SCREW,Valve Cover	
6	192039	**192039E**	CUM 3904408	GUIDE,Valve(60.50mm Lg)(Intake)(2 VH)**(Finished)**	
6	192040	**192040E**	CUM 3904409	GUIDE,Valve(51.75mm Lg)(Exhaust)(2 VH) **(Semi-Finished)**	
6	192041	**192041E**	CUM 3906206	GUIDE,Valve(Thin Wall)(Intake and Exhaust)(2 VH) **(Finished)**	
7	131467		CUM 3927154	GASKET,Exhaust Manifold	
7	131600		CUM 3929881	GASKET,Exhaust Manifold(Late)	
8	192022		CUM 3900250	COLLET	
9	192059		CUM 3900299	RETAINER,Valve Spring	
10	192054		CUM 3900276	SPRING,Valve(ISB Engine)	
10	192128		CUM 3926700	SPRING,Valve(36 psi)	
10	**192135**		**CUM 3932453**	**SPRING,Valve(ISB Engine w/o Rotator)**	
10	**192184**		**CUM 3925667**	**SPRING,Valve(Natural Gas)**	
11	ECP-3485		MAK 79AX63	PLUG,Expansion	CUM 3902606
12	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
13	191968	**191968E**	CUM 3920868	VALVE,Exhaust(2 VH)	CUM 3901607
13	**192213**		**CUM 3922714**	**VALVE,Exhaust(Natural Gas)**	
14	191970		CUM 3802356	KIT,Exhaust Valve(2 VH) Includes Valve (1)191968 Collets (2)192022	CUM 3802006
14	**192214**		**CUM 3802659**	**KIT,Exhaust Valve(Natural Gas) Includes Valve (1)192213 Collets (2)192022**	
15	191980	**191980E**	CUM 3920867	VALVE,Intake(2 VH)	CUM 3901117
15	**192219**		**CUM 3922713**	**VALVE,Intake(Natural Gas)**	
16	191983		CUM 3802355	KIT,Intake Valve(2 VH) Includes Valve (1)191980 Collets (2)192022	CUM 3802005
16	**192220**		**CUM 3802658**	**KIT,Intake Valve(Natural Gas) Includes Valve (1)192219 Collets (2)192022**	
17	EPP-3573		MAK 49AX230	PLUG,Pipe(1/8in NPT)	CUM 3008465
18	131418		CUM 3283335	GASKET,Head(STD)	CUM 3921394
18	131578		CUM 3283337	GASKET,Head(.25mm OS)	
18	131686		CUM 3283339	GASKET,Head(.50mm OS)	
19	131442		CUM 3931347	GASKET,Intake	
20	042092		CUM 3906659	SEAL,Injector(For 7mm Head)(1.6mm)	
20	042093		CUM 3923261	SEAL,Injector(For 7mm Head)(2.45mm)	
20	042094		CUM 3930324	SEAL,Injector(For 7mm Head)(.55mm)	
21	042081		CUM 3919358	SLEEVE,Copper(For 9mm Head)	
22	192005		CUM 3921640	SEAL,Valve Stem(Red)(2 VH)	
22	192110		CUM 3957912	SEAL,Valve Stem(Tall)(2 VH)	
23	192101		CUM 3957914	ROTATOR,Valve(ISB Engine)	
24	192015	**192015E**	CUM 3904105	INSERT,Exhaust(2 VH)	
24	**192225**		**CUM 3922716**	**INSERT,Exhaust(STD-Natural Gas)**	**CUM 3395612**
25	192003	**192003E**	CUM 3906854	INSERT,Intake(2 VH)	
25	**192221**		**CUM 3922715**	**INSERT,Intake(STD-Natural Gas)**	**CUM 3020211**
26	EPP-3576		MAK 49AX235	PLUG,Pipe(3/4in NPT)	CUM S-995
27	040045		CUM 3920779	BOLT,Cylinder Head(6 req) (M12 x 1.75 x 70mm)	CUM 3900046, CUM 3903938
28	040046		CUM 3920780	BOLT,Cylinder Head(14 req) (M12 x 1.75 x 120mm)	CUM 3901220, CUM 3903939
29	040028		CUM 3901448	SCREW,Exhaust Manifold	
29	**040146**		**CUM 3930249**	**SCREW(10M x 1.5 x 65 Hex-Head w/ Flange) (Stainless)(Carbon)**	
30	192122		CUM 3284377	PUSHROD(Intake & Exhaust)(2VH)	CUM 3901898
31	040050		CUM 3920781	BOLT,Cylinder Head(M12 x 1.75 x 180mm)	
32	040092		CUM 3920443	PLUG,Cup	
33	045081		CUM 3918614	HOSE,Breather(17in x 3/4in)	CUM 3908049
34	040066		N/A	KIT,Cylinder Head Bolts Includes Bolts (6)040045 (14)040046 (6)040050	
35	042025		CUM 3823921	GAUGE,Head Bolts	

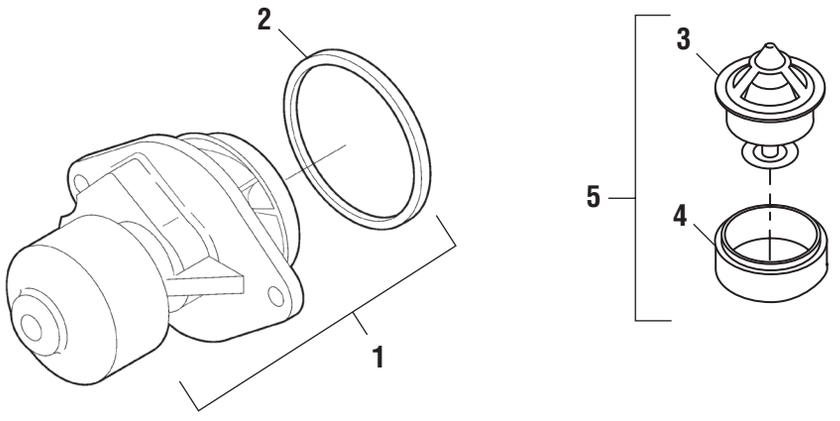
FIGURE 6504



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	191899		CUM 3929886	CAMSHAFT	
1	191911	191911E	CUM 3914639	CAMSHAFT(Early)	CUM 3910624
1	Call		CUM 3921953	CAMSHAFT(Current)	
2	Call		CUM 3907431	GEAR,Camshaft(Early)	
2	Call		CUM 3921954	GEAR,Camshaft(Current)	
3	191830		CUM 3902332	KEY(Early)	
3	Call		CUM 3921953	CAMSHAFT(Current)	
3	Call		CUM 3920455	KEY(Current)	
4	151527		CUM 3927155	SUPPORT	
5	**040075**		**CUM 3900227**	**SCREW,Camshaft**	
6	Call		CUM 3919943	RETAINER,Gear(Current)	
7	Call		CUM 3920164	SCREW,Cap(Current)	
8	191860	191860E	CUM 3925031	TAPPET	CUM 3931623

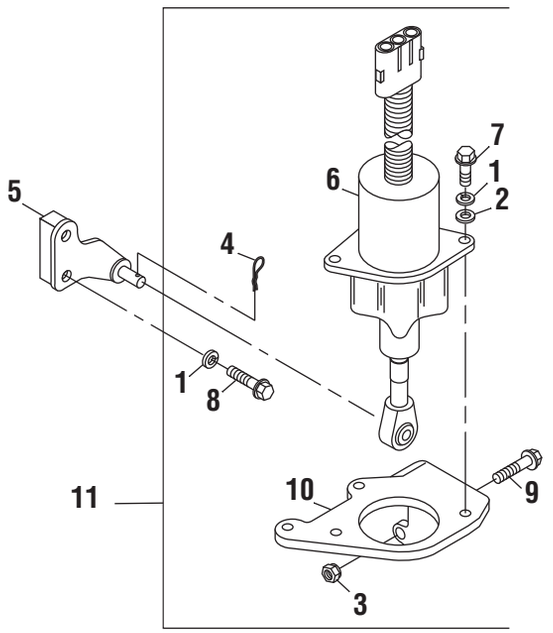
PAI Copyright 2017

FIGURE 6506



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181815		CUM 3802970	KIT,Water Pump(Hardened Pulley)(2VH)	
1	**181913**		**CUM 4955394**	**KIT,Water Pump(6.7 L)**	
2	121258		CUM 3906698	O-RING,Rectangular	
3	181843	181843E	CUM 3917324	THERMOSTAT(Used in Kit 181844)	
4	136028		CUM 3923331	SEAL,Thermostat	
5	181844		CUM 3802968	KIT,Thermostat Includes Thermostat (1)181843 Seal (1)136028	

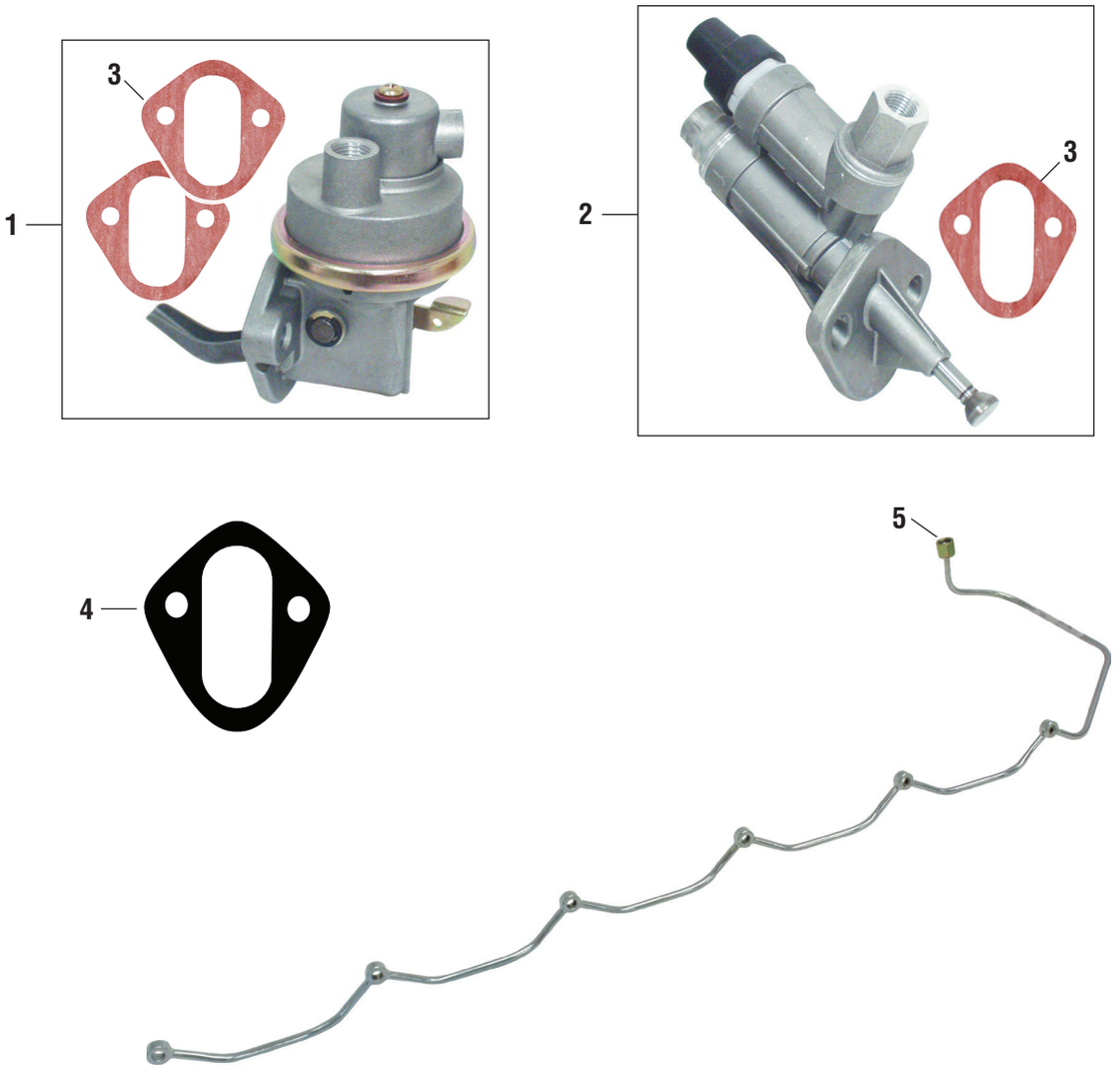
FIGURE 6516



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	EWA-0703		MAK 36AX1	WASHER,Lock	CUM S 600
2	042095		CUM 3529610	WASHER,Flat	
3	FNU-0436		MAK 154AM5001	NUT	CUM 3910959
4	045057		CUM 3919449	PIN,Hitch	
5	Call		CUM 3922832	LEVER,Shutoff Valve	
6	**180198**		**CUM 3931570**	**SOLENOID,Fuel Shutoff**	
6	180215		CUM 3935649	SOLENOID,Fuel Shutoff(3in o/c mounting holes)	
7	040077		CUM 3936683	SCREW,Hex Head(M6 x 1.00 x 16)	
8	040078		CUM 3936684	SCREW,Hex Head	
9	040079		CUM 3936685	SCREW,Hex Head(M6 x 1.00 x 30)	
9	040080		CUM 3901937	SCREW,Hex Head(M6 x 1.00 x 45)	
10	180250		CUM 3965494	BRACKET,Solenoid	
11	180220		CUM 4089574	SOLENOID Assembly Includes Solenoid (1)180215 Bracket (1)180250 Washers (3)EWA-0703 (2)042095 Screws (2)040077 (2)040078 (1)040079 Pin (1)045057	

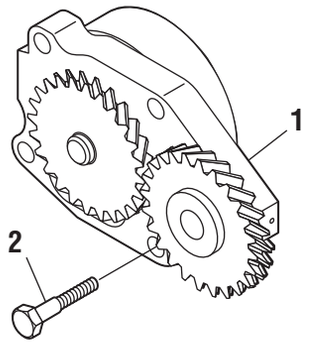
PAI Copyright 2017

FIGURE 6507



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180102		CUM 3928143	PUMP,Fuel Transfer(w/ Primer) Includes Gasket (2)131532	
2	180103		CUM 3918076	PUMP,Fuel Transfer Includes Gasket (1)131532	
2	180104		CUM 3918000	PUMP,Fuel Transfer Includes Gasket (1)131532	
3	131532		CUM 3939258	GASKET	
4	**180121**		**CUM 3914284**	**SPACER,Fuel Pump**	
5	**180320**		**CUM 3909696**	**MANIFOLD,Fuel Drain**	**CUM 3905117**

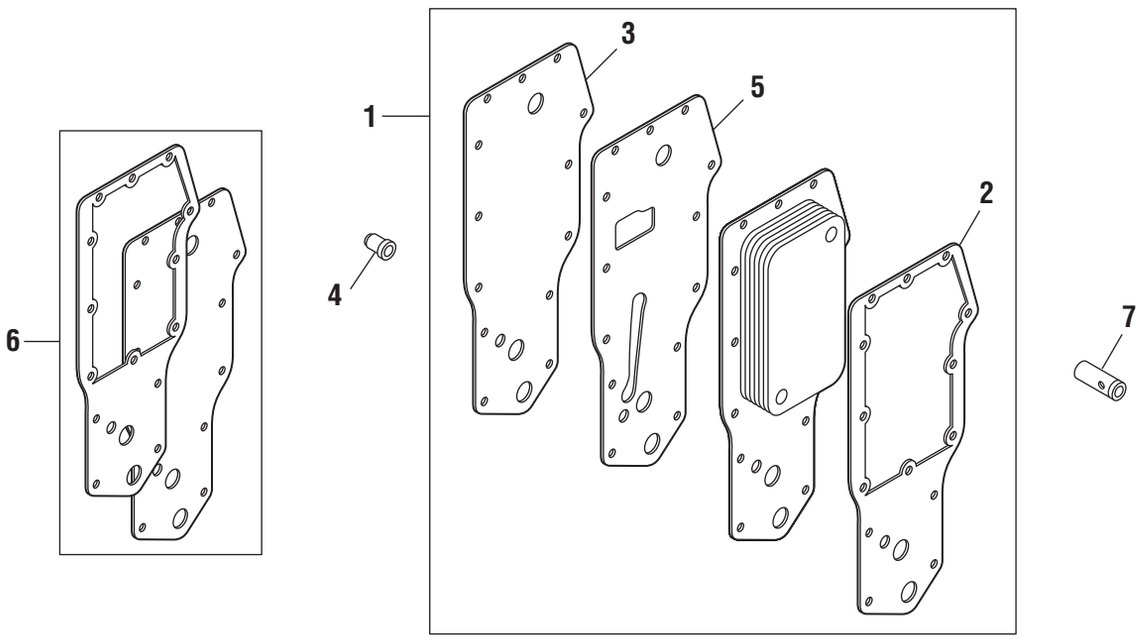
FIGURE 6508



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141299		CUM 3937404	PUMP,Lube	
1	**141319**		**CUM 4935792**	**PUMP,Lube**	
2	040049		CUM 3900677	SCREW(M8 x 1.25 x 30mm)	

Oil Cooler

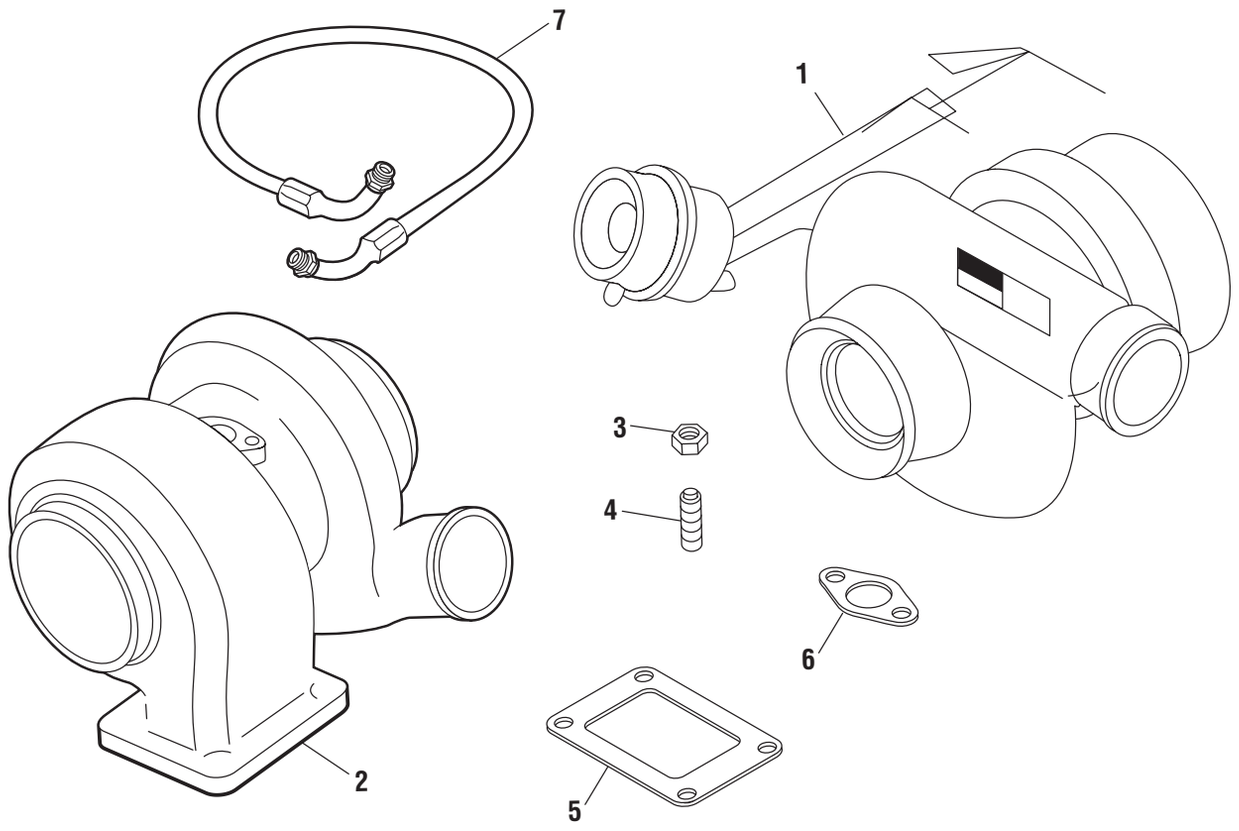
FIGURE 6509



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141419		CUM 3957544	COOLER,Oil Includes Oil Cooler (1) Gaskets(1)131443 (1)131536 (1)131445	
1	**141428**		**CUM 3975818**	**COOLER,Oil** **Includes Oil Cooler (1) Gasket kit (1)131737**	
2	131443		CUM 3942914	GASKET,Oil Cooler Mounting	CUM 3926760
2	131735		CUM 2830559	GASKET,Oil Cooler Mounting(w/ EGR Valve)	
3	131445		CUM 3929792	GASKET,Oil Cooler Mounting	
3	131736		CUM 3974127	GASKET,Oil Cooler Mounting(w/ EGR Valve)	
4	141433		CUM 3936365	VALVE,Pressure Relief	CUM 3927622
5	131536		CUM 3942915	GASKET,Oil Cooler Mounting	
6	131737		CUM 3977913	KIT,Oil Cooler Gasket Includes Gaskets (1)131735 (1)131736	
7	**141434**		**CUM 3918428**	**PLUNGER,Relief**	**CUM 3909376**

PAI Copyright 2017

FIGURE 6517

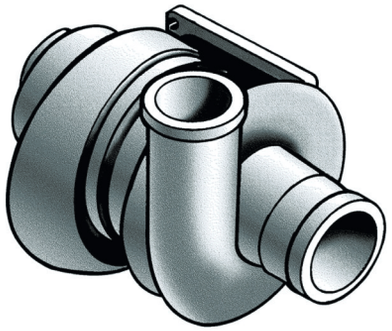


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181194	181194E	CUM 3802770	TURBOCHARGER(Waste Gated)	
1	181206		CUM 4090050	TURBOCHARGER(Waste Gated)	
2	181195	181195E	CUM 3802778	TURBOCHARGER(Non-Waste Gate)	
3	040062		CUM 3818824	NUT,Turbo Mounting(M10 x 1.5)	
4	040110		CUM 3818823	STUD,Turbo Mounting	
5	131603		CUM 3919369	GASKET,Turbocharger	
6	131694		CUM 4931365	GASKET,Oil Drain	
7	180280		CUM 3916289	HOSE,Oil Supply	

PAI Copyright 2017

4B and 6B Series

FIGURE 6510



Please note:

(1) Check Oil Feed Line any restrictions.
(2) Check Oil Return Line any restrictions that would block the oil from draining back into the Engine.
(3) Check Air Filter.
(4) Always prelube Turbocharger before starting Engine.
(5) The most common failures are due to low oil pressure, contaminated oil and hot shut down.

CPL #	H1 or H2 TURBO
592	ETC-9252 / EM92520 CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
593	N/A
594	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
595	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
597	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
598	N/A
599	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
600	N/A
646	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
681	N/A
689	N/A

CPL #	H1 or H2 TURBO
690	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
691	N/A
692	N/A
696	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
697	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
698	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
710	N/A
711	N/A
712	N/A
713	N/A
714	N/A
715	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115

CPL #	H1 or H2 TURBO
716	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
721	N/A
725	N/A
727	N/A
728	N/A
729	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
730	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
741	N/A
742	N/A
762	N/A
763	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
766	N/A
767	N/A
791	N/A

PAI Copyright 2017

CPL #	H1 or H2 TURBO
792	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
793	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
802	N/A
804	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
807	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
817	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
826	N/A
834	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
843	N/A
845	N/A
856	N/A
857	N/A
858	N/A
895	N/A
912	N/A
937	N/A
938	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
940	N/A
941	N/A
953	N/A
960	N/A
961	N/A
962	N/A
970	N/A
971	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
981	N/A
983	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
986	N/A
987	N/A
994	N/A
998	N/A
999	N/A
1160	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1163	N/A
1165	N/A
1168	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1172	N/A
1173	N/A
1174	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1184	N/A
1189	N/A
1201	N/A
1202	N/A
1207	N/A
1209	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1245	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1246	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1247	N/A
1259	N/A
1260	N/A
1261	N/A
1266	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1268	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
1277	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
1278	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
1279	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1287	N/A
1288	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1289	N/A
1312	N/A
1313	N/A
1320	N/A
1322	N/A
1351	N/A
1358	N/A
1397	N/A

PAI Copyright 2017

New Parts are in BOLD text

CPL #	H1 or H2 TURBO
1403	N/A
1408	N/A
1422	N/A
1440	N/A
1508	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
1509	ETC-9252 / **EM92520** CUM 3520030 CUM 3528744 CUM 3522900 CUM 3802290 CUM 3528743 SCH 171270
1527	N/A
1549	N/A
1550	N/A
1551	N/A
1552	N/A
1553	N/A
1554	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1570	N/A
1577	N/A
1578	N/A
1579	N/A
1581	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1582	N/A
1601	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1605	N/A
1606	N/A
1613	N/A
1638	N/A
1640	N/A
1655	N/A
1659	N/A

CPL #	H1 or H2 TURBO
1694	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1810	N/A
1811	N/A
1815	N/A
1816	N/A
1817	N/A
1822	N/A
1823	N/A
1824	N/A
1825	N/A
1839	N/A
1850	N/A
1863	N/A
1876	ETC-9253 / EM92530 CUM 3522777 CUM 3802289 CUM 3522778 CUM 3916349 CUM 3528741 CUM 3919127 CUM 3528742 SCH 166592 CUM 3802115
1889	N/A
1914	N/A
1915	N/A
1916	N/A
1917	N/A
1928	N/A
1940	N/A
1941	N/A
1948	N/A
1959	N/A
1961	N/A
1962	N/A
1963	N/A
1965	N/A
1966	N/A
1967	N/A
1968	N/A
2011	N/A
2014	N/A
2015	N/A
2016	N/A

CPL #	H1 or H2 TURBO
2021	N/A
2022	N/A
2023	N/A
2063	N/A
2070	N/A
2071	N/A
2072	N/A
2104	N/A

Turbocharger Repair Kit

PAI REFERENCE	OEM REFERENCE
181190	CUM 3575169

(Used for HX35 Turbocharger)

PAI Copyright 2017


pai
INDUSTRIES
ISO 9001 CERTIFIED
www.paiindustries.com

PAI PART NUMBER	PISTON PART NUMBER (6)	RING SET PART NUMBER (6)
6BS101-(001 thru 025)	CUM 3906223 (Standard)	505083 CUM 3802040 (Standard)
-(026 thru 050)	CUM 3906209 (.50 mm)	505084 CUM 3802042 (.50 mm)
-(051 thru 075	CUM 3906208 (1.00 mm)	505085 CUM 3802044 (1.00 mm)
6BS102-(001 thru 025)	CUM 3907156 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3907157 (.50 mm)	505081 CUM 3907157 (.50 mm)
-(051 thru 075)	CUM 3907158 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
-(076 thru 100) Fractured Rod	CUM 3907156 (Standard)	505080 CUM 3802230 (Standard)
-(101 thru 125) Fractured Rod	CUM 3907157 (.50 mm)	505081 CUM 3907157 (.50 mm)
-(126 thru 150) Fractured Rod	CUM 3907158 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS103-(001 thru 025)	CUM 3907163 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3908815 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3908816 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
-(076 thru 100) Fractured Rod	CUM 3907163 (Standard)	505080 CUM 3802230 (Standard)
-(101 thru 125) Fractured Rod	CUM 3908815 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(126 thru 150) Fractured Rod	CUM 3908816 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS104-(001 thru 025)	CUM 3911400 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3912049 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3912050 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS105-(001 thru 025)	CUM 3917619 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3919047 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3919048 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS106-(001 thru 025)	CUM 3922577 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3922580 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3922581 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
-(076 thru 100) Fractured Rod	CUM 3922577 (Standard)	505080 CUM 3802230 (Standard)
-(101 thru 125) Fractured Rod	CUM 3922580 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(126 thru 150) Fractured Rod	CUM 3922581 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS107-(001 thru 025)	CUM 3919041 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3919044 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3919045 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
-(076 thru 100) Fractured Rod	CUM 3919041 (Standard)	505080 CUM 3802230 (Standard)
-(101 thru 125) Fractured Rod	CUM 3919044 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(126 thru 150) Fractured Rod	CUM 3919045 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS108-(001 thru 025)	CUM 3921880 (Standard)	505083 CUM 3802040 (Standard)
-(026 thru 050)	CUM 3921882 (.50 mm)	505084 CUM 3802042 (.50 mm)
-(051 thru 075)	CUM 3921881 (1.00 mm)	505085 CUM 3802044 (1.00 mm)
6BS109-(001 thru 025)	CUM 3930187 (Standard)	505075 CUM 3802750 (Standard)
-(026 thru 050)	CUM 3930188 (.50 mm)	505076 CUM 3802863 (.50 mm)
-(051 thru 075)	CUM 3930189 (1.00 mm)	505077 CUM 3802864 (1.00 mm)
-(076 thru 100) Fractured Rod	CUM 3930187 (Standard)	505075 CUM 3802750 (Standard)
-(101 thru 125) Fractured Rod	CUM 3930188 (.50 mm)	505076 CUM 3802863 (.50 mm)
-(126 thru 150) Fractured Rod	CUM 3930189 (1.00 mm)	505077 CUM 3802864 (1.00 mm)

Kits are continued on the following page.

 PAI Copyright 2017

ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET PART NUMBER (1)	LOWER GASKET SET PART NUMBER (1)
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171801 ** (12 pieces) CUM 3901170	171811 ** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171952 ** (6 pair) N/A Fractured Rod			

PAI PART NUMBER	PISTON PART NUMBER (6)	RING SET PART NUMBER (6)
6BS110-(001 thru 025)	CUM 3926631 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 050)	CUM 3926634 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3926635 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS111-(001 thru 025)	CUM 3928673 (Standard)	505080 CUM 3802230 (Standard)
-(026 thru 051)	CUM 3928674 (.50 mm)	505081 CUM 3802232 (.50 mm)
-(051 thru 075)	CUM 3928675 (1.00 mm)	505082 CUM 3802234 (1.00 mm)
6BS112-(001 thru 025)	**CUM 3957795 (Standard)**	**505150 CUM 4089460 (Standard)**
-(026 thru 051)	**CUM 3957798 (.50 mm)**	**505151 CUM 4089614 (.50 mm)**
-(051 thru 075)	**CUM 3957800 (1.00 mm)**	**505152 CUM 4089615 (1.00 mm)**
-(076 thru 100) Fractured Rod	**CUM 3957795 (Standard)**	**505150 CUM 4089460 (Standard)**
-(101 thru 125) Fractured Rod	**CUM 3957798 (.50 mm)**	**505151 CUM 4089614 (.50 mm)**
-(126 thru 150) Fractured Rod	**CUM 3957800 (1.00 mm)**	**505152 CUM 4089615 (1.00 mm)**
6BS113-(001 thru 025)	**CUM 3935591 (Standard)**	**505180 CUM 3802831 (Standard)**
-(026 thru 051)	**CUM 3935594 (.50 mm)**	**505181 CUM 3806229 (.50 mm)**
-(051 thru 075)	**CUM 3935595 (1.00 mm)**	**505182 CUM 3806230 (1.00 mm)**
-(076 thru 100) Fractured Rod	**CUM 3935591 (Standard)**	**505180 CUM 3802831 (Standard)**
-(101 thru 125) Fractured Rod	**CUM 3935594 (.50 mm)**	**505181 CUM 3806229 (.50 mm)**
-(126 thru 150) Fractured Rod	**CUM 3935595 (1.00 mm)**	**505182 CUM 3806230 (1.00 mm)**
Natural Gas 6BS201-(001 thru 025)	**CUM 3922687 (Standard)**	**505154 CUM 3802951 (Standard)**
-(026 thru 051)	**CUM 3930489 (.50 mm)**	**505084 CUM 3802042 (.50 mm)**
-(051 thru 075)	**CUM 3930490 (1.00 mm)**	**505085 CUM 3802044 (1.00 mm)**
-(076 thru 100) Fractured Rod	**CUM 3922687 (Standard)**	**505154 CUM 3802951 (Standard)**
-(101 thru 125) Fractured Rod	**CUM 3930489 (.50 mm)**	**505084 CUM 3802042 (.50 mm)**
-(126 thru 150) Fractured Rod	**CUM 3930490 (1.00 mm)**	**505085 CUM 3802044 (1.00 mm)**
Natural Gas 6BS202-(001 thru 025)	**CUM 3930503 (Standard)**	**505154 CUM 3802951 (Standard)**
-(026 thru 051)	**CUM 3930504 (.50 mm)**	**505084 CUM 3802042 (.50 mm)**
-(051 thru 075)	**CUM 3930505 (1.00 mm)**	**505085 CUM 3802044 (1.00 mm)**
-(076 thru 100) Fractured Rod	**CUM 3930503 (Standard)**	**505154 CUM 3802951 (Standard)**
-(101 thru 125) Fractured Rod	**CUM 3930504 (.50 mm)**	**505084 CUM 3802042 (.50 mm)**
-(126 thru 150) Fractured Rod	**CUM 3930505 (1.00 mm)**	**505085 CUM 3802044 (1.00 mm)**

FIGURE 6511

Please note:

(*) Specify size of Piston, Rings, Rod and Main Bearings when ordering rebuild kits.

**** Part number standard sizes are shown in chart. Part numbers (and kit Dash numbers) will change if nonstandard components are requested.**

***** Available in HP**

1. **To ensure correct parts application, please have CPL and Engine Serial number available.**
2. **Piston kits include Pins and Retainers.**

PAI Copyright 2017

ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET PART NUMBER (1)	LOWER GASKET SET PART NUMBER (1)
171801 ** (12 pieces) CUM 3901170	171811 *** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171801 ** (12 pieces) CUM 3901170	171811 *** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
171801 ** (12 pieces) CUM 3901170	**171811 *** CUM 3802070**	**131404 CUM 3804897**	**131405 CUM 3802376**
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	**171811 *** CUM 3802070**	**131404 CUM 3804897**	**131405 CUM 3802376**
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	**171811 *** CUM 3802070**	**131881 CUM 2881955**	**131405 CUM 3802376**
171952 ** (6 pair) N/A Fractured Rod			
171801 ** (12 pieces) CUM 3901170	**171811 *** CUM 3802070**	**131881 CUM 2881955**	**131405 CUM 3802376**
171952 ** (6 pair) N/A Fractured Rod			

Upper Gasket Sets

FIGURE 6513

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131404		CUM 3804897	SET,Upper Gasket(2 VH-Early)	
1	131566		CUM 4089790	SET,Upper Gasket(4 VH-ISB Engine)	
1	131601		CUM 4089649	SET,Upper Gasket (2 VH Engine-Late w/Top Hat Valve Seal)	
1	131609		CUM 4089650	SET,Upper Gasket (2 VH Engine-Late w/.25mm OS Head Gasket)	
1	131635		CUM 3802364	SET,Upper Gasket (2 VH Early w/.25mm OS Head Gasket)	CUM 3802027, CUM 3802244
1	131687		CUM 3802245	SET,Upper Gasket(2VH-Early) (w/.50mm OS Head Gasket w/Push on Valve Seals)	
1	131688		CUM 4089651	SET,Upper Gasket(2VH-Late) (w/.50mm OS Head Gasket w/Top Hat Valve Seals)	
1	**131881**		**CUM 2881955**	**SET,Upper Gasket(Natural Gas)**	

Lower Gasket Sets

FIGURE 6514

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131405		CUM 3802376	SET,Lower Gasket(2 VH)	
1	131608		CUM 3800833	SET,Lower Gasket(4VH-ISB) (w/ Speedi-Sleeve)	CUM 3802980
1	131726		CUM 3800487	SET,Lower Gasket(4VH-ISB) (w/ Heavy Sleeve)	

PAI Copyright 2017

FIGURE 6515

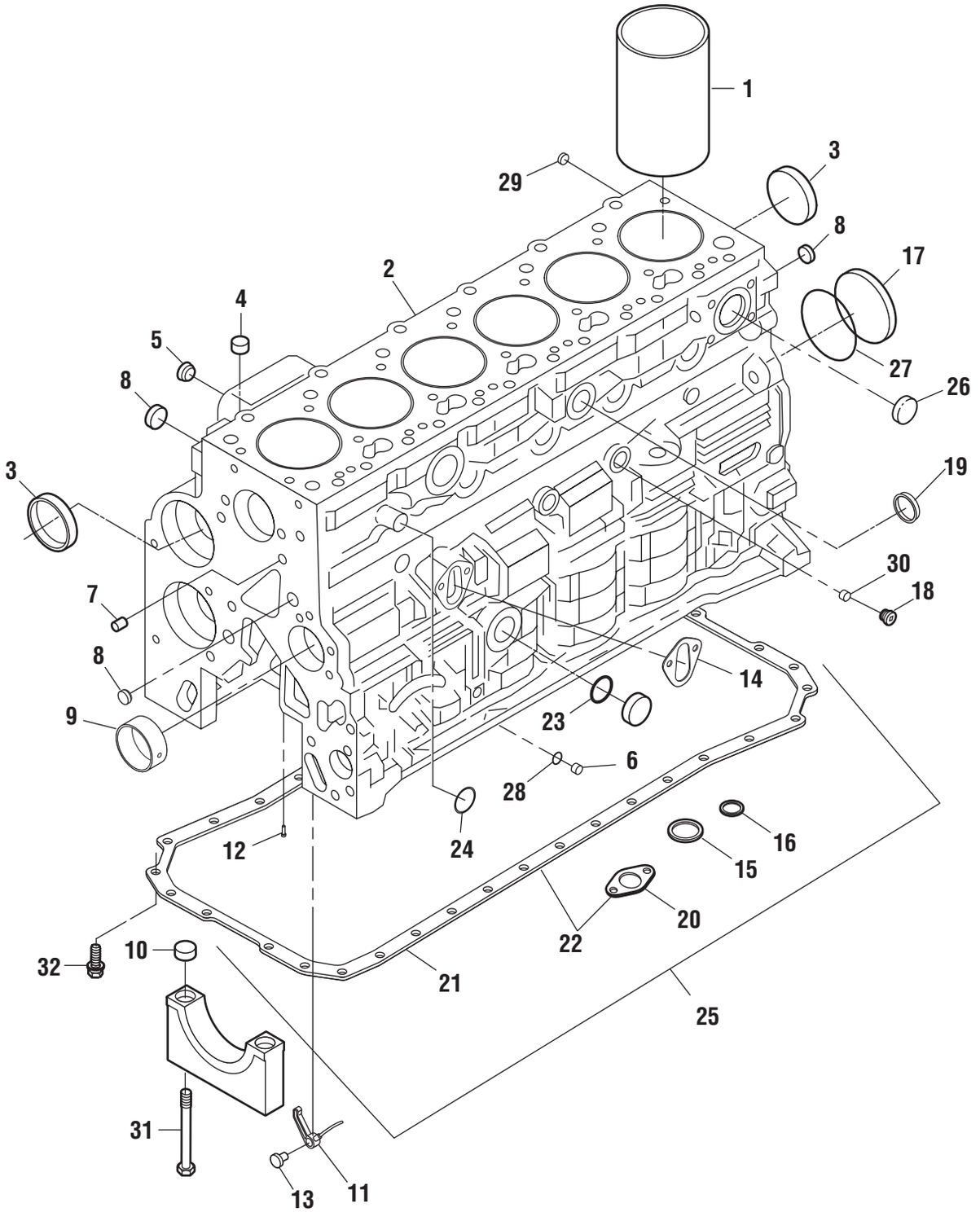
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131461		CUM 3931607	GASKET,Fuel Injection Mounting(VE Pump)	
2	131444		CUM 3008400	GASKET,Compressor Drive Hydraulic Pump Mounting	
3	131446		CUM 3931349	GASKET,Oil Pickup Tube	
4	131447		CUM 3901356	GASKET,Turbo Mounting	
5	131511		CUM 3931604	GASKET,Inlet Connection	
6	131480		CUM 3937706	GASKET,Turbo Drain	

Miscellaneous Components

FIGURE 6512

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180935		CUM 3910739	BEARING,Fan Drive(4B/6B/6C)	
2	121264		CUM 3883284	O-RING	
3	136047		CUM 3902363	SEAL,Oil Fill Cap	
4	136059		CUM 3935172	SEAL,Fuel Fitting	
5	136065		CUM 3906773	SEAL,Plug	
6	042155		CUM 3917747	INSULATOR	
7	042125		CUM 3026396	CLAMP,Hose(2-1/6in to 3in)	
7	**042126**		**CUM 3937613**	**CLAMP,Hose**	
8	121286		CUM 3910530	RING,Rectangular(Water Connector)	
9	042023		CUM 3069053	CLAMP,V-Band(3in)	
10	141284		CUM 3915703	PAN,Oil	CUM 3900960
11	181030		CUM 3901683	MANIFOLD,Exhaust	**CUM 3931747**
12	**042091**		**CUM 4891385**	**WASHER,Copper**	
13	**042179**		**CUM 3905307**	**SCREW,Banjo(6mm)**	
14	**132022**		**CUM 4089240**	**KIT,Compressor Head Repair(15.2CFM)**	

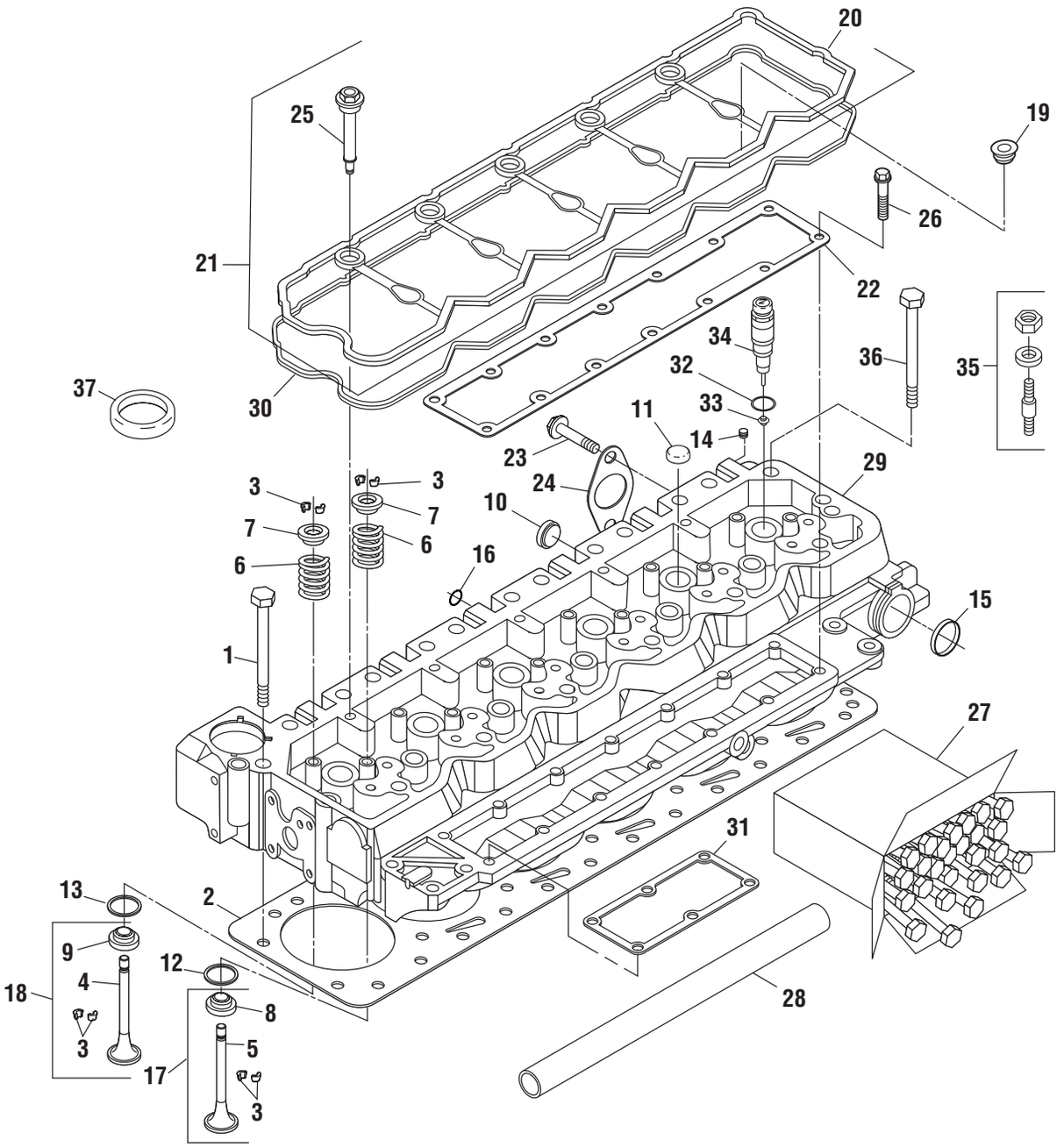
FIGURE 6563



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**161603**		**CUM 4919951**	**SLEEVE,Repair(6.7 L)**	
1	161630		CUM 3904166	SLEEVE,Repair(5.9 L)	
2	060025		CUM 4946586	ASSEMBLY,Cylinder Block(QSB 6.7 L)	CUM 4929972
3	040093		CUM 3922072	PLUG,Expansion (2-1/4in x 5/16in)	CUM 3812090
4	**045067**		**CUM 3902343**	**DOWEL,Ring(Head Alignment)**	
5	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
6	050572		CUM 3680420	PLUG,Threaded	
7	**045066**		**CUM 3900257**	**PIN,Dowel**	
8	040084		CUM 3900956	PLUG,Expansion	
9	151528		CUM 3940059	BEARING,Cam(Storm Block)	
10	Call		CUM 3900068	DOWEL,Ring	
11	045054		CUM 4937308	NOZZLE,Piston Cooling	
12	045036		CUM 3959574	PLUG,Piston Cooling	
13	042181		CUM 3964817	SCREW,Cooling Nozzle	
14	131532		CUM 3939258	GASKET,Fuel Pump	
15	136057		CUM 3902425	SEAL,Oil Pan	
16	136071		CUM 3920773	SEAL,Drain	
16	**136104**		**CUM 3287561**	**SEAL,Drain**	
17	040090		CUM 3900687	PLUG,Expansion(Camshaft)	
18	050573		CUM 3680419	PLUG,Threaded	
19	040086		CUM 3007635	PLUG,Expansion	
20	131446		CUM 3931349	GASKET,Oil Pickup	
20	131698		CUM 3949562	GASKET,Oil Pickup	
20	131793		CUM 4898301	GASKET,Oil Pickup	
21	**132020**		**CUM 4337596**	**GASKET,Oil Pan**	
21	131406		CUM 3911536	GASKET,Oil Pan	
21	131697		CUM 3958165	GASKET,Oil Pan	
21	131794		CUM 4934344	GASKET,Oil Pan	CUM 4897861
21	**131831**		**CUM 4939246**	**GASKET,Oil Pan**	**CUM 4897877**
21	**131868**		**CUM 4943167**	**GASKET,Oil Pan(QSB 6)**	**CUM 4936940**
22	131689		N/A	KIT,Oil Pan Gasket Includes Gaskets (1)131697 (1)131698	
22	**131839**		**N/A**	**KIT,Oil Pan Gasket(ISB 6.7 L) Includes Gaskets (1)131794 (1)131793 Seal (1)136104**	
23	121268		CUM 3906696	RING,Rectangular	
24	136069		CUM 3928759	SEAL,Side Plate(Current)	
25	**132021**		**N/A**	**KIT,Oil Pan Gasket Includes Pan Gasket (1)132020 Pickup Gasket (1)131698 Drain Seal (1)136071**	
25	131610		N/A	KIT,Oil Pan Gasket(Early ISB) Includes Gaskets (1)131406 (1)131446 Seals (1)136071 (1)136057	
26	ECP-3487		MAK 79AX67	PLUG	CUM 3905401
27	121335		CUM 3926047	O-RING,Cam Plug	
28	121298		CUM 3678786	O-RING	
29	321241		CAT 5P7813	O-RING	CUM 3678925
30	121210		CUM 3678912	O-RING	
31	**040133**		**CUM 3927948**	**BOLT,Main Cap(M12 x 1.50 x 119)**	
32	**040145**		**CUM 3907860**	**BOLT,Flanged Hex Head(M8 x 1.25 x 25)**	

FIGURE 6550



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	040054		CUM 3927063	BOLT,Screw,Hex Flanged Head Cap	
1	**040125**		**CUM 4891024**	**BOLT,Screw,Hex Flanged(M12 x 1.75 x 130)**	
2	131417		CUM 3283333	GASKET,Cylinder Head(ISB4)	
2	131586		CUM 3977063	ASSEMBLY,Gasket,Cylinder Head(Early)	
2	131587		CUM 3957650	ASSEMBLY,Gasket,Cylinder Head(Late)	
2	131710		CUM 3958644	GASKET,Cylinder Head(QSB)(Grade A)	
2	131711		CUM 3958645	GASKET,Cylinder Head(QSB)(Grade B)	
2	131717		CUM 3966342	GASKET,Cylinder Head(QSB)	
2	131753		CUM 4932210	GASKET,Cylinder Head(QSB)	CUM 4929656
2	**131822**		**CUM 4932209**	**GASKET,Cylinder Head(QSB)**	
2	**131862**		**CUM 2830706**	**GASKET,Cylinder Head(QSB4)**	
2	**131866**		**CUM 2830704**	**GASKET,Cylinder Head(QSB6)**	
2	**131882**		**CUM 3283338**	**GASKET,Cylinder Head(ISB4)**	
2	**131957**		**CUM 4946620**	**GASKET,Cylinder Head(ISB/QSB)**	
3	192021		CUM 3940123	COLLET,Valve	
4	192139		CUM 3940734	VALVE,Exhaust	
4	192153		CUM 3968183	VALVE,Exhaust	CUM 4089672
5	192137		CUM 3940735	VALVE,Intake	
6	**192135**		**CUM 3932453**	**SPRING,Valve(ISB 4/6 w/o Rotator)**	
6	192181		CUM 4936080	SPRING,Valve	CUM 3943161
7	192149		CUM 3943198	RETAINER,Valve Spring	
8	192108		CUM 3955393	SEAL,Valve Stem(Top Hat Style)	
9	192005		CUM 3921640	SEAL,Valve Stem(Exhaust and Intake)(ISB4)	
9	192109		CUM 3955394	SEAL,Valve Stem(Top Hat Style)	
9	192111		CUM 3945438	SEAL,Valve Stem(Exhaust)(ISB/QSB)(Short)	
9	192112		CUM 3942989	SEAL,Valve Stem(Intake)(ISB/QSB)(Tall)	
10	040086		CUM 3007635	PLUG,Expansion	
11	GCP-3484		MAK 79AX57X	PLUG,Expansion	CUM 3920706
12	192185		CUM 3943449	INSERT,Valve(Intake)(STD)	
12	192186		CUM 3939719	INSERT,Valve(Intake)(.005in)	
12	192187		CUM 3939720	INSERT,Valve(Intake)(.010in)	
12	192188		CUM 3939721	INSERT,Valve(Intake)(.020in)	
13	192190		CUM 3943450	INSERT,Valve(Exhaust)(STD)	
13	192191		CUM 3939723	INSERT,Valve(Exhaust)(.005in)	
13	192192		CUM 3939724	INSERT,Valve(Exhaust)(.010in)	
13	192193		CUM 3939725	INSERT,Valve(Exhaust)(.020in)	
14	040089		CUM 3007632	PLUG,Expansion	
15	GKP-3498		MAK 79AX60Z	PLUG,Expansion	CUM 3945094
16	GKP-3488		MAK 79AX59	PLUG,Expansion	CUM 3945095
17	192138		CUM 3802924	KIT,Intake Valve Includes Intake Valve (1)192137 Collets (2)192021 Seal (1)192108	
18	192140		CUM 3802967	KIT,Exhaust Valve Includes Exhaust Valve (1)192139 Collets (2)192021 Seal (1)192109	
18	192141		CUM 4955210	KIT,Exhaust Valve Includes Valve (1)192153 Collets (2)192021 Seal (1)192109	
19	042150		CUM 3942659	ISOLATOR,Valve Cover	
20	131419		CUM 3930906	GASKET,Valve Cover(ISB4)	
20	131580		CUM 3935878	GASKET,Valve Cover(Industrial)	
20	131606		CUM 4939178	GASKET,Valve Cover(Automotive)	
20	131691		CUM 3954324	GASKET,Valve Cover(QSB)	
20	131791		CUM 4899226	GASKET,Valve Cover(QSB)	CUM 5272479
20	**131820**		**CUM 4899228**	**GASKET,Valve Cover**	
20	**131832**		**CUM 5264950**	**GASKET,Valve Cover(ISB 6.7) w/ Wiring Harness**	**CUM 3975641**
21	131607		CUM 4942356	KIT,Valve Cover Gasket Includes Gasket (1)131606 Screws (5)040051	
22	131442		CUM 3931347	GASKET,Intake Manifold Cover	CUM 3938152
22	131448		CUM 3931605	GASKET,Intake Manifold Cover(ISB4)	
22	131693		CUM 3947530	GASKET,Intake Manifold Cover	
23	040028		CUM 3901448	SCREW,Hex Flanged Head Cap (M10x 1.5 x 65)	CUM 3944593
23	**040146**		**CUM 3930249**	**SCREW(10M x 1.5 x 65 Hex-Head w/ Flange) (Stainless)(Carbon)**	

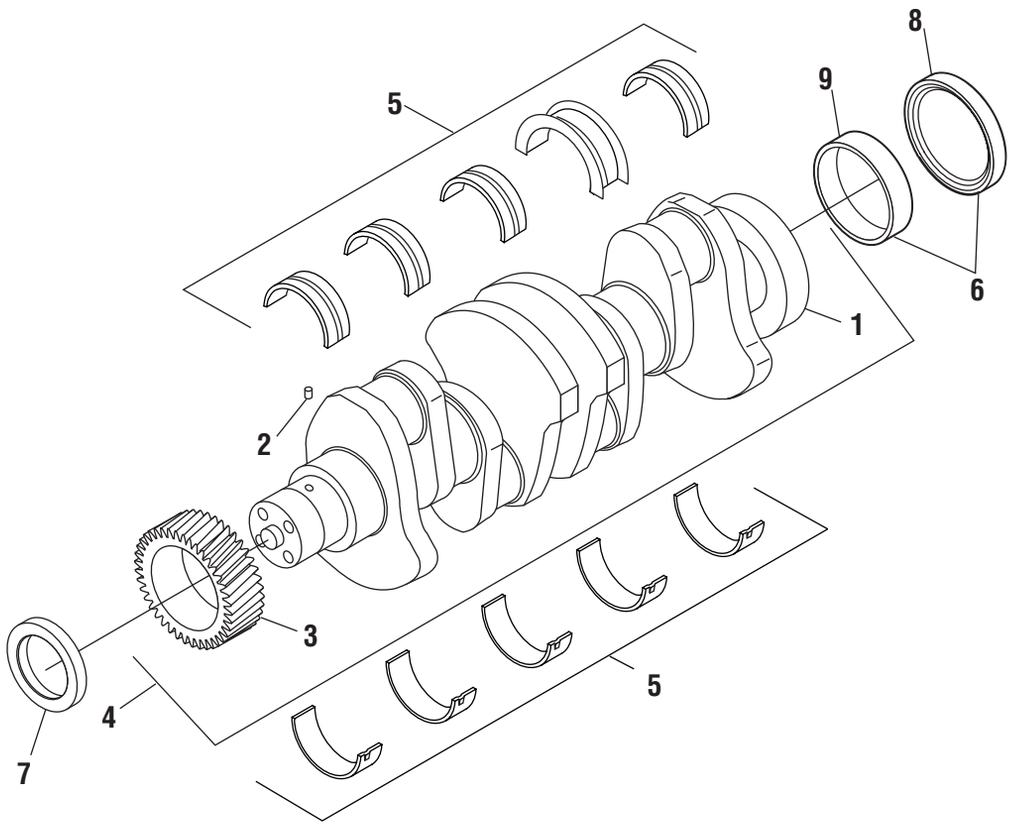
Keys 24 - 37 are on the following page.

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
24	131467		CUM 3927154	GASKET,Exhaust Manifold(ISB4)	
24	131599		CUM 3946275	GASKET,Exhaust Manifold	
24	131725		CUM 3955339	GASKET,Exhaust Manifold	
25	040051		CUM 4939179	ASSEMBLY,Valve Cover Screw	
25	040082		CUM 3946168	ASSEMBLY,Isolator	CUM 3943717
26	**040129**		**CUM 3918109**	**CAPSCREW,Hex Flange Head Cap(M8x 1.25 x 25)**	**CUM 3904341**
27	040069		N/A	KIT,Cylinder Bolt Includes Bolts (26)040054	
27	**040123**		**N/A**	**KIT,Cylinder Bolt(ISB4) Includes Bolts (8)040125 (10)040126**	
27	**040124**		**N/A**	**KIT,Cylinder Bolt(ISB6) Includes Bolts (12)040125 (14)040126**	
27	**040101**		**N/A**	**KIT,Cylinder Bolts(ISB4) Includes Bolts (18)040054**	
28	045081		CUM 3918614	HOSE,Breather(17in x 3/4in)	CUM 3908049
29	060171		CUM 3977225	HEAD,Cylinder(Bare)(Common Rail)	
29	060172		CUM 4936081	ASSEMBLY,Cylinder Head(Loaded) (Common Rail) Includes Bare Head (1)060171 Exhaust Valve Kits (12)192140 Intake Valve Kits (12)192138 Seals (24)192108 Springs (24)192181 Retainers (24)192149	CUM 2831474
29	**060178**		**CUM 3944992**	**HEAD,Cylinder(Bare)(Non-Common Rail)**	**CUM 3937728**
29	**060179**		**CUM 3991773**	**ASSEMBLY,Cylinder Head(Loaded)(Non-Common Rail) Includes Bare Head (1)060178 Valve Kits (12)192140 (12)192138 Seals (12)191108 (12)192109 Springs (24)192181 Retainers (24)192149**	
30	131692		CUM 3963379	GASKET,Rocker Housing	CUM 3955109
30	131792		CUM 4899231	GASKET,Rocker Housing	
30	**131821**		**CUM 4899230**	**GASKET,Rocker Housing**	
31	131755		CUM 3978072	GASKET,Intake Inlet	
31	**131849**		**CUM 5264566**	**GASKET,Intake Inlet**	**CUM 4940849**
32	121287		CUM 3909356	RING,Injector(ISB 12 Valve)	
32	121319		CUM 4890926	O-RING,Injector(ISB 24 Valve)	
32	121337		CUM 3977393	O-RING,Injector	
32	**121386**		**CUM 4890929**	**O-RING,Injector**	
32	EGS-3905-021		MAK 446GC1215	O-RING,Injector	CUM 3029820
33	**042089**		**CUM 4893741**	**WASHER,Injector**	
33	042092		CUM 3906659	WASHER,Injector(ISB 24 Valve)	
33	136145		CUM 3976371	SEAL,Injector	
34	**209965X**		**CUM 5263262**	**ASSEMBLY,Injector(Reman)**	**CUM 3976372X**
34	Call		CUM 4993510	INJECTOR	
35	**042152**		**CUM 5271613**	**ISOLATOR,Noise(QSB)**	**CUM 4899239**
36	**040126**		**CUM 4891025**	**BOLT,Screw,Hex Flanged(M12x1.75x150)**	
37	**131861**		**CUM 5255450**	**GASKET,Oil Cap(QSB4)**	

PAI Copyright 2017

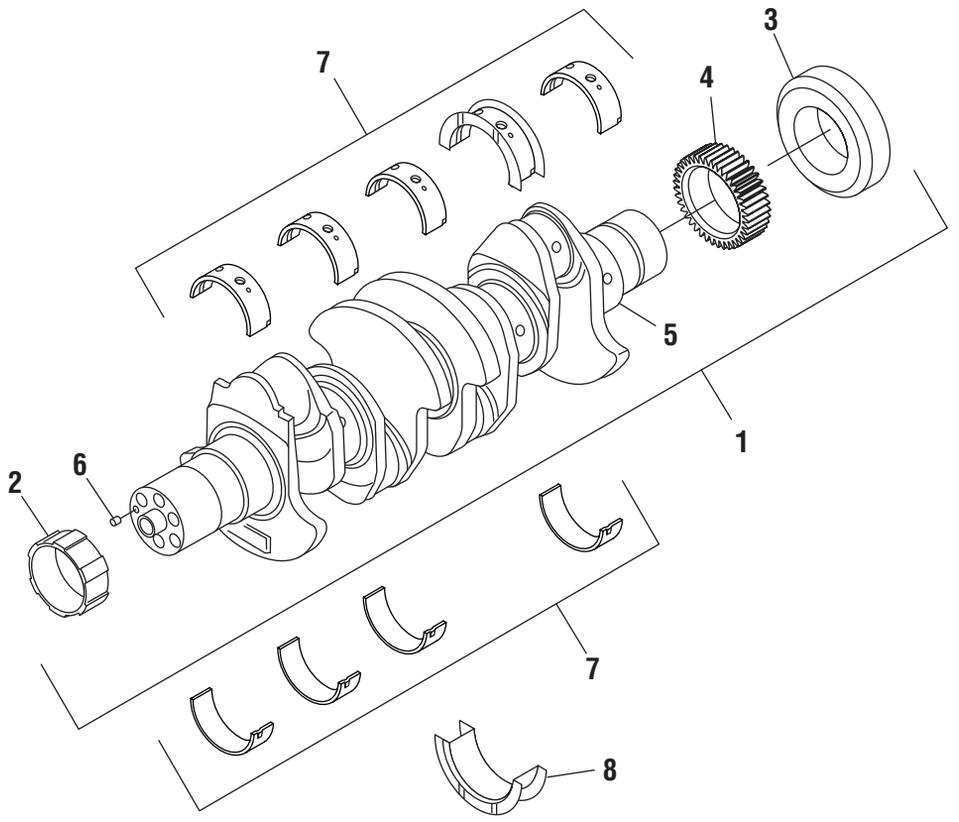
FIGURE 6560



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171653		CUM 3939367	CRANKSHAFT	
2	171717		CUM 3904483	PIN,Dowel	
3	171716		CUM 3929027	GEAR	
4	171652		N/A	ASSEMBLY,Crankshaft Includes Crankshaft (1)171653 Gear (1)171716 Pin (1)171717	
5	**171806**		**CUM 3802010**	**KIT,Main Bearing(STD)** **Includes Upper Main Bearings (4)** **Upper Thrust Bearing (1) Lower Main Bearings (5)**	
5	**171807**		**CUM 3802011**	**KIT,Main Bearing(.010in/.25mm)** **Includes Upper Main Bearings (4)** **Upper Thrust Bearing (1) Lower Main Bearings (5)**	
5	**171808**		**CUM 3802012**	**KIT,Main Bearing(.020in/.50mm)** **Includes Upper Main Bearings (4)** **Upper Thrust Bearing (1) Lower Main Bearings (5)**	
5	**171809**		**CUM 3802013**	**KIT,Main Bearing(.030in/.75mm)** **Includes Upper Main Bearings (4)** **Upper Thrust Bearing (1) Lower Main Bearings (5)**	
5	**171810**		**CUM 3802014**	**KIT,Main Bearing(.040in/1.00mm)** **Includes Upper Main Bearings (4)** **Upper Thrust Bearing (1) Lower Main Bearings (5)**	
6	136126		CUM 3926126	KIT,Rear Seal Includes Seal (1)136127 Wear Ring (1)136128	
7	136084		CUM 3802820	KIT,Front Seal(w/ Heavy Wear Ring)	
8	**136127**		**CUM 3925530**	**SEAL,Rear Crankshaft**	
9	**136128**		**CUM 3925532**	**RING,Wear**	

PAI Copyright 2017

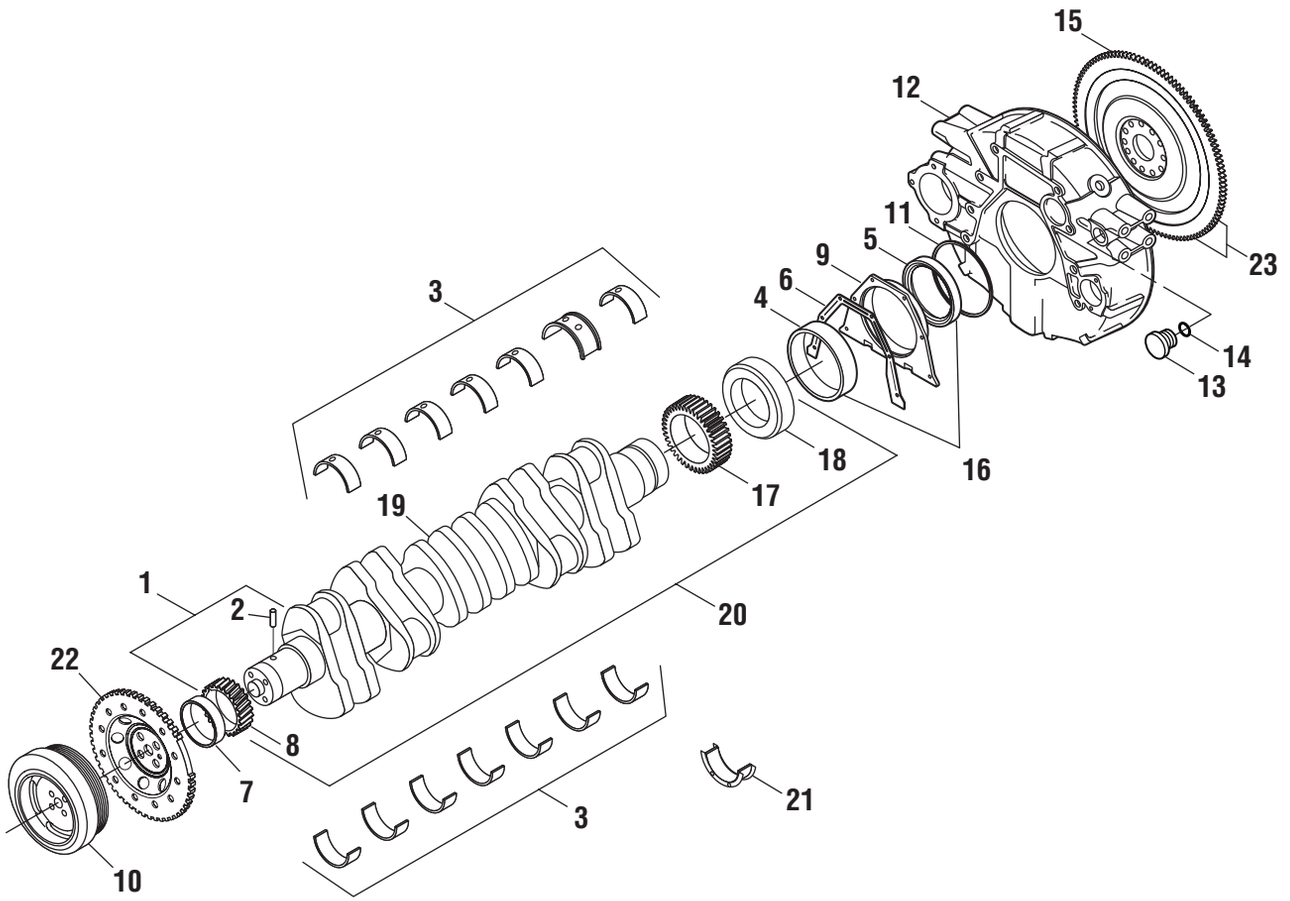
FIGURE 6565



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 2831069	CRANKSHAFT	
2	Call		CUM 2830354	SLEEVE	
3	172029		CUM 2831066	COLLAR	
4	172031		CUM 4892438	GEAR	
5	Call		CUM 4899393	CRANKSHAFT	
6	Call		CUM 4899046	PIN,Dowel	
7	171806		CUM 3802010	KIT,Main Bearing(STD) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
7	171807		CUM 3802011	KIT,Main Bearing(.010in/.25mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
7	171808		CUM 3802012	KIT,Main Bearing(.020in/.50mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
7	171809		CUM 3802013	KIT,Main Bearing(.030in/.75mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
7	171810		CUM 3802014	KIT,Main Bearing(.040in/1.00mm) Includes Upper Main Bearings (4) Upper Thrust Bearing (1) Lower Main Bearings (5)	
8	**172040**		**CUM 3945528**	**BEARING,Lower Thrust(STD)**	
8	**172041**		**CUM 3945664**	**BEARING.Lower Thrust(.010in/.25mm)**	
8	**172042**		**CUM 3945665**	**BEARING,Lower Thrust(.020in/.50mm)**	
8	**172043**		**CUM 3945666**	**BEARING,Lower Thrust(.030in/.75mm)**	
8	**172044**		**CUM 3945667**	**BEARING,Lower Thrust(.040in/1.00mm)**	

5.9 L and 6.7 L

FIGURE 6561



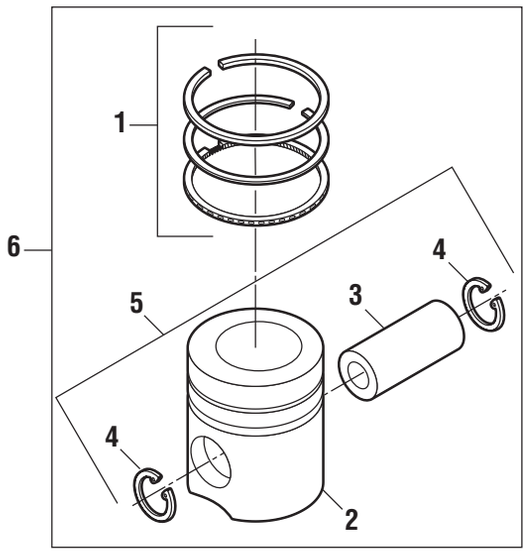
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171654		CUM 3944243	ASSEMBLY,Crankshaft(5.9 L) Includes Crankshaft (1) Gear (1)171716 Pin (1)171717	
2	171717		CUM 3904483	PIN,Dowel(5.9 L)	
2	Call		CUM 3955030	PIN,Dowel(6.7 L)	
3	171811		CUM 3802070	KIT,Main Bearing(STD) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171812		CUM 3802071	KIT,Main Bearing(.010in/.25mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171813		CUM 3802072	KIT,Main Bearing(.020in/.50mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171814		CUM 3802073	KIT,Main Bearing(.030in/.75mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
3	171815		CUM 3802074	KIT,Main Bearing(.040in/ 1.00mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
4	136040		CUM 3906081	RING,Wear(Speedi-Sleeve) (Use w/ Seal 136026)	
4	**136128**		**CUM 3925532**	**RING,Wear(Heavy Sleeve)(Use w/ Seal 136127)**	

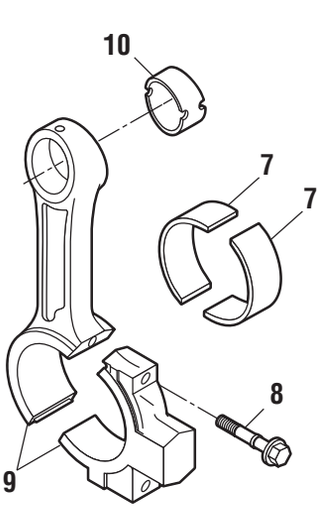
PAI Copyright 2017

5.9 L and 6.7 L

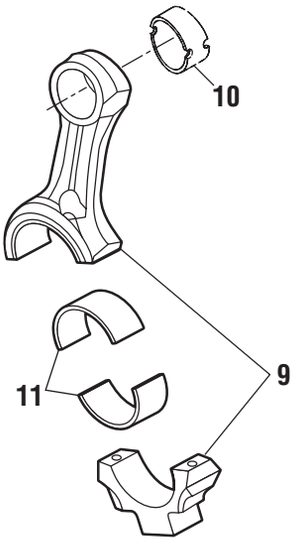
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
5	136026		CUM 3909410	SEAL,Rear Crankshaft(Dry only)(Speedi-Sleeve) (Use w/ Wear Ring 136040 or Kit 136116)	
5	**136127**		**CUM 3925530**	**SEAL,Rear Crankshaft(Heavy Sleeve) (Use w/ Wear Ring 136128 or Kit 136126)**	
5	**136158**		**CUM 5259499**	**SEAL,Rear Crankshaft(Dry Seal)**	
6	131463		CUM 3938159	GASKET,Rear Cover	CUM 3928493
7	136084		CUM 3802820	KIT,Seal(Current)(w/ Heavy Wear Ring)	
7	**136119**		**CUM 4890832**	**SEAL,Front**	
8	171716		CUM 3929027	GEAR,Crankshaft	
8	172035		CUM 4934419	GEAR,Crankshaft(6.7 L)	
8	**172036**		**CUM 4893386**	**GEAR,Crankshaft(Industrial 6.7 L)**	
9	060101		CUM 3921043	COVER,Rear Seal	
10	202022		CUM 3918999	DAMPER	
11	136031		CUM 3912473	O-RING(for Wet Clutch)	
12	Call		CUM 3923045	HOUSING,Flywheel	
13	042019		CUM 3910248	PLUG,Flywheel Housing	CUM 3904470
14	121233		CUM 3058653	SEAL	
15	060071		CUM 3901774	GEAR,Flywheel	
15	**060072**		**CUM 3903309**	**GEAR,Flywheel(173 Tooth Ring Gear)**	
16	136116		CUM 3927683	KIT,Crank Seal(Rear)(Speedi-Sleeve) Includes Seal (1)136026 Wear Ring (1)136040	
16	**136122**		**CUM 4890833**	**SEAL,Rear Crankshaft (Unitized Seal Assembly)**	
16	**136126**		**CUM 3926126**	**KIT,Seal(Rear)(Heavy Wear Sleeve) Includes Seal (1)136127 Wear Ring (1)136128**	
17	**172030**		**CUM 4934418**	**GEAR,Crankshaft**	
17	**172031**		**CUM 4892438**	**GEAR,Crankshaft**	
18	**172029**		**CUM 2831066**	**COLLAR**	
19	**171621**		**CUM 3968164**	**CRANKSHAFT(6.7 L)**	
19	**171623**		**CUM 2830477**	**CRANKSHAFT(Industrial 6.7 L)**	
19	171655		CUM 3944204	CRANKSHAFT(ISB)	
19	**171657**		**CUM 4980462**	**CRANKSHAFT(ISB-Dodge Truck, 325 hp)**	
20	**171622**		**CUM 4934862**	**ASSEMBLY,Crankshaft Includes Crankshaft (1)171621 Collar (1)172029 Gears (1)172030 (1)172035**	**CUM 3974538**
20	**171624**		**CUM 2830476**	**ASSEMBLY,Crankshaft(Industrial 6.7 L) Includes Crankshaft (1)171623 Collar (1)172029 Gears (1)172031 (1)172036**	
21	**172040**		**CUM 3945528**	**BEARING,Thrust(STD)**	
21	**172041**		**CUM 3945664**	**BEARING,Thrust(.010in/.25mm)**	
21	**172042**		**CUM 3945665**	**BEARING,Thrust(.020in/.50mm)**	
21	**172043**		**CUM 3945666**	**BEARING,Thrust(.030in/.75mm)**	
21	**172044**		**CUM 3945667**	**BEARING,Thrust(.040in/1.00mm)**	
22	Call		CUM 3974245	RING,Speed Indicator(Used w/ Crankshaft 171657)	
23	**060054**		**CUM 3906807**	**ASSEMBLY,Flywheel(ISB)**	

FIGURE 6552





Straight Cut Rod



Fractured Rod

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	505105		CUM 3804990	SET,Ring(ISB)(STD)	CUM 3804947
1	505109		CUM 3806201	SET,Ring(ISB)(.50mm)	CUM 3804979
1	505113		CUM 3806203	SET,Ring(ISB)(1.00mm)	CUM 3804986
1	505130		CUM 3804930	SET,Ring(ISB)(STD)	
1	505131		CUM 3804931	SET,Ring(ISB)(.50mm)	CUM 3933583
1	505132		CUM 3804932	SET,Ring(ISB)(1.00mm)	CUM 3933584
1	505133		CUM 4089258	SET,Ring(QSB)(STD)	CUM 3949579
1	505134		CUM 4089181	SET,Ring(QSB)(.50mm)	CUM 3957244
1	505135		CUM 4089182	SET,Ring(QSB)(1.00mm)	CUM 3949580
1	505150		CUM 4089460	SET,Ring(ISB)(STD)	
1	505151		CUM 4089614	SET,Ring(ISB)(.50mm)	
1	505152		CUM 4089615	SET,Ring(ISB)(1.00mm)	
1	505160		CUM 4955251	SET,Ring(ISB)(STD)	
1	505164		CUM 4955480	SET,Ring(ISB)(.50mm)	
1	505170		CUM 3802919	SET,Ring(ISB/QSB)(STD)	
1	505172		CUM 3802917	SET,Ring(ISB/QSB)(.50mm)	
1	505174		CUM 3802918	SET,Ring(ISB/QSB)(1.00mm)	
1	**505180**		**CUM 3802831**	**SET,Ring(ISB)(STD)**	**CUM 3897673**
1	**505181**		**CUM 3806229**	**SET,Ring(ISB)(.50mm)**	**CUM 3866105**
1	**505182**		**CUM 3806230**	**SET,Ring(ISB)(1.00mm)**	**CUM 3866106**
2	111443		CUM 3932514	PISTON(ISB)(STD)	
2	111446		CUM 3933581	PISTON(ISB)(.50mm)	
2	111449		CUM 3933582	PISTON(ISB)(1.00mm)	
2	111455		CUM 3946153	PISTON(ISB/QSB)(STD)	
2	111458		CUM 3946156	PISTON(ISB/QSB)(.50mm)	
2	111461		CUM 3946157	PISTON(ISB/QSB)(1.00mm)	
2	111465		CUM 3946050	PISTON(ISB/QSB)(STD)	
2	111468		CUM 3946053	PISTON(ISB/QSB)(.50mm)	
2	111471		CUM 3946054	PISTON(ISB/QSB)(1.0mm)	
2	111500		CUM 3958675	PISTON(ISB)(STD)	
2	111503		CUM 3949843	PISTON(ISB)(.50mm)	
2	111506		CUM 3949844	PISTON(ISB)(1.00mm)	
2	111521		CUM 3970192	PISTON(ISB)(STD)	CUM 3966678
2	111524		CUM 3970126	PISTON(ISB)(.50mm)	CUM 3966679
2	111527		CUM 3970127	PISTON(ISB)(1.00mm)	CUM 3966680
2	111531		CUM 3957416	PISTON(ISB)(STD)	CUM 3957420
2	111534		CUM 3957417	PISTON(ISB)(.50mm)	
2	111537		CUM 3957418	PISTON(ISB)(1.00mm)	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
2	111540		CUM 3965497	PISTON(ISB)(STD)	CUM 3949808
2	111543		CUM 3949841	PISTON(ISB)(.50mm)	CUM 3966675
2	111546		CUM 3949842	PISTON(ISB)(1.00mm)	CUM 3966676
2	111553		CUM 4934860	PISTON(ISB)(STD)	
2	111556		CUM 4934816	PISTON(ISB)(.50mm)	
2	111572		CUM 3948465	PISTON(ISB/QSB)(STD)	CUM 3948466
2	111575		CUM 3948468	PISTON(ISB/QSB)(.50mm)	CUM 3942298
2	111578		CUM 3948469	PISTON(ISB/QSB)(1.00mm)	CUM 3942348
2	111601		CUM 3944073	PISTON(ISB)(STD)	
2	111604		CUM 3944076	PISTON(ISB)(.50mm)	
2	111607		CUM 3944077	PISTON(ISB)(1.00mm)	
2	**111721**		**CUM 3969036**	**PISTON(ISB)(STD)**	
2	**111610**		**CUM 3972880**	**PISTON(ISB)(STD)**	**CUM 4897935**
2	**111724**		**CUM 3970840**	**PISTON(ISB)(.50mm)**	
2	**111613**		**CUM 3972885**	**PISTON(ISB)(.50mm)**	**CUM 4898820**
2	**111616**		**CUM 3972886**	**PISTON(ISB)(1.00mm)**	**CUM 4898821**
2	**111620**		**CUM 4938619**	**PISTON(ISB)(STD)**	**CUM 4936946**
2	**111623**		**CUM 4938620**	**PISTON(ISB)(.50mm)**	
2	**111626**		**CUM 3935591**	**PISTON(ISB/QSB)(STD)**	**CUM 3866410**
2	**111630**		**CUM 3935594**	**PISTON(ISB/QSB)(.50mm)**	**CUM 3866413**
2	**111634**		**CUM 3935595**	**PISTON(ISB/QSB)(1.00mm)**	**CUM 3866414**
2	**111716**		**CUM 3965259**	**PISTON(QSB)(.20mm)**	
2	**111719**		**CUM 3965260**	**PISTON(QSB)(.40mm)**	
2	**111727**		**CUM 3970841**	**PISTON(ISB)(1.00mm)**	
2	**111713**		**CUM 3939398**	**PISTON(QSB)(STD)**	
3	111088		CUM 4931041	PIN	
3	111213		CUM 3934047	PIN(Long 3-1/4in)	
3	**111086**		**CUM 3939374**	**PIN**	
4	**111097**		**CUM 3939375**	**RETAINER**	
4	111209		CUM 3901706	RETAINERS	
5	**111722**		**N/A**	**KIT,Piston(ISB)(STD)** **Includes Piston (1)111721** **Retainers (2)111097 Pin (1)111086**	
5	**111725**		**N/A**	**KIT,Piston(ISB)(.50mm)** **Includes Piston (1)111724** **Retainers (2)111097 Pin (1)111086**	
5	111441		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111443 Retainers (2)111209 Pin (1)111213	
5	111444		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111446 Retainers (2)111209 Pin (1)111213	
5	111447		N/A	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111449 Retainers (2)111209 Pin (1)111213	
5	111456		N/A	KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111455 Retainers (2)111209 Pin (1)111213	
5	111459		N/A	KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111458 Retainers (2)111209 Pin (1)111213	
5	111462		N/A	KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111461 Retainers (2)111209 Pin (1)111213	
5	111466		N/A	KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111465 Retainers (2)111209 Pin (1)111213	
5	111469		N/A	KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111468 Retainers (2)111209 Pin (1)111213	
5	111472		N/A	KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111471 Retainers (2)111209 Pin (1)111213	

Keys 6-11 continued on the following pages.

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
5	111501		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111500 Retainers (2)111209 Pin (1)111213	
5	111504		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111503 Retainers (2)111209 Pin (1)111213	
5	111507		N/A	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111506 Retainers (2)111209 Pin (1)111213	
5	111522		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111521 Retainers (2)111209 Pin (1)111213	
5	111525		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111524 Retainers (2)111209 Pin (1)111213	
5	111528		N/A	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111527 Retainers (2)111209 Pin (1)111213	
5	111532		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111531 Retainers (2)111209 Pin (1)111213	
5	111535		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111534 Retainers (2)111209 Pin (1)111213	
5	111538		N/A	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111537 Retainers (2)111209 Pin (1)111213	
5	111541		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111540 Retainers (2)111209 Pin (1)111213	
5	111544		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111543 Retainers (2)111209 Pin (1)111213	
5	111547		N/A	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111546 Retainers (2)111209 Pin (1)111213	
5	111554		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111553 Retainers (2)111209 Pin (1)111088	
5	111557		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111556 Retainers (2)111209 Pin (1)111088	
5	111573		N/A	KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111572 Retainers (2)111209 Pin (1)111213	
5	111576		N/A	KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111575 Retainers (2)111209 Pin (1)111213	
5	111579		N/A	KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111578 Retainers (2)111209 Pin (1)111213	
5	111602		N/A	KIT,Piston(ISB)(STD) Includes Piston (1)111601 Retainers (2)111209 Pin (1)111213	
5	111605		N/A	KIT,Piston(ISB)(.50mm) Includes Piston (1)111604 Retainers (2)111209 Pin (1)111213	
5	111608		N/A	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111607 Retainers (2)111209 Pin (1)111213	
5	**111611**		**N/A**	**KIT,Piston(ISB)(STD) Includes Piston (1)111610 Retainers (2)111209 Pin (1)111213**	
5	**111614**		**N/A**	**KIT,Piston(ISB)(.50mm) Includes Piston (1)111613 Retainers (2)111209 Pin (1)111213**	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
5	**111617**		**N/A**	**KIT,Piston(ISB)(1.00mm) Includes Piston (1)111616 Retainers (2)111209 Pin (1)111213**	
5	**111621**		**N/A**	**KIT,Piston(ISB)(STD) Includes Piston (1)111620 Retainers (2)111209 Pin (1)111088**	
5	**111624**		**N/A**	**KIT,Piston(ISB)(.50mm) Includes Piston (1)111623 Retainers (2)111209 Pin (1)111088**	
5	**111627**		**N/A**	**KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111626 Retainers (2)111209 Pin (1)111213**	
5	**111631**		**N/A**	**KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111630 Retainers (2)111209 Pin (1)111213**	
5	**111635**		**N/A**	**KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111634 Retainers (2)111209 Pin (1)111213**	
5	**111717**		**N/A**	**KIT,Piston(QSB)(.20mm) Includes Piston (1)111716 Retainers (2)111097 Pin (1)111086**	
5	**111720**		**N/A**	**KIT,Piston(QSB)(.40mm) Includes Piston (1)111719 Retainers (2)111097 Pin (1)111086**	
5	**111728**		**N/A**	**KIT,Piston(ISB)(1.00mm) Includes Piston (1)111727 Retainers (2)111097 Pin (1)111086**	
5	**111714**		**N/A**	**KIT,Piston(STD)(QSB) Includes Piston (1)111713 Pin (1)111086 Retainers (2)111097**	
6	111442		CUM 3804980	KIT,Piston(ISB)(STD) Includes Piston (1)111443 Retainers (2)111209 Ring Set (1)505130 Pin (1)111213	
6	111445		CUM 3804981	KIT,Piston(ISB)(.50mm) Includes Piston (1)111446 Retainers (2)111209 Ring Set (1)505131 Pin (1)111213	
6	111448		CUM 3804982	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111449 Retainers (2)111209 Ring Set (1)505132 Pin (1)111213	
6	111457		CUM 3800781	KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111455 Retainers (2)111209 Ring Set (1)505105 Pin (1)111213	
6	111460		CUM 3806201	KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111458 Retainers (2)111209 Ring Set (1)505109 Pin (1)111213	
6	111463		CUM 3800785	KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111461 Retainers (2)111209 Ring Set (1)505113 Pin (1)111213	
6	111467		CUM 3800838	KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111465 Retainers (2)111209 Ring Set (1)505105 Pin (1)111213	
6	111470		CUM 3800841	KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111468 Retainers (2)111209 Ring Set (1)505109 Pin (1)111213	
6	111473		CUM 3800842	KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111471 Retainers (2)111209 Ring Set (1)505113 Pin (1)111213	
6	111502		CUM 4089260	KIT,Piston(ISB)(STD) Includes Piston (1)111500 Retainers (2)111209 Ring Set (1)505133 Pin (1)111213	
6	111505		CUM 4089185	KIT,Piston(ISB)(.50mm) Includes Piston (1)111503 Retainers (2)111209 Ring Set (1)505134 Pin (1)111213	
6	111508		CUM 4089186	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111506 Retainers (2)111209 Ring Set (1)505135 Pin (1)111213	

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
6	**111523**		CUM 4089669	KIT,Piston(ISB)(STD) Includes Piston (1)111521 Retainers (2)111209 Ring Set (1)505105 Pin (1)111213	
6	111526		CUM 4089670	KIT,Piston(ISB)(.50mm) Includes Piston (1)111524 Retainers (2)111209 Ring Set (1)505134 Pin (1)111213	
6	111529		CUM 4089671	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111527 Retainers (2)111209 Ring Set (1)505135 Pin (1)111213	
6	111533		CUM 4089461	KIT,Piston(ISB)(STD) Includes Piston (1)111531 Retainers (2)111209 Ring Set (1)505150 Pin (1)111213	CUM 4089616
6	111536		CUM 4089618	KIT,Piston(ISB)(.50mm) Includes Piston (1)111534 Retainers (2)111209 Ring Set (1)505151 Pin (1)111213	
6	111539		CUM 4089619	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111537 Retainers (2)111209 Ring Set (1)505152 Pin (1)111213	
6	111542		CUM 4089259	KIT,Piston(ISB)(STD) Includes Piston (1)111540 Retainers (2)111209 Pin (1)111213 Ring Set (1)505105	CUM 4089140
6	111545		CUM 4089976	KIT,Piston(ISB)(.50mm) Includes Piston (1)111543 Retainers (2)111209 Pin (1)111213 Ring Set (1)505134	CUM 4089183
6	111548		CUM 4089977	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111546 Retainers (2)111209 Pin (1)111213 Ring Set (1)505135	CUM 4089184
6	111555		CUM 4955160	KIT,Piston(ISB)(STD) Includes Piston (1)111553 Retainers (2)111209 Pin (1)111088 Ring Set (1)505160	CUM 4931888, CUM 3975868
6	111558		CUM 4955481	KIT,Piston(ISB)(.50mm) Includes Piston (1)111556 Retainers (2)111209 Pin (1)111088 Ring Set (1)505164	
6	111574		CUM 3802927	KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111572 Retainers (2)111209 Pin (1)111213 Ring Set (1)505170	
6	111577		CUM 3802925	KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111575 Retainers (2)111209 Pin (1)111213 Ring Set (1)505172	
6	111580		CUM 3802926	KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111578 Retainers (2)111209 Pin (1)111209 Ring Set (1)505174	
6	111603		CUM 3800323	KIT,Piston(ISB)(STD) Includes Piston (1)111601 Retainers (2)111209 Pin (1)111213 Ring Set (1)505170	
6	111606		CUM 3800326	KIT,Piston(ISB)(.50mm) Includes Piston (1)111604 Retainers (2)111209 Pin (1)111213 Ring Set (1)505172	
6	111609		CUM 3800327	KIT,Piston(ISB)(1.00mm) Includes Piston (1)111607 Retainers (2)111209 Pin (1)111213 Ring Set (1)505174	
6	**111612**		**CUM 4025072**	**KIT,Piston(ISB)(STD) Includes Piston (1)111610 Retainers (2)111209 Pin (1)111213 Ring Set (1)505133**	
6	**111615**		**N/A**	**KIT,Piston(ISB)(.50mm) Includes Piston (1)111613 Retainers (2)111209 Pin (1)111213 Ring Set (1)505134**	
6	**111618**		**N/A**	**KIT,Piston(ISB)(1.00mm) Includes Piston (1)111616 Retainers (2)111209 Pin (1)111213 Ring Set (1)505135**	
6	**111622**		**CUM 4955365**	**KIT,Piston(ISB)(STD) Includes Piston (1)111620 Retainers (2)111209 Ring Set (1)505160 Pin (1)111088**	**CUM 4955520**
6	**111625**		**CUM 4956007**	**KIT,Piston(ISB)(.50mm) Includes Piston (1)111623 Retainers (2)111209 Ring Set (1)505164 Pin (1)111088**	

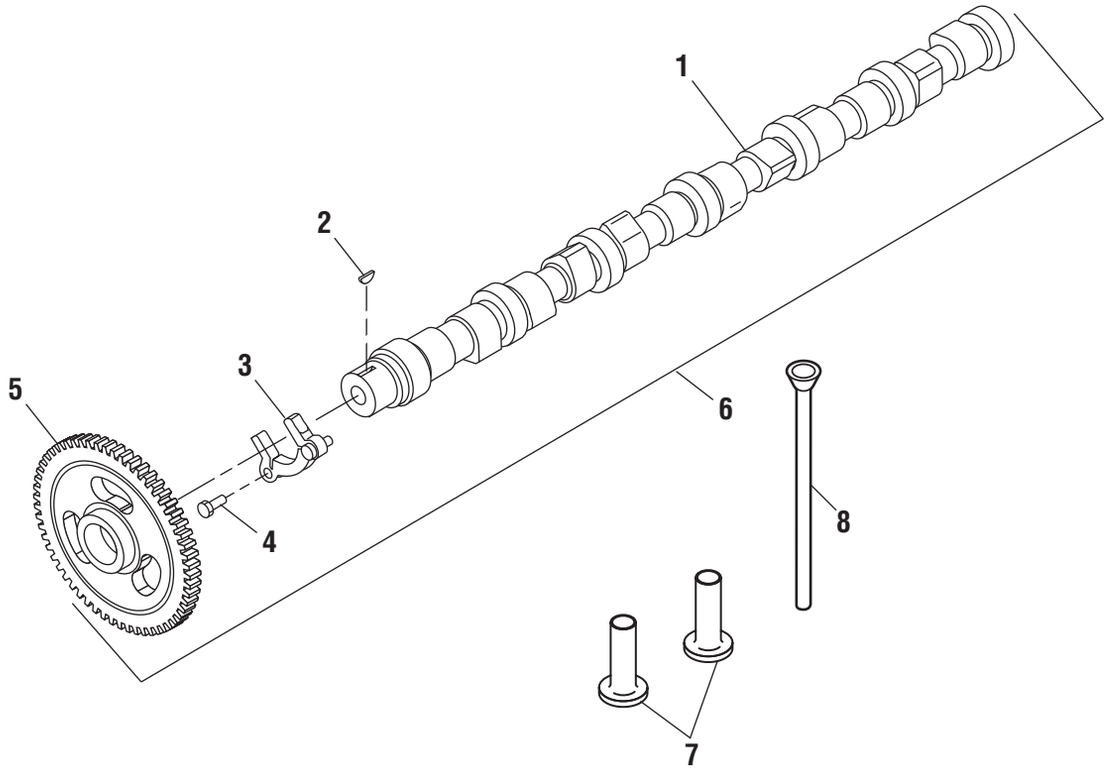
PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
6	**111628**		**N/A**	**KIT,Piston(ISB/QSB)(STD) Includes Piston (1)111626 Retainers (2)111209 Ring Set (1)505180 Pin (1)111213**	**CUM 3800756**
6	**111632**		**N/A**	**KIT,Piston(ISB/QSB)(.50mm) Includes Piston (1)111630 Retainers (2)111209 Ring Set (1)505181 Pin (1)111213**	**CUM 3800761**
6	**111636**		**N/A**	**KIT,Piston(ISB/QSB)(1.00mm) Includes Piston (1)111634 Retainers (2)111209 Ring Set (1)505182 Pin (1)111213**	
6	**111718**		**CUM 4089620**	**KIT,Piston(QSB)(.20mm) Includes Piston (1)111716 Retainers (2)111097 Ring Set (1)505151 Pin (1)111086**	
6	**111735**		**CUM 4089621**	**KIT,Piston(QSB)(.40mm) Includes Piston (1)111719 Retainers (2)111097 Ring Set (1)505152 Pin (1)111086**	
6	**111723**		**CUM 4089726**	**KIT,Piston(STD)(ISB) Includes Piston (1)111721 Retainers (2)111097 Ring Set (1)505130 Pin (1)111086**	
6	**111726**		**CUM 4089737**	**KIT,Piston(ISB)(.50mm) Includes Piston (1)111724 Retainers (2)111097 Ring Set (1)505131 Pin (1)111086**	
6	**111729**		**CUM 4089738**	**KIT,Piston(ISB)(1.00mm) Includes Piston (1)111727 Retainers (2)111097 Ring Set (1)505131 Pin (1)111086**	
6	**111715**		**CUM 4089462**	**KIT,Piston/Ring(STD) Includes Piston Kit (1)111714 Ring Set (1)505150**	
7	171801		CUM 3901170	BEARING,Shell(STD)	
7	171802		CUM 3901171	BEARING,Shell(.010in/.25mm)	
7	171803		CUM 3901172	BEARING,Shell(.020in/.50mm)	
7	171804		CUM 3901173	BEARING,Shell(.030in/.75mm)	
7	171805		CUM 3901174	BEARING,Shell(.040in/1.00mm)	
8	040035		CUM 3900919	BOLT,Connecting Rod	
8	040072		CUM 4891179	BOLT,Connecting Rod	
9	171631		CUM 3942581	ROD,Connecting(Straight Cut)	
9	171633		CUM 4898808	ROD,Connecting(Fractured Rod)	CUM 4891176
9	**171637**		**CUM 4943979**	**ROD,Connecting(ISB)(Fractured Rod)**	
9	**171629**		**CUM 5257364**	**ROD,Connecting (Fractured Rod) (will use Rod Bushing -151548)**	**CUM 4989163**
10	151514		CUM 4891178	BUSHING,Rod	
10	**151548**		**CUM 5257363**	**BUSHING,Rod**	
11	171952		N/A	KIT,Rod Bearing(STD)(Fractured Rod)	
11	**172080**		**N/A**	**KIT,Rod Bearing(STD)**	
11	171955		N/A	KIT,Rod Bearing(.010in/.25mm)(Fractured Rod)	
11	**172083**		**N/A**	**KIT,Rod Bearing(.010in/.25mm)**	
11	171958		N/A	KIT,Rod Bearing(.020in/.50mm)(Fractured Rod)	
11	**172086**		**N/A**	**KIT,Rod Bearing(.020in/.50mm)**	
11	171961		N/A	KIT,Rod Bearing(.030in/.75mm)(Fractured Rod)	
11	**172089**		**N/A**	**KIT,Rod Bearing(.030in/.75mm)**	
11	171964		N/A	KIT,Rod Bearing(.040in/1.00mm)(Fractured Rod)	
11	**172092**		**N/A**	**KIT,Rod Bearing(.040in/1.00mm)**	

***Straight Cut Rod Bearing Shells are identical and can be installed in upper or lower postions.**

***Fractured Rod Bearing kits contain different upper and lower Shells that are not interchangeable.**

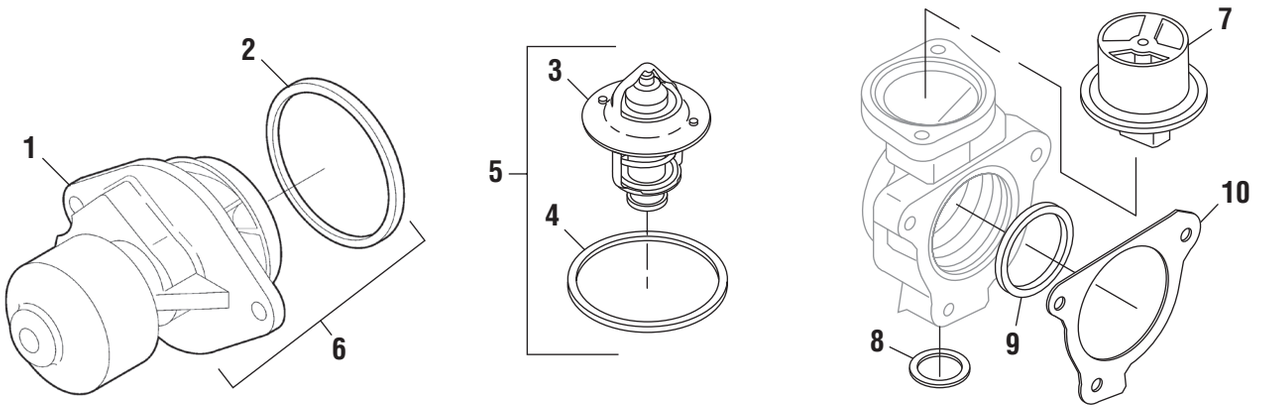
FIGURE 6559



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**191875**		**CUM 3968381**	**CAMSHAFT(ISB)**	**CUM 3939377**
1	**191887**		**CUM 3283179**	**CAMSHAFT(ISB)**	
1	**191893**		**CUM 3979506**	**CAMSHAFT(QSB)**	**CUM 4896421**
1	191923	**191923E**	CUM 3929734	CAMSHAFT(ISB/QSB 6)	CUM 3926671, CUM 3929040
1	191935	**191935E**	CUM 3942567	CAMSHAFT(QSB)	
1	191936		CUM 4930770	CAMSHAFT(ISB)	CUM 3947007
2	191830		CUM 3902332	KEY,Camshaft	
3	151527		CUM 3927155	THRUSTWASHER,Camshaft	
3	151531		CUM 3944001	THRUSTWASHER,Camshaft(ISB)	
4	040075		CUM 3900227	SCREW(M8 x 1.25 x 22)	
5	**191879**		**CUM 3929028**	**GEAR,Camshaft(ISB)**	**CUM 3912884**
5	191881		CUM 3942755	GEAR,Camshaft(QSB)	
5	191884		CUM 5273732	GEAR,Camshaft(ISB)	
6	**191888**		**CUM 3280102**	**KIT,Camshaft(ISB)** **Includes Camshaft (1)191887 Gear (1)191879 Key (1)191830 Thrustwasher (1)151527 Screws (2)040075**	
6	191890		CUM 4025134	KIT,Camshaft(QSB) Includes Camshaft (1)191935 Key (1)191830 Gear (1)191881 Screws (2)040075 Thrustwasher (1)151527	CUM 3800947
6	191891		CUM 4955389	KIT,Camshaft(ISB) Includes Camshaft (1)191936 Key (1)191830 Gear (1)191884 Screws (2)040075 Thrustwasher (1)151531	
7	191859		CUM 3947759	TAPPET,Valve	CUM 4891226
8	**192133**		**CUM 3941253**	**PUSHROD(4VH)**	

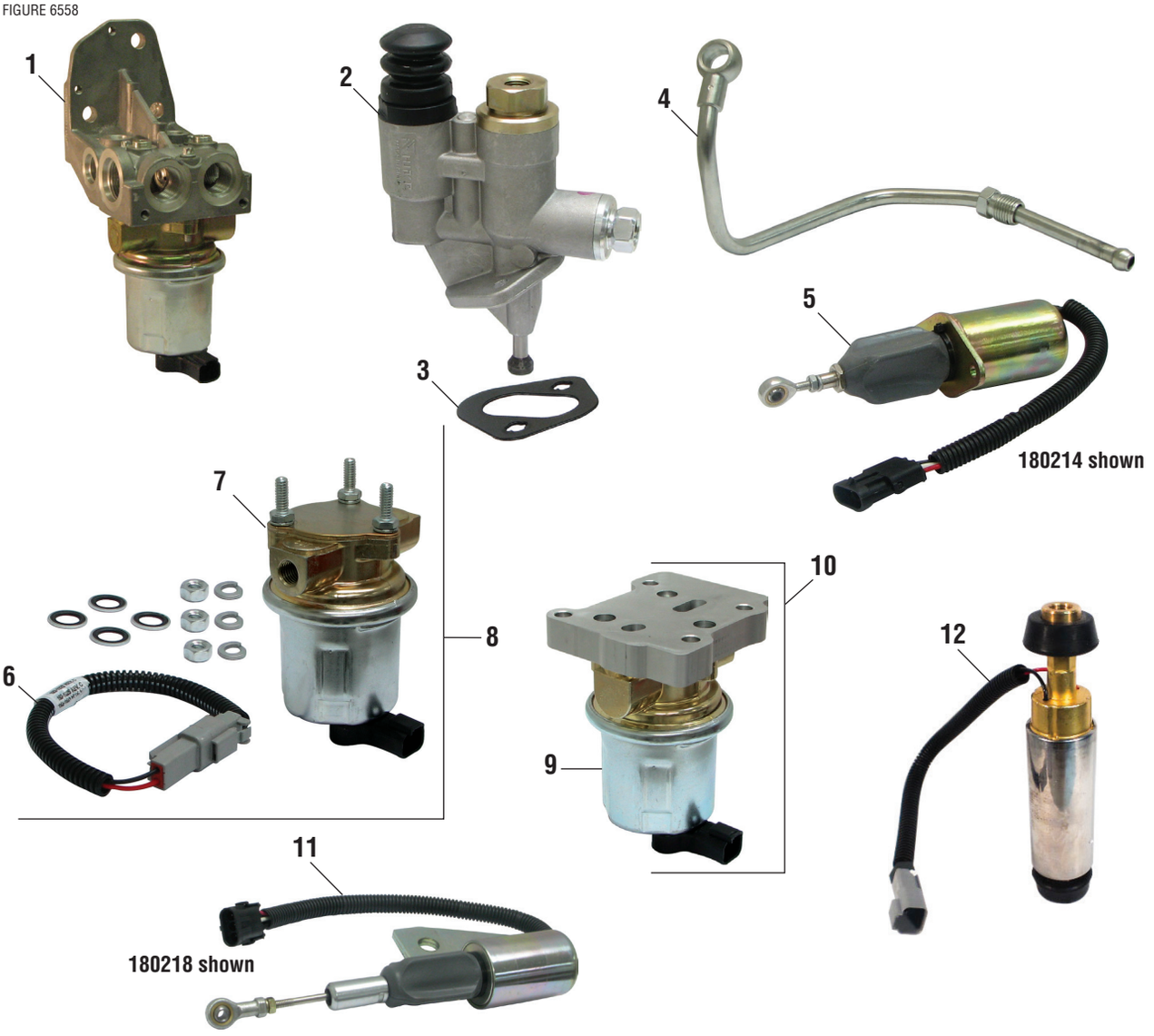
PAI Copyright 2017

FIGURE 6554



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181817		CUM 3285414	PUMP,Water(NSS, sold in kit 181823 only)	
1	181889		CUM 4891252	PUMP,Water(NSS, sold in kit 181878 only)	
1	**181931**		**CUM 5260263**	**PUMP,Water(QSB)(Use 181932 kit)**	
1	**181939**		**CUM 5257844**	**PUMP,Water(QSB)(NSS, sold in kit 181938 only)**	**CUM 4983391**
1	**181912**		**CUM 5262784**	**PUMP,Water(NSS, sold in kit 181913 only)**	
2	121258		CUM 3906698	O-RING,Rectangular	
3	181863		CUM 4090093	THERMOSTAT(190 def F)(NSS, sold in kit 181866)	
3	181885		CUM 3967192	THERMOSTAT(Vented 180 deg F) (NSS, sold in kit 181884)(Used on 4 VH)	
3	181888		CUM 3928499	THERMOSTAT(Non-vented 180 deg F)	
3	**181906**		**CUM 3946847**	**THERMOSTAT(190 deg F) (NSS, sold in kit 181907)**	**CUM 3935825**
4	**121375**		**CUM 3942454**	**D-RING,Thermostat**	
4	136095		CUM 3954829	SEAL,Thermostat	
5	181866		CUM 3954830	KIT,Thermostat(190 deg F) Includes Thermostat (1)181863 Seal (1)136095	
5	181884		CUM 3967195	KIT,Thermostat(180 deg F)(Used on 4 VH) Includes Thermostat (1)181885 Seal (1)136095	
5	**181907**		**CUM 3946849**	**KIT,Thermostat(190 deg F) Includes Thermostat (1)181906 D-Ring (1)121375**	
5	**181940**		**CUM 3864178**	**KIT,Thermostat(180 deg F) Includes Thermostat (1)181940-100 O-Ring (1)421215**	
6	181823		CUM 3286278	KIT,Water Pump(88mm pulley) Includes Pump (1)181817 O-Ring (1)121258	
6	181878		CUM 3800984	KIT,Water Pump(88mm pulley) Includes Pump (1)181889 O-Ring (1)121258	
6	**181932**		**CUM 2881804**	**KIT,Water Pump(QSB) Includes Pump (1)181931 O-Ring (1)121258**	
6	**181938**		**CUM 2881688**	**KIT,Water Pump(QSB) Includes Pump (1)181939 O-Ring (1)121258**	
6	**181912**		**CUM 4955394**	**KIT,Water Pump Includes Pump (1)181912 O-Ring (1)121258**	
7	181887		CUM 4973373	THERMOSTAT(4.5 & 6.7 L) (Non-Vented, 180 deg)	CUM 4952204
8	121373		CUM 3035026	O-RING,Thermostat(4.5 & 6.7 L)	
9	131289		CUM 186780	SEAL,Thermostat(4.5 & 6.7 L)	CUM 3084879
10	131808		CUM 3101054	GASKET,Thermostat Housing(4.5 & 6.7 L)	

FIGURE 6558

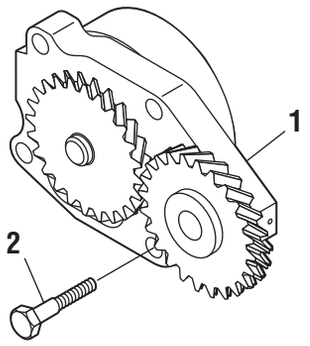


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180106		CUM 4935005	PUMP,Fuel(12V Electronic)	
1	**180111**		**CUM 4935006**	**PUMP,Fuel(24 vdc)**	**CUM 3939898, CUM 3949086**
2	180107		CUM 4988748	PUMP,Fuel(Mechanical)	CUM 3415699
3	131532		CUM 3939258	GASKET,Cover Plate	
4	180310		CUM 3918539	ASSEMBLY,Fuel Line(for 180107 Pump)	
5	180214		CUM 3935650	SOLENOID,Fuel Shutoff(24 vdc)	
5	180216		CUM 3991624	SOLENOID,Fuel Shutoff(12 vdc)	
5	**180226**		**CUM 3932529**	**SOLENOID,Fuel Shutoff**	
6	**050711**		**CUM 4025182**	**HARNESS,Extension (Used w/ 180112 Fuel Pump)**	
7	180112		CUM 4943048	PUMP,Fuel(12 vdc)	CUM 3945812
7	**180114**		**CUM 4943049**	**PUMP,Fuel(24 vdc) (Pump does not come in a kit)**	**CUM 3990106**
8	**180113**		**CUM 3990082**	**KIT,Fuel Pump Includes Pump (1)180112 Harness (1)050711 Nuts (3)ENU-0287 Washers (3)EWA-0703 Seals (4)136102**	
9	**180115**		**CUM 4935013**	**PUMP,Fuel(12 vdc)(NSS)**	**CUM 3964381**
10	**180117**		**CUM 4935092**	**PUMP,Fuel(12 vdc)**	**CUM 4088507**
11	**180209**		**CUM 5267132**	**SOLENOID,Shutoff(24 vdc)**	**CUM 5267132**
11	**180218**		**CUM 3991167**	**SOLENOID,Shutoff(12 vdc)**	
11	**180219**		**CUM 3991168**	**SOLENOID,Shutoff(24 vdc)**	
12	**180122**		**CUM 5260632**	**PUMP,Fuel(In-Line)(12 vdc)**	**CUM 3968188**

New Parts are in BOLD text

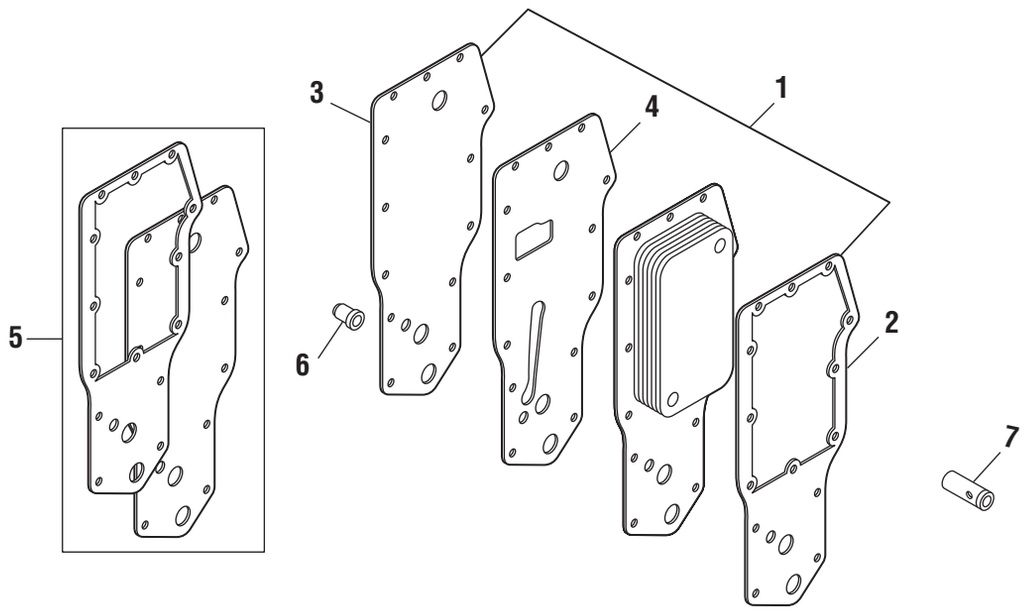
PAI Copyright 2017

FIGURE 6564



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141309		CUM 3971544	PUMP,Lube(w/ Spur Drive Gear)	CUM 4939588, CUM 3976089
1	141311		CUM 4939586	PUMP,Lube(w/ Spur Drive Gear)	CUM 3974781
1	141315		CUM 4988801	PUMP,Lube(w/ Spur Drive Gear)	CUM 3957266
1	141316		CUM 4897481	PUMP,Lube(w/ Spur Drive Gear)	
2	040049		CUM 3900677	SCREW(M8 x 1.25 x 30mm)	

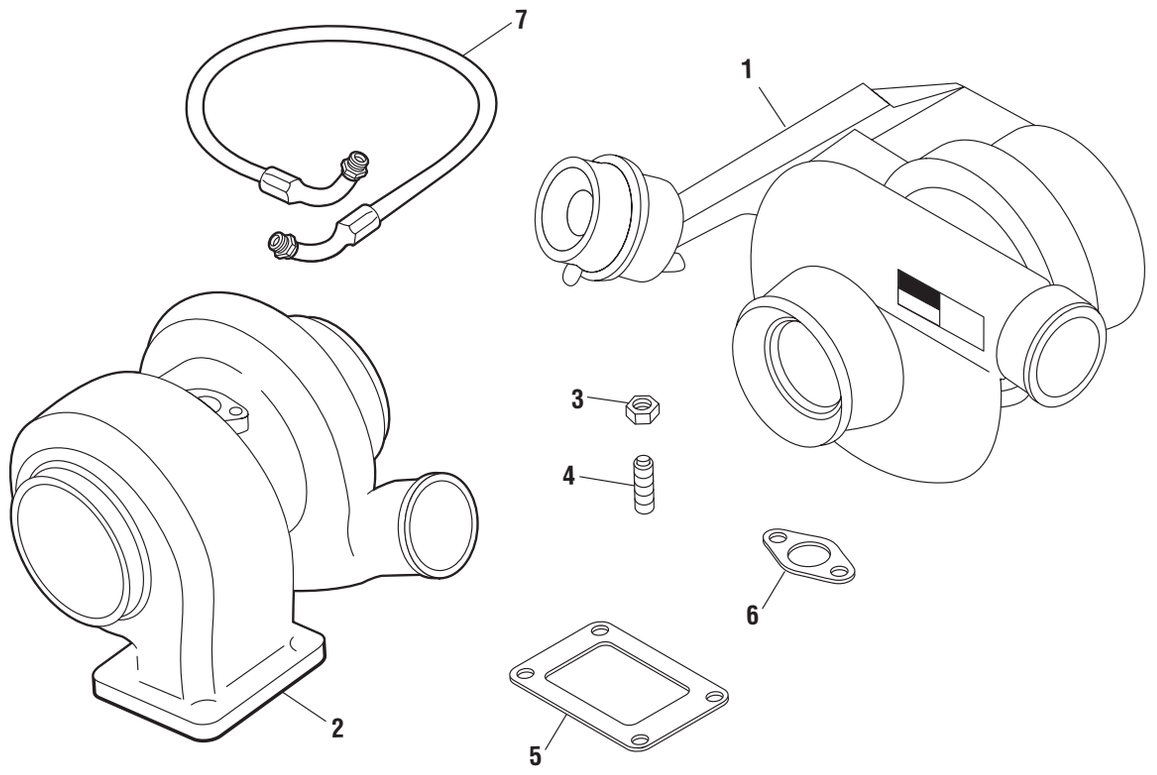
FIGURE 6553



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141419		CUM 3957544	COOLER,Oil(6 ISB) Includes Oil Cooler (1) Gaskets (1)131443 (1)131536 (1)131445	
1	141421		CUM 3957543	COOLER,Oil(4 ISB) Includes Oil Cooler (1) Gasket (1)131445	
1	141427		CUM 3959031	COOLER,Oil Includes Oil Cooler (1) Gasket kit (1)131737	CUM 4896407
2	131443		CUM 4932124	GASKET,Oil Cooler(ISB)	
2	131708		CUM 4895742	GASKET,Oil Cooler(ISB)	
2	131735		CUM 2830559	GASKET,Oil Cooler(QSB w/EGR Valve)	
2	131796		CUM 4896409	GASKET,Oil Cooler	
3	131445		CUM 3929792	GASKET,Filter Head(4 ISB)	
3	131709		CUM 3947413	GASKET,Filter Head(6 ISB)	
3	131736		CUM 3974127	GASKET,Filter Head(QSB w/EGR Valve)	
3	131790		CUM 2831077	GASKET,Filter Head(QSB)	
4	131536		CUM 3942915	GASKET,Gasket Oil Cooler Mounting	
5	131737		CUM 3977913	KIT,Oil Cooler Gasket(QSB w/EGR Valve) Includes Gaskets (1)131735 (1)131736	
6	141433		CUM 3936365	VALVE,Pressure Relief	
7	**141434**		**CUM 3918428**	**PLUNGER,Relief**	**CUM 3909376**

PAI Copyright 2017

FIGURE 6567



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181194	181194E	CUM 3802770	TURBOCHARGER(Waste Gated)	CUM 4033173
2	181195	181195E	CUM 3802778	TURBOCHARGER(Non-Waste Gated)	CUM 3534923
2	181208		CUM 4955156	TURBOCHARGER(Non-Waste Gated)	
2	ETC-9252		CUM 3522900	TURBOCHARGER	
2	ETC-9253		CUM 3522778	TURBOCHARGER	
3	040062		CUM 3818824	NUT,Turbo Mounting(M10 x 1.5)	
4	040110		CUM 3818823	STUD,Turbo Mounting	
5	131603		CUM 3919369	GASKET,Turbocharger	
6	131694		CUM 4931365	GASKET,Oil Drain	
7	180280		CUM 3916289	HOSE,Oil Supply	

PAI Copyright 2017

Upper Gasket Sets

FIGURE 6556

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131401		CUM 3804896	SET,Upper Gasket(ISB4)	
1	131404		CUM 3804897	SET,Upper Gasket(ISB6)	
1	131566		CUM 4089790	SET,Upper Gasket(ISB6) (w/ Push on Valve Seal)	
1	131683		CUM 4089819	SET,Upper Gasket(QSB6) (w/ Top Hat Valve Seal)	
1	131718		N/A	KIT,Upper Gasket(QSB6) (w/ Oversize Bore & Top Hat Valve Seal)	
1	131734		CUM 4089263	KIT,Upper Gasket(QSB 6 w/EGR Valve)	
1	131754		CUM 4955229	KIT,Upper Gasket(QSB)	
1	131756		CUM 4955523	KIT,Upper Gasket(QSB w/ EGR)	
1	131809		CUM 4090037	KIT,Upper Gasket(ISB6)	CUM 4089881
1	**131824**		**CUM 4955356**	**KIT,Upper Gasket(QSB4)**	
1	**131850**		**CUM 4955354**	**KIT,Upper Gasket(ISB)**	
1	**131863**		**CUM 4089780**	**KIT,Upper Gasket(QSB4)**	
1	**131867**		**CUM 4089781**	**KIT,Upper Gasket(QSB6)**	
1	**131880**		**CUM 4089957**	**KIT,Upper Gasket(ISB)**	
1	**131881**		**CUM 2881955**	**KIT,Upper Gasket(ISB)**	
1	**131883**		**CUM 3802242**	**KIT,Upper Gasket(ISB4)**	

Lower Gasket Sets

FIGURE 6557

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131402		CUM 3802375	SET,Lower Gasket(ISB4)	
1	131405		CUM 3802376	SET,Lower Gasket(ISB6)	
1	131608		CUM 3800833	KIT,Lower Gasket(ISB6) (w/ Front Wear Sleeve)	
1	131685		CUM 4089173	KIT,Lower Gasket(QSB6)	
1	131726		CUM 3800487	KIT,Lower Gasket(ISB6) (w/ Front & Rear Heavy Wear Sleeve)	
1	131739		CUM 4089264	KIT,Lower Gasket(QSB 6 EGR Engine)	
1	131798		CUM 4955230	SET,Lower Gasket(QSB)	
1	131799		CUM 4025139	KIT,Lower Gasket(ISB)	
1	**131830**		**CUM 4025108**	**SET,Lower Gasket(QSB4)**	
1	**131854**		**CUM 4955522**	**KIT,Lower Gasket(ISBe-QSBe)**	
1	**131864**		**CUM 4955357**	**KIT,Lower Gasket**	
1	**131865**		**CUM 4089956**	**KIT,Lower Gasket**	
1	**131869**		**CUM 4955355**	**KIT,Lower Gasket(QSB6)**	
1	**131875**		**CUM 4089173A**	**KIT,Lower Gasket w/ Seals(QSB)**	

PAI Copyright 2017



ENGINE PARTS



CHASSIS



BODY PARTS



POWER STEERING



DRIVELINE



WATER and OIL PUMPS

...and more!

Visit our website to get the latest available parts! www.paiindustries.com

4 Cylinder

PAI PART NUMBER	PISTON PART NUMBER (4)	RING SET PART NUMBER (4)	ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET (1)	LOWER GASKET SET (1)
ISB403-(001 thru -025) Straight Cut Rod	111443 CUM 3932514	505130 CUM 3804930	171801 ** CUM 3901170 (8 pieces)	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
-(026 thru -050) Straight Cut Rod	111446 CUM 3933581	505131 CUM 3804931				
-(051 thru -075) Straight Cut Rod	111449 CUM 3933582	505132 CUM 3804932				
-(076 thru -100) Fractured Rod	111443 CUM 3932514	505130 CUM 3804930	171952 ** N/A (4 pieces)	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
-(101 thru -125) Fractured Rod	111446 CUM 3933581	505131 CUM 3804931				
-(126 thru -150) Fractured Rod	111449 CUM 3933582	505132 CUM 3804932				
ISB404-(001 thru -025) Straight Cut Rod	111531 CUM 3957416	505150 CUM 4089460	171801 ** CUM 3901170 (8 pieces)	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
-(026 thru -050) Straight Cut Rod	111534 CUM 3957417	505151 CUM 4089614				
-(051 thru -075) Straight Cut Rod	111537 CUM 3957418	505152 CUM 4089615				
-(076 thru -100) Fractured Rod	111531 CUM 3957416	505150 CUM 4089460	171952 ** N/A (4 pieces)	171806 ** CUM 3802010	131401 CUM 3804896	131402 CUM 3802375
-(101 thru -125) Fractured Rod	111534 CUM 3957417	505151 CUM 4089614				
-(126 thru -150) Fractured Rod	111537 CUM 3957418	505152 CUM 4089615				
ISB407-(076 thru -100)	**111540 CUM 3965497**	**505133 CUM 4089258**	**171952 ** N/A (4 pieces)**	**171806 ** CUM 3802010**	**131863 CUM 4089780**	**131830 CUM 4025108**
ISB410-(076 thru -100)	**111611 CUM 4025072**	**505105 CUM 3804990**	**171952 ** N/A (4 pieces)**	**171806 ** CUM 3802010**	**131863 CUM 4089780**	**131830 CUM 4025108**
ISB430-(076 thru -100) Fractured Rod	**111553 CUM 4934860**	**505160 CUM 4955251**	**171952 ** N/A (4 pieces)**	**171806 ** CUM 3802010**	**131824 CUM 4955356**	**131864 CUM 4955357**
-(101 thru -125) Fractured Rod	**111556 CUM 4934816**	**505164 CUM 4955480**				
ISB430 kits also include (1) 136123 CUM 4955372 Rear Seal						
ISB440-(076 thru -100)	**Pistonless**		**171952 ** N/A (4 pieces)**	**171806 ** CUM 3802010**	**131863 CUM 4089780**	**131830 CUM 4025108**

FIGURE 6562

Please note:

(*) Specify size of Piston, Rings, Rod and Main Bearings when ordering rebuild kits.

**** Part number standard sizes are shown in chart. Part numbers (and kit Dash numbers) will change if nonstandard components are requested.**

1. **To ensure correct parts application, please have CPL and Engine Serial number available.**
2. **Piston kits include Pins and Retainers.**

PAI Copyright 2017

6 Cylinder

PAI PART NUMBER	PISTON PART NUMBER (6)	RING SET PART NUMBER (6)	ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET (1)	LOWER GASKET SET (1)
ISB601-(001 thru -025) Straight Cut Rod	111455 CUM 3946153	505105 CUM 3804990	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131566 CUM 4089790	131608 CUM 3800833
-(026 thru -050) Straight Cut Rod	111458 CUM 3946156	505109 CUM 3806201				
-(051 thru -075) Straight Cut Rod	111461 CUM 3946157	505113 CUM 3806203				
-(076 thru -100) Fractured Rod	111455 CUM 3946153	505105 CUM 3804990	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131566 CUM 4089790	131608 CUM 3800833
-(101 thru -125) Fractured Rod	111458 CUM 3946156	505109 CUM 3806201				
-(126 thru -150) Fractured Rod	111461 CUM 3946157	505113 CUM 3806203				
-(151 thru -175) Fractured Rod	111455 CUM 3946153	505105 CUM 3804990	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131566 CUM 4089790	131726 CUM 3800487
-(176 thru 200) Fractured Rod	111458 CUM 3946156	505109 CUM 3806201				
-(201 thru -225) Fractured Rod	111461 CUM 3946157	505113 CUM 3806203				
ISB602-(001 thru -025)	111465 CUM 3946050	505105 CUM 3804990	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131566 CUM 4089790	131608 CUM 3800833
-(026 thru -050)	111468 CUM 3946053	505109 CUM 3806201				
-(051 thru -075)	111471 CUM 3946054	505113 CUM 3806203				
ISB604-(001 thru -025) Straight Cut Rod	111531 CUM 3957416	505150 CUM 4089460	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
-(026 thru -050) Straight Cut Rod	111534 CUM 3957417	505151 CUM 4089614				
-(051 thru -075) Straight Cut Rod	111537 CUM 3957418	505152 CUM 4089615				
-(076 thru -100) Fractured Rod	111531 CUM 3957416	505150 CUM 4089460	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131404 CUM 3804897	131405 CUM 3802376
-(101 thru -125) Fractured Rod	111534 CUM 3957417	505151 CUM 4089614				
-(126 thru -150) Fractured Rod	111537 CUM 3957418	505152 CUM 4089615				
ISB604-001 thru -150 Kits also include (12) 192110 CUM 3957912 Valve Seals						
ISB605-(001 thru -025) Straight Cut Rod	111500 CUM 3958675	505133 CUM 4089258	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(026 thru -050) Straight Cut Rod	111503 CUM 3949843	505134 CUM 4089181				
-(051 thru -075) Straight Cut Rod	111506 CUM 3949844	505135 CUM 4089182				
-(076 thru -100) Fractured Rod	111500 CUM 3958675	505133 CUM 4089258	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(101 thru -125) Fractured Rod	111503 CUM 3949843	505134 CUM 4089181				
-(126 thru -150) Fractured Rod	111506 CUM 3949844	505135 CUM 4089182				
ISB605-001 thru -150 Kits also include (1) 136026 CUM 3909410 Rear Seal and (1)136105 CUM 3937111 Front Seal						

6 Cylinder

PAI PART NUMBER	PISTON PART NUMBER (6)	RING SET PART NUMBER (6)	ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET (1)	LOWER GASKET SET (1)
ISB605-(151 thru -175) Straight Cut Rod	111500 CUM 3958675	505133 CUM 4089258	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(176 thru -200) Straight Cut Rod	111503 CUM 3949843	505134 CUM 4089181				
-(201 thru -225) Straight Cut Rod	111506 CUM 3949844	505135 CUM 4089182				
-(226 thru -250) Fractured Rod	111500 CUM 3958675	505133 CUM 4089258	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(251 thru -275) Fractured Rod	111503 CUM 3949843	505134 CUM 4089181				
-(276 thru -300) Fractured Rod	111506 CUM 3949844	505135 CUM 4089182				
ISB605-151 thru -300 Kits also include (1) 136122 CUM 4890833 Rear Seal and (1)136119 CUM 4890832 Front Seal						
-(301 thru -325) Straight Cut Rod	111500 CUM 3958675	505133 CUM 4089258	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131734 CUM 4089263	131739 CUM 4089264
-(326 thru -350) Straight Cut Rod	111503 CUM 3949843	505134 CUM 4089181				
-(351 thru -375) Straight Cut Rod	111506 CUM 3949844	505135 CUM 4089182				
-(376 thru -400) Fractured Rod	111500 CUM 3958675	505133 CUM 4089258	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131734 CUM 4089263	131739 CUM 4089264
-(401 thru -425) Fractured Rod	111503 CUM 3949843	505134 CUM 4089181				
-(426 thru -450) Fractured Rod	111506 CUM 3949844	505135 CUM 4089182				
ISB605-301 thru -450 Kits Rear & Front Seals are included in the Lower Gasket Set						
ISB606-(001 thru -025) Straight Cut Rod	111521 CUM 3970192	505133 CUM 4089258	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(026 thru -050) Straight Cut Rod	111524 CUM 3970126	505134 CUM 4089181				
-(051 thru -075) Straight Cut Rod	111527 CUM 3970127	505135 CUM 4089182				
-(076 thru -100) Fractured Rod	111521 CUM 3970192	505133 CUM 4089258	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(101 thru -125) Fractured Rod	111524 CUM 3970126	505134 CUM 4089181			131718 N/A (Oversize Bore Head Gasket)	
-(126 thru -150) Fractured Rod	111527 CUM 3970127	505135 CUM 4089182				
ISB606 Kits also include (1) 136026 CUM 3909410 Rear Seal and (1)136105 CUM 3937111 Front Seal						
ISB607-(001 thru -025) Straight Cut Rod	111540 CUM 3965497	505133 CUM 4089258	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(026 thru -050) Straight Cut Rod	111543 CUM 3949841	505134 CUM 4089181				
-(051 thru -075) Straight Cut Rod	111546 CUM 3949842	505135 CUM 4089182				
ISB607-001 thru -150 Kits also include (1) 136026 CUM 3909410 Rear Seal and (1)136105 CUM 3937111 Front Seal						

Kits are continued on the following page.

 PAI Copyright 2017

6 Cylinder

PAI PART NUMBER	PISTON PART NUMBER (6)	RING SET PART NUMBER (6)	ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET (1)	LOWER GASKET SET (1)
ISB607-(076 thru -100) Fractured Rod	111540 CUM 3965497	505133 CUM 4089258	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131683 CUM 4089819	131685 CUM 4089173
-(101 thur -125) Fractured Rod	111543 CUM 3949841	505134 CUM 4089181				
-(126 thru -150) Fractured Rod	111546 CUM 3949842	505135 CUM 4089182				
ISB607-001 thru -150 Kits also include (1) 136026 CUM 3909410 Rear Seal and (1)136105 CUM 3937111 Front Seal						
-(151 thru -175) Straight Cut Rod - EGR	111540 CUM 3965497	505133 CUM 4089258	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131734 CUM 4089263	131739 CUM 4089264
-(176 thru -200) Straight Cut Rod - EGR	111543 CUM 3949841	505134 CUM 4089181				
-(201 thru -225) Straight Cut Rod - EGR	111546 CUM 3949842	505135 CUM 4089182				
-(226 thru -250) Fractured Rod - EGR	111540 CUM 3965497	505133 CUM 4089258	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131734 CUM 4089263	131739 CUM 4089264
-(251 thru -275) Fractured Rod - EGR	111543 CUM 3949841	505134 CUM 4089181				
-(276 thru -300) Fractured Rod - EGR	111546 CUM 3949842	505135 CUM 4089182				
ISB607-151 thru -300 Kits also include (1) 136122 CUM 4890833 Rear Seal and (1)136119 CUM 4890832 Front Seal						
ISB608-(001 thru -025) Straight Cut Rod	111572 CUM 3948465	505170 CUM 3802919	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131566 CUM 4089790	131608 CUM 3800833
-(026 thru -050) Straight Cut Rod	111575 CUM 3948468	505172 CUM 3802917				
-(051 thru -075) Straight Cut Rod	111578 CUM 3948469	505174 CUM 3802918				
-(076 thru -100) Fractured Rod	111572 CUM 3948465	505170 CUM 3802919	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131566 CUM 4089790	131608 CUM 3800833
-(101 thur -125) Fractured Rod	111575 CUM 3948468	505172 CUM 3802917				
-(126 thru -150) Fractured Rod	111578 CUM 3948469	505174 CUM 3802918				
ISB608 Kits also include (1)136105 CUM 3937111 Front Seal						
ISB609-(001 thru -025) Straight Cut Rod	111601 CUM 3944073	505170 CUM 3802919	171801 ** CUM 3901170 (12 pieces)	171811 *** CUM 3802070	131566 CUM 4089790	131726 CUM 3800487
-(026 thru -050) Straight Cut Rod	111604 CUM 3944076	505172 CUM 3802917				
-(051 thru -075) Straight Cut Rod	111607 CUM 3944077	505174 CUM 3802918				
-(076 thru -100) Fractured Rod	111601 CUM 3944073	505170 CUM 3802919	171952 ** N/A (6 pair)	171811 *** CUM 3802070	131566 CUM 4089790	131726 CUM 3800487
-(101 thru -101) Fractured Rod	111604 CUM 3944076	505172 CUM 3802917				
-(126 thru -150) Fractured Rod	111607 CUM 3944077	505174 CUM 3802918				

Kits are continued on the following page.

6 Cylinder

PAI PART NUMBER	PISTON PART NUMBER (6)	RING SET PART NUMBER (6)	ROD BEARING PART NUMBER	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET (1)	LOWER GASKET SET (1)
ISB610-(076 thru -100)	111610 CUM 3972880	505105 CUM 3804990	171952** N/A (6 pair)	171811 *** CUM 3802070	131867 CUM 4089781	131799 CUM 4025139
-(101 thru -125)	111613 CUM 3972885	505134 CUM 4089181				
-(126 thru -150)	111616 CUM3972886	505135 CUM 4089182				
ISB630-(076 thru -100) Fractured Rod	111553 CUM 4934860	505160 CUM 4955251	171952** N/A (6 pair)	171811 *** CUM 3802070	131754 CUM 4955229	131798 CUM 4955230
-(101 thur -125) Fractured Rod	111556 CUM 4934816	505164 CUM 4955480				
ISB631-(076 thru -100) Fractured Rod	111620 CUM 4938619	505160 CUM 4955251	171952** N/A (6 pair)	171811 *** CUM 3802070	131756 CUM 4955523	131854 CUM 4955522
-(101 thur -125) Fractured Rod	111623 CUM 4938620	505164 CUM 4955480				
ISB640-(076 thru -100)			171952** N/A (6 pair)	171811 *** CUM 3802070	131867 CUM 4089781	131799 CUM 4025139

FIGURE 6555

Please note:

(*) Specify size of Piston, Rings, Rod and Main Bearings when ordering rebuild kits.

**** Part number standard sizes are shown in chart. Part numbers (and kit Dash numbers) will change if nonstandard components are requested.**

***** Available in HP**

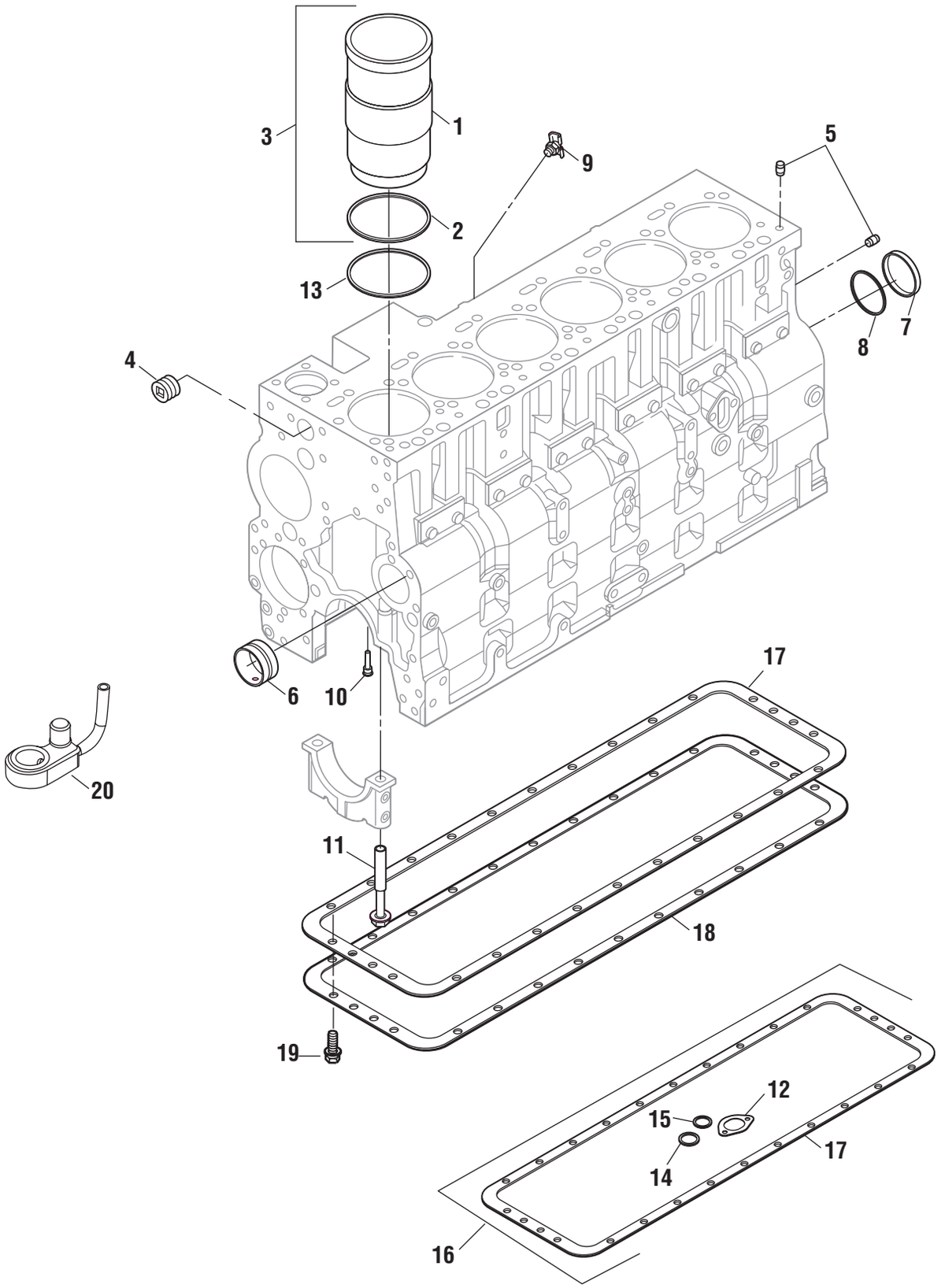
1. **To ensure correct parts application, please have CPL and Engine Serial number available.**
2. **Piston kits include Pins and Retainers.**

PAI Copyright 2017

FIGURE 6551

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	192136		CUM 3901693	CLAMP,Shaft(ISB)	
2	**042091**		**CUM 4891385**	**WASHER,Copper**	
3	**042028**		**CUM 3930881**	**PLUG,Plastic(Air Compressor)**	
4	121288		CUM 3935032	D-RING,Fuel Pump	
4	121359		CUM 3906252	RING,Rectangular(QSB)	
5	131615		CUM 3938706	GASKET,Pump Cover	
5	131695		CUM 3947814	GASKET,Gear Housing	
5	131696		CUM 3957492	GASKET,Rear Cover	
5	131707		CUM 3938655	GASKET,Accessory Drive	CUM 3919601
5	131732		CUM 3949417	GASKET,EGR Valve(QSB)	
5	131733		CUM 3949910	GASKET,Breather(QSB w/ EGR Valve)	
5	131738		CUM 3955457	GASKET,Accessory Drive(QSB w/EGR Valve)	
5	131757		CUM 4896897	GASKET,Accessory Drive	
5	131761		CUM 3979769	GASKET,EGR Valve(QSB)	
5	131762		CUM 4932615	GASKET,Connection(QSB)	
5	131797		CUM 3939357	GASKET,Cover Plate(QSB)	CUM 3932512
5	**131817**		**CUM 3932475**	**GASKET,Turbo Mounting**	
5	**131819**		**CUM 3934638**	**GASKET,Turbo Drain**	**CUM 3932444, CUM 5264571**
5	**131823**		**CUM 4896254**	**GASKET,Wastegate Turbocharger**	
5	**131843**		**CUM 5260648**	**GASKET,Turbocharger Mounting**	**CUM 3977338**
5	**131844**		**CUM 4933225**	**GASKET,EGR Exhaust**	
5	**131845**		**CUM 5266801**	**GASKET,EGR Connection**	**CUM 4937829**
5	**131846**		**CUM 4933235**	**GASKET,Air/Fuel Valve**	
5	**131847**		**CUM 5260647**	**GASKET,EGR Connection**	**CUM 3958716**
5	**131848**		**CUM 4933223**	**GASKET,EGR Connection**	
5	**131879**		**CUM 3921961**	**GASKET,Outlet Exhaust**	
5	**431209**		**NAV 670079C2**	**GASKET,Turbo**	**CUM 4938639**
6	121339		CUM 3946689	SEAL,Rectangular	
6	121348		CUM 3925466	SEAL,Rectangular	
6	121349		CUM 3947328	SEAL,Rectangular	
6	121350		CUM 3949688	SEAL,Rectangular	
6	121355		CUM 3949916	SEAL,Rectangular(QSB w/EGR Valve)	
6	**136143**		**CUM 3684284**	**SEAL,Fitting(ISB)**	
7	121330		CUM 3927305	RING,Housing Seal	
8	042017		CUM 4933628	LOCK,Exhaust Manifold Bolt	
9	121192		CUM 3957440	O-RING	
9	121193		CUM 3946188	O-RING	
9	121194		CUM 3947270	O-RING	
9	121205		CUM 3089240	O-RING,Plug	
9	121206		CUM 3969697	O-RING	
9	121220		CUM 3990084	O-RING	
9	121321		CUM 3679139	O-RING	
9	121322		CUM 4010643	O-RING,Sensor Fitting	
9	121329		CUM 3958414	O-RING,Crankcase Breather(QSB w/EGR Valve)	
9	121331		CUM 3957131	O-RING,Turbocharger(QSB w/EGR Valve)	
9	121361		CUM 2830409	O-RING,Crankcase Breather	
9	121362		CUM 3867646	O-RING	
9	121363		CUM 3973512	O-RING,Valve Cover	
9	121364		CUM 2830977	O-RING,Fuel Pump	CUM 3977375
9	121367		CUM 4898876	O-RING,Filter	
9	121368		CUM 3533955	O-RING,Air Compressor Drain(QSB)	
9	**121369**		**CUM 4894095**	**O-RING,Fuel(QSB)**	
9	121370		CUM 4895710	O-RING	
9	**121376**		**CUM 3408438**	**O-RING,Sensor(Used w/ 050701 Sensor)**	
10	121356		CUM 3965385	SEAL,Fuel Pump(QSB6 w/EGR Valve)	CUM 3954327
11	**121072**		**CUM 3286499**	**HOSE,Turbo Drain**	
12	**131971**		**CUM 2871452**	**GASKET,After Treatment**	
13	**050587**		**CUM 3932290**	**PLUG,Protective Sensor**	
14	**132022**		**CUM 4089240**	**KIT,Compressor Head Repair(15.2CFM)**	
15	**220103**		**CUM 4089208**	**HEAD,Compressor(18.7CFM)**	

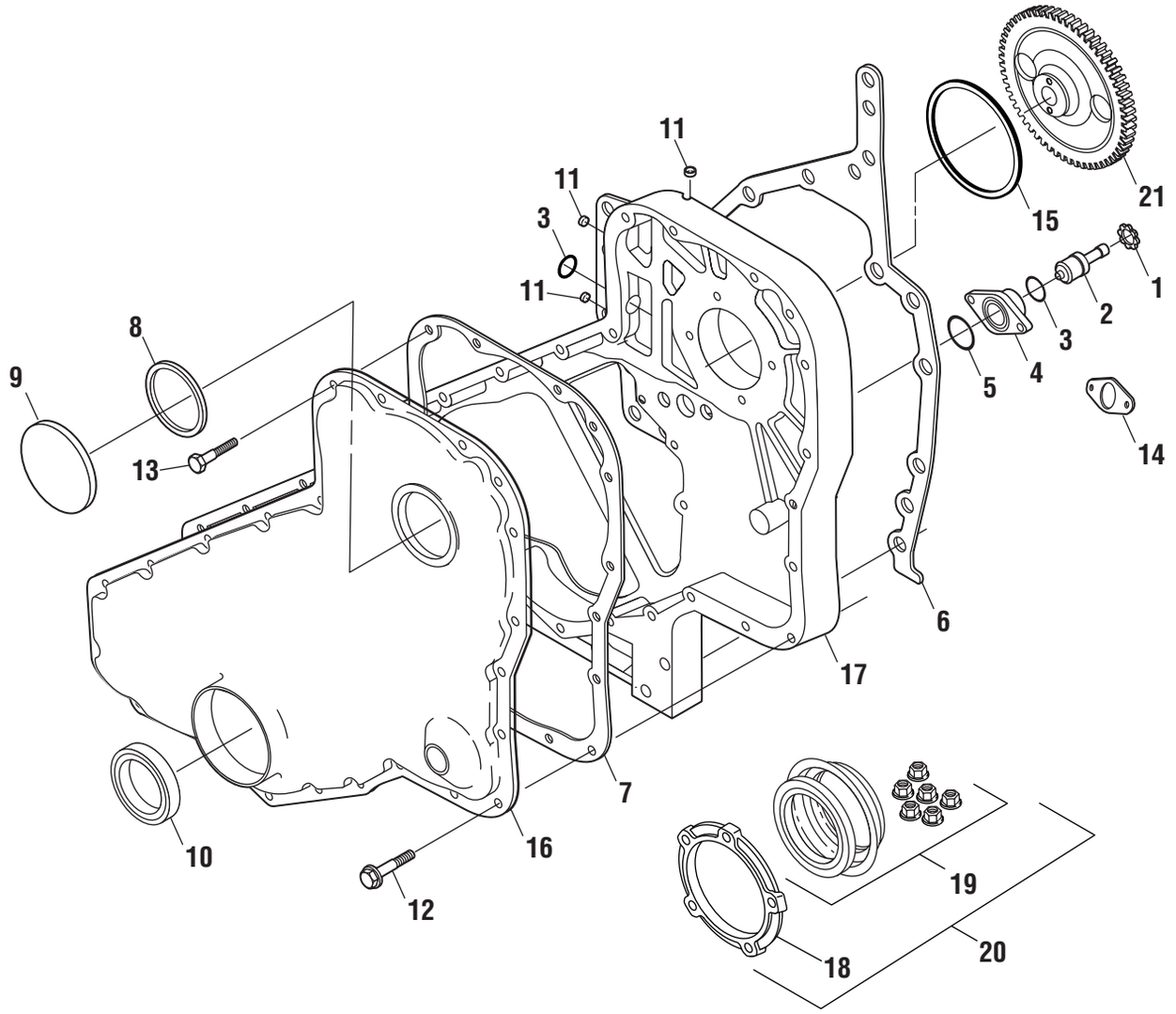
FIGURE 6300



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	161631		CUM 3907792	LINER(Early)(5.233in Flange OD)	
1	161633		CUM 3948095	LINER(Current)(5.154in Flange OD)	
2	136020		CUM 3907177	SEAL,Liner	
3	161632		CUM 3802370	KIT,Liner(Early) Includes Liner (1)161631 Seal (1)136020	
3	161634		CUM 3800328	KIT,Liner(Current) Includes Liner (1)161633 Seal (1)136020	
4	EPP-3566		MAK 49AX226	PLUG,Pipe(1in NPT)	CUM 3008470
5	Call		CUM 3901846	PIN,Dowel	
6	151509		CUM 3945329	BEARING,Camshaft(requires 7)	CUM 3901685
7	040094		CUM 3901969	PLUG,Cup	
8	121320		CUM 3926048	O-RING	
9	Call		CUM S-923-E	DRAINCOCK	
10	045030		CUM 3905928	NOZZLE,Piston Cooling(Early)	
10	045031		CUM 3928031	NOZZLE,Piston Cooling(Current)	
10	**045058**		**CUM 3945435**	**NOZZLE,Piston Cooling(ISL)**	
10	**045059**		**CUM 4944337**	**NOZZLE,Piston Cooling(ISL Natural Gas)**	
11	040039		CUM 3916369	BOLT,Main Cap	
12	131522		CUM 3914302	GASKET,Oil Suction	
13	**162009**		**CUM 3924448**	**SHIM,Liner(.030in / .75mm)**	
13	162013		CUM 3924446	SHIM,Liner(.015in / .38mm)	
13	162014		CUM 3924447	SHIM,Liner(.020in / .50mm)	
13	162016		CUM 3924445	SHIM,Liner(.010in / .25mm)	CUM 3914653
14	136071		CUM 3920773	SEAL,Drain	
15	136057		CUM 3902425	SEAL,Oil	
16	131612		N/A	KIT,Oil Pan Gasket Includes Gaskets (1)131409 (1)131522 Seals (1)136057 (1)136071	
17	131409		CUM 3914017	GASKET,Oil Pan	
17	**131858**		**CUM 3931967**	**GASKET,Oil Pan(ISL)**	
18	**131857**		**CUM 3930408**	**GASKET,Stiffener(ISL)**	
19	**040145**		**CUM 3907860**	**BOLT,Flanged Hex Head(M8 x 1.25 x 25)**	
20	**045065**		**CUM 4937311**	**NOZZLE,Cooling(Bolton)**	

FIGURE 6316

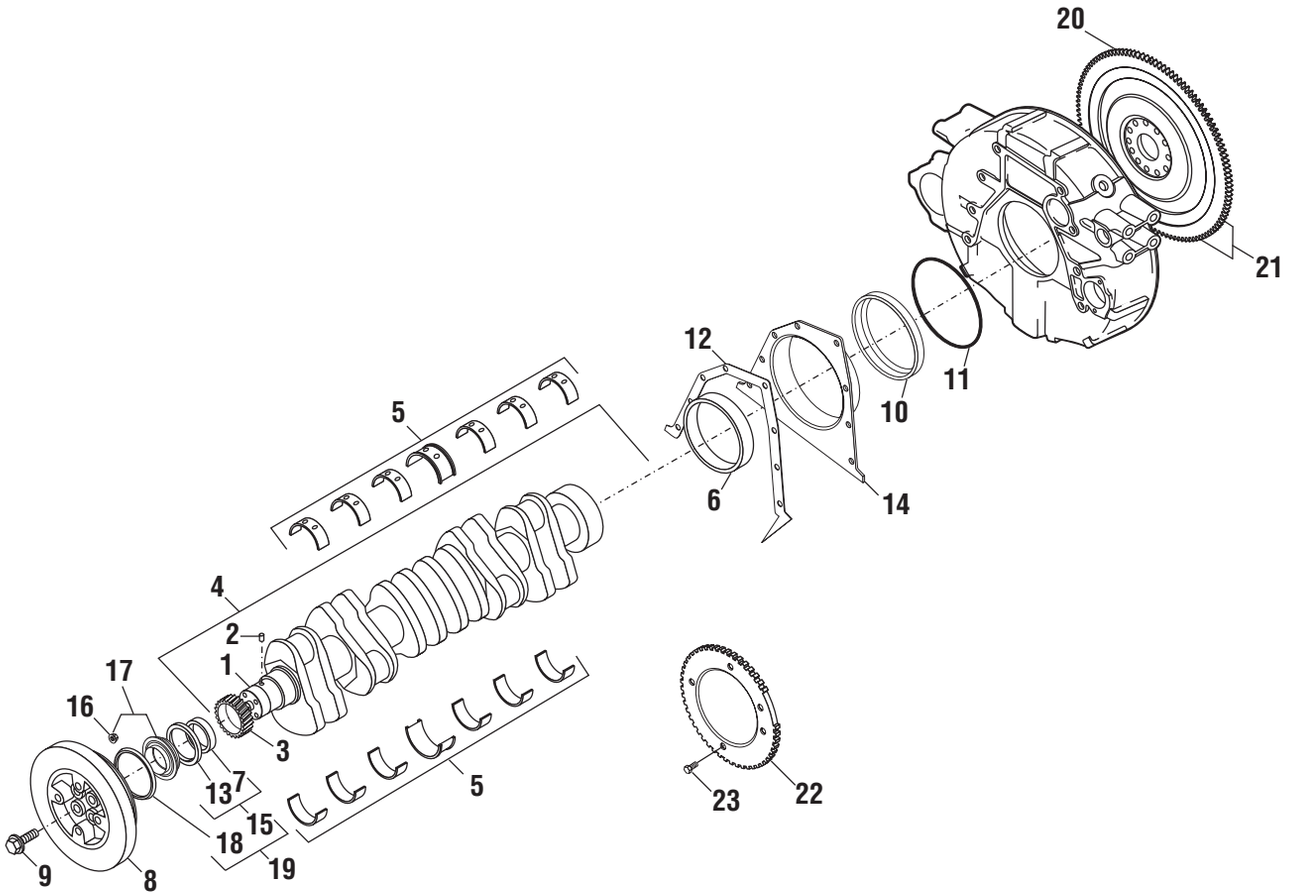


PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	042064		CUM 3904849	RING,Retaining	
2	042013		CUM 3903924	PIN,Timing	CUM 3902627
3	121244		CUM 3913994	O-RING,Seal	
4	Call		CUM 3905933	HOUSING,Timing Pin	
5	121266		CUM 3915772	SEAL,Rectangular Ring	
6	131503		CUM 3938737	GASKET,Gear Housing	
6	131705		CUM 3944293	GASKET,Gear Housing(ISC)	
7	131501		CUM 3917780	GASKET,Gear Cover (Fits Bosch Pump P3000 & P7100)	
7	131528		CUM 3917779	GASKET,Gear Cover (Fits Bosch Pump A & MW and Denso EP9)	
8	136030		CUM 3903475	SEAL,Rectangular Ring	
9	042018		CUM 3903463	COVER,Access	
10	136024		CUM 3353977	SEAL,Front	
11	EPP-3573		MAK 49AX230	PLUG	CUM 3906619
12	040048		CUM 4070462	SCREW,Cap(M8 x 1.25 x 16)	
13	Call		CUM 3900633	SCREW,Cap(M8 x 1.25 x 50)	
14	131534		CUM 3905595	GASKET,Timing Housing	
15	**121415**		**CUM 3969698**	**O-RING,Internal Dampening**	
16	060094		CUM 3926847	COVER,Gear	CUM 3918450
16	**060095**		**CUM 3943813**	**COVER,Gear**	
16	Call		CUM 3905469	COVER,Gear	
17	060092		CUM 3926518	HOUSING,Gear	
17	Call		CUM 3908760	HOUSING,Gear	
18	**060103**		**CUM 3941786**	**COVER,Front Seal**	
19	136115		CUM 4025270	KIT,Crank Seal(Front) Includes Seal (1)136024 Nuts (6)040063	
20	**136142**		**CUM 4024883**	**KIT,Crank Seal(Front) Includes Seal kit (1)136115 Cover (1)060103**	**CUM 3942535**
21	**180130**		**CUM 3931380**	**GEAR,Fuel Pump**	**CUM 3923578**

***Note: To ensure correct parts for application, please have Engine Serial number available.**

FIGURE 6301

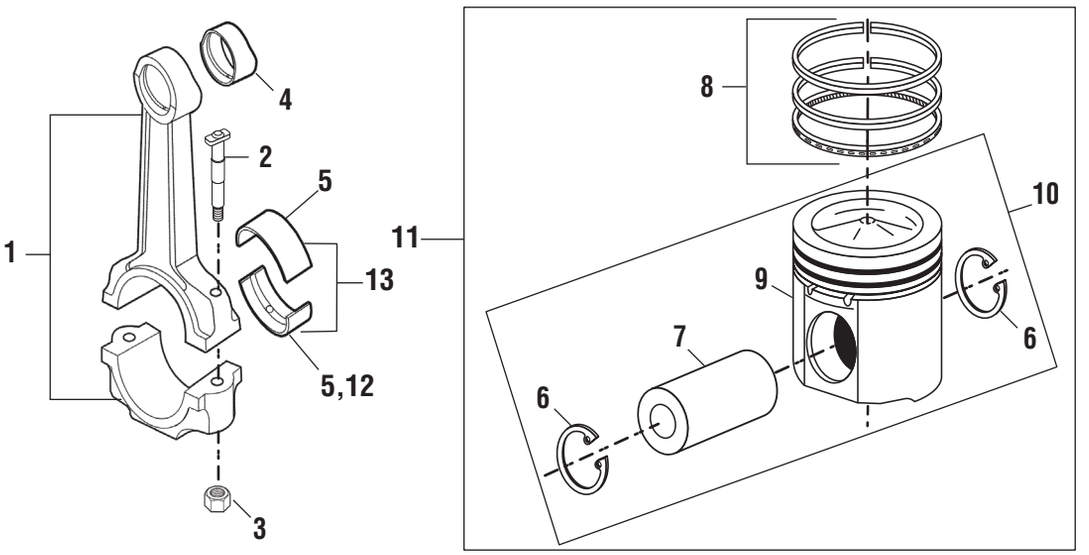


PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171625		CUM 3965010	CRANKSHAFT(ISL 8.9 L)	
1	171709		CUM 3917320	CRANKSHAFT	
1	**171757**		**CUM 3965006**	**CRANKSHAFT(ISC/QSC)**	
2	**045064**		**CUM 3329899**	**PIN,Dowel(ISC)**	
2	171717		CUM 3904483	PIN	
3	171714		CUM 3918776	GEAR	CUM 3918380
4	171712		CUM 3918986	KIT,Crankshaft Includes Crankshaft (1)171709 Gear (1)171714 Pin (1)171717	CUM 3917443
4	**171758**		**CUM 3965007**	**ASSEMBLY,Crankshaft(ISC)** **Includes Crankshaft (1)171757 Exciter Ring (1)170990 Screws (4)040141 Pin (1)045064**	
4	**171759**		**CUM 3965008**	**ASSEMBLY,Crankshaft** **Includes Crankshaft Assembly (1)171758 Gear (1)171714 Pin (1)171717**	
5	171821		CUM 3945917	SET,Main Bearing(STD) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	CUM 3802210
5	171822		CUM 3945918	SET,Main Bearing(.010in/.25mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	CUM 3802211
5	171823		CUM 3945919	SET,Main Bearing(.020in/.50mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	CUM 3802212
5	171824		CUM 3945920	SET,Main Bearing(.030in/.75mm) Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	CUM 3802213
5	171825		CUM 3802214	SET,Main Bearing(.040in/1.00mm)Special Order Includes Upper Main Bearings (6) Upper Thrust Bearing (1) Lower Main Bearings (7)	
6	136040		CUM 3906081	RING,Wear(Rear Crankshaft)	
7	136045		CUM 3908277	RING,Wear(Front Crankshaft)	CUM 3920408
7	136113		CUM 3924986	RING,Wear(Front Crankshaft)(ISC)	
8	202006		CUM 3925566	DAMPER,Crankshaft	CUM 3922556
8	**202026**		**CUM 3925570**	**DAMPER,CRANKSHAFT(ISC)**	**CUM 3922560**
9	Call		CUM 3906733	SCREW,Damper(M14x1.5x 35)	
10	136026		CUM 3909410	SEAL,Rear	
10	136123		CUM 4955372	SEAL,Rear(ISC)(Wet Clutch)	CUM 3909411
10	**136158**		**CUM 5259499**	**SEAL,Rear(Dry Seal)**	
11	136031		CUM 3912473	O-RING	
12	131462		CUM 3914301	GASKET	
13	136024		CUM 3353977	SEAL,Front	CUM 3921927
13	136112		CUM 3921928	SEAL,Front(ISC)	CUM 3920404
14	060100		CUM 3933384	COVER,Rear Seal	CUM 3921042
15	136111		CUM 3925626	KIT,Crank Seal(Front)(ISC) Includes Seal (1)136112 Wear Ring (1)136113	
16	040063		CUM 3938077	NUT,Carrier	
17	136115		CUM 4025270	KIT,Crank Seal(Front)(ISC) Includes Seal (1)136024 Nuts (6)040063	
18	136114		CUM 3924987	SHIELD,Dust	
19	136118		CUM 3925343	KIT,Crank Seal(Front)(ISC/QSC) Includes Seal Kit (1)136111 Shield (1)136114	
20	**060073**		**CUM 3902127**	**GEAR,Flywheel(14in,138 Tooth Ring Gear)(ISC)**	
20	**060074**		**CUM 3908546**	**GEAR,Flywheel(ISC)(NSS-sold in Kit 060057) (138 Tooth Ring Gear)**	
21	**060056**		**CUM 3922645**	**ASSEMBLY,Flywheel(ISC)(w/ 138 Tooth Ring Gear)**	
21	**060057**		**CUM 3912913**	**ASSEMBLY,Flywheel(ISC)(#2 Flywheel)** **Includes Flywheel (1) Gear (1)060074**	
22	**170990**		**CUM 3972345**	**RING,Exciter**	
23	**040141**		**CUM 3950161**	**SCREW(M6 x 1.0 x 12)**	

One Piece Piston

FIGURE 6302



Please note:

*** To ensure correct parts for application, please have CPL and Engine Serial number available.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171632		CUM 3971394	ROD,Connecting	CUM 3901383
1	**171638**		**CUM 4944670**	**ROD,Connecting(Fractured)(ISL 8.9L)**	**CUM 3942090**
2	040032		CUM 3928870	BOLT,Connecting Rod	CUM 3901380
3	040059		CUM 3934864	NUT,Connecting Rod	CUM 3901381
4	151515		CUM 3913990	BUSHING,Rod(Pre-Finished ID)	
4	151515A		N/A	BUSHING,Rod(Semi-Finished ID, to be Reamed after Assembly)	
4	**151533**		**CUM 4944137**	**BUSHING,Rod**	
5	171816		CUM 3901430	BEARING,Shell(STD)	
5	171817		CUM 3901431	BEARING,Shell(.010in/.25mm)	
5	171818		CUM 3901432	BEARING,Shell(.020in/.50mm)	
5	171819		CUM 3901433	BEARING,Shell(.030in/.75mm)	
5	171820		CUM 3901434	BEARING,Shell(.040in/1.00mm)	
6	111269		CUM 3901996	RING,Retaining	
7	111087		CUM 3950549	PIN	
7	111268		CUM 3901597	PIN	
8	505090		CUM 3802429	SET,Ring	
8	505139		CUM 4089644	SET,Ring(ISC)	CUM 4089643
8	505140		CUM 3802538	SET,Ring(ISC)	
8	**505149**		**CUM 4955651**	**SET,Ring(ISC)**	
8	**505184**		**CUM 3800912**	**SET,Ring(ISC)**	
8	**505185**		**CUM 4025290**	**SET,Ring(6CTA 8.3)**	**CUM 4089351**
9	111265		CUM 3917707	PISTON	
9	111270		CUM 3919247	PISTON	
9	111275		CUM 3919566	PISTON	
9	111280		CUM 3923163	PISTON	
9	111285		CUM 3923164	PISTON	
9	111290		CUM 3923165	PISTON	
9	111295		CUM 3925878	PISTON	
9	111300		CUM 3929161	PISTON	
9	111434		CUM 3923537	PISTON	
9	111474		CUM 3925673	PISTON	
9	111480		CUM 3942106	PISTON(ISC)	CUM 3943446
9	111513		CUM 3943367	PISTON(ISC)	
9	111516		CUM 3973265	PISTON(ISC)	CUM 4933120
9	**111637**		**CUM 4932720**	**PISTON(ISC)**	**CUM 4943104**
9	**111644**		**CUM 4987914**	**PISTON(ISL 8.9L)**	
9	**111646**		**CUM 3992117**	**PISTON(10.5CR, ISC 8.3 Natural Gas)**	**CUM 3927253**
9	**111668**		**CUM 3992118**	**PISTON(6CTA 8.3 Natural Gas)**	**CUM 3607354**

PAI Copyright 2017

One Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
9	**111671**		**CUM 3394459**	**PISTON(6CTA 8.3 Natural Gas)**	
10	111266		N/A	KIT,Piston Includes Piston (1)111265 Pin (1)111268 Retaining Rings (2)111269	CUM 3917707
10	111271		N/A	KIT,Piston Includes Piston (1)111270 Pin (1)111268 Retaining Rings (2)111269	CUM 3919247
10	111276		N/A	KIT,Piston Includes Piston (1)111275 Pin (1)111268 Retaining Rings (2)111269	CUM 3919566
10	111281		N/A	KIT,Piston Includes Piston (1)111280 Pin (1)111268 Retaining Rings (2)111269	CUM 3923163
10	111286		N/A	KIT,Piston Includes Piston (1)111285 Pin (1)111268 Retaining Rings (2)111269	CUM 3923164
10	111291		N/A	KIT,Piston Includes Piston (1)111290 Pin (1)111268 Retaining Rings (2)111269	CUM 3923165
10	111296		N/A	KIT,Piston Includes Piston (1)111295 Pin (1)111268 Retaining Rings (2)111269	CUM 3925878
10	111301		N/A	KIT,Piston Includes Piston (1)111300 Pin (1)111268 Retaining Rings (2)111269	CUM 3929161
10	111435		N/A	KIT,Piston Includes Piston (1)111434 Pin (1)111268 Retaining Rings (2)111269	CUM 3923537
10	111475		N/A	KIT,Piston Includes Piston (1)111474 Pin (1)111268 Retaining Rings (2)111269	
10	111481		N/A	KIT,Piston(ISC) Includes Piston (1)111480 Pin (1)111268 Retaining Rings (2)111269	
10	111514		N/A	KIT,Piston(ISC) Includes Piston (1)111513 Pin (1)111268 Retaining Rings (2)111269	
10	111517		N/A	KIT,Piston(ISC) Includes Piston (1)111516 Pin (1)111087 Retaining Rings (2)111269	
10	**111638**		**N/A**	**KIT,Piston(ISC) Includes Piston (1)111637 Pin (1)111087 Retaining Rings (2)111269**	
10	**111645**		**N/A**	**KIT,Piston(ISL) Includes Piston (1)111644 Pin (1)111087 Retaining Rings (2)111269**	
10	**111647**		**N/A**	**KIT,Piston(ISC 8.3 Natural Gas) Includes Piston (1)111646 Pin (1)111268 Retaining Rings (2)111269**	
10	**111669**		**CUM 4025295**	**KIT,Piston(6CTA 8.3 Natural Gas) Includes Piston (1)111668 Pin (1)111268 Retaining Rings (2)111269**	
10	**111672**		**CUM 3800846**	**KIT,Piston(6CTA 8.3 Natural Gas) Includes Piston (1)111671 Pin (1)111268 Retaining Rings (2)111269**	
11	111267		CUM 3802263	KIT,Piston Includes Piston (1)111265 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3917707
11	111272		CUM 3802344	KIT,Piston Includes Piston (1)111270 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3919247
11	111277		CUM 3802280	KIT,Piston Includes Piston (1)111275 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3919566
11	111282		CUM 3802397	KIT,Piston Includes Piston (1)111280 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3923163

Continued on the following page.

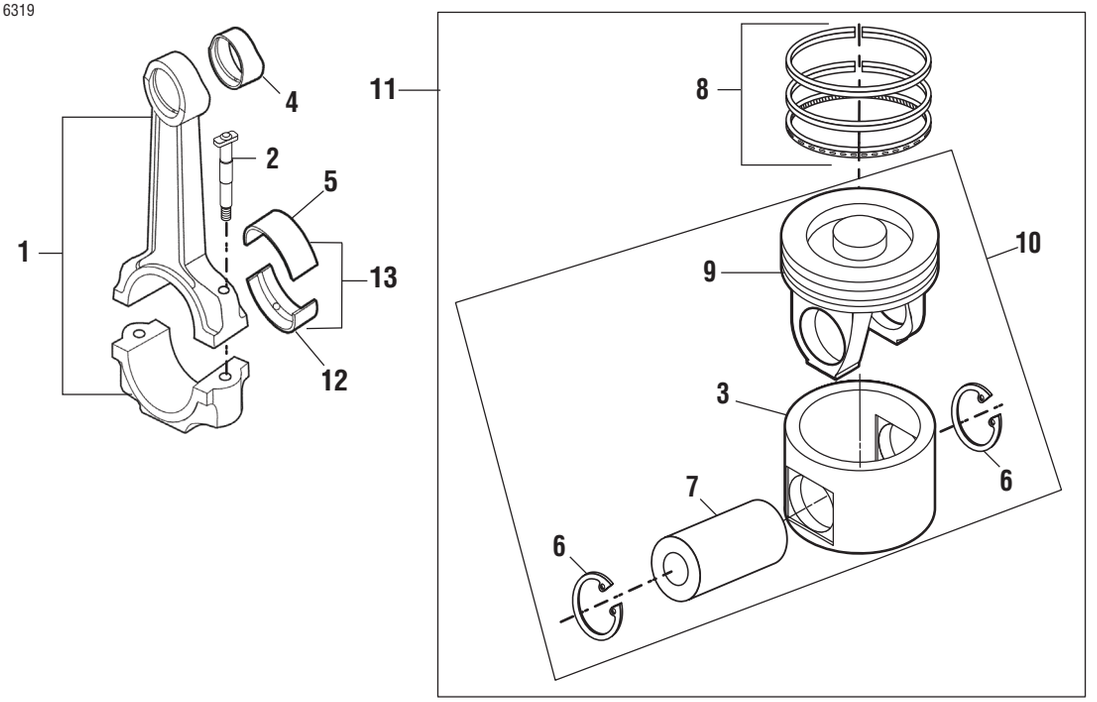
One Piece Piston

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
11	111287		CUM 3802398	KIT,Piston Includes Piston (1)111285 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3923164
11	111292		CUM 3802396	KIT,Piston Includes Piston (1)111290 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3923165
11	111297		CUM 3802601	KIT,Piston Includes Piston (1)111295 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3925878
11	111302		CUM 3802657	KIT,Piston Includes Piston (1)111300 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3929161
11	111387		CUM 3802460	KIT,Piston(Sold only in Cylinder kit 101089) Includes Piston (1)111385 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3922476
11	111436		CUM 3802474	KIT,Piston Includes Piston (1)111434 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3923537
11	111476		CUM 3802484	KIT,Piston Includes Piston (1)111474 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	
11	111482		CUM 3800318	KIT,Piston(ISC) Includes Piston (1)111480 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090	CUM 3942106
11	111515		CUM 3800320	KIT,Piston(ISC) Includes Piston (1)111513 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505140	
11	111518		CUM 4955190	KIT,Piston(ISC) Includes Piston (1)111516 Pin (1)111087 Retaining Rings (2)111269 Ring Set (1)505139	
11	**111639**		**CUM 4955581**	**KIT,Piston(ISC) Includes Piston (1)111637 Pin (1)111087 Retaining Rings (2)111269 Ring Set (1)505149**	
11	**111648**		**CUM 4089348**	**KIT,Piston(ISC 8.3 Natural Gas) Includes Piston (1)111646 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505185**	
11	**111670**		**CUM 4089346**	**KIT,Piston(6CTA 8.3 Natural Gas) Includes Piston (1)111668 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505185**	
11	**111673**		**CUM 4089433**	**KIT,Piston(6CTA 8.3 Natural Gas) Includes Piston (1)111671 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505185**	
12	**171895**		**CUM 3966244**	**BEARING,Rod(STD, QSL)**	
12	**171896**		**CUM 3966245**	**BEARING,Rod(.25mm, QSL)**	
12	**171897**		**CUM 3966246**	**BEARING,Rod(.50mm, QSL)**	
12	**171898**		**CUM 3966247**	**BEARING,Rod(.75mm, QSL)**	
12	**171899**		**CUM 3966248**	**BEARING,Rod(1.00mm, QSL)**	
13	**171915**		**N/A**	**KIT,Rod Bearing(STD, QSL) Includes Rod Bearings (1)171816 (1)171895**	
13	**171916**		**CUM 4089804**	**KIT,Rod Bearing(.25mm, QSL) Includes Rod Bearings (1)171817 (1)171896**	
13	**171917**		**CUM 4089805**	**KIT,Rod Bearing(.50mm, QSL) Includes Rod Bearings (1)171818 (1)171897**	
13	**171918**		**CUM 4089806**	**KIT,Rod Bearing(.75mm, QSL) Includes Rod Bearings (1)171819 (1)171898**	
13	**171919**		**CUM 4089807**	**KIT,Rod Bearing(1.00mm, QSL) Includes Rod Bearings (1)171820 (1)171899**	

PAI Copyright 2017

Two Piece Piston

FIGURE 6319



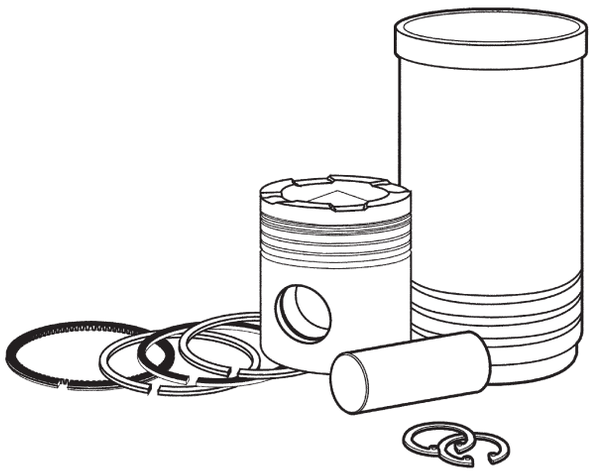
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 3967347	ROD,Connecting	
2	Call		CUM 3944679	SCREW,Connecting Rod	
3	**111704**		**CUM 3966721**	**SKIRT,Piston**	**CUM 4945337**
4	151515		CUM 3913990	BUSHING,Rod	
5	**171895**		**CUM 3966244**	**BEARING,Rod(STD)**	
5	**171896**		**CUM 3966245**	**BEARING,Rod(.25mm)**	
5	**171897**		**CUM 3966246**	**BEARING,Rod(.50mm)**	
5	**171898**		**CUM 3966247**	**BEARING,Rod(.75mm)**	
5	**171899**		**CUM 3966248**	**BEARING,Rod(1.00mm)**	
6	111269		CUM 3901996	RETAINER	
7	111087		CUM 3950549	PIN,Piston	
8	505139		CUM 4089644	SET,Piston Ring	
9	**111703**		**CUM 4941396**	**CROWN,Piston**	
9	**111707**		**CUM 4941395**	**CROWN,Piston**	
9	**111710**		**CUM 4941393**	**CROWN,Piston**	
10	**111705**		**N/A**	**KIT,Piston** **Includes Crown (1)111703 Skirt (1)111704 Pin (1)111087 Retainers (2)111269**	
10	**111708**		**N/A**	**KIT,Piston** **Includes Crown (1)111707 Skirt (1)111704 Pin (1)111087 Retainers (2)111269**	
10	**111711**		**N/A**	**KIT,Piston** **Includes Crown (1)111710 Skirt (1)111704 Pin (1)111087 Retainers (2)111269**	
11	**111706**		**CUM 4955237**	**KIT,Piston** **Includes Piston kit (1)111705 Ring set (1)505139**	
11	**111709**		**CUM 4089944**	**KIT,Piston** **Includes Piston kit (1)111708 Ring set (1)505139**	**CUM 4955299**
11	**111712**		**CUM 4089963**	**KIT,Piston** **Includes Piston kit (1)111711 Ring set (1)505139**	
12	171816		CUM 3901430	BEARING,Rod(STD)	
12	171817		CUM 3901431	BEARING,Rod(.25mm)	
12	171818		CUM 3901432	BEARING,Rod(.50mm)	
12	171819		CUM 3901433	BEARING,Rod(.75mm)	
12	171820		CUM 3901434	BEARING,Rod(1.00mm)	

 PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
13	171915		N/A	KIT,Rod Bearing(STD) Includes Rod Bearings (1)171816 (1)171895	
13	171916		CUM 4089804	KIT,Rod Bearing(.25mm) Includes Rod Bearings (1)171817 (1)171896	
13	171917		CUM 4089805	KIT,Rod Bearing(.50mm) Includes Rod Bearings (1)171818 (1)171897	
13	171918		CUM 4089806	KIT,Rod Bearing(.75mm) Includes Rod Bearings (1)171819 (1)171898	
13	171919		CUM 4089807	KIT,Rod Bearing(1.00mm) Includes Rod Bearings (1)171820 (1)171899	

PAI Copyright 2017

FIGURE 6303

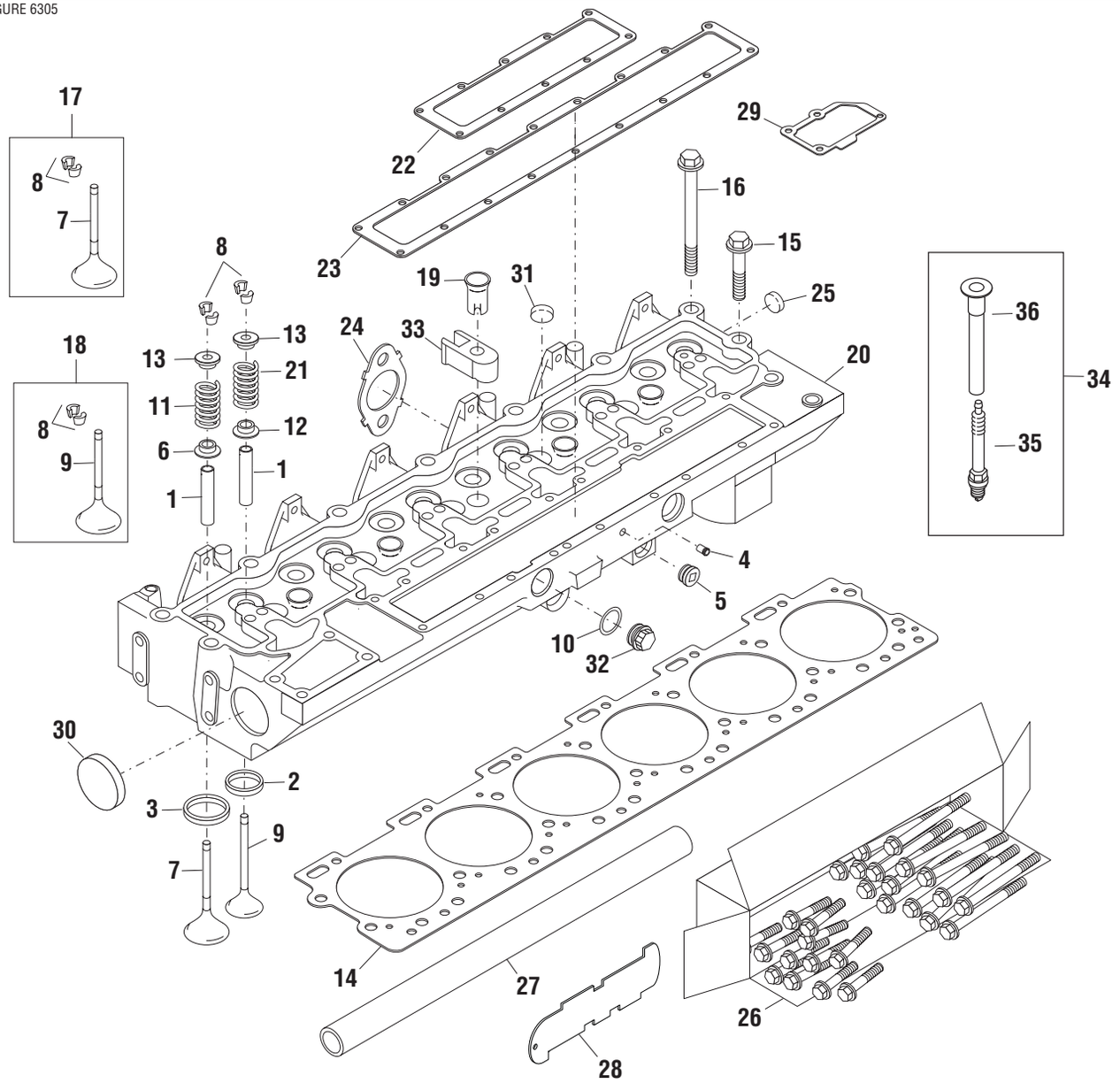


KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	PISTON NUMBER
1	101070		CUM 3802388	KIT,Cylinder(Early) Includes Piston (1)111265 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3917707
1	101071		N/A	KIT,Cylinder(Early) Includes Piston (1)111270 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 101071
1	101072		CUM 3802372	KIT,Cylinder(Early) Includes Piston (1)111275 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3919566
1	101073		CUM 3802400	KIT,Cylinder(Early) Includes Piston (1)111280 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3923163
1	101074		CUM 3802401	KIT,Cylinder(Early) Includes Piston (1)111285 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3923164
1	101075		CUM 3802399	KIT,Cylinder(Early) Includes Piston (1)111290 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3923165
1	101076		CUM 3802406	KIT,Cylinder(Current) Includes Piston (1)111265 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3917707
1	101077		N/A	KIT,Cylinder(Current) Includes Piston (1)111270 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3919247
1	101078		CUM 3802405	KIT,Cylinder(Current) Includes Piston (1)111275 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3919566
1	101079		CUM 3802403	KIT,Cylinder(Current) Includes Piston (1)111280 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3923163

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	PISTON NUMBER
1	101080		CUM 3802404	KIT,Cylinder(Current) Includes Piston (1)111285 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3923164
1	101081		CUM 3802402	KIT,Cylinder(Current) Includes Piston (1)111290 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3923165
1	101082		N/A	KIT,Cylinder(Early) Includes Piston (1)111295 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3922578
1	101083		N/A	KIT,Cylinder(Early) Includes Piston (1)111300 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3929161
1	101084		N/A	KIT,Cylinder(Early) Includes Piston (1)111387 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020	CUM 3922476
1	101087		CUM 3802743	KIT,Cylinder(Current) Includes Piston (1)111295 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3925878
1	101088		N/A	KIT,Cylinder(Current) Includes Piston (1)111300 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3929161
1	101089		CUM 3802660	KIT,Cylinder(Current) Includes Piston (1)111387 Pin (1)111268 Retaining Ring (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3922476
1	101091		CUM 3802912	KIT,Cylinder Includes Piston (1)111474 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3925673
1	101096		CUM 3800319	KIT,Cylinder(ISC) Includes Piston (1)111480 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020	CUM 3942106
1	101097		CUM 3800321	KIT,Cylinder(ISC) Includes Piston (1)111513 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505140 Sleeve (1)161633 Seal (1)136020	CUM 3943367
1	**101103**		**N/A**	**KIT,Cylinder(ISC) Includes Piston (1)111637 Pin (1)111087 Retaining Rings (2)111269 Ring Set (1)505149 Sleeve (1)161633 Seal (1)136020**	**CUM 3943367**
1	**101182**		**N/A**	**KIT,Cylinder(ISC) Includes Piston (1)111516 Pin (1)111087 Retaining Rings (2)111269 Ring Set (1)505139 Sleeve (1)161633 Seal (1)136020**	**CUM 4932720**
1	**101184**		**N/A**	**KIT,Cylinder(ISC Natural Gas)(10.5 CR) Includes Piston (1)111646 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505185 Sleeve (1)161633 Seal (1)136020**	**CUM 3992117**
1	**101185**		**N/A**	**KIT,Cylinder(ISC Natural Gas)(10.0CR) Includes Piston (1)111668 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505185 Sleeve (1)161633 Seal (1)136020**	**CUM 3992118**
1	**101186**		**N/A**	**KIT,Cylinder(ISC Natural Gas)(8.5CR) Includes Piston (1)111671 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505185 Sleeve (1)161633 Seal (1)136020**	**CUM 3394459**
1	**101187**		**N/A**	**KIT,Cylinder(6C Early) Includes Piston (1)111434 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161631 Seal (1)136020**	**CUM 3923537**
1	**101188**		**N/A**	**KIT,Cylinder(6C Current) Includes Piston (1)111434 Pin (1)111268 Retaining Rings (2)111269 Ring Set (1)505090 Sleeve (1)161633 Seal (1)136020**	**CUM 3923537**
1	**101189**		**N/A**	**KIT,Cylinder(ISL) Includes Piston kit (1)111706 Pin (1)111087 Retaining Rings (2)111269 Ring Set (1)505139 Sleeve (1)161633 Seal (1)136020**	**CUM 4955237**
1	**101190**		**N/A**	**KIT,Cylinder(ISL) Includes Piston Kit (1)111709 Pin (1)111087 Retaining Rings (2)111269 Ring Set (1)505139 Sleeve (1)161633 Seal (1)136020**	
1	**101191**		**N/A**	**KIT,Cylinder(ISL) Includes Piston Kit (1)111711 Pin (111087 Retaining Rings (2)111269 Ring Set (1)505139 Sleeve (1)161633 Seal (1)136020**	

FIGURE 6305



*** Please have Engine serial number available for correct Head Bolts and quantities.**

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	192042	**192042E**	CUM 3923564	GUIDE,Valve**(Finished)**	
1	192129		CUM 4934063	GUIDE,Valve(ISC-Semi-finished)	CUM 3942645
1	192132		CUM 3948102	GUIDE,Valve(ISC-Finished)	
1	**192182**		**CUM 3925863**	**GUIDE,Valve(ISC-Semi-finished)**	**CUM 3925864**
1	**192183**		**CUM 3925863**	**GUIDE,Valve(Semi-finished)**	
2	192195		CUM 3933088	INSERT,Exhaust(STD)(ISC)	CUM 3927257
2	192012	**192012E**	CUM 3928174	INSERT,Exhaust(.250 Tall)	
2	192016		CUM 3904716	INSERT,Exhaust(.230 Tall)	
2	192210		CUM 3968074	INSERT,Exhaust(ISC, ISL)	
3	192200		CUM 3927256	INSERT,Intake(STD)(ISC)	
3	192004	**192004E**	CUM 3908830	INSERT,Intake	
3	192205		CUM 3940152	INSERT,Intake(ISC, ISL)	

 PAI Copyright 2017

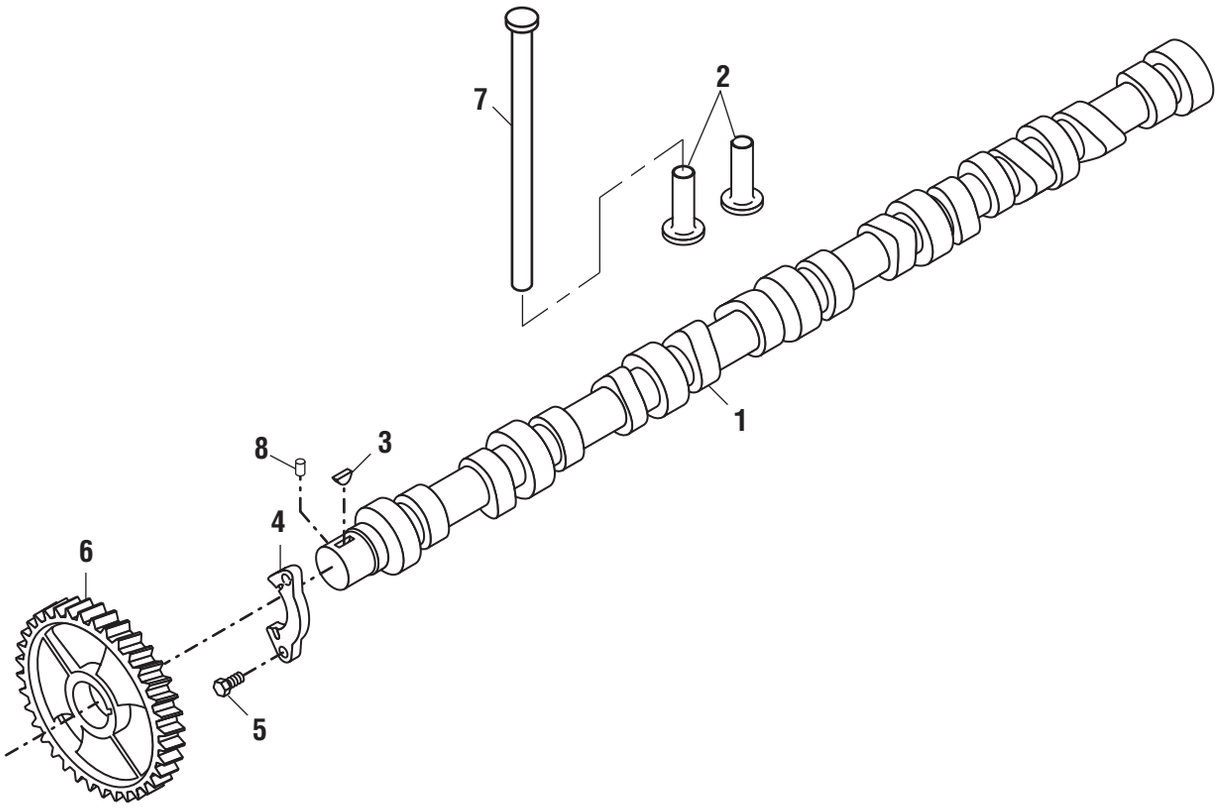
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
4	FPP-3577		MAK 49AX244	PLUG,Pipe(1/4in NPT)	CUM 3008466
5	EPP-3575		MAK 49AX234Z	PLUG,Pipe(1/2in NPT)	CUM 3008468
6	191991		CUM 3915707	SEAL,Valve Stem(Intake)	
6	192118		CUM 3948578	SEAL,Valve Stem(Intake & Exhaust)(ISC)	CUM 3943888
6	192124		CUM 3930057	SEAL,Valve Stem(ISC)	
6	**192157**		**CUM 4946374**	**SEAL,Valve Stem(ISL)**	
7	191979	191979E	CUM 3915506	VALVE,Intake (Use CUP 191982 Intake Valve Kit)	
7	192150		CUM 3927254	VALVE,Intake(CNG Engine)	CUM 3802812
7	192215		CUM 3942588	VALVE,Intake	
7	**192270**		**CUM 4981794**	**VALVE,Intake**	
8	192023		CUM 3901177	COLLET,Valve	
9	191967	191967E	CUM 3902254	VALVE,Exhaust (Use CUP 191969 Exhaust Valve Kit)	
9	192152		CUM 3927255	VALVE,Exhaust(CNG Engine)	CUM 3802813
9	192217		CUM 3942589	VALVE,Exhaust	
9	**192272**		**CUM 4981795**	**VALVE,Exhaust**	
10	136057		CUM 3902425	SEAL	
11	192055		CUM 3906412	SPRING,Valve	
11	**192156**		**CUM 3940279**	**SPRING,Valve(ISC 24V Head)**	**CUM 3944711**
12	191998		CUM 3919038	SEAL,Exhaust Valve Stem	
13	192102		CUM 3972757	RETAINER	CUM 3907990, CUM 3912976
13	**192162**		**CUM 3944452**	**RETAINER,Spring Valve**	
14	131500		CUM 3938267	GASKET,Cylinder Head(STD)	
14	131579		CUM 3935586	GASKET,Cylinder Head(.25mm OS)	
14	131712		CUM 3943366	GASKET,Cylinder Head(ISC)	CUM 3943902
14	131740		CUM 3935587	GASKET,Cylinder Head(+.50)(6C)	CUM 3914306
14	131742		CUM 4981796	GASKET,Cylinder Head(ISC/QSC)	CUM 3967059
14	**131945**		**CUM 3969609**	**GASKET,Cylinder Head(ISL)**	
15	040037		CUM 3917729	SCREW(M14 x 2.0 x 80mm Lg)(2V Head)*	
15	040043		CUM 3907234	SCREW(M14 x 2.0 x 70mm Lg)(4V Head)*	
16	040036		CUM 3917728	SCREW(M14 x 2.0 x 160mm Lg)(2V Head)*	
16	040044		CUM 3907233	SCREW(M14 x 2.0 x 150mm Lg)(4V Head)*	
17	191982		CUM 3802275	KIT,Intake Valve Includes Valve (1)191979 Collets (2)192023	
17	192151		CUM 3802812	KIT,Intake Valve(CNG Engine) Includes Valve (1)192150 Collets (2)192023	
17	192216		CUM 3800340	KIT,Intake Valve(ISC) Includes Valve (1)192215 Collets (2)192022	
17	**192271**		**CUM 5259420**	**KIT,Intake Valve(ISL 8.9) Includes Valve (1)192270 Collets (2)192022)**	
18	191969		CUM 3802085	KIT,Exhaust Valve Includes Valve (1)191967 Collets (2)192023	
18	192154		CUM 3802813	KIT,Exhaust Valve(CNG Engine) Includes Valve (1)192152 Collets(2)192023	
18	192218		CUM 3800341	KIT,Exhaust Valve(ISC) Includes Valve (1)192217 Collets (2)192022	
18	**192273**		**CUM 5259419**	**KIT,Exhaust Valve(ISL 8.9) Includes Valve (1)192272 Collets (2)192022**	
19	136070		CUM 3909886	SEAL,Injector	
20	060174	**060174E**	CUM 3936180	ASSEMBLY,Cylinder Head(Bare-2V Head)	
20	060175	**060175E**	CUM 4089290	ASSEMBLY,Cylinder Head(Loaded-2V Head) (19 Bolt Intake)	CUM 3939345
21	192106		CUM 3916588	SPRING,Exhaust Valve	
22	131714		CUM 3992090	GASKET,Inlet(ISC)	CUM 3943144
23	131713		CUM 3944646	GASKET,Intake Manifold(ISC)	CUM 3940851
23	**131818**		**CUM 3970134**	**GASKET,Intake(ISC)**	
23	**131870**		**CUM 4937032**	**GASKET,Intake(ISC - EGR)**	
23	**131873**		**CUM 5264572**	**GASKET,Intake(ISC)**	
24	131512		CUM 3932063	GASKET,Exhaust(ISC)(Early)(Laminated)	CUM 3921787
24	131706		CUM 3937479	GASKET,Exhaust(ISC)(Late)	
24	**131944**		**CUM 5316185**	**GASKET,Exhaust(ISL)**	

Keys 25-36 are on the following page.

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
25	040092		CUM 3920443	PLUG,Cup	
26	040068		N/A	KIT,Head Bolt(2V Head) Includes Screws (12)040037 (14)040036	
26	040074		N/A	KIT,Head Bolt(ISC) Includes Screws (26)040036	
26	**040131**		**N/A**	**KIT,Head Bolt(ISC 4V Head) Includes Screws (12)040043 (14)040044**	
27	045081		CUM 3918614	HOSE,Breather(17in x 3/4in)	CUM 3908049
28	042025		CUM 3823921	GAUGE,Head Bolt	
29	131747		CUM 3967891	GASKET,Intake Connection	
29	**131812**		**CUM 3975487**	**GASKET,Intake Connection(QSC)**	
30	040093		CUM 3922072	PLUG,Expansion	
31	040086		CUM 3007635	PLUG,Expansion	
32	042026		CUM 3924148	PLUG,Drain	
33	**045090**		**CUM 3910279**	**CLAMP,Injector**	**CUM 3909923**
34	**105001**		**CUM 4955850**	**KIT,Spark Plug(Natural Gas Units) Includes Spark Plug (1)105002 Spark Plug Boot (1)105003**	**CUM 2881797**
35	**105002**		**CUM 4937472**	**SPARK,Plug(Natural Gas Units)**	**CUM3976119**
36	**105003**		**CUM 4989131**	**BOOT,Spark Plug(Natural Gas Units)**	**CUM 3973945**

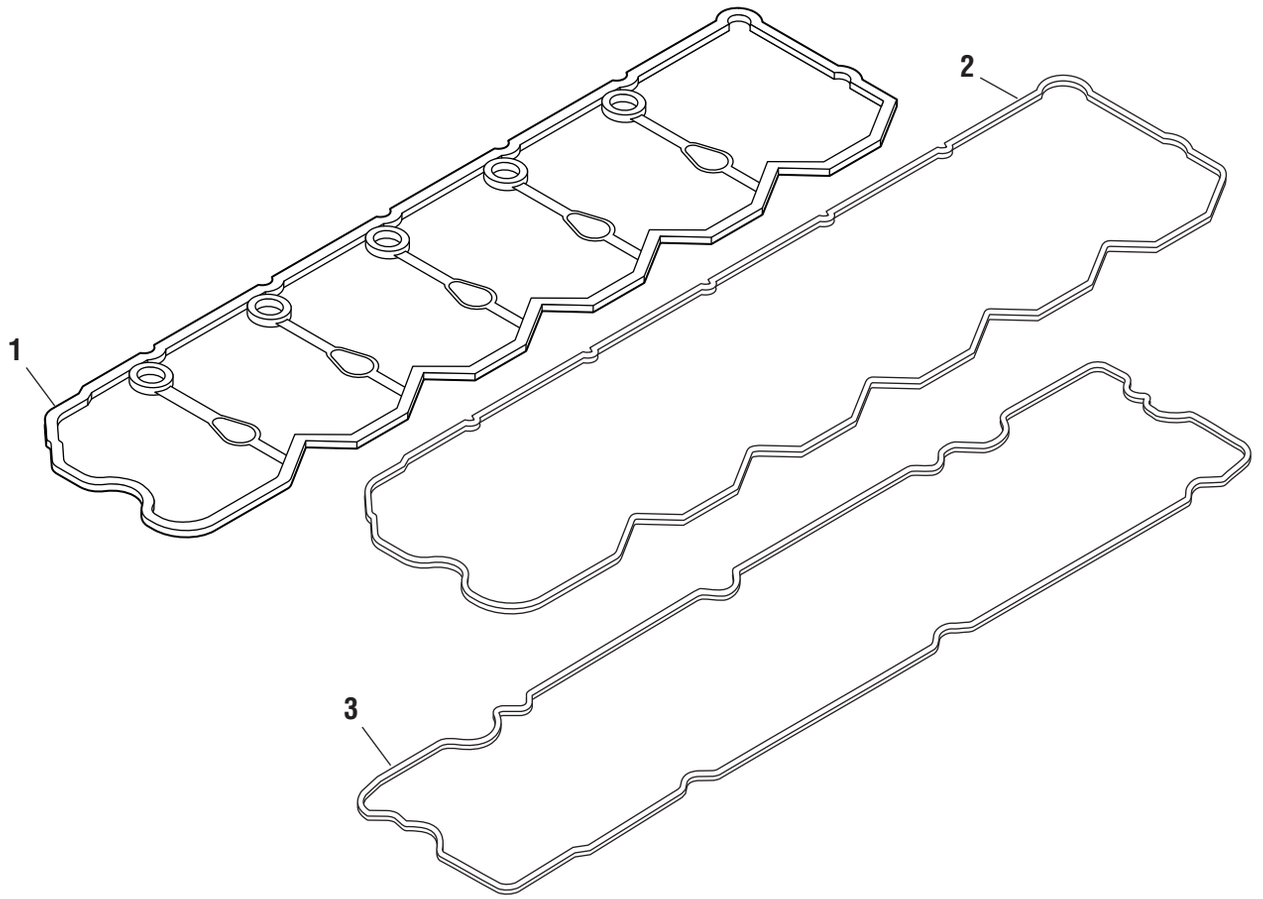
PAI Copyright 2017

FIGURE 6304



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**191863**		**CUM 3934167**	**CAMSHAFT(ISC)**	
1	**191865**		**CUM 3966431**	**CAMSHAFT(ISC)**	
1	**191867**		**CUM 3944474**	**CAMSHAFT(ISC)**	**CUM 3943258**
1	191912	191912E	CUM 3924471	CAMSHAFT	
1	191934	**191934E**	CUM 3938163	CAMSHAFT(ISC)	CUM 3949089
2	191860	191860E	CUM 3925031	TAPPET	
2	191861		CUM 3945866	TAPPET(ISC)	
2	191862		CUM 3942565	TAPPET(ISC)	
2	**191857**		**CUM 3965966**	**TAPPET,Roller(ISC)**	
3	191830		CUM 3902332	KEY,Woodruff	
4	151527		CUM 3927155	SUPPORT,Thrust Washer	
5	040075		CUM 3900227	SCREW,Camshaft(M8 x 1.25 x 22 Lg)	
6	**191877**		**CUM 3944298**	**GEAR(ISC)**	**CUM 3942891**
6	191885		CUM 3918777	GEAR(6C)	CUM 3907677
7	192121		CUM 3905194	PUSHROD,Intake & Exhaust Valve	
7	**192142**		**CUM 3964715**	**PUSHROD(ISC)**	
8	**045063**		**CUM 3917883**	**PIN,Dowel(ISC)**	
9	**191864**		**CUM 3934168**	**ASSEMBLY,Camshaft(ISC)** **Includes Camshaft (1)191863 Pin (1)045063**	
9	**191866**		**CUM 3966430**	**ASSEMBLY,Camshaft(ISC)** **Includes Camshaft (1)191865 Pin (1)045063**	
9	**191868**		**CUM 3944984**	**ASSEMBLY,Camshaft(ISC)** **Includes Camshaft (1)191867 Pin (1)045063**	

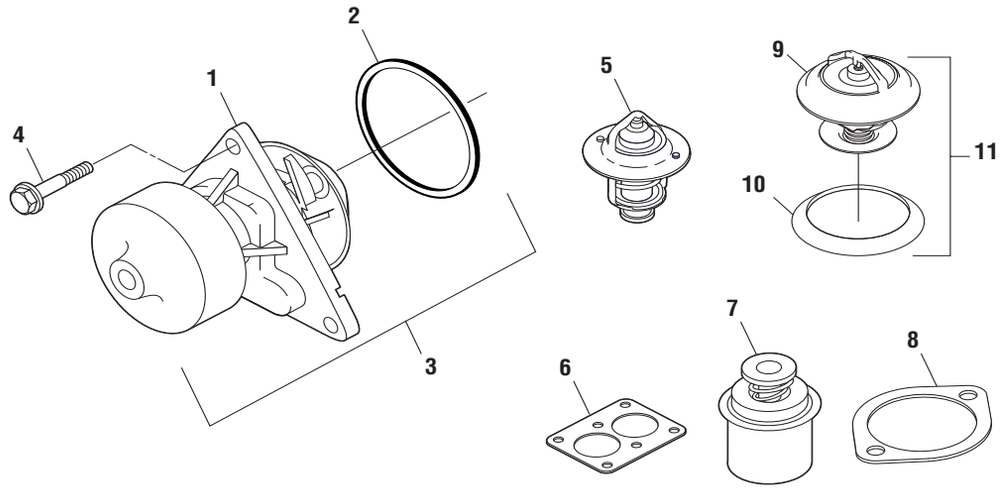
FIGURE 6350



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131690		CUM 3939284	GASKET,Valve Cover	CUM 3943303, CUM 3943864
2	131748		CUM 3966708	GASKET,Rocker Lever Housing	
3	131749		CUM 3959798	GASKET,Valve Cover	

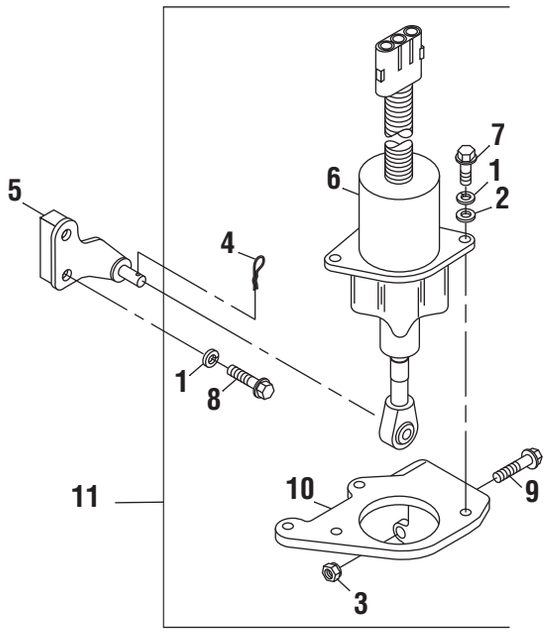
PAI Copyright 2017

FIGURE 6317



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181813		CUM 3285324	PUMP,Water(Long Nose Industrial)	CUM 3925540
1	181819		CUM 3973114	PUMP,Water(Encore Engine)	
1	**181922**		**CUM 3285325**	**PUMP,Water(Marine)(NSS use 181923 kit)**	**CUM 3924021**
1	**181935**		**CUM 3973116**	**PUMP,Water(ISL)(NSS use 181934 kit)**	**CUM 5291443**
1	**181943**		**CUM 5291444**	**PUMP,Water(NSS use 181942 kit)**	
2	GGA-2991		MAK 56AX352	O-RING,Seal	CUM 3902089
2	GGA-2992		MAK 56AX431	O-RING,Seal	CUM 3940386
3	181818		CUM 3802081	ASSEMBLY,Water Pump	
3	181868		CUM 3800974	ASSEMBLY,Water Pump (Long Nose Large Bearing)	CUM 3285323
3	181822	181822E	CUM 4089647	KIT,Water Pump(Encore Engine) Includes Pump (1)181819 Seal (1)GGA-2992	
3	181824		CUM 3800976	KIT,Water Pump(Long Nose Industrial) Includes Pump (1)181813 Seal (1)GGA-2991	
3	**181923**		**CUM 3800975**	**KIT,Water Pump(Marine) Includes Pump (1)181922 O-Ring (1)GGA-2991**	
3	**181934**		**CUM 4309417**	**KIT,Water Pump(ISL) Includes Pump (1)181935 O-Ring (1)GGA-2992**	
3	**181942**		**CUM 4309344**	**KIT,Water Pump(ISL) Includes Pump (1)181943 O-Ring (1)GGA-2992**	
4	Call		CUM 3926125	SCREW(M8 x 1.25 x 28)	
4	Call		CUM 3934054	SCREW	
5	181860		CUM 3928639	THERMOSTAT(83C, 180 Deg)	CUM 3901845, CUM 3907242
5	181861		CUM 3928640	THERMOSTAT(71C, 160 Deg)	CUM 3922477
6	131519		CUM 3914310	GASKET,Thermostat	CUM 3902113, CUM 3910505
7	**181862**		**CUM 3913028**	**THERMOSTAT(83C, 180 Deg)**	
7	181890		CUM 3940632	THERMOSTAT(83C, 180 Deg)(ISC)	
8	131752		CUM 3945603	GASKET,Connection Water(ISC Gas units)	
9	**181927**		**CUM 5282375**	**THERMOSTAT(180 Deg)(ISC, QSC)**	**CUM 5265798**
10	**136147**		**CUM 4936967**	**SEAL,Thermostat**	
11	**181928**		**CUM 5273379**	**KIT,Thermostat (180 Deg)(ISC, QSC) Includes Thermostat (1)181927 Seal (1)136147**	**CUM 4992231**

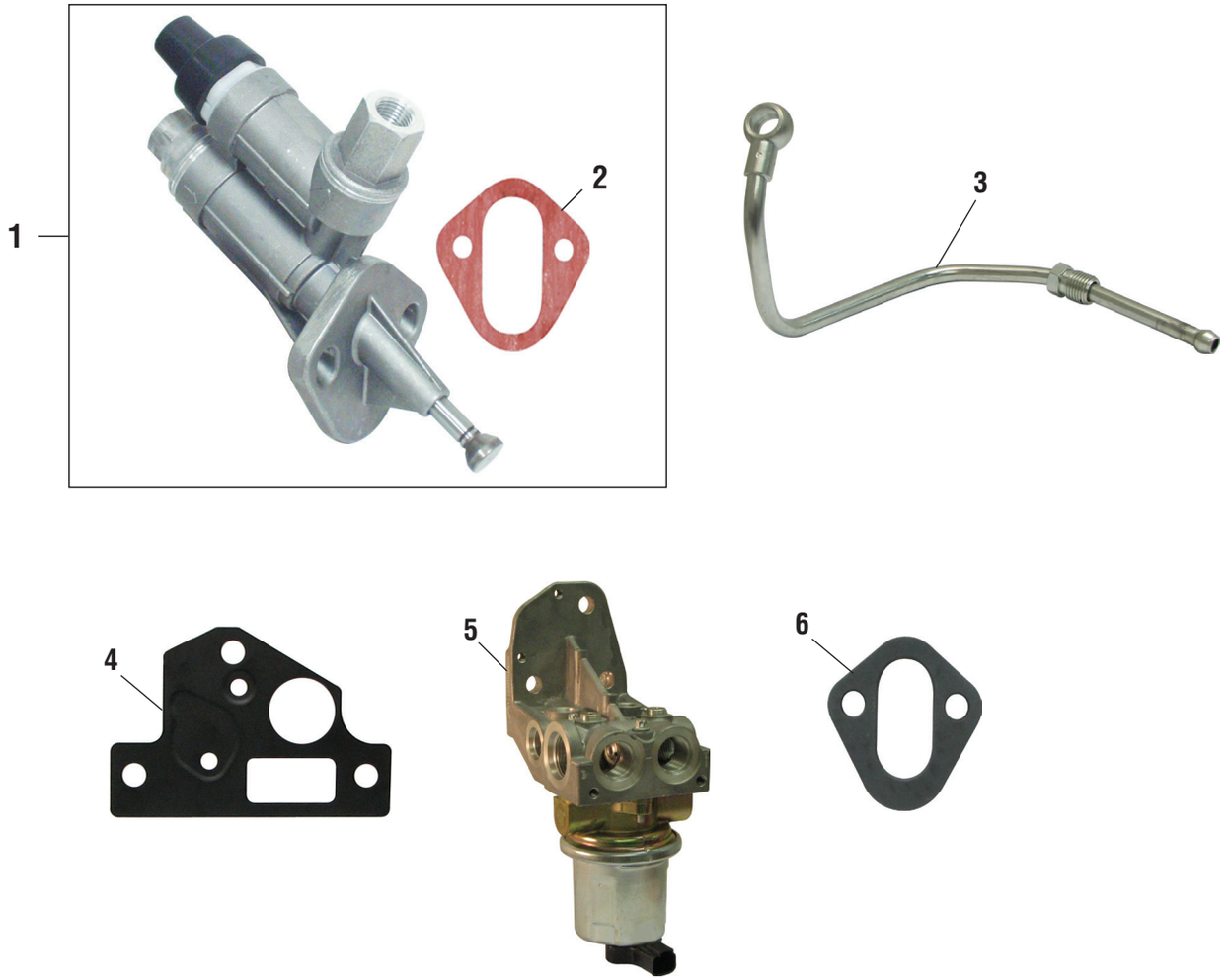
FIGURE 6318



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	EWA-0703		MAK 36AX1	WASHER,Lock	CUM S 600
2	042095		CUM 3529610	WASHER,Flat	
3	FNU-0436		MAK 154AM5001	NUT	CUM 3910959
4	045057		CUM 3919449	PIN,Hitch	
5	Call		CUM 3922832	LEVER,Shutoff Valve	
6	180215		CUM 3935649	SOLENOID,Fuel Shutoff(3in o/c mounting holes)	
6	**180222**		**CUM 3928160**	**SOLENOID,Fuel Shutoff(12 vdc)**	**CUM 3923257**
6	**180223**		**CUM 3939019**	**SOLENOID,Fuel Shutoff(24 vdc)**	
6	**180224**		**CUM 3928161**	**SOLENOID,Fuel Shutoff(24 vdc)**	**CUM 3923258**
7	040077		CUM 3936683	SCREW,Hex Head(M6 x 1.00 x 16)	
8	040078		CUM 3936684	SCREW,Hex Head(M6 x 1.00 x 25)	
9	040079		CUM 3936685	SCREW,Hex Head(M6 x 1.00 x 30)	
10	180250		CUM 3965494	BRACKET,Solenoid	
11	180220		CUM 4089574	SOLENOID Assembly Includes Solenoid (1)180215 Bracket (1)180250 Washers (3)EWA-0703 (2)042095 Screws (2)040077 (2)040078 (1)040079 Pin (1)045057	

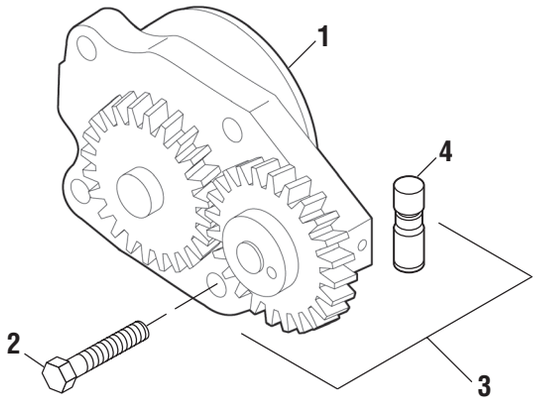
PAI Copyright 2017

FIGURE 6306



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	180100		CUM 3917998	PUMP,Fuel Transfer Includes Gasket (1)131532	CUM 3917999
1	180105		CUM 3936316	PUMP, Fuel Transfer Includes Gasket (1)131532	CUM 3925709, CUM 3930134
2	131532		CUM 3939258	GASKET	
3	180310		CUM 3918539	ASSEMBLY,Fuel Supply Line	CUM 3922480
4	131751		CUM 4902952	GASKET,Fuel Pump (ISC Gas units)	
4	**131932**		**CUM 4935004**	**GASKET,Fuel Pump**	
5	180106		CUM 4935005	PUMP,Fuel(12V - Electronic) (ISC & ISL)	
6	**180121**		**CUM 3914284**	**SPACER,Fuel Pump**	
7	**180189**		**CUM 4903523**	**ACTUATOR,Fuel(Photo not available)**	

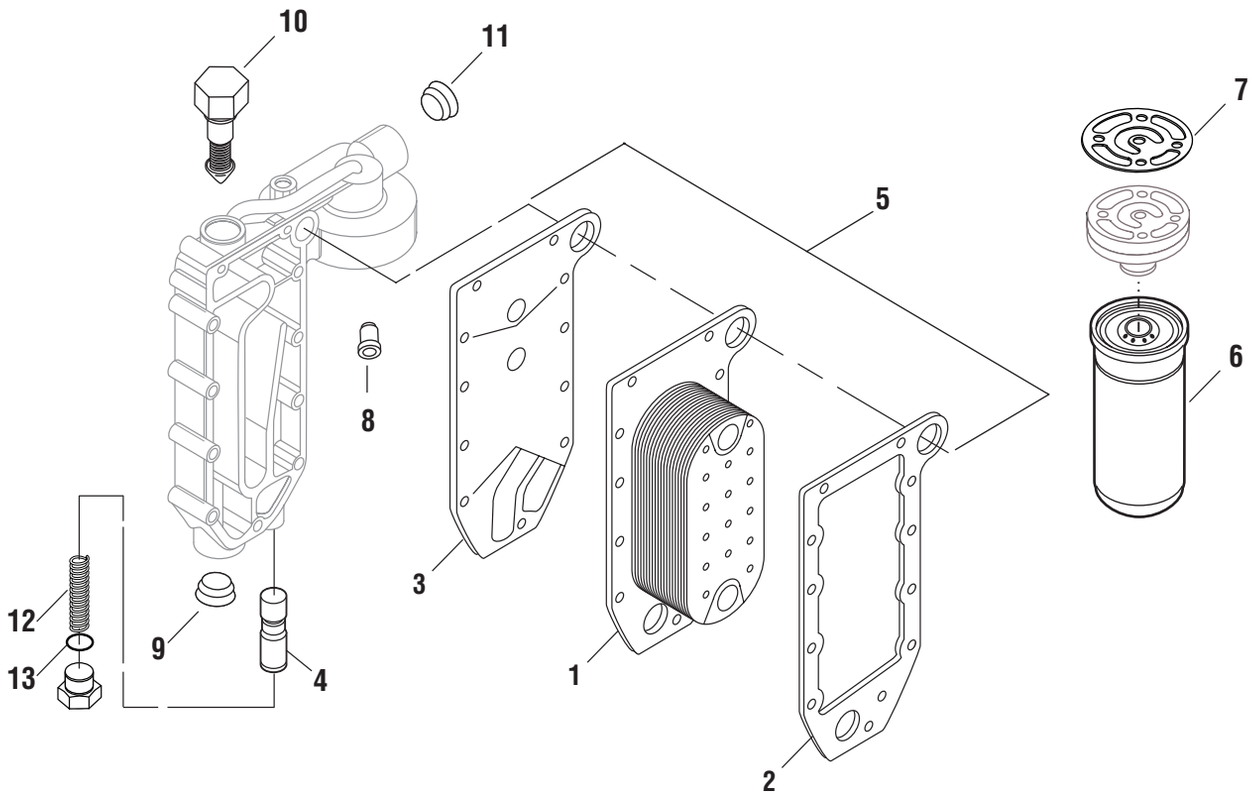
FIGURE 6315



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141291		CUM 3966840	PUMP,Oil(ISC)	
1	141297		CUM 3930338	PUMP,Oil(2 VH)	
1	141310		CUM 4941464	PUMP,Oil(ISL)	CUM 3991123
2	040049		CUM 3900677	SCREW(ISL)(M8 x 1.25 x 30)	
3	**141317**		**CUM 3800828**	**KIT,Oil Pump(ISL)** **Includes Pump (1)141297** **Plunger (1)141289**	**CUM 3802278**
4	**141289**		**CUM 3945967**	**PLUNGER,Relief**	**CUM 3918532**

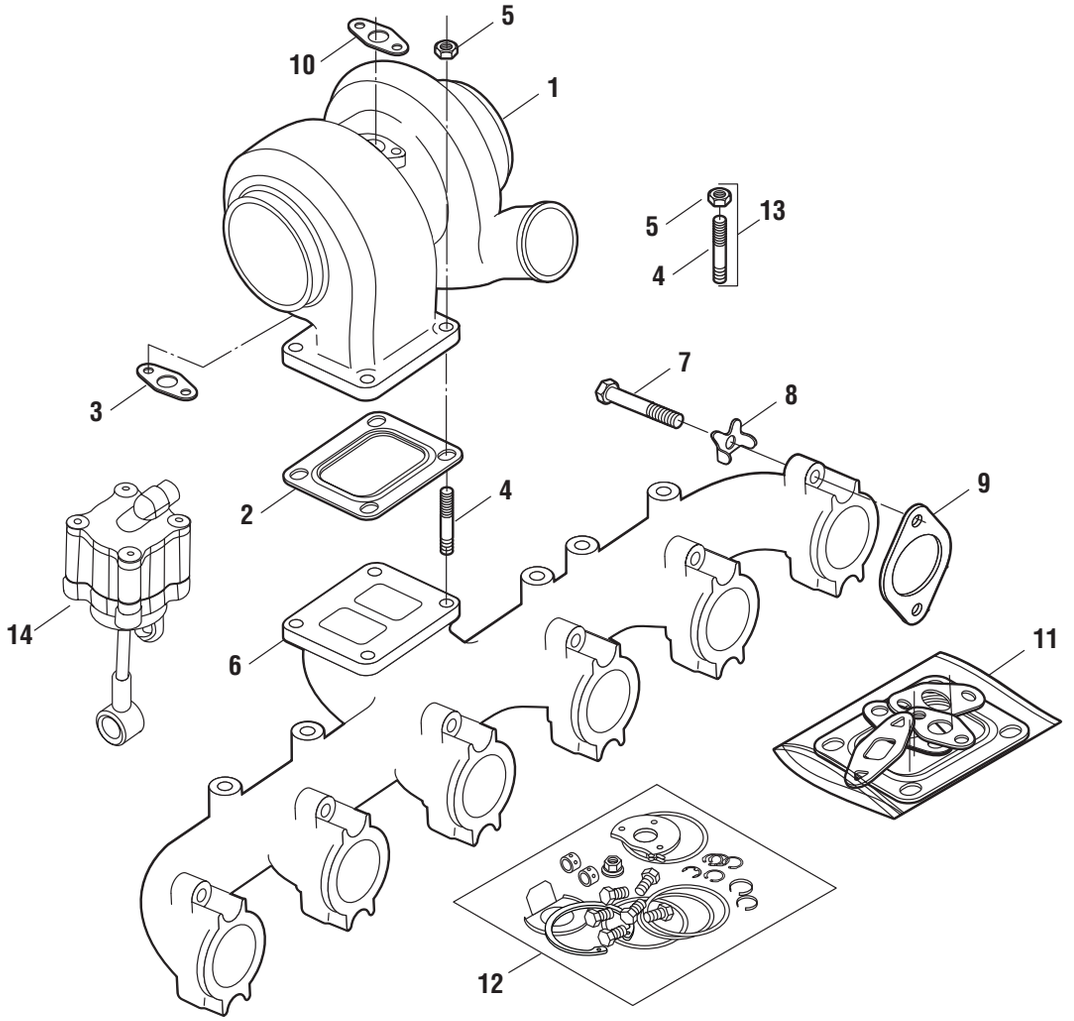
 PAI Copyright 2017

FIGURE 6314



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**141435**		**CUM 3966365**	**CORE,Oil Cooler(QSL 8.9L)**	**CUM 3944464**
2	131453		CUM 3918174	GASKET,Oil Cooler Core	
3	131454		CUM 3914308	GASKET,Oil Cooler Cover	
3	131529		CUM 3929011	GASKET,Oil Cooler Cover	CUM 3918332
4	**141289**		**CUM 3945967**	**PLUNGER,Relief**	**CUM 3918532**
5	**141436**		**N/A**	**KIT,Oil Cooler(QSL 8.9L)** **Includes Cooler (1)141435** **Gaskets (1)131529 (1)131453**	
5	**141408**		**CUM 3918175**	**KIT,Oil Cooler** **Includes Cooler (1)141408-100** **Gaskets (1)131453 (1)131454 (1)131529**	
6	**050511**		**CUM 3318853**	**FILTER,Oil**	
7	**131699**		**CUM 3992092**	**GASKET,Adapter Filter**	
8	**141433**		**CUM 3936365**	**VALVE,Relief**	
9	**EPP-3575**		**CUM 3027232**	**PLUG,Pipe**	
10	**181880**		**CUM 3934410**	**VALVE,Bypass**	
11	**EPP-3576**		**CUM 3008469**	**PLUG,Pipe**	
12	**141330**		**CUM 38274**	**SPRING**	
13	**121323**		**CUM 3930911**	**O-RING**	

FIGURE 6307

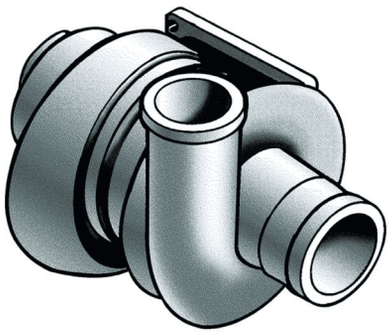


(Please see following pages for Turbocharger Applications by CPL)

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**181205**		**CUM 3802651**	**TURBOCHARGER(HX40W)**	**CUM 3535635**
1	**181207**		**CUM 3802619**	**TURBOCHARGER(ISC)**	**CUM 3535665**
1	ETC-9254	EM92540	MAK 7536-316468	TURBOCHARGER	CUM 3528778, SCH 316468
2	131518		CUM 3911941	GASKET,Turbo Mounting	
2	131605		CUM 3755843	GASKET,Turbo Mounting	CUM 3016246
2	**131813**		**CUM 3921926**	**GASKET,Turbo Mounting**	**CUM 3916300**
3	131480		CUM 3937706	GASKET,Turbo Drain	CUM 3914388
4	040110		CUM 3818823	STUD,Turbo Mounting	
5	040062		CUM 3818824	NUT	
6	Call		CUM 3929779	MANIFOLD,Exhaust	
7	040029		CUM 3929537	SCREW(M10 x 1.50 x 70mm Lg)	CUM 3914956
8	042012		CUM 3914708	LOCK	
9	131512		CUM 3932063	GASKET,Exhaust(Early)(Laminated)	CUM 3921787, CUM 3929012
9	131706		CUM 3937479	GASKET,Exhaust(Late)	
10	EGS-2861		MAK 56AX356	GASKET,Turbocharger(Oil Inlet)	CUM 3519762
11	EKT-2663		SCH 318418	KIT,Turbo Mounting Includes Gaskets (1)131605 (1)131480 (1)331308 (1)EGS-2863 (1)131494 O-Rings (1)121297 (1)121298	
12	181190		CUM 3575169	KIT,Turbo Repair (HX356 Turbo)	CUM 3580745
13	**040109**		**CUM 3801888**	**KIT,Turbo Mounting Stud Includes Stud (1)040110 Nut (1)040062**	**CUM 3034375**
14	**181169**		**CUM 3599755**	**ACTUATOR,Turbocharger**	

PAI Copyright 2017

FIGURE 6308



Please note:

(1) Check Oil feed line for any restrictions.
(2) Check Oil return line for any restrictions that would block the oil from draining back into the engine.
(3) Check Air Filter.
(4) Always prelube Trubocharger before starting engine.
(5) The most common failures are due to low oil pressure, contaminated oil and hot shut down.

CPL #	H1 or H2 TURBO
602	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
603	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
604	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
605	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
752	N/A
753	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
754	N/A
755	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
805	N/A
818	N/A
819	N/A
828	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468

CPL #	H1 or H2 TURBO
829	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
830	N/A
831	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
848	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
890	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
892	N/A
893	N/A
954	N/A
955	N/A
959	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
982	N/A
984	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468

CPL #	H1 or H2 TURBO
985	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1196	N/A
1212	N/A
1216	N/A
1217	N/A
1221	N/A
1222	N/A
1248	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1262	N/A
1263	N/A
1269	N/A
1270	N/A
1273	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1274	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1275	N/A
1281	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468

PAI Copyright 2017

New Parts are in BOLD text

CPL #	H1 or H2 TURBO
1290	N/A
1321	N/A
1356	N/A
1366	N/A
1371	N/A
1372	N/A
1377	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1406	N/A
1419	N/A
1439	N/A
1464	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1539	N/A
1547	N/A
1563	N/A
1564	N/A
1565	N/A
1566	N/A
1567	N/A
1568	N/A
1569	N/A
1603	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1604	N/A
1612	N/A
1614	N/A
1615	N/A
1616	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1618	N/A
1633	N/A
1639	ETC-9254 / EM92540 CUM 3524034 CUM 3528778 CUM 3524035 CUM 3802303 CUM 3528777 SCH 316468
1658	N/A
1668	N/A
1804	N/A
1811	N/A
1812	N/A
1819	N/A
1820	N/A
1821	N/A
1826	N/A
1905	N/A
1918	N/A
1919	N/A
1920	N/A
1922	N/A
1923	N/A
1929	N/A
1943	N/A
1949	N/A
1950	N/A
1999	N/A
2007	N/A
2034	N/A
2054	N/A
2055	N/A
2056	N/A
2057	N/A
2060	**181205 (HX40W)** **CUM 3802651 CUM 3535635**
2061	N/A
2062	N/A
2101	N/A
2102	N/A
2103	N/A
2105	N/A
2106	N/A
2107	N/A
2108	N/A
2150	N/A

PAI Copyright 2017

HIGH PERFORMANCE GEARS
NOW AVAILABLE!

PAI
HIGH PERFORMANCE

HIGH-GRADE STEEL
ROBOTIC CNC MACHINGING
PRECISION GROUND TOOTH FINISH
100% NOISE TEST
PROTECTIVE PACKAGING

5 YEAR WARRANTY

5 YEAR WARRANTY

PAI PART NUMBER	PISTON KIT NUMBER (6)	RING SET NUMBER (6)	SLEEVE KIT NUMBER (6)
6CS103-(*) (-001 thru -025 Early Liner (Long)	111266 Includes: CUM 3917707 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS104-(*) (-001 thru -025 Early Liner (Long)	111271 Includes: CUM 3919247 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS105-(*) (-001 thru -025 Early Liner (Long)	111276 Includes: CUM 3919566 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS106-(*) (-001 thru -025 Early Liner (Long)	111386 Includes: CUM 3922476 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS107-(*) (-001 thru -025 Early Liner (Long)	111281 Includes: CUM 3923163 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS108-(*) (-001 thru -025 Early Liner (Long)	111286 Includes: CUM 3923164 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS109-(*) (-001 thru -025 Early Liner (Long)	111291 Includes: CUM 3923165 Piston	505090 CUM 3802429	Early 161632 *** CUM 3802370
(-026 thru -050 Current Liner (Short)			Current 161634 *** CUM 3800328
6CS111-(*)	111475 Includes: CUM 3925673	505090 CUM 3802429	Current 161634 *** CUM 3800328
6CS112-(*) (-026 thru -050 Current Liner (Short)	111296 Includes: CUM 3925878 Piston	505090 CUM 3802429	Current 161634 *** CUM 3800328
6CS113-(*) (-026 thru -050 Current Liner (Short)	111301 Includes: CUM 3929161 Piston	505090 CUM 3802429	Current 161634 *** CUM 3800328
6CS115-(*) Natural Gas	**111648 Includes: CUM 3992117 Piston**	**505185 CUM 4025290**	**Current 161634 *** CUM 3800328**
6CS116-(*) Natural Gas	**111670 Includes: CUM 4025295 Piston**	**505185 CUM 4025290**	**Current 161634 *** CUM 3800328**
6CS117-(*) Natural Gas	**111673 Includes: CUM 3800846 Piston**	**505185 CUM 4025290**	**Current 161634 *** CUM 3800328**
ISC101-(*)	111481 Includes: CUM 3942106 Piston	505090 CUM 3802429	Current 161634 *** CUM 3800328
ISC102-(*)	111514 Includes: CUM 3943367 Piston	505140 CUM 3802538	Current 161634 *** CUM 3800328
ISC103-(*) (-001 thru -025)	111517 Includes: CUM 3973265 Piston	505139 CUM 4089644	Current 161634 *** CUM 3800328
(-026 thru -050)			
ISC104-(*)	**111638 Includes: CUM 4932720 Piston**	**505149 CUM 4955651**	**Current 161634 *** CUM 3800328**

PAI Copyright 2017

ROD BEARING NUMBER (12 pieces)	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)	LOWER GASKET SET NUMBER (1)
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	171821 ** CUM 3945917	131407 CUM 3802624	131408 CUM 3802389
171816 ** CUM 3901430	**171821 ** CUM 3945917**	**131730 CUM 4025274**	**131408 CUM 3802389**
171816 ** CUM 3901430	**171821 ** CUM 3945917**	**131730 CUM 4025274**	**131408 CUM 3802389**
171816 ** CUM 3901430	**171821 ** CUM 3945917**	**131730 CUM 4025274**	**131408 CUM 3802389**
171816 ** CUM 3901430	171821 ** CUM 3945917	131684 CUM 4089958	131722 CUM 3800343
171816 ** CUM 3901430	171821 ** CUM 3945917	131684 CUM 4089958	131722 CUM 3800343
171816 ** CUM 3901430	171821 ** CUM 3945917	131743 CUM 4089758	131746 CUM 4089759
		131814 CUM 4089978	**131811 CUM 4089979**
171816 ** CUM 3901430	**171821 ** CUM 3945917**	**131814 CUM 4089978**	**131885 CUM 4955644**

PAI Copyright 2017

New Parts are in BOLD text

PAI PART NUMBER	PISTON KIT NUMBER (6)	RING SET NUMBER (6)	SLEEVE KIT NUMBER (6)
ISL101-(*) (-001 thru -025)	**111706 CUM 4955237**	**505139 CUM 4089644**	**161634 CUM 3800328**
ISL102-(*) (-001 thru -025)	**111709 Includes: CUM 4089944 Piston**	**505139 CUM 4089644**	**161634 CUM 3800328**
ISL103-(*) (-001 thru -025)	**111712 Includes: CUM 4089963 Piston**	**505139 CUM 4089644**	**161634 CUM 3800328**
ISL140-(*) (-001 thru -025)		**505139 CUM 4089644**	**161634 CUM 3800328**

FIGURE 6312

Please note:

(*) Specify early or current style sleeve and size of Rod Bearing and Main Bearings when ordering Rebuild kits.

**** Part number for standard sizes are shown in chart.**
Part numbers (and kit Dash numbers) will change if non-standard components are requested.

***** Early style Sleeve kits have 5.233 in flange OD. Late style Sleeve kits have 5.154 in flange OD.**

1. **To ensure correct parts for application, please have CPL and Engine Serial number available.**
2. **Piston kits include pins and retainers.**

FIGURE 6312

PAI Copyright 2017

ROD BEARING NUMBER (12 pieces)	MAIN BEARING KIT NUMBER (1)	UPPER GASKET SET NUMBER (1)	LOWER GASKET SET NUMBER (1)
171915 N/A	171821 CUM 3945917	131743 CUM 4089758	131746 CUM 4089759
171915 N/A	171821 CUM 3945917	131743 CUM 4089758	131746 CUM 4089759
171915 N/A	171821 CUM 3945917	131743 CUM 4089758	131746 CUM 4089759
171915 N/A	171821 CUM 3945917	131743 CUM 4089758	131746 CUM 4089759

Upper Gasket Set

FIGURE 6309

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131407		CUM 3802624	SET,Upper Gasket	CUM 4025271, CUM 3802452
1	131684		CUM 4089958	SET,Upper Gasket	
1	131721		CUM 3800747	SET,Upper Gasket (w/ .25mm Oversize Head Gasket)	CUM 3802622
1	131730		CUM 4025274	KIT,Upper Gasket (Gas + CNG Engine)	
1	131731		CUM 4025275	SET,Upper Gasket (Gas + CNG Engine w/ .25mm Oversize Head Gasket)	
1	131741		CUM 3800748	KIT,Upper Gasket (w/.50mm Oversize Head Gasket)	CUM 3802623
1	131743		CUM 4089758	KIT,Upper Gasket (24V for Gas Units)	
1	**131814**		**CUM 4089978**	**KIT,Upper Gasket(QSC)**	
1	**131874**		**CUM 4955643**	**KIT,Upper Gasket(ISC - EGR)**	
1	**131953**		**CUM 4352349**	**KIT,Upper Gasket(ISL - Natural Gas)**	**CUM 4955785**
1	**131954**		**CUM 4089888**	**KIT,Upper Gasket(ISL - Natural Gas)**	

Please note:
*** Have Engine Serial number available for correct Upper Gasket Set.**

Lower Gasket Set

FIGURE 6310

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**131263**		**CUM 3800929**	**SET,Lower Gasket(ISC/QSC)**	
1	131408		CUM 3802389	SET,Lower Gasket(2VH Engine)	CUM 3806183, CUM 3802354
1	131722		CUM 3800343	SET,Lower Gasket(4VH Engine)	
1	131746		CUM 4089759	KIT,Lower Gasket(ISL/ISC)	
1	**131811**		**CUM 4089979**	**KIT,Lower Gasket(ISL)**	
1	**131856**		**CUM 4089889**	**KIT,Lower Gasket(ISL/QSL)**	
1	**131859**		**CUM 2882049**	**KIT,Lower Gasket(ISLe)**	
1	**131885**		**CUM 4955644**	**KIT,Lower Gasket(ISL/ISC)**	

Miscellaneous Gaskets

FIGURE 6311

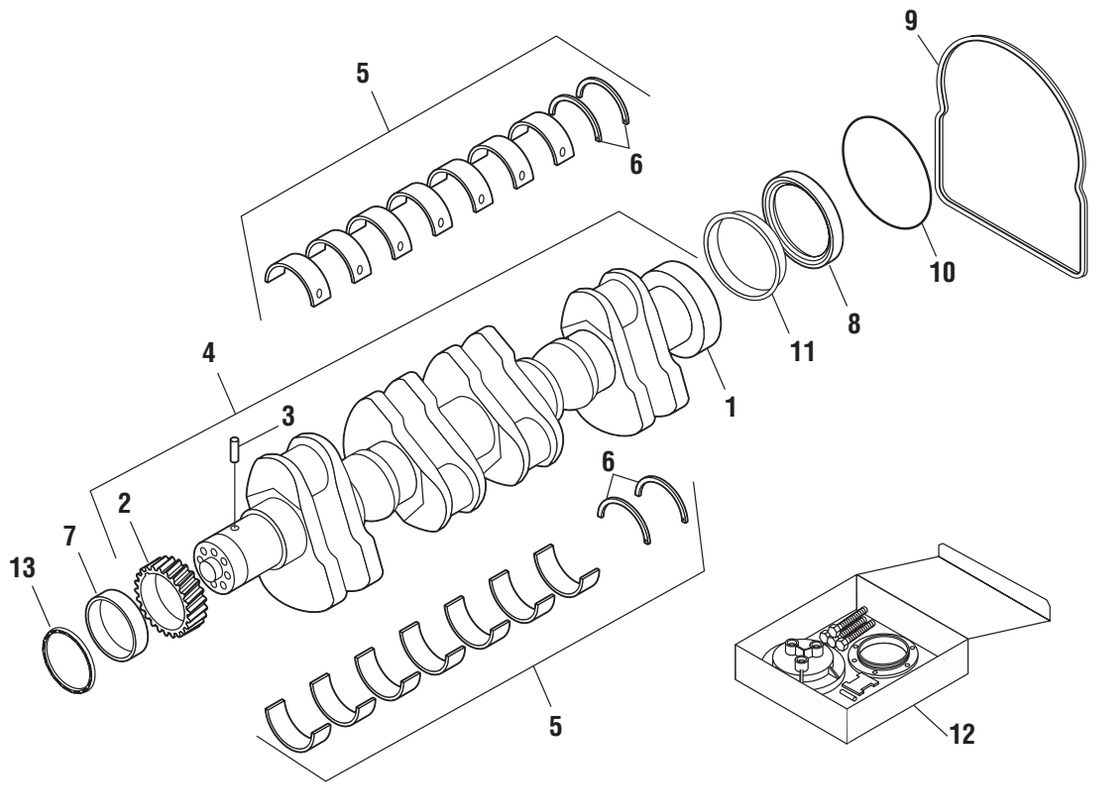
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131420		CUM 3905449	GASKET,Valve Cover	
1	**131871**		**CUM 4938761**	**GASKET,Valve(EGR ISL)**	
1	**131872**		**CUM 5253019**	**GASKET,Valve(EGR ISL)**	
2	131598		CUM 3060912	GASKET,Connector	CUM 205342, CUM 195866
3	131449		CUM 3914311	GASKET,Intake Manifold(19 Holes)	CUM 3904300, CUM 3910779
4	131517		CUM 3921440	GASKET,Intake(Short)(15 Holes)	
5	131533		CUM 3908096	GASKET,Cover Plate(Flywheel Housing)	
6	131523		CUM 3918779	GASKET,Water Outlet	
6	131716		CUM 3913032	GASKET,Water(ISC)	
7	131520		CUM 3917892	GASKET,Air Inlet(1 Req'd)	
8	131715		CUM 3942902	GASKET,Breather(ISC)	
8	**131827**		**CUM 3970886**	**GASKET,Breather(ISC/QSC)**	**CUM 3944683**
9	131531		CUM 3918340	GASKET,Oil Cooler Pump Cover	
10	131521		CUM 3916042	GASKET,Compressor Mounting	
10	131704		CUM 3940245	GASKET,Compressor Mounting	
11	131699		CUM 3992092	GASKET,Adapter Filter	CUM 3921605
11	131703		CUM 4942874	GASKET,Adapter Filter	CUM 3943963
12	**131884**		**CUM 3936027**	**GASKET,Cover(ISL)**	

PAI Copyright 2017

FIGURE 6313

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181880		CUM 3934410	VALVE,Oil Filter Bypass	
2	121323		CUM 3930911	O-RING,Oil Cooler Fitting	
3	042155		CUM 3917747	INSULATOR	
4	121267		CUM 3915800	RING,Rectangular(.066in Sq) (For Angle Drive Adapter)	
4	121269		CUM 3906695	RING,Rectangular(.100in Sq) (Fuel Filter Mount)	
4	121270		CUM 3914095	RING,Rectangular(.155in)	
4	121271		CUM 3906694	RING,Rectangular(.065in Sq) (Fuel Filter Mount)	
4	121272		CUM 3906697	RING,Rectangular(.187in Sq) (Water Outlet)	
4	**121392**		**CUM 3101215**	**RING,Rectangular(ISL)**	
5	180935		CUM 3910739	BEARING,Fan Drive(4B/6B/6C)	
6	180212		CUM 3921978	SOLENOID,Fuel Shutoff(12V)	CUM 3915502, CUM 3918343
6	180213		CUM 3921980	SOLENOID,Fuel Shutoff(24V)	
7	136068		CUM 3902466	SEAL,Oil Fill	
7	**136143**		**CUM 3684284**	**SEAL,Fitting(ISC, ISL)**	
8	042125		CUM 3026396	CLAMP,Hose(2-1/16in to 3in)	
8	**042126**		**CUM 3937613**	**CLAMP,Hose**	
9	121254		CUM 3001340	O-RING,Fuel Shaft (For QSC Corrosion Resistor)	CUM 3943857, CUM 4989614
10	040081		CUM 3902468	CAP,OII Fill	
11	121351		CUM 3926722	SEAL,Fuel Pump Mtg.	
12	121371		N/A	KIT,Injector O-Ring Includes O-Rings (1)121254 (1)EGS-3905-021 Washer (1)042092	

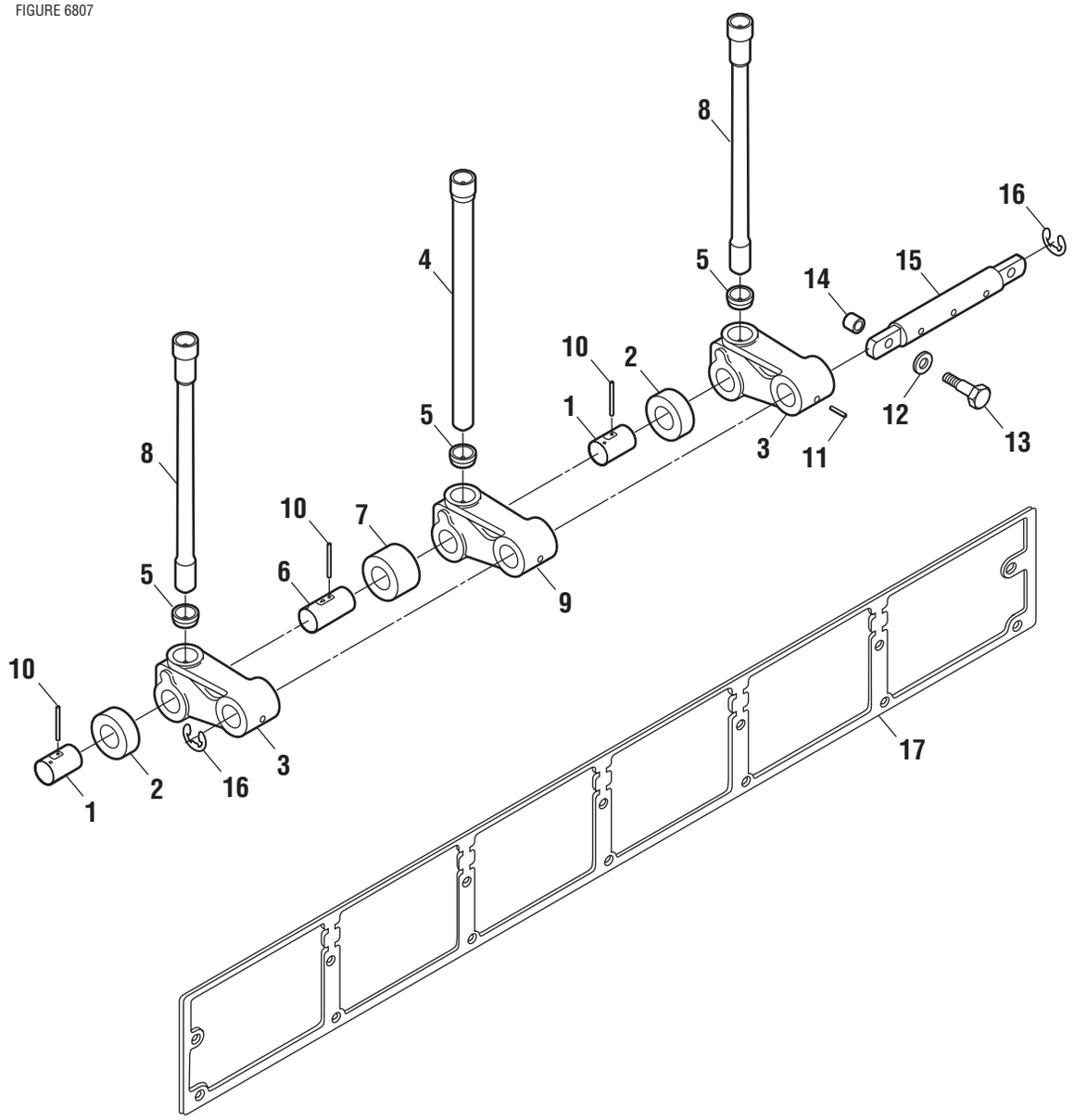
FIGURE 6805



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171651		CUM 3096362	CRANKSHAFT,(K19)	
2	191870		CUM 4953165	GEAR,Crankshaft(K19)	
3	191815		CUM 206904	KEY(K19)	
4	171648		CUM 3347569	ASSEMBLY,Crankshaft(K19) Includes Crankshaft (1)171651 Key (1)191815 Gear (1)191870	CUM 3005357, CUM 3201082
5	171880		CUM AR12250	KIT,Main Bearing(STD)(K38)	CUM 3014054
5	171881		CUM AR12251	KIT,Main Bearing(.010in)(K38)	
5	171882		CUM AR12252	KIT,Main Bearing(.020in)(K38)	
5	171900		CUM AR12270	KIT,Main Bearing(STD)(K19)	CUM AR10575
5	171910		CUM AR12271	KIT,Main Bearing(.010in)(K19)	
5	171920		CUM AR12272	KIT,Main Bearing(.020in)(K19)	
5	171925		CUM 3018210	KIT,Main Bearing(STD)(K50)	
5	171935		CUM 3018211	KIT,Main Bearing(.010in)(K50)	
5	171945		CUM 3018212	KIT,Main Bearing(.020in)(K50)	
6	171905		CUM 205112	BEARING,Thrust	
6	171940		CUM 3001708	BEARING,Thrust(.010in)(K50)	
6	171950		CUM 3001709	BEARING,Thrust(.020in)(K50)	
7	136077		CUM 3016792	SEAL,Front(K19)	
8	136050		CUM 3016793	SEAL,Rear(K38/K50)	CUM 3001138
8	136078		CUM 3005886	SEAL,Rear(K19)	CUM 3005883
8	136096		CUM 3870890	SEAL,Rear(K19)	
9	**121398**		**CUM 3096260**	**RING,Flywheel Housing Seal**	**CUM 205239**
10	**121429**		**CUM 205247**	**O-RING,Flywheel Housing**	
11	**136169**		**CUM 3006237**	**RING,Wear(Rear)(K19)**	
12	**136155**		**CUM 380703**	**KIT,Front Seal**	
13	**136005**		**CUM 3331663**	**SHIELD,DUST**	

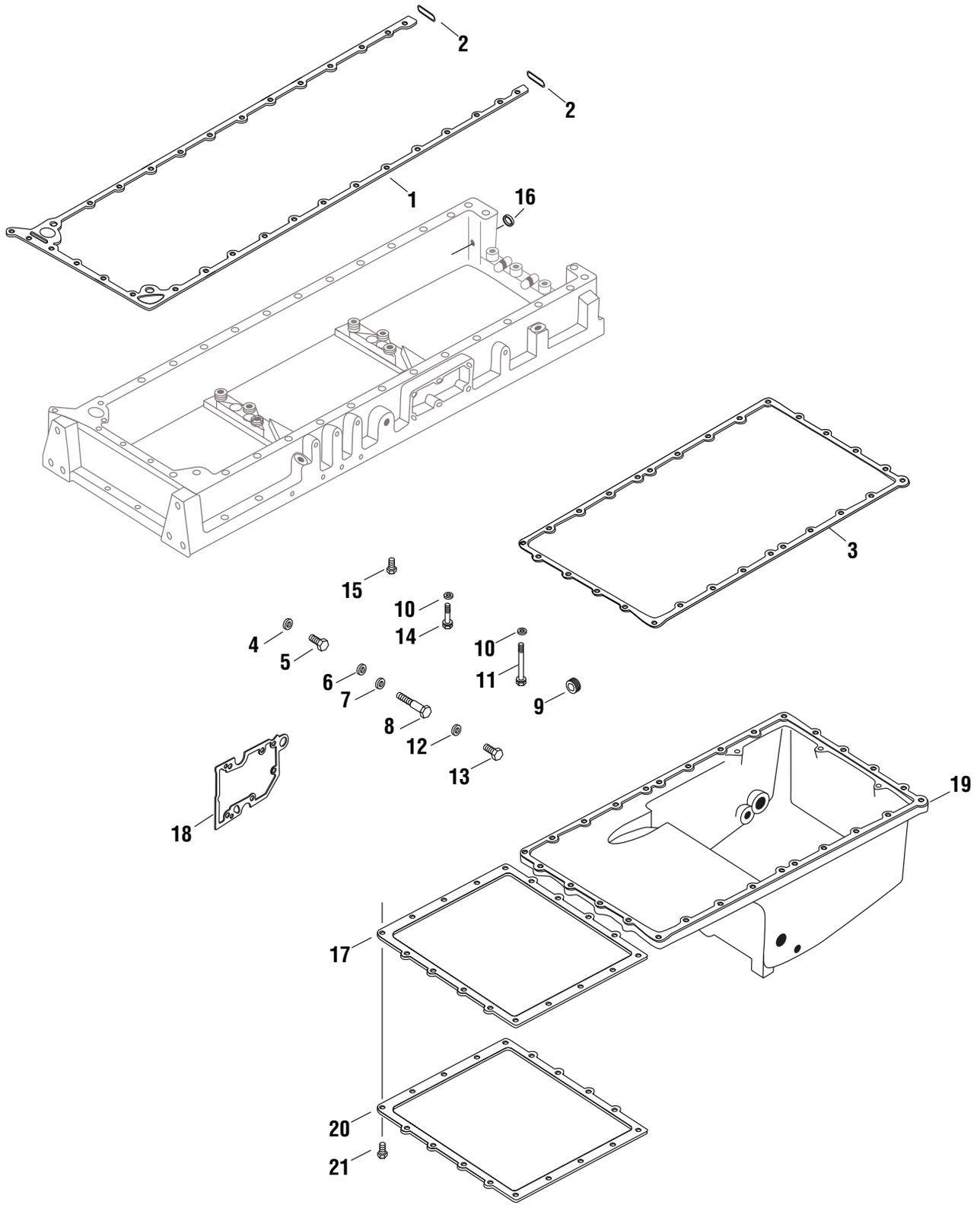
PAI Copyright 2017

FIGURE 6807



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	045049		CUM 205071	PIN,Cam Follower Roller Valve	
2	045047		CUM 3016826	ROLLER,Cam Follower Valve	
3	Call		CUM 205069	LEVER,Cam Follower	
4	192074		CUM 3017961	PUSHROD,Injector	
5	045060		CUM 213559	SOCKET,Cam Follower	
6	045050		CUM 205068	PIN,Cam Follower Roller Injector	
7	045048		CUM 3016825	ROLLER,Cam Follower Injector	
8	192082		CUM 3057139	PUSHROD, Valve	
9	Call		CUM 206231	LEVER,Cam Follower	
10	045070		CUM 205438	LOCKWIRE,Tappet Roller Pin	
11	Call		CUM 205227	PLUG,Expansion	
12	Call		CUM 127362	WASHER,Plain(3/8in)	
13	Call		CUM 3002886	SCREW,Cam Follower Shaft	
14	Call		CUM 3002993	DOWEL,Ring	
15	Call		CUM 205301	SHAFT,Cam Follower	
16	Call		CUM 205439	RING,Retaining	
17	**131916**		**CUM 4910190**	**GASKET,Follower Cover(SVT Engine)**	**CUM 3331672**

FIGURE 6810

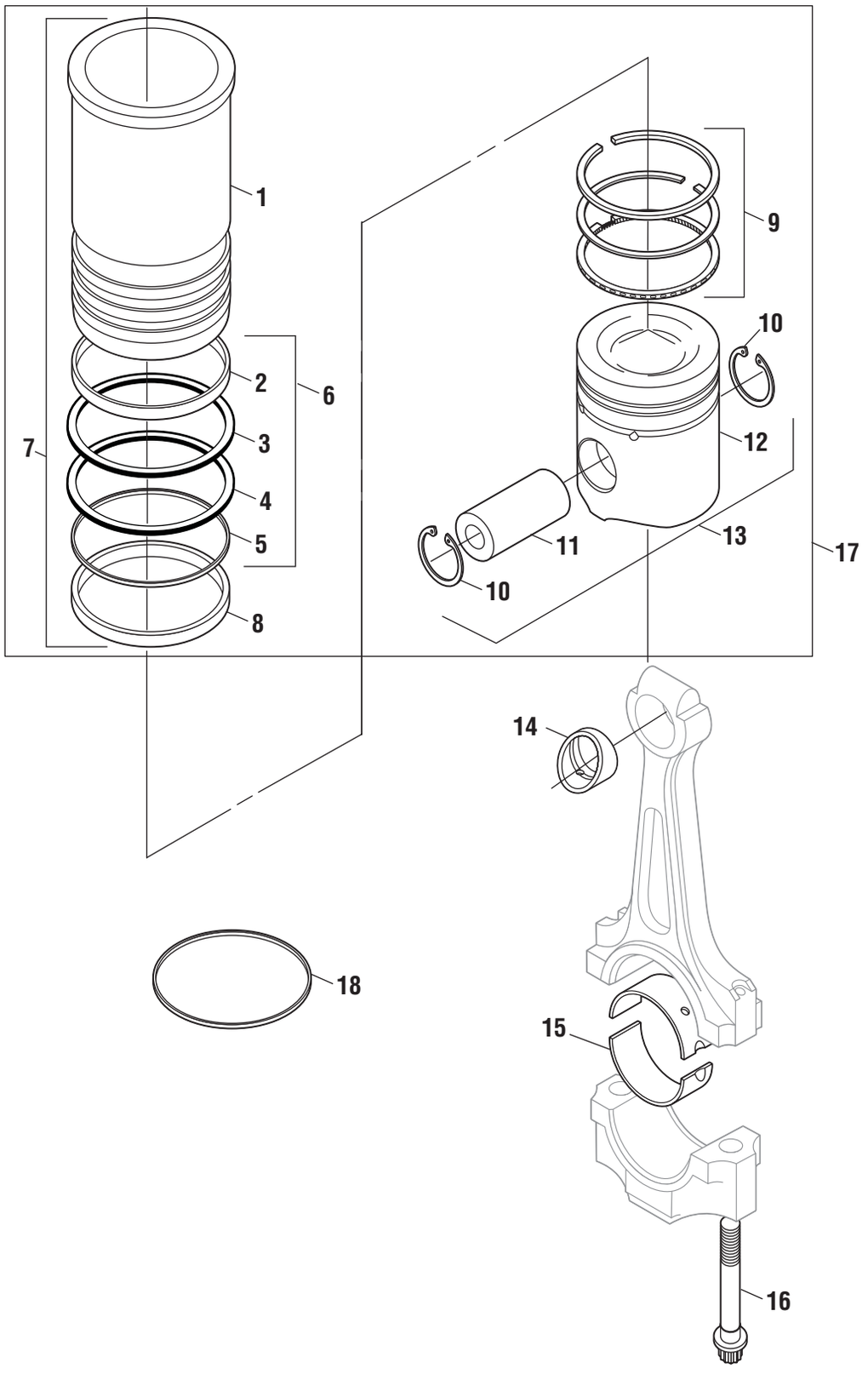


PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131915		CUM 2888747	GASKET,Oil Pan Adapter(Metal edge version)	
1	131923		CUM 4000595	GASKET,Oil Pan Adapter(Paper version)	CUM 3081611
2	131912		CUM 4910518	GASKET,Rectangular Seal	CUM 205241
3	131525		CUM 3042590	GASKET,Oil Pan(K19)	CUM 3008406, CUM 205776
3	131526		CUM 3043212	GASKET,Oil Pan(K38)	CUM 207546
3	131527		CUM 3043211	GASKET,Oil Pan(K50)	CUM 206098
4	342070		CUM 130914	WASHER	
5	Call		CUM S-181-C	SCREW(1/2-20 x 3/4in)	
6	Call		CUM S-689	WASHER(1/2in)	
7	Call		CUM S-609	WASHER(9/16in)	
8	Call		CUM 3085753	SCREW	
9	EPP-3574		CUM 3013786	PLUG,Pipe(3/8in)	
10	Call		CUM 3085886	WASHER	
11	Call		CUM 3085751	SCREW	
12	GWA-0063		CUM S-622	WASHER(3/8in)	
13	Call		CUM 3012481	SCREW(7/16-14 x 1-1/2in)	
14	Call		CUM 3070679	SCREW(3/8-16 x 1-3/4in)	
15	Call		CUM 3035624	SCREW(3/8-16 x 1-1/2in)	
16	121396		CUM 153518	RING,Seal	
17	131918		CUM 3073213	GASKET,Pan Cover	CUM 3202259
18	131926		CUM 3079754	GASKET,Pickup Tube	
19	Call		CUM 3032521	PAN,Oil	
20	Call		CUM 3070780	COVER,Oil Pan Adapter	
21	Call		CUM 3040838	SCREW(3/8-16 x 1-1/4in)	

PAI Copyright 2017

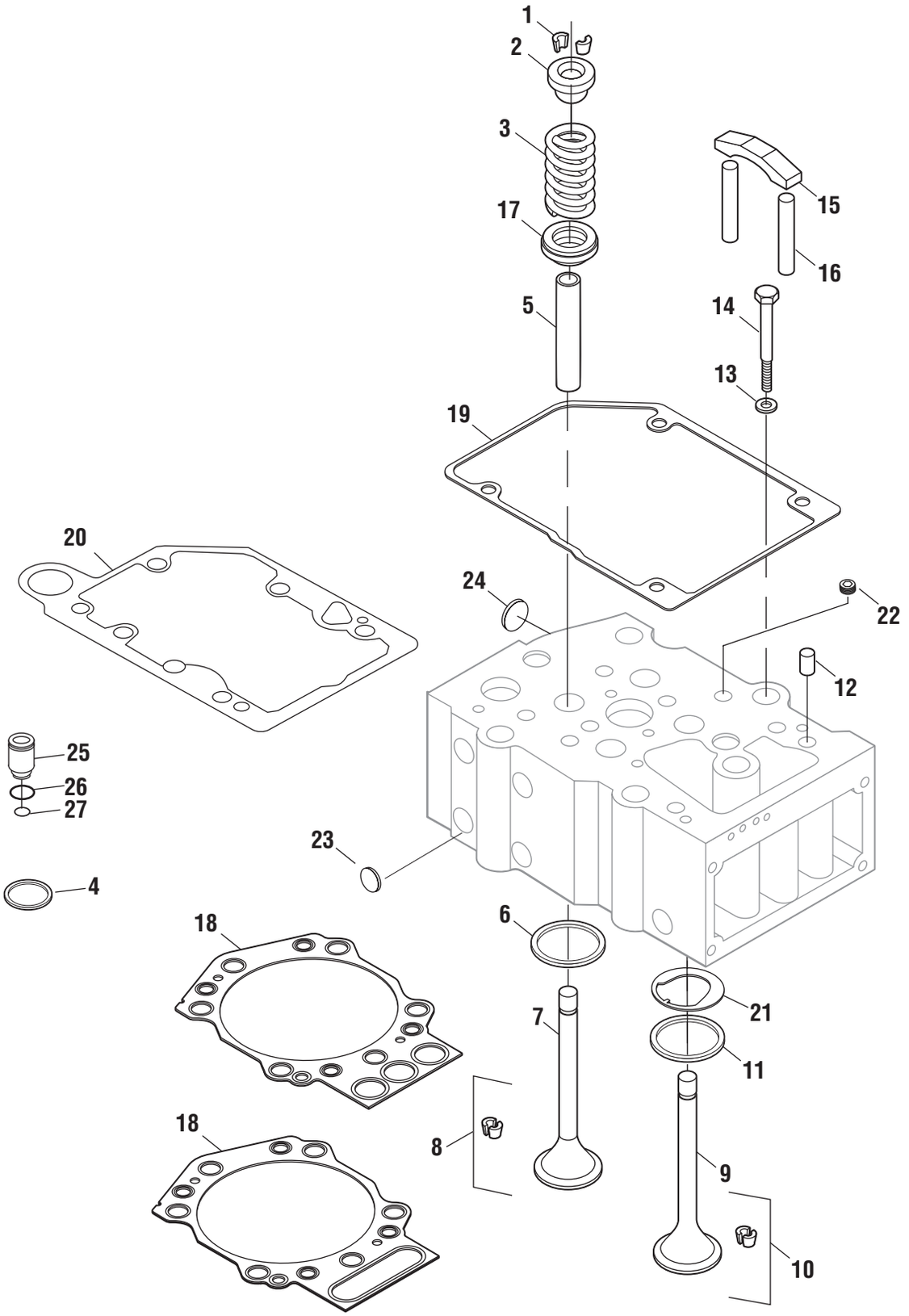
FIGURE 6801



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	161636		CUM 4009220	LINER,Cylinder(K19)	CUM 3028122
1	161637		CUM 3022157	LINER,Cylinder(K38)	CUM 3005984, CUM 3011885
2	121263		CUM 3081489	SEAL,Oil,Liner(K19)	CUM 207525, CUM 205115
3	121262		CUM 3011076	O-RING,Liner(K19)	CUM 205181, CUM 207524
4	121261		CUM 3014668	O-RING,Liner(K19)	CUM 205182
5	121281		CUM 4000504	RING,Rectangular O-Ring(K19) (New Style Liner)	
6	121283		CUM 4024779	KIT,Liner O-Ring(K19) (New Style Liner) Includes O-Rings (1)121261 (1)121262 Seal (1)121263 Ring (1)121281	
6	121325		CUM AR70577	KIT,Liner O-Ring Includes O-Rings (1)121261 (1)121262 Seal (1)121263	
7	161638		CUM 3028434	KIT,Liner(K19) Includes Liner (1)161636 O-Rings (1)121261 (1)121262 Seal (1)121263 Ring (1)121281	CUM 4024767
7	161640		CUM 3007525	KIT,Liner(K38, K50) Includes Liner (1)161637 O-Rings (1)121261 (1)121262 Seal (1)121263 Insert (1)161639	
8	161639		CUM 3011884	INSERT,Liner(K38, K50)	
9	505095		CUM 3803472	SET,Piston Ring(K19, K38, K50)	CUM 3801108, CUM 4089500
10	111357		CUM 205269	RETAINER,Piston Pin(K19, K38, K50)	
11	111356		CUM 205200	PIN,Piston(K19, K38, K50)	
12	111355		CUM 3096682	PISTON,(K19, K38, K50)	CUM 3070706, CUM 3036073
12	111359		CUM 3096681	PISTON,(K19, K38, K50)	CUM 3070707
12	111376		CUM 3096685	PISTON,(K19, K38, K50)	CUM 3070703
13	111354		CUM 3803314	KIT,Piston(K19, K38, K50) Includes Piston (1)111355 Retainers (2)111357 Pin (1)111356	CUM 3096682
13	111358		CUM 3631245	KIT,Piston(K19, K38, K50) Includes Piston (1)111359 Retainers (2)111357 Pin (1)111356	CUM 3096681
13	111375		CUM 3803312	KIT,Piston(K19, K38, K50) Includes Piston (1)111376 Retainers (2)111357 Pin (1)111356	CUM 3096685
14	151534		CUM 3043909	BUSHING,Rod(K19, K38, K50)	
15	171875		CUM 205840	BEARING,Rod(STD)(Early K19)	
15	171876		CUM 205841	BEARING,Rod(.010in)(Early K19)	
15	171877		CUM 205842	BEARING,Rod(.020in)(Early K19)	
15	171885		CUM 3047390	BEARING,Rod(STD)(Current K19, K38, K50)	
15	171886		CUM 3047391	BEARING,Rod(.010in)(Current K19, K38, K50)	
15	171887		CUM 3047392	BEARING,Rod(.020in)(Current K19, K38, K50)	
16	040042		CUM 3013265	BOLT,Rod(K19)	
17	101140		N/A	KIT,Cylinder(K19) Includes Liner Kit (1)161638 Ring Set (1)505095 Piston Kit (1)111354	
17	101141		N/A	KIT,Cylinder Includes Liner Kit (1)161638 Ring Set (1)505095 Piston Kit (1)111358	
17	**101142**		**N/A**	**KIT,Cylinder(K19) Includes Liner Kit (1)161638 Ring Set (1)505095 Piston Kit (1)111375**	
18	**162028**		**CUM 3088298**	**SHIM,Liner(.0205in)**	

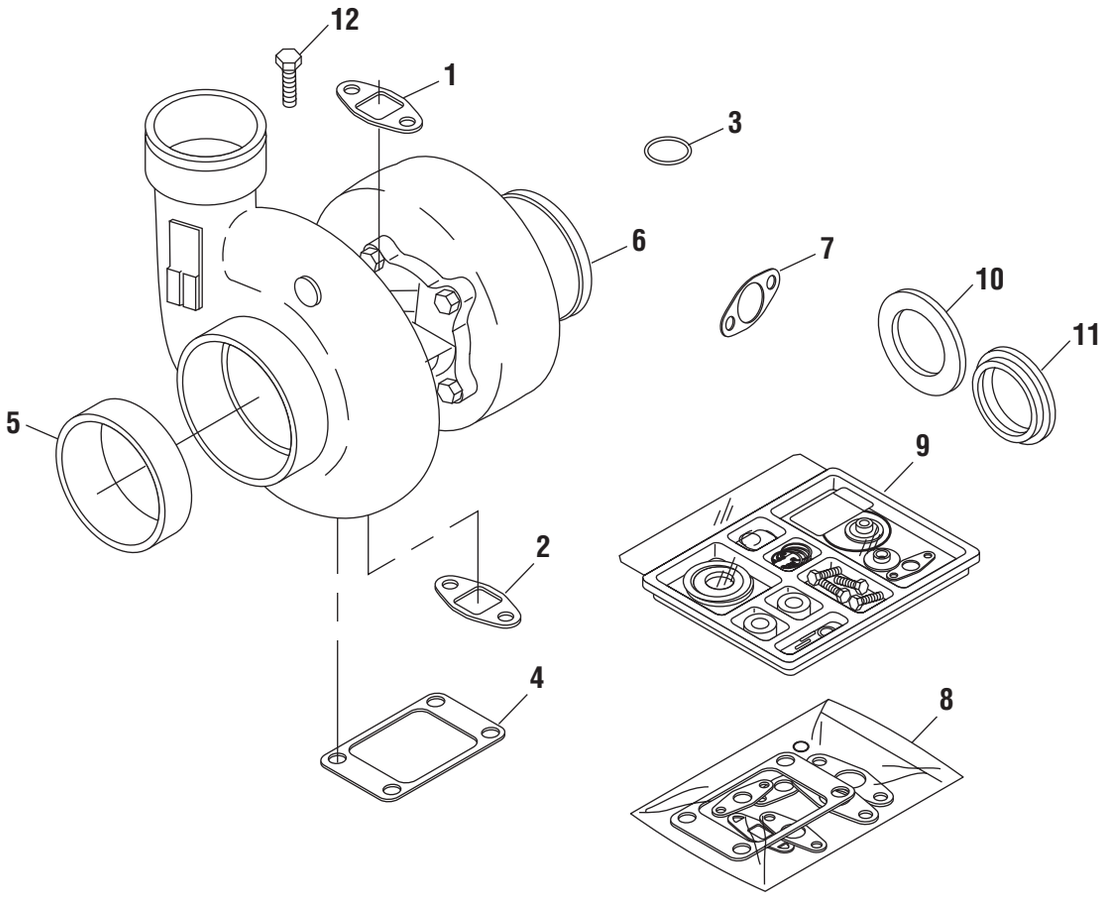
FIGURE 6806



PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	192018		CUM 205091	COLLET,Valve(K19/K38/K50)	
2	192061		CUM 205094	RETAINER,Valve Spring	
3	192052		CUM 3629006	SPRING,Valve(Long)(K19,K38,K50)	
3	192053		CUM 3630628	SPRING,Valve(Short)(K19,K38,K50)	CUM 3633840, CUM 3629007
4	**121181**		**CUM 3045979**	**O-RING,Oil**	
5	192028		CUM 3018818	GUIDE,Valve Stem(Intake & Exhaust) (K19,K38,K50)**(Finished)**	CUM 206286
5	192036	**192036E**	CUM 3201311	GUIDE,Valve Stem(Intake & Exhaust) (K19,K38,K50)**(Finished)**	CUM 3202210, CUM 3021693
6	192007	**192007E**	CUM 205093	INSERT,Valve(Exhaust)(K19,K38,K50)	CUM 3023062
6	Call		CUM 3086192	INSERT,Valve(Exhaust)	
7	191962	191962E	CUM 3035110	VALVE,Exhaust(STD)(K19,K38,K50)	CUM 3088391
7	191963	191963E	CUM 3034827	VALVE,Exhaust(Premium)(K19,K38,K50)	CUM 3088389
8	191946		CUM 3803529	KIT,Exhaust Valve(STD)(K19,K38,K50) Includes Valve Exhaust (1)191962 Collets (2)192018	CUM 3007225
8	191973		CUM 3803528	KIT,Exhaust Valve(Premium)(K19,K38,K50) Includes Valve Exhaust (1)191963 Collets (2)192018	CUM 3088389
9	191976	191976E	CUM 207241	VALVE,Intake(STD)(K19,K38,K50)	CUM 3088393
9	191978		CUM 3052820	VALVE,Intake(Premium)(K19,K38,K50)	
10	191945		CUM 3803515	KIT,Intake Valve(STD)(K19,K38,K50) Includes Valve Intake (1)191976 Collets (2)192018	CUM 207241
10	191986		CUM 3803518	KIT,Intake Valve(Premium)(K19,K38,K50) Includes Valve Intake (1)191978 Collets (2)192018	
11	191997	**191997E**	CUM 3026296	INSERT,Valve(Intake)(K19,K38,K50)	
11	191999		CUM 3052819	INSERT,Valve(Intake)(K19,K38,K50)	
11	Call		CUM 3086193	INSERT,Valve(Intake)	
12	045020		CUM 68445	PIN,Groove	
12	**045066**		**CUM 3900257**	**PIN,Groove**	
13	Call		CUM 205059	WASHER,Plain(3/4in)	
14	040005		CUM 3032633	BOLT,Head(K19,K38,K50)	CUM 3007238
15	192069		CUM 3086362	CROSSHEAD,Valve(K19,K38,K50)	CUM 3048620
16	192064		CUM 205169	GUIDE,Crosshead(K19,K38,K50)	
17	192056		CUM 3081081	ROTATOR,Valve Spring(K19,K38,K50)	CUM 3065936
18	131558		CUM 3166288	GASKET,Head(All K Series)(Old Style, 3 Holes)	
18	131559		CUM 3634664	GASKET,Head(All K Series)(New Style, 1 Hole)	CUM 4959089
19	131805		CUM 3081898	GASKET(QSK19)	
20	131560		CUM 3630839	GASKET(K)	
20	131804		CUM 3081895	GASKET(QSK19)	
21	**192159**		**CUM 3009109**	**PLATE,Swirl**	
22	**EPP-3575**		**MAK 49AX234Z**	**PLUG**	
23	**GCP-3484**		**MAK 79AX57X**	**PLUG**	
24	**040091**		**CUM 206224**	**PLUG**	
25	**195020**		**CUM 3394117**	**ADAPTER,Spark Plug(NH/NT)(NG)**	
26	**321426**		**CUM 172205**	**O-RING,Adapter(NG)**	
27	**131943**		**CUM 3394114**	**GASKET,Plug Adapter(NG)**	

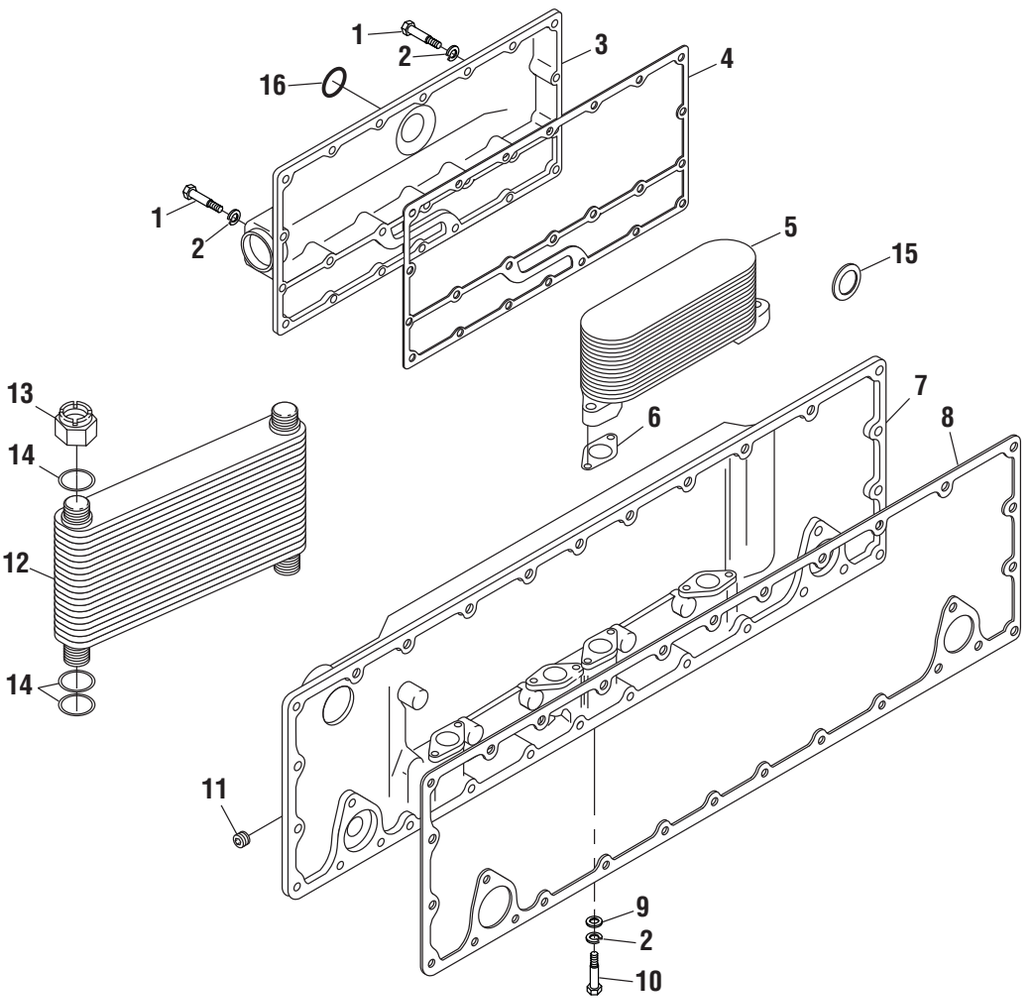
FIGURE 6808



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131298		CUM 201048	GASKET,Connection	
2	EGS-2861		MAK 56AX356	GASKET,Connection	CUM 201049
3	121365		CUM 3023066	O-RING	
4	131803		CUM 3081824	GASKET,Turbocharger(QSK19)	CUM 4096160
4	**131907**		**CUM 3177942**	**GASKET,Turbocharger(QSK50)**	**CUM 3010622**
4	EGS-3890-020		MAK 590GB1189A	GASKET,Turbocharger	CUM 206576
5	Call		CUM 3088371	SEAL,Dust	
6	ETC-9267		CUM 3801697	TURBOCHARGER(K19)	SCH 317107
7	131802		CUM 3010926	GASKET,Flange(QSK19)	
8	EKT-2668		SCH 318417	KIT,Turbocharger Mounting Includes Gaskets (1)EGS-3890-020 (1)EGS-2861 (1)331308 (1)EGS-2862 (1)131480 (1)EGS-2863 (1)131494 O-Ring (1)121227	
9	181191		CUM 3803257	KIT,Turbocharger Repair(QSK19)	CUM 3801669, CUM 3545677
10	**181160**		**CUM 3523980**	**SLINGER,Oil**	**CUM 3519622**
11	**181161**		**CUM 3591522**	**COLLAR,Thrust**	**CUM 3519623**
12	**040135**		**CUM 3627095**	**SCREW,Mounting w/ special grd shank feature (QSK19)**	

PAI Copyright 2017

FIGURE 6809



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	Call		CUM 3012474	SCREW(3/8in-16 x 2in)	
2	EWA-0049		MAK 36AX22	WASHER,Lock(5/16in)	
2	FWA-0050		MAK 36AX3	WASHER.Lock(3/8in)	CUM S-604
3	Call		CUM 3200987	COVER,Oil Cooler	
4	131455		CUM 3065791	GASKET,Oil Cooler(K19)	CUM 206967, CUM 3011627
5	141412		CUM 3201785	COOLER,Oil(K19)	CUM 206969, CUM 3804935
6	131457		CUM 206973	GASKET,Oil Cooler(K19)	CUM 3085998
7	Call		CUM 3201645	HOUSING,Oil Cooler	
8	131456		CUM 3065790	GASKET,Oil Cooler(K19)	CUM 2069678, CUM 3200550
9	Call		CUM 127362	WASHER(3/8in)	
10	Call		CUM S-103-C	SCREW,Hexagon(3/8in-24 x 3-3/4in)	
10	ESC-0025		MAK 4AX194	SCREW	
11	Call		CUM 3201583	PLUG,Threaded(1-5/16in-12)	
11	EPP-3566		MAK 49AX226	PLUG,Pipe	CUM 3008470
12	141413		CUM 3627295	COOLER,Oil(K38/50)	CUM 205615, CUM 3177235
13	Call		CUM 3633479	NUT,Lock(K38/50)	
14	131458		CUM 3630969	GASKET(K38/50)	CUM 206021
15	**121395**		**CUM 4094865**	**RING,Rectangular Seal (2.30in x .099in sq)**	
16	**121427**		**CUM 145540**	**O-RING**	

Upper Gasket Sets

FIGURE 6802

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131261		CUM 3803597	KIT,Upper Gasket(K19/KT19) (Old Style, 3 holes Head Gasket)	CUM 3006135
1	131262		CUM 3803600	KIT,Upper Gasket(K38) (Old Style, 3 hole Head Gasket)	CUM 3006132
1	131557		CUM 3801005	KIT,Upper Gasket(KTA/KTTA-19) (Old Style, 3 hole Head Gasket)	
1	131723		CUM 3804298	KIT,Upper Gasket(K38/QSK38) (New Style, 1 hole Head Gasket)	CUM 3800730
1	131728		CUM 3800727	KIT,Upper Gasket(KT19) (New Style, 1 hole Head Gasket)	CUM 3804295
1	131729		CUM 3800728	KIT,Upper Gasket(KTA-19) (New Style, 1 hole Head Gasket)	CUM 3804296, CUM 3803598
1	131815		CUM 3804667	KIT,Upper Gasket(QSKA19)	
1	131816		CUM 3804668	KIT,Upper Gasket(QSKA19)(Single Head)	
1	**131825**		**CUM 3800731**	**KIT,Upper Gasket(K50) (New Style, 1 hole Head Gasket)**	**CUM 3804299**
1	**131891**		**CUM 3800729**	**KIT,Upper Gasket(K38)**	**CUM 3804297**
1	**131892**		**CUM 3800726**	**KIT,Upper Gasket(K19)**	**CUM 3804294**

Lower Gasket Sets

FIGURE 6803

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131535		CUM 3801007	SET,Lower Gasket(K19) (1 Piece Gear Cover, Steel Plate)	
1	131537		CUM 3801719	SET,Lower Gasket(K38)	CUM 3801265, CUM 3804301
1	131719		CUM 4089391	SET,Lower Gasket	
1	**131826**		**CUM 3804300**	**KIT,Lower Gasket(K50)**	**CUM 3801717**
1	**131902**		**CUM 4089717**	**KIT,Lower Gasket(QSK19)**	**CUM 3804666**
1	**131952**		**CUM 4089390**	**KIT,Lower Gasket(K19)**	

PAI Copyright 2017

Miscellaneous Gaskets

FIGURE 6804

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131807		CUM 3079883	GASKET,Manifold Cover(QSK19)	
2	131680		CUM 4922219	GASKET,Rocker Lever Cover(K19/K38/K50)	
3	131556		CUM 3001304	GASKET,Aftercooler	
3	131806		CUM 3090299	GASKET,Aftercooler(QSK19)	CUM 3081480
3	**131257**		**CUM 3011580**	**GASKET,Cooler Cover(K38)**	
4	131554		CUM 3032161	GASKET,Throttle Adapter	
5	131459		CUM 3009324	GASKET,Cover(K38/K50)	
5	**131947**		**CUM 205794**	**GASKET,Cover**	
5	**131928**		**CUM 3201388**	**GASKET,Cover**	
5	**131919**		**CUM 4922528**	**GASKET,Cover**	
5	**131935**		**CUM 3074690**	**GASKET,Cover Gear**	
5	**131951**		**CUM 131951**	**GASKET,Cover Gear**	
5	**131936**		**CUM 3410141**	**GASKET,Front Cover Plate**	
5	**131922**		**CUM 3042586**	**GASKET,Hand Cover**	
6	131514		CUM 3202283	GASKET,Pump Support	CUM 205233
7	131515		CUM 205289	GASKET,Water Connection	
7	131516		CUM 205288	GASKET,Water Connection	
7	131553		CUM 3001305	GASKET,Water Connection(K19)	
7	**131965**		**CUM 206460**	**GASKET,Water Connection(K38)**	
7	**131909**		**CUM 3049364**	**GASKET,Water Connection(K38)**	
7	**131966**		**CUM 207515**	**GASKET,Water Connection(K38/K50)**	
7	**131967**		**CUM 3175517**	**GASKET,Water Connection(K38/K50)**	
7	**131968**		**CUM 3179026**	**GASKET,Water Connection(K38/K50)**	
7	**131927**		**CUM 3014449**	**GASKET,Water Connection**	
9	**121399**		**CUM 3086120**	**RING,Rectangular**	
10	131760		CUM 206279	GASKET,Air Intake(K19)	
11	131759		CUM 206277	GASKET,Intake Manifold(K19)	
12	131758		CUM 3043097	GASKET,Exhaust	CUM 205196
12	**131889**		**CUM 3037821**	**GASKET,Exhaust**	
13	**131890**		**CUM 3179027**	**GASKET,Inlet Connection**	**CUM 3028123**
14	**131259**		**CUM 206443**	**GASKET,Thermostat Housing(K38/K50)**	
14	**131908**		**CUM 3052906**	**GASKET,Thermostat Housing**	
14	**131914**		**CUM 3090170**	**GASKET,Thermostat Housing**	
14	**131949**		**CUM 207058**	**GASKET,Thermostat Housing**	
14	**131942**		**CUM 3010918**	**GASKET.Thermostat Housing**	
15	**131911**		**CUM 3410171**	**GASKET,Accessory Drive**	
16	**131910**		**CUM 3081621**	**GASKET,Camshaft Cover**	
17	**131913**		**CUM 4000436**	**GASKET,Housing Filter**	
18	**131948**		**CUM 205827**	**GASKET,Housing**	
19	**131924**		**CUM 3085989**	**GASKET,Lube Pump**	
20	**131925**		**CUM 207117**	**GASKET,Compressor**	
21	**131940**		**CUM 3200977**	**GASKET,Mount Filter**	
22	**131939**		**CUM 3040721**	**GASKET,Cam Cover**	
23	**131937**		**CUM 3042612**	**GASKET,Fan Cover Hub**	
24	**131946**		**CUM 207056**	**GASKET,Connector**	
25	**131920**		**CUM 3913287**	**GASKET,Pump Mount**	
25	**131921**		**CUM 3007380**	**GASKET,Pump Mount**	
26	**131917**		**CUM 4080829**	**GASKET,Timing Cover**	
27	**131941**		**CUM 131941**	**GASKET,Accelerator Drive**	
28	**131938**		**CUM 131938**	**GASKET,Scavenge Pump**	
29	**136157**		**CUM 3160924**	**SHIELD,Dust**	

PAI Copyright 2017

New Parts are in BOLD text

FIGURE 6800

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	181858		CUM 3803153	KIT,Water Pump Repair(K19) Includes Valve (1)042220 Bearings (1)EBG-6163 (1)EBG-8689 Rings (1)111082 (1)111081 Seals (1)136067 (1)181845 Shaft (1)180918 Gaskets (1)131514 (1)131515 (1)131516	
2	180918		CUM 3042827	SHAFT,Water Pump(K19)	
2	180919		CUM 3040832	SHAFT,Water Pump(K19)	
3	042220		CUM S-692-E	VALVE,Drain	CUM S-971
4	EBG-8689		MAK 46AX118	BEARING,Water Pump	CUM S-16069
5	111082		CUM 70183	RING,Retaining	
6	111081		CUM 205258	RING,Retaining	
7	136037		CUM 3010465	RING,Wear(Water Pump)e	NAT 471700, CHI 8821
8	136085		CUM 206808	SEAL,Water Connector	
9	151542		CUM 205230	BUSHING,Cam	CUM 3175805
10	136093		CUM 3016789	SEAL,Fan(Hub)(K19)	
11	136094		CUM 3628895	SEAL,Accessory Drive(Pulley)(K19)	
12	136048		CUM 3016791	SEAL,Oil(Neoprene)(K19)	
13	136058		CUM 3016794	KIT,Seal(Tefon)(K19)(w/ Installation Tool)	
14	151553		CUM 205145	BUSHING,Valve Lever	
14	151552		CUM 207226	BUSHING,Injection Lever	
15	045034		CUM 3007517	NOZZLE,Piston Cooling(K19)	
16	151550		CUM 3002834	BEARING,Cam(K19 only)	
17	**191892**		**CUM 3066882**	**CAMSHAFT(K19)**	**CUM 3062123**
17	191921	191921E	CUM 3066877	CAMSHAFT(K19)	CUM 207770
17		191922E	CUM 3076767	CAMSHAFT(K19)	
18	151551		CUM 3004686	BUSHING,Idler Gear(K19)	
19	136135		CUM 3633046	SEAL,Ferrule(K19)	CUM 3002150
20	**136170**		**CUM 3175705**	**SEAL,Ferrule**	
21	121372		CUM 3867651	O-RING,Injector	CUM 3076095
22	180290		CUM 205462	LINK,Plunger(K19)	
23	136079		CUM 207244	SEAL,Injector(K19)	
24	180291		CUM 3006696	CLAMP,Plunger(K19)	
25	121274		CUM 206978	SEAL,Rectangular	
25	121354		CUM 3820030	SEAL,Rectangular	
25	136132		CUM 3014304	SEAL,Rectangular	
26	121306		CUM 3084539	O-RING(Oil Manifold)	
26	**121382**		**CUM 3044942**	**O-RING**	**CUM 3023870**
26	**121421**		**CUM 3026421**	**O-RING**	**CUM 3021421, CUM 145614**
26	**121426**		**CUM 3015067**	**O-RING**	**CUM 3002369**
26	**121428**		**CUM 205898**	**O-RING**	
26	**121430**		**CUM 4998542**	**O-RING**	
26	**121436**		**CUM 3033915**	**O-RING**	
27	141293	141293E	CUM 3047549	PUMP,Lube(K19)	
28	121307		CUM 3014435	O-RING,Water Inlet(K19 & K38)	
29	050690		CUM 3408631	SWITCH,Temperature	CUM 3062866
30	121328		CUM 145623	O-RING,Water Pump Housing	
31	136133		CUM 3023129	SEAL,Dust	CUM 207542
31	136134		CUM 3023130	SEAL,Dust	CUM 207543
32	**136154**		**CUM 3086279**	**SHIELD,Dust**	
32	**136156**		**CUM 3628894**	**SHIELD,Dust**	
33	180199		CUM 3035738	VALVE,Fuel Shutoff(24 VDC)	
34	131258		CUM BM68356	SET,Fuel Pump Gasket(QSK, KT19)	
35	**121391**		**CUM 4308682**	**RING,Rectangular** **(Used in 141293 Lube Pump)**	**CUM 207135**
35	**121404**		**CUM 3008710**	**RING,Rectangular**	
35	**121397**		**CUM 172648**	**RING,Rectangular**	
36	**EOS-3305**		**CUM 3627961**	**SEAL,Thermostat**	**CUM 3042759**
37	131504		CUM 3010242	KIT,Fuel Pump Gasket	
38	**136148**		**CUM 3634007**	**SEAL,Water Pump**	
39	**180245**		**CUM 3013811**	**DIAPHRAGM,Solenoid**	
40	**136162**		**CUM 3803852**	**KIT,Seal Accelerator Drive** **Includes Sleeve Accelerator Drive (1)136022** **Seal Keyway (1)136049 Dust Shield (1)136156**	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
41	136153		CUM 3085867	SEAL,Oil Fan Drive	
42	136152		CUM 3065830	SEAL,Idler Pulley	
43	136151		CUM 3067259	SEAL,Idler Shaft	
44	121057		CUM 60985	HOSE,Coolant	
45	136149		CUM 3081724	SEAL,Split Ring	
46	180840		CUM 3090194	BELLOWS,Idler	

FIGURE 6700

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	171702		CUM 195240	CRANKSHAFT(378)	
1	171707		CUM 194840	CRANKSHAFT(504)	
1	171718		CUM 201950	CRANKSHAFT(555)	
2	121196		CUM 193736	O-RING,Injector Mount	
3	136025		CUM 3010459	SEAL,Rear(378/504/555)	
3	191988		CUM 156541	SEAL,Intake Valve(378/504/555)	
4	136036		CUM 3010464	RING,Wear(378/504)	
4	136037		CUM 3010465	RING,Wear(378/504)	
5	141301		CUM AR62181	PUMP,Oil(504/555)	
6	171734		CUM 177086	GEAR,Crankshaft(378/504/555)	
7	191903		CUM 3277463	CAMSHAFT(378)	
7	191904		CUM 3278029	CAMSHAFT(378)	
7	191906		CUM 3277462	CAMSHAFT(504/555)	
7	191907		CUM 3278031	CAMSHAFT(504)	
8	192058		CUM 155441	RETAINER,Valve(378/504/555)	
9	192070		CUM 168209	PUSHROD,Intake/Exhaust(378/504/555)	
10	192083		CUM 169630	TUBE,Injector(378/504/555)	
11	191964		CUM 3275356	VALVE,Exhaust(504/555)	
12	191993		CUM 195000	INSERT,Intake Valve(STD)(378/504/555)	
12	192087		CUM 195001	INSERT,Intake Valve(.010in)(378/504/555)	
12	192088		CUM 195002	INSERT,Intake Valve(.020in)(378/504/555)	
12	192089		CUM 195003	INSERT,Intake Valve(.030in)(378/504/555)	
13	192006		CUM 154390	INSERT,Exhaust Valve(STD)(378/504/555)	
13	192090		CUM 154391	INSERT,Exhaust Valve(.010in)(378/504/555)	
13	192091		CUM 154392	INSERT,Exhaust Valve(.020in)(378/504/555)	
13	192092		CUM 154393	INSERT,Exhaust Valve(.030in)(378/504/555)	
14	192038		CUM 3278173	GUIDE,Valve(378/504/555)**(Finished)**	
15	505055		CUM 3278723	SET,Ring(378/504/555)	
16	141410		CUM 173287	COOLER,Oil(VT555)	
17	192020		CUM 3275354	COLLET(2 Per Valve)	
18	191939		CUM 3275779	KIT,Exhaust Valve(504/555) Includes Exhaust Valve (1)191964 Collets (2)192020	
19	161641		CUM 3022530	LINER,Cylinder(378/504)	
20	**121434**		**CUM 178937**	**O-RING,Water Cooler Exhaust Manifold**	
21	**136138**		**CUM 3062676**	**SEAL,Fuel Pump**	

PAI Copyright 2017

FIGURE 6650

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	505005		CUM AR12098	SET,Ring	
2	111305		CUM AR7510	KIT,Piston Includes Piston (1)111304 Pin (1)111093 Retainers (2)111095	CUM 199821
2	111307		CUM AR7440	KIT,Piston Includes Piston (1)111306 Pin (1)111093 Retainers (2)111095	
3	111093		CUM 203070	PIN,Piston	
4	121241		CUM 215983	SEAL,Crevice	
5	121242		CUM 181449	O-RING,Liner	
6	121243		CUM 216879	O-RING,Liner	
7	151516		CUM 43067	BUSHING,Pin	
8	161614		CUM 184400	LINER	
9	161615		CUM BM98224	KIT,Liner Includes Liner (1)161614 Seal (1)121241 O-Rings (1)121242 (1)121243	
10	101085		CUM AR7383	KIT,Cylinder Includes Piston (1)111304 Retainers (2)111095 Pin (1)111093 Ring Set (1)505005 Liner Kit (1)161615	
11	171703		CUM 3029341	CRANKSHAFT	
12	131425		CUM 3802077	SET,Upper Gasket(Turbo and Naturally Aspirated)	
13	131424		CUM 3802076	SET,Upper Gasket(Supercharged Engines)	
14	131433		CUM 107371	GASKET,Cylinder Head	
15	131576		CUM 106425	GASKET	
16	131436		CUM 108692	GASKET,Valve Cover	
17	131421		CUM 3801466	SET,Lower Gasket(Non FFC/Non Supercharged)	
17	131437		CUM 3802075	SET,Lower Gasket	
18	136008		CUM 3010457	SEAL,Oil	
19	151490		CUM BM27253	SET,Cam Bearing Includes Cam Bearing (1) Cam Bearing (6)	
20	171750		CUM 203670	BEARING,Rod(STD)	
20	171751		CUM 203671	BEARING,Rod(.010in)	
20	171752		CUM 203672	BEARING,Rod(.020in)	
20	171753		CUM 203673	BEARING,Rod(.030in)	
21	181804		CUM BM76506	WATER,Pump	
22	191951		CUM 150288	VALVE,Intake	
23	191957		CUM 144911	VALVE,Exhaust	
24	191992		CUM 69965	INSERT,Intake Valve	
25	192024		CUM S-2037	COLLET	
26	192025	**192025E**	CUM 66890	GUIDE,Valve**(Finished)**	
27	192043		CUM 111446	SPRING,Valve	
28	192084		CUM 202605	TUBE,Injector	
29	040003		CUM 188329	BOLT,Cylinder Head	
30	171720		CUM 3801260	KIT,Main Bearing(STD) Includes Main Bearing Set (1) Lockplates (14) Bearings (2)	
30	171721		CUM 3801261	KIT,Main Bearing(.010in) Includes Main Bearing Set (1) Lockplates (14) Bearings (2)	
30	171722		CUM 3801262	KIT,Main Bearing(.020in) Includes Main Bearing Set (1) Lockplates (14) Bearings (2)	
30	171723		CUM 3801263	KIT,Main Bearing(.030in) Includes Main Bearing Set (1) Lockplates (14) Bearings (2)	
30	171724		CUM 3801264	KIT,Main Bearing(.040in) Includes Main Bearing Set (1) Lockplates (14) Bearings (2)	
31	131574		CUM 9097	GASKET,Water Pump	
32	131573		CUM 70441	GASKET,Thermostat	
33	181014		CUM 200566	MANIFOLD,Exhaust(NH220)(Log Style, Center Section)	
34	181015		CUM 151489	MANIFOLD,Exhaust(NH220)(Log Style, Rear Section)	
35	181013		CUM 151478	MANIFOLD,Exhaust(NH220)(Log Style, Front Section)	
36	131575		CUM 123733	GASKET,Water Inlet	
37	121327		N/A	KIT,Liner O-Ring Includes Seal (1)121241 O-Rings (1)121242 (1)121243	
38	**131964**		**CUM 129373**	**GASKET,Cork**	
39	**136146**		**CUM70854**	**SEAL,Fuel**	

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
40	121403		CUM 160196	RING,Rectangular	
41	042088		CUM 9426-2	SEAL,Copper	
42	131963		CUM 9267	GASKET,Manifold Water	
43	131960		CUM 139266	GASKET,Exhaust Connector	
44	131961		CUM 194106	GASKET	
45	131962		CUM 147263	GASKET,Exhaust Manifold	

PAI Copyright 2017

Miscellaneous Components

FIGURE 6600

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	141415		CUM 186348	COOLER,Oil	
2	191952		CUM 216707	VALVE,Intake	
3	191958		CUM 138887	VALVE,Exhaust	
4	191996		CUM 212217	INSERT,Intake Valve	
5	192008		CUM 212940	INSERT,Exhaust Valve	
6	192026		CUM 138937	GUIDE,Valve**(Finished)**	
7	192044		CUM 146731	SPRING,Valve	
8	192045		CUM 146732	SPRING,Valve	
9	192057		CUM 146733	GUIDE,Valve Spring	
10	192071		CUM 169351	PUSHROD,Intake and Exhaust	
11	192073		CUM 3003602	PUSHROD,Injector	
12	040004		CUM 214751	BOLT,Cylinder Head	
13	151546		CUM 200780	BEARING,Cam(#1 and #5 Position)	
14	151547		CUM 200790	BEARING,Cam(#2-#4 Position)	
15	151537		CUM 156420	BUSHING,Turbo	
16	045037		CUM 213058	PIN,Roller Injector	
17	045028		CUM 213061	ROLLER,Injector	
18	131504		CUM 3010242	KIT,Fuel Pump Gasket	
19	121204		CUM 3032874	O-RING,Liner	
19	**121377**		**CUM 213768**	**O-RING**	
19	**121378**		**CUM 68061A**	**O-RING**	
19	**121379**		**CUM 3046201**	**O-RING**	
19	**121380**		**CUM 43696A**	**O-RING**	
19	**121417**		**CUM 3348318**	**O-RING**	
19	**121418**		**CUM 3081494**	**O-RING**	
19	**121419**		**CUM 3090127**	**O-RING,Oil Filter**	
19	**121434**		**CUM 178937**	**O-RING,Water Cooled Exhaust Manifold**	
20	121259		CUM 194115	O-RING,Liner	
21	121260		CUM 3044795	SEAL,Liner(Rectangular)	
22	161610		CUM 203170	LINER	
23	161611		CUM AR8069	KIT,Liner Includes Liner (1)161610 O-Rings (1)121259 (1)121204 Seal (1)121260	
24	101086		CUM AR11909	KIT,Cylinder Includes Piston (1)111111 Retaining Ring (2)111096 Pin (1)111091 Ring Set (1)505010 Liner Kit (1)161611	
25	111112		CUM 3019287	KIT,Piston Includes Piston (1)111111 Pin (1)111091 Retaining Ring (2)111096	CUM AR11908
26	111111		CUM 3037413	PISTON	
27	111091		CUM 215390	PIN,Piston(Heavy Pin .700in ID)	
28	111096		CUM 155267	RETAINER,Piston Pin	
29	505010		CUM AR11930	SET,Ring Piston	
30	136053		CUM 3023867	SEAL,Rear Crankshaft	
31	131505		CUM 212224	GASKET,Cylinder Head	
31	**131834**		**CUM 3096077**	**GASKET,Fuel Pump**	**CUM 3080837**
31	**131835**		**CUM 110855**	**GASKET,Fuel Pump**	**CUM 104978**
32	171730		CUM AR3640	KIT,Main Bearing(STD)	
32	171731		CUM AR3641	KIT,Main Bearing(.010in)	
32	171732		CUM AR3642	KIT,Main Bearing(.020in)	
33	171890		CUM 189770	BEARING,Rod(STD)(2 pc)	
33	171891		CUM 189771	BEARING,Rod(.010in)(2 pc)	
33	171892		CUM 189772	BEARING,Rod(.020in)(2 pc)	
33	171893		CUM 189773	BEARING,Rod(.030in)(2 pc)	
34	151538		CUM 189763	BUSHING,Pin	
35	181867		CUM AR9931	KIT,Water Pump	
36	136052		CUM 3020184	SEAL,Front Crankshaft	
37	045029		CUM 152082	ROLLER,Cam Follower(Valve)	
38	131550		CUM 3028673	GASKET,Valve Cover	
39	191931		CUM 199180	CAMSHAFT(Fits 1.2:1 Injector Rockers)	
39	191932		CUM 215580	CAMSHAFT	
40	131681		CUM 3013497	SET,Upper Gasket	
41	131682		CUM 3014458	SET,Lower Gasket	

PAI Copyright 2017

New Parts are in BOLD text

Miscellaneous Components

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
42	121326		N/A	KIT,Liner O-Ring Includes O-Rings (1)121204 (1)121259 Seal (1)121260	
43	**181192**		**CUM 3801096**	**KIT,Turbocharger**	**CUM AR7983**
44	**042059**		**CUM 163945**	**RING,Retaining**	
44	**121333**		**CUM 151900**	**RING,Rectangular**	
44	**121357**		**CUM 154088**	**RING,Rectangular**	
44	**121360**		**CUM 100099**	**RING,Rectangular**	
44	**121390**		**CUM 139988**	**RING,Rectuangular**	
45	**042027**		**CUM 160514**	**WASHER,Nylon**	
46	**040122**		**CUM 3067897**	**SCREW w/Seal**	**CUM 3018682**
47	**045062**		**CUM 3908612**	**PIN,Drive**	**CUM 3920978**
48	**045071**		**CUM 105375**	**NAMEPLATE,Fuel Pump**	**CUM 4076866**
49	**180931**		**CUM 212613**	**COUPLING,Fuel Pump**	
50	**136129**		**CUM 212603**	**SEAL,Fuel Pump**	
51	**131833**		**CUM 70705**	**GASKET,Solenoid**	
52	**136150**		**CUM 3003156**	**SEAL,Lead/Wire**	
53	**136138**		**CUM 3062676**	**SEAL,Fuel Pump**	

PAI Copyright 2017

Miscellaneous Components

FIGURE 6900

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131258		CUM BM68356	SET,Governor Gasket	
2	131260	*131260E	CUM 3803697	SET,Upper Gasket (*Note: 131260E is an Economy version that does not contain some of the minor components in 131260)	
2	**131893**		**CUM 3801403**	**SET,Upper Gasket**	**CUM 3014205**
3	131450		CUM 3017564	SET,Lower Gasket	
3	131810		CUM 3017564	SET,Lower Gasket (Economy version)	
4	136032		CUM 3020187	SEAL,Accessory Drive	
4	136033		CUM 3020188	SEAL,Accessory Drive	
5	136034		CUM 3020182	SEAL,Crankshaft	
6	192076		CUM 3046419	PUSHROD,Valve	
7	171640		CUM 200600	BEARING,Rod(STD)	
7	171641		CUM 200601	BEARING,Rod(.010in)	
7	171642		CUM 200602	BEARING,Rod(.020in)	
7	171643		CUM 200603	BEARING,Rod(.030in)	
8	171860		CUM AR4220	SET,Main Bearing(STD) Includes Main Bearing Set (1) Thrust Bearings (4)171865	
9	192080		CUM 3046432	PUSHROD,Injector	
10	040002		CUM 177734	BOLT,Head	
11	151495		CUM 70437	BEARING,Cam	
12	045053		CUM 163815	PIN,Injector Roller	
13	045052		CUM 113749	PIN,Valve Roller	
14	111407		CUM 3801666	KIT,Piston Includes Piston (1)3040097 Retaining Rings (2)111095 Inserts (2)111406	
14	111408		N/A	KIT,Piston Includes Piston (1)111405 Retaining Ring (2)111095 Insert (2)111406 Pin (1)111094	
15	131701		CUM 200998	GASKET,Fuel Pump	
15	**131836**		**CUM 3063052**	**GASKET,Fuel Pump**	**CUM 3058512**
15	**131837**		**CUM 2885050**	**GASKET,Fuel Pump**	**CUM 100764**
16	111406		CUM 3043650	INSERT,Piston Skirt	
17	136092		CUM 3003353	SEAL,Water Pump	
18	131572		CUM 67362	GASKET,Inlet Manifold	
18	131771		CUM 3069890	GASKET,Inlet Manifold	CUM 142324
19	131581		CUM BM98021	ASSEMBLY,Gasket,Cylinder Head	CUM 3058347, CUM 3034263
20	131583		CUM 3077198	GASKET,Rocker(V28)	CUM 3046306, CUM 3040730
20	131763		CUM 3077200	GASKET,Rocker Lever	CUM 3036100, CUM 216056
21	131582		CUM 181256	GASKET,Oil Pan	
22	131588		CUM 3037573	GASKET,Cylinder Head	CUM 3034263
23	131590		CUM 3058346	GASKET,Insert	CUM 136265
24	131569		CUM 193946	GROMMET,Head Gasket	CUM 3037575
25	136107		CUM 181293	SEAL,Gasket	
26	136108		CUM 181272	RETAINER,Seal	
27	136125		CUM 3005887	KIT,Oil Seal(Wet Clutch Application)	CUM 3001771
28	209930		CUM 3054532	BARREL/PLUNGER	CUM 3018324
29	210003		CUM 3018813	CUP,Injector	
29	210005		CUM 3018814	CUP,Injector	
30	210050		CUM 212607	SHAFT,Tach Drive	
31	210055		CUM 70690	DRIVER,Plunger	
32	171865		CUM 4073137	BEARING,Thrust	CUM 4073137
33	131770		CUM 3081076	GASKET,Exhaust Manifold	CUM 211194, CUM 134767
33	131780		CUM 3045941	GASKET,Exhaust	
33	131781		CUM 193295	GASKET,Exhaust	
34	131777		CUM 100918	GASKET,Turbocharger	
35	131783		CUM 3033215	GASKET,Thermostat Housing	
35	**131855**		**CUM 70732**	**GASKET,Tachometer Housing**	
36	136136		CUM 3035331	GROMMET,Manifold	CUM 193301
37	131764		CUM 69651	GASKET,Bypass	
37	131779		CUM 64413	GASKET,Bypass	
38	131765		CUM 200258	GASKET,Water Connection	

Keys 38-77 are continued on the following page.

PAI Copyright 2017

New Parts are in BOLD text

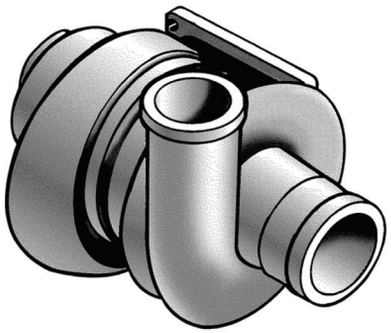
Miscellaneous Components

38	131766		CUM 201747	GASKET,Water Connection	
38	131767		CUM 200259	GASKET,Water Connection	
38	131768		CUM 64502	GASKET,Water Connection	
38	**132002**		**CUM 113914**	**GASKET,Water Outlet**	
39	131769		CUM 102867	GASKET,Thermostat	
40	131772		CUM 124246	GASKET,Cover Plate	
41	131774		CUM 199572	GASKET,Turbo	CUM 102953
42	131775		CUM 202873	GASKET,Turbo Mount	
43	131784		CUM 125547	GASKET,Intercooler	
43	131785		CUM 125548	GASKET,Intercooler	
43	131786		CUM 125549	GASKET,Intercooler	
44	131773		CUM 44814	GASKET,Cooler Torque Convertor	
45	131778		CUM 101732	GASKET,Cover Manifold	
46	131782		CUM 102791	GASKET,Water Manifold	
47	131787		CUM 3410348	GASKET,Water Pump	CUM 200260
48	131788		CUM 199569	GASKET,Manifold	
49	151532		CUM 130083	WASHER,Thurst(Idler Gear)	CUM 116690
50	**136140**		**CUM 70809**	**SEAL,Fuel Pump**	
50	**136141**		**CUM 210218**	**SEAL,Fuel Pump**	
51	**131980**		**CUM 180730**	**GASKET,Oil Cooler**	
51	**131979**		**CUM 195736**	**GASKET,Oil Cooler**	
51	**131996**		**CUM 172723**	**GASKET,Oil Cooler**	
51	**131976**		**CUM 69165**	**GASLET,Oil Cooler**	
52	**131985**		**CUM 3001562**	**GASKET,Cooler Connector**	
53	**131998**		**CUM 160112**	**GASKET,Support**	
53	**131986**		**CUM 64420**	**GASKET,Support**	
54	**131997**		**CUM 42376**	**GASKET,Hub Fan**	
55	**131983**		**CUM 180735**	**GASKET,Oil Filter**	
56	**131977**		**CUM 121057**	**GASKET,Rear Seal Drain**	
57	**131993**		**CUM 9284**	**GASKET,Lube Pump**	
57	**131987**		**CUM 204253**	**GASKET,Lube Pump**	
57	**132011**		**CUM 129484**	**GASKET,Lube Pump**	
57	**132012**		**CUM 180760**	**GASKET,Lube Pump**	
58	**131990**		**CUM 183475**	**GASKET,Oil Pump**	
59	**131974**		**CUM 3008965**	**GASKET,Oil Tube**	
59	**131973**		**CUM 3008966**	**GASKET,Oil Tube**	
60	**131978**		**CUM 162679**	**GASKET,Oil P/U Tube Flange**	
61	**131981**		**CUM 69164**	**GASKET,Oil Cover**	
62	**131975**		**CUM 136995**	**GASKET,Gear Cover**	
62	**131995**		**CUM 139867**	**GASKET,Gear Cover**	
62	**132013**		**CUM 181187**	**GASKET,Gear Cover**	
63	**131989**		**CUM 164976**	**GASKET,Oil Pump Connector**	
64	**131969**		**CUM 163607**	**GASKET,Water Transfer**	
65	**131999**		**CUM 123078**	**GASKET,Water Pump**	
65	**131994**		**CUM 136171**	**GASKET,Water Pump**	
65	**131982**		**CUM 69654**	**GASKET,Water Pump**	
66	**131984**		**CUM 644331**	**GASKET,Manifold Water**	
67	**131988**		**CUM 123146**	**GASKET,Water Inlet**	
68	**131991**		**CUM 64565**	**GASKET,Flywheel Housing**	
69	**132015**		**CUM 181085**	**GASKET,Housing Gear**	
69	**132016**		**CUM181243**	**GASKET,Housing Gear**	
69	**132017**		**CUM 163532**	**GASKET,Housing Gear**	
69	**132018**		**CUM 64436**	**GASKET,Housing Gear**	
69	**132019**		**CUM 64436A**	**GASKET,Housing Gear**	
70	**131995**		**CUM 139867**	**GASKET,Accelerator Drive**	
71	**131992**		**CUM 129527**	**GASKET,Accelerator Drive Bearing Support**	
72	**042096**		**CUM 66665**	**WASHER,Copper**	
73	**132008**		**CUM 3078124**	**GASKET,Cover**	
73	**132009**		**CUM 3077199**	**GASKET,Cover**	
73	**132010**		**CUM 67396**	**GASKET,Cover(RR)**	
74	**132003**		**CUM 69163**	**GASKET**	
74	**132006**		**CUM 43569**	**GASKET**	
74	**132005**		**CUM 196337**	**GASKET**	
75	**132007**		**CUM 180748**	**GASKET,Hand Hole**	
76	**136171**		**CUM 106339**	**SEAL,Pump Shaft**	
77	**131934**		**CUM 144042**	**GASKET,Connection Lube**	

PAI Copyright 2017

Turbocharger Applications by CPL

FIGURE 6901



Please note:

(1) Check oil feed line for any restrictions.
(2) Check oil return line for any restrictions that would block the oil from draining back into the engine.
(3) Check air filter.
(4) Always pre lube Turbochargers before starting Engine.
(5) The most common failures are due to low oil pressure, contaminated oil and hot shut down.

CPL #	4LHR TURBO	4LHR TURBO UNDER 580 HP	4LHR TURBO OVER 580 HP	4LHR TURBO UNDER 680 HP	4LHR TURBO OVER 680 HP
60	N/A	N/A	N/A	N/A	N/A
62	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390	N/A	N/A	N/A	N/A
63	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A
66	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741	N/A	N/A	N/A	N/A
67	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741	N/A	N/A	N/A	N/A
111	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741	N/A	N/A	N/A	N/A
138	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A
139	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A

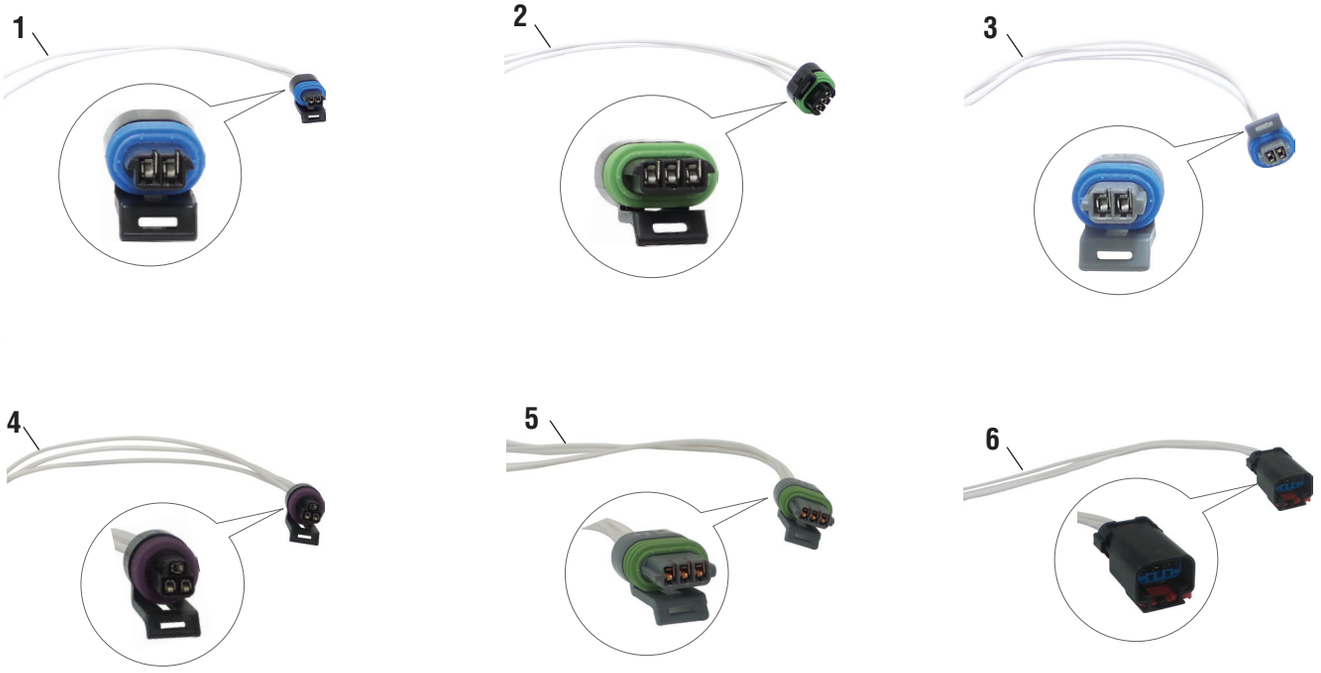
PAI Copyright 2017

CPL #	4LHR TURBO	4LHR TURBO UNDER 580 HP	4LHR TURBO OVER 580 HP	4LHR TURBO UNDER 680 HP	4LHR TURBO OVER 680 HP
140	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390	N/A	N/A	N/A	N/A
142	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390	N/A	N/A	N/A	N/A
145	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A
236	N/A	N/A	N/A	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
239	N/A	N/A	N/A	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
240	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A	N/A	N/A
242	ETC-9295 CUM 3003708 CUM 3029515 CUM 3013679 CUM 3801989 CUM 3018067 SCH 193903 CUM 3018068	N/A	N/A	N/A	N/A
244	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A
304	N/A	N/A	N/A	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
335	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A
336	N/A	ETC-9295 CUM 3003708 CUM 3801989 CUM 3013679 SCH 193903 CUM 3018067 CUM 3018068 CUM 3029515	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	N/A	N/A
337	ETC-9297 CUM 3007688 CUM 3032061 CUM 3018066 CUM 3801936 CUM 3024740 SCH 196390	N/A	N/A	N/A	N/A
403	N/A	N/A	N/A	N/A	N/A

PAI Copyright 2017

CPL #	4LHR TURBO	4LHR TURBO UNDER 580 HP	4LHR TURBO OVER 580 HP	4LHR TURBO UNDER 680 HP	4LHR TURBO OVER 680 HP
405	ETC-9296 CUM AR12789 CUM 3025391 CUM AR45428 CUM 3029514 CUM 3002723 CUM 3032068 CUM 3011902 CUM 3801904 CUM 3023900 SCH 196389 CUM 3024741	N/A	N/A	N/A	N/A
486	N/A	N/A	N/A	ETC-9289 CUM 3528281 CUM 3525325 CUM 3529041 CUM 3803270 SCH 197916	ETC-9297 CUM 3007688 SCH 196390 CUM 3018066 CUM 3024740 CUM 3032061 CUM 3801936
487	ETC-9289 CUM 3528281 CUM 3803270 CUM 3525325 SCH 197916 CUM 3529041	N/A	N/A	N/A	N/A
587	N/A	N/A	N/A	N/A	N/A
589	N/A	N/A	N/A	N/A	N/A
607	N/A	N/A	N/A	N/A	N/A
623	N/A	N/A	N/A	N/A	N/A
679	N/A	N/A	N/A	N/A	N/A
680	N/A	N/A	N/A	N/A	N/A
740	N/A	N/A	N/A	N/A	N/A
759	N/A	N/A	N/A	N/A	N/A
944	N/A	N/A	N/A	N/A	N/A
945	N/A	N/A	N/A	N/A	N/A
964	N/A	N/A	N/A	N/A	N/A
965	N/A	N/A	N/A	N/A	N/A
993	N/A	N/A	N/A	N/A	N/A
1176	N/A	N/A	N/A	N/A	N/A
1195	N/A	N/A	N/A	N/A	N/A
1593	N/A	N/A	N/A	N/A	N/A
1595	N/A	N/A	N/A	N/A	N/A
1596	N/A	N/A	N/A	N/A	N/A
1597	N/A	N/A	N/A	N/A	N/A
1656	N/A	N/A	N/A	N/A	N/A
1689	N/A	N/A	N/A	N/A	N/A
1690	N/A	N/A	N/A	N/A	N/A
1691	N/A	N/A	N/A	N/A	N/A
1692	N/A	N/A	N/A	N/A	N/A
1693	N/A	N/A	N/A	N/A	N/A

FIGURE 6519



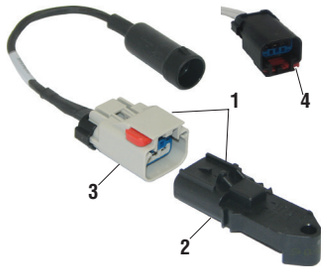
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	854050		N/A	ASSEMBLY,Connector(2 Pin / 2 Wire)	
2	854051		N/A	ASSEMBLY,Connector(3 Pin / 3 Wire)	
3	854052		N/A	ASSEMBLY,Connector(2 Pin / 2 Wire)	
4	854053		N/A	ASSEMBLY,Connector(3 Pin / 3 Wire)	
5	854054		N/A	ASSEMBLY,Connector(3 Pin / 3 Wire)	
6	854055		N/A	ASSEMBLY,Connector(3 Pin / 3 Wire)	

***Please Note:** For any Sensor that does not have a connector listed in the following tables, please call as we are adding new connectors frequently.

PAI Copyright 2017

Air Pressure

FIGURE 6424



KEY	PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
1	050651	CUM 3331044	KIT,Ambient Air Pressure Sensor Includes: Sensor (1)050653 Harness (1)050654
2	050653	CUM 4076493	SENSOR,Ambient Air Temperature (Included in Kit 050651)
3	050654	CUM 3104345	HARNESS,Sensor
4	854055	N/A	CONNECTOR,Mating(3 Pin 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050655	CUM 4902720	KIT,Ambient Air Pressure Sensor Includes: Sensor (1)050653 Harness (1)050654
854051	N/A	CONNECTOR,Mating(3 Pin 3 Wire)

Air Temperature

FIGURE 6464



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050669	CUM 4921473	SENSOR,Air Temperature
Call	N/A	CONNECTOR,Mating

Boost

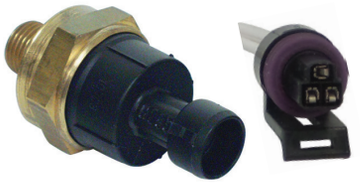
FIGURE 6431



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050644	**CUM 4921497 CUM 3348747**	**KIT,Sensor,Pressure,Boost Includes Sensor (1)050643 O-Ring (1)121210**
854053	**N/A**	**CONNECTOR,Mating (3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050649	**CUM 4921485**	**KIT,Sensor,Pressure,Boost Includes Sensor (1)050666 O-Ring (1)121227**
854051	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050652	**CUM 3084521**	**SENSOR,Pressure,Boost**
854053	**N/A**	**CONNECTOR,Mating (3 Pin / 3 Wire)**

Cam / Crank Position

FIGURE 6432



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050695	**CUM 2872277**	**KIT,Cam/Crank Position Sensor Includes Sensor (1)050693 O-Ring (1)321288**
Call		**CONNECTOR, Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050696	**CUM 2872279**	**KIT,Cam/Crank Position Sensor Includes Sensor (1)050694 O-Ring (1)321288**
Call		**CONNECTOR, Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050699	**CUM 4890190**	**KIT,Cam/Crank Position Sensor Includes Sensor (1)050697 O-Ring (1)EGA-3174**
Call		**CONNECTOR, Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050700	CUM 3408503	**SENSOR,Cam/Crank Position**
Call		**CONNECTOR, Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050703	**CUM 4921599**	**KIT,Sensor,Position,Cam/Crank Includes Sensor (1)050704 O-Ring (1)121317**
854054	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050705	**CUM 4921597**	**KIT,Sensor,Position,Cam/Crank Includes Sensor (1)050706 O-Ring (1)121376**
854054	**N/A**	**CONNECTOR,Mating (3 Pin / 3 Wire)**

PAI Copyright 2017

Crankshaft

FIGURE 6433



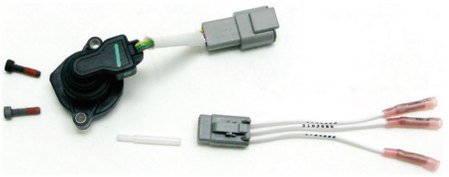
PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050590	**CUM 4984575**	**SENSOR,Breather,Crankshaft Includes O-Ring (1)321437**
Call	**N/A**	**CONNECTOR,Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050698	**CUM 4890189**	**SENSOR,Position,Crankshaft**
Call	**N/A**	**CONNECTOR,Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050701	CUM 4921601	KIT,Sensor,Position,Crankshaft Includes Sensor (1)050702 O-Ring (1)EGA-3174
854054	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050707	**CUM 4956084**	**KIT,Sensor,Position,Crankshaft Includes Sensor (1) Harness (1) Guide Pin (1)042032 Screw (1)040143**
854054	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**

Coolant Level

FIGURE 6434



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050673	CUM 4903489	SENSOR,Level,Coolant
Call	**N/A**	**CONNECTOR,Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050668	**CUM 3255122**	**SENSOR,Temperature,Coolant**
Call	**N/A**	**CONNECTOR,Mating**

EGR Pressure

FIGURE 6435



KEY	PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
1	050741	CUM 4921728	KIT,Sensor,Pressure,EGR Includes Sensor (1)050740 Sealing Ring (1)121402
2	050742	CUM 4903035	KIT,Sensor,Pressure,EGR Includes Sensor Kit (1) Wire Harness (1)050713
3	050713	CUM 3104227	HARNESS,Wire (Used w/ 050741 EGR Pressure Sensor)

Coolant Level

FIGURE 6436



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050630	CUM 4921519	SENSOR,Pressure,Fuel
854055	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050631	CUM 5297641	SENSOR,Pressure,Fuel
Call	N/A	CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050645	CUM 4921495	SENSOR,Pressure,Fuel
854053	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050646	CUM 4921499	SENSOR,Pressure,Fuel
854054	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)

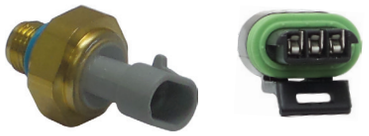


PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050647	CUM 4025130	KIT,Sensor,Fuel Includes Sensor (1)050648 Seal (1)136121
Call	N/A	CONNECTOR,Mating

PAI Copyright 2017

Map Sensor Kits

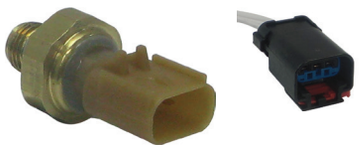
FIGURE 6437



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050601	CUM 4921505	KIT,Sensor,Map Includes Sensor (1)050600 O-Ring (1)121210
854051	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050603	CUM 4921505	KIT,Sensor,Map Includes Sensor (1)050602 O-Ring (1)121227
854051	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050605	CUM 4921519	KIT,Sensor,Map Includes Sensor (1)050604 O-Ring (1)121210
854055	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050607	CUM 4921503	KIT,Sensor,Map Includes Sensor (1)050606 O-Ring (1)121210
854054	N/A	CONNECTOR,Mating(3 Pin / 3 Wire)

Oil Pressure

FIGURE 6438



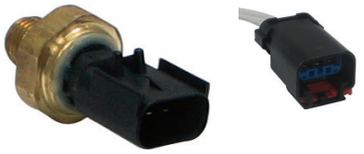
PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050638	**CUM 3967251**	**SENSOR,Pressure,Oil**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050650	CUM 3080406	SENSOR,Pressure,Oil
854054	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050656	CUM 4921511	KIT,Sensor,Pressure,Oil Includes Sensor (1)050663 O-Ring (1)121210
854054	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050657	**CUM 4921511**	**KIT,Sensor,Pressure,Oil(EGR) Includes Sensor (1) O-Ring (1)121210**
854055	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050665	**CUM 4076930**	**KIT,Sensor,Pressure,Oil(EGR) Includes Sensor (1)050664 O-Ring (1)121210**
Call	**N/A**	**CONNECTOR,Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050691	CUM 3408607	SWITCH,Pressure,Oil
854054	**N/A**	**CONNECTOR,Mating(3 Pin / 3 Wire)**

PAI Copyright 2017

Oil Temperature

FIGURE 6439



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050661	CUM 4921475	SENSOR,Temperature,Oil
Call	**N/A**	**CONNECTOR,Mating**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050680	**CUM 3015238**	**SENSOR,Temperature,Oil(0-250 Degrees)**
Call	**N/A**	**CONNECTOR,Mating**

Dual Pressure / Temperature

FIGURE 6440



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050626	CUM 2897334	KIT,Sensor,Dual,Pressure,Temperature Includes Sensor (1)050625 O-Ring (1)121383
Call	N/A	CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
	CUM 2897333	KIT,Sensor,Dual,Pressure,Temperature Includes Sensor (1)050633 O-Ring (1)121383
Call	N/A	CONNECTOR,Mating



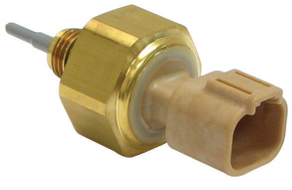
PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050640	CUM 3401006	KIT,Sensor,Dual,Pressure,Temperature Includes Sensor (1)050639 O-Ring (1)121282
Call	N/A	CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050660	CUM 3330141	KIT,Sensor,Dual,Pressure,Temperature Includes Sensor (1)050667 O-Ring (1)121282
854054	N/A	CONNECTOR,Mating(3 Pin 3 Wire)



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050636	CUM 42921483	KIT,Sensor,Dual Pressure,Temperature Includes Sensor (1)050635 O-Ring (1)121282
Call	N/A	CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050682	CUM 4921479	KIT,Sensor,Dual Pressure,Temperature Includes Sensor (1)050681 O-Ring (1)121210
Call	N/A	CONNECTOR,Mating

PAI Copyright 2017

FIGURE 6441



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050627	**CUM 4954245**	**KIT,Sensor,Fuel,Temperature**
Call	N/A	CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050641	CUM 4088712	KIT,Sensor,Temperature(EGR) Includes Sensor (1)050642 Gasket (1)131789
Call		CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050659	**CUM 4088712**	**KIT,Sensor,Temperature(EGR) Includes Sensor (1)050662 O-Ring (1)121210**
854055	**N/A**	**CONNECTOR,Mating(3 Pin 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050670	CUM 3865312	KIT,Sensor,Temperature(EGR) Includes Sensor (1)050662 O-Ring (1)121210
854050	**N/A**	**CONNECTOR,Mating(2 Pin 2 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050671	CUM 3085185	SENSOR,Temperature
854052	**N/A**	**CONNECTOR,Mating(2 Pin 2 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050672	CUM 3865346	SENSOR,Temperature
854050	**N/A**	**CONNECTOR,Mating(2 Pin 2 Wire)**

Temperature

FIGURE 6441



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050675	CUM 3408346	KIT,Sensor,Temperature Includes Sensor (1)050674 O-Ring (1)121210
854052	**N/A**	**CONNECTOR,Mating(2 Pin 2 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050676	**CUM 4088832**	**KIT,Sensor,Temperature Includes Sensor (1)050677 O-Ring (1)121210**
854052	**N/A**	**CONNECTOR,Mating(2 Pin 2 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050678	**CUM 4897224**	**KIT,Sensor,Temperature Includes Sensor (1)050677 O-Ring (1)121210**
Call		CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050679	**CUM 3613547**	**SENSOR,Temperature**
854052	**N/A**	**CONNECTOR,Mating(2 Pin 2 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050690	**CUM 3408631**	**SWITCH,Temperature**
854054	**N/A**	**CONNECTOR,Mating(3 Pin 3 Wire)**



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050730	**CUM 2872858**	**SENSOR,Temperature,Exhaust**
Call	N/A	CONNECTOR,Mating

Temperature Sensors continued on following page

PAI Copyright 2017

Temperature

FIGURE 6442



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050731	**CUM 4954574**	**SENSOR,Temperature,Exhaust**
Call		CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050732	**CUM 4902912**	**SENSOR,Temperature,Exhaust**
Call		CONNECTOR,Mating



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050780	**CUM 3967250**	**SENSOR,Temperature,Coolant**
Call		CONNECTOR,Mating

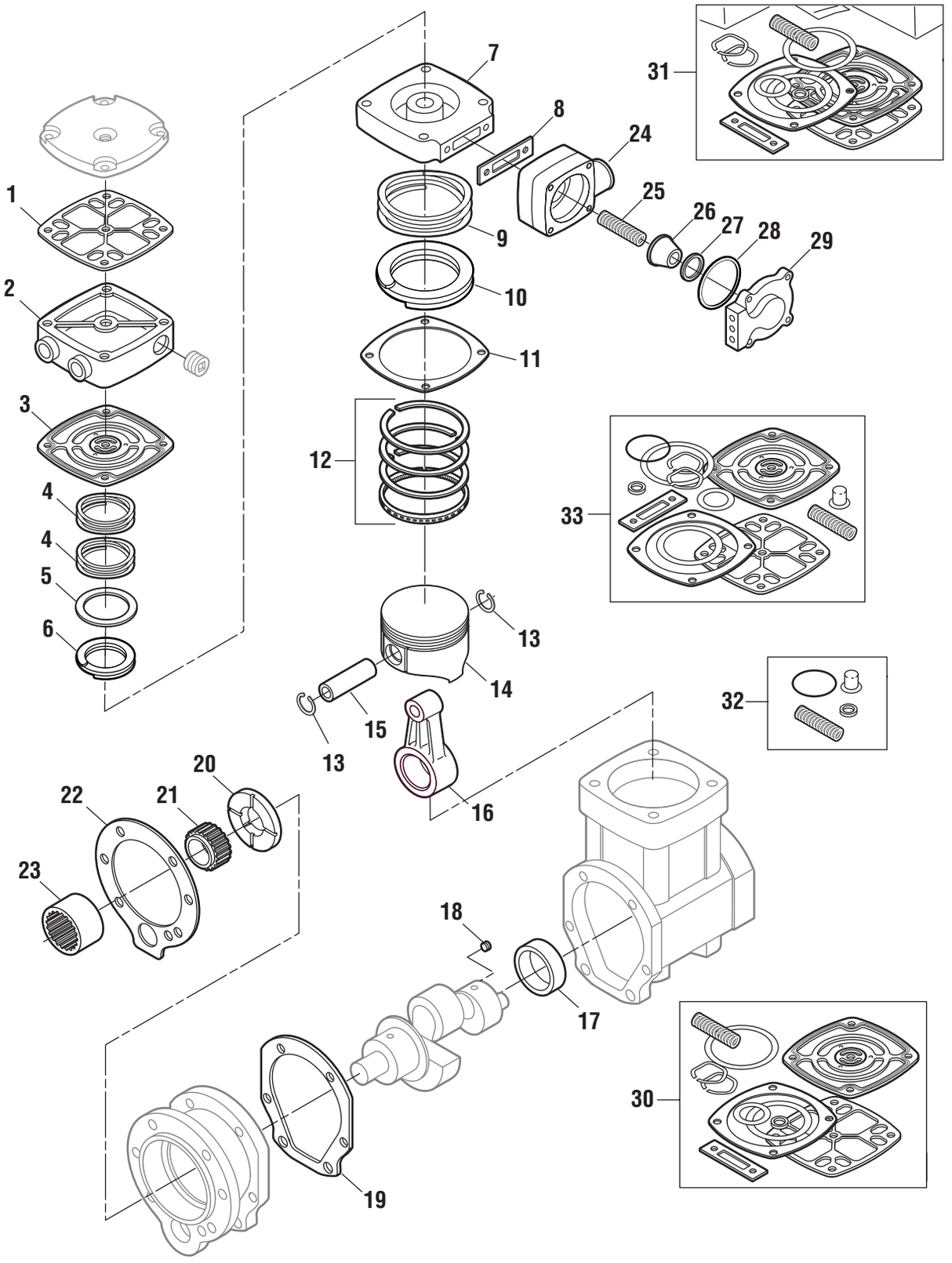
Speedometer

FIGURE 6443



PAI / EXCEL REF.	OEM REFERENCE	DESCRIPTION
050621	**CUM 4032806**	**KIT,Sensor,Speedometer** **Includes Sensor (1)050620** **Screw (1)040077** **Clips (2)121130**
Call	N/A	CONNECTOR,Mating

FIGURE 6862



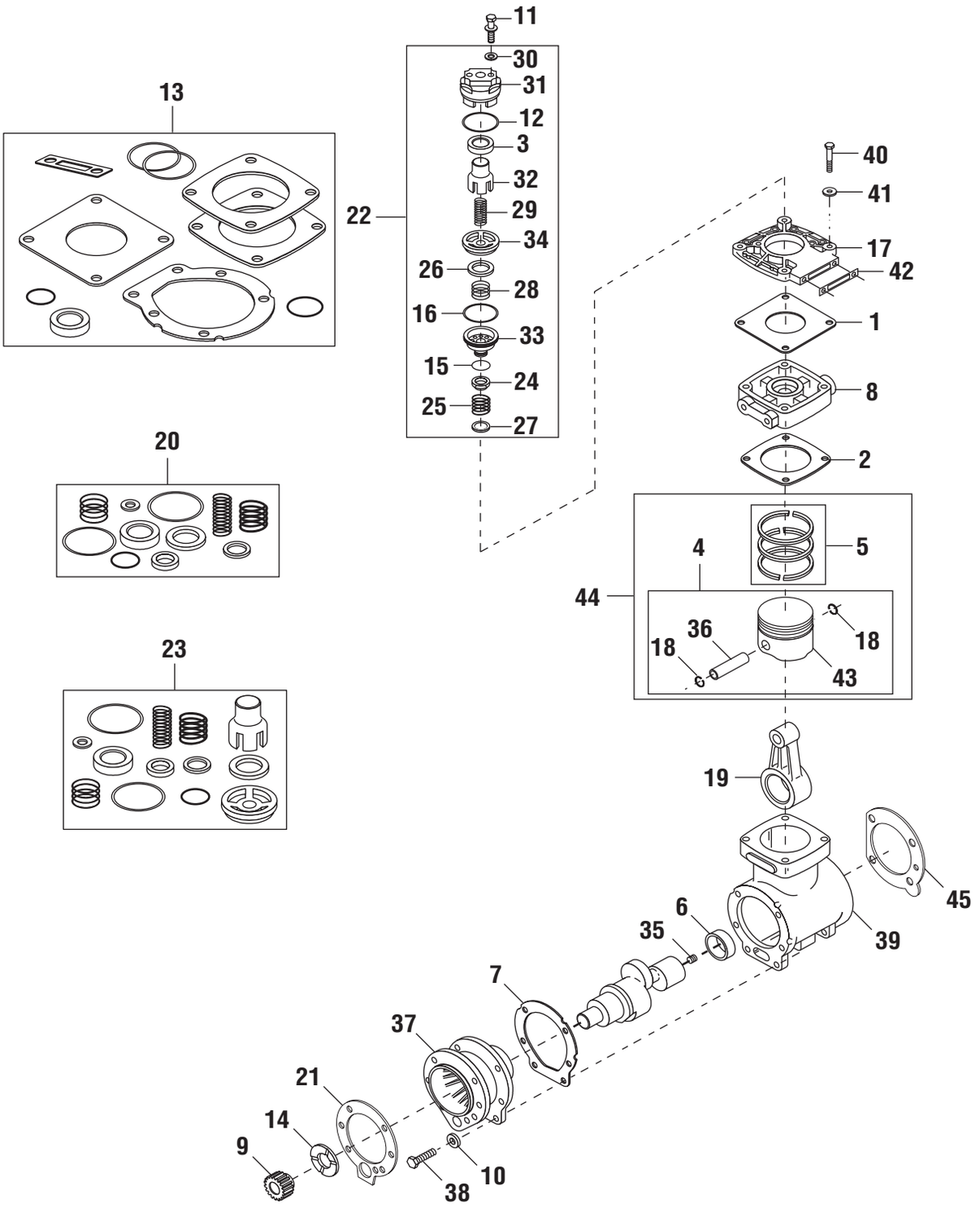
PAI Copyright 2017

QE Series

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	220140		CUM 3559049	GASKET	CUM 3558677
2	Call		CUM 3558817	HEAD,Compressor	
3	220141		CUM 3559133	GASKET	CUM 3559096
4	141337		CUM 3558691	SPRING,Washer,Wave	
5	Call		CUM 3558690	RETAINER,Valve Disc	
6	220125		CUM 3558665	VALVE,Compressor Exhaust	
7	220085		CUM 3558799	BODY,Compressor Valve	
8	131700		CUM 3558723	GASKET	
9	220126		CUM 3558664	VALVE,Compressor Intake	
10	220127		CUM 3558899	RETAINER,Intake Valve	
11	131543		CUM 3058952	GASKET,Head	
12	220065		CUM 3803880	SET,Compressor Piston Ring(STD)(QE 338)	
12	220066		CUM 3803881	SET,Compressor Piston Ring(.010)(QE 338)	
12	220067		CUM 3803882	SET,Compressor Piston Ring(.020)(QE 338)	
12	220068		CUM 3803883	SET,Compressor Piston Ring(.030)(QE 338)	
13	042062		CUM 3558754	RING,Retaining	
14	220070		CUM 3803890	KIT,Piston(STD)(QE 338) Includes Piston (1) Pin (1)220005 Retainers (2)042062 Ring Set (1)220065	
14	220071		CUM 3803891	KIT,Piston(.010)(QE 338) Includes Piston (1) Pin (1)220005 Retainers (2)042062 Ring Set (1)220066	
14	220072		CUM 3803892	KIT,Piston(.020)(QE 338) Includes Piston (1) Pin (1)220005 Retainers (2)042062 Ring Set (1)220067	
14	220073		CUM 3803893	KIT,Piston(.030)(QE 338) Includes Piston (1) Pin (1)220005 Retainers (2)042062 Ring Set (1)220068	
15	220005		CUM 119810	PIN,Piston	
16	220090		CUM 3018151	ROD,Connecting	CUM 3558982
17	151485		CUM 147610	BUSHING	
18	EPP-3572		MAK 49AX242	PLUG	CUM 3038081
19	131544		CUM 3558947	GASKET,Support	CUM 3060538
20	151523		CUM 211662	WASHER,Thrust	
21	180926		CUM 3000174	COUPLING	
22	131367		CUM 3069102	GASKET,A/C Support(Paper)	
22	131591		CUM 3076226	GASKET,A/C Support(Edge Molded)	
23	180928		CUM 199349	SLEEVE	
24	220086		CUM 3558830	HOUSING,Inlet	
25	141336		CUM 3049553	SPRING,Unloader	
26	220088		CUM 184240	CAP,Unloader	
27	136029		CUM 127936	SEAL,Unloader	
28	121248		CUM 3043995	O-RING	
29	220087		CUM 3558828	BODY,Unloader	
30	220027		CUM 3559549	KIT,Compressor Repair	
31	220028		CUM 3559557	KIT,Compressor Repair Includes Repair Kit (1)220027 Valve Body (1)220085 Housing (1)220086 Unloader Body (1)220087 Cap (1)220088	
32	220038		CUM 3803766	KIT,Valve Repair(QE 296)	
33	220039		CUM 3803767	KIT,Compressor Head Repair(QE 296)	

13.2 CFM Model SS296

FIGURE 6851



PAI Copyright 2017

13.2 CFM Model SS296

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	131438		CUM 3047159	GASKET,Air Compressor	CUM 154996
2	131439		CUM 154018	GASKET,Air Compressor Head	
2	131543		CUM 3058952	GASKET,Air Compressor Head	
3	136029		CUM 127936	SEAL,Unloader,Rectangular	
4	220010		CUM 3801740	KIT,Piston(STD)(Pin & Retainers Only)	CUM BM77410
4	220011		CUM 3801741	KIT,Piston(.010in)(Pin & Retainers Only)	
4	220012		CUM 3801742	KIT,Piston(.020in)(Pin & Retainers Only)	
4	220013		N/A	KIT,Piston(.030in)(Pin & Retainers Only)	
5	220060		CUM AR73350	SET,Ring(STD)	CUM AR4130
5	220061		CUM AR73351	SET,Ring(.010in)	CUM AR4131
5	220062		CUM AR73352	SET,Ring(.020in)	CUM AR4132
5	220063		CUM AR73353	SET,Ring(.030in)	CUM AR4133
6	151485		CUM 147610	BUSHING	
7	131544		CUM 3558947	GASKET,Mounting	
8	220102		CUM 3558762	HEAD,Compressor	CUM 3558703
9	180926		CUM 3000174	COUPLING,Spline Hub	
10	GWA-0062		MAK 37AX472U	WASHER,Flat(3/8in)	CUM S-602
11	Call		CUM 3021470	SCREW	
12	121248		CUM 3043995	O-RING	
13	131430		CUM AR73308	SET,Gasket Includes Gaskets (2)131439 (1)131438 (1)131377 (1)131544 O-Rings (1)121245 (2)121246 (1)EGS-3895-007 Seal (1)136029	
14	151523		CUM 211662	WASHER,Thrust	CUM 199348
15	121245		CUM 128085	O-RING	
16	121246		CUM 128086	O-RING	
17	220100		CUM 153964	COVER	
18	042062		CUM 3558754	RING,Retaining(Use w/ Key 4)(Qty 2)	CUM 119859
19	220090		CUM 3018151	ROD,Connecting (Non-Bushing design)	CUM 3011891
20	220030		CUM AR12719	KIT,Unloader Repair(Minor) Includes Seal (1)136029 Valves (1)220030-001 (1)220030-003 Springs (1)220030-002 (1)220030-005 (1)220030-006 O-Rings (1)121246 (1)121248 (1)121245 (1)EGS-3895-007 Plate (1)220030-004 Washers (2)220030-007	
21	131367		CUM 3069102	GASKET,A/C Support(Paper)	
21	131591		CUM 3076226	GASKET,A/C Support(Edge Molded) (Edge Molded - Steel)	
22	220035		CUM 3801728	KIT,Unloader Repair(Major) Includes Minor Kit (1)220030 Caps (1)220031 (1)220032 Seats (1)220033 (1)220034	
23	220036		CUM 3801733	KIT,Unloader(Major Less Unloader Cap) Includes Minor Kit (1)220030 Cap (1)220032 Seats (1)220034 (1)220033	
24	220030-001		CUM 127940	VALVE,Exhaust	
25	220030-002		CUM 128080	SPRING	CUM 150187
26	220030-003		CUM 144948	VALVE,Intake	
27	220030-004		CUM 183429	PLATE,Wear	
28	220030-005		CUM 190334	SPRING,Valve	CUM 144308
29	220030-006		CUM 3023101	SPRING,Compression	CUM 217557
30	220030-007		CUM 109557	WASHER,Plain	
31	220031		CUM 3046298	CAP,Unloader Body	CUM 163369
32	220032		CUM 191037	CAP,Unloader Valve	
33	220033		CUM 3043945	SEAT,Compressor Exhaust Valve	CUM 144714
34	220034		CUM 145028	SEAT,Intake Valve	
35	EPP-3572		MAK 49AX242	PLUG,Pipe	CUM 3038081
36	220005		CUM 119810	PIN,Piston	
37	Call		CUM 3005153	SUPPORT,Air Compressor	
38	Call		CUM 3010596	SCREW	
39	Call		CUM 176025	CRANKCASE,Compressor	
40	Call		CUM 3558761	SCREW	

Please see following page for keys 41-45.

PAI Copyright 2017

13.2 CFM Model SS296

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
41	Call		CUM S-626	WASHER	
42	131377		CUM 3201386	GASKET	NAV 370362C1
43	220006		CUM 3045670	PISTON(STD)	CUM 146250
43	220007		CUM 3045671	PISTON(+.010in)	CUM 165431
43	220008		CUM 3045672	PISTON(+.020in)	CUM 165432
43	220009		CUM 3045673	PISTON(+.030in)	CUM 165433
44	220014		CUM 3803930	KIT,Piston(w/ Rings)(STD)	
44	220015		CUM 3803931	KIT,Piston(w/ Rings)(.010in)	
44	220016		CUM 3803932	KIT,Piston(w/ Rings)(.020in)	
44	220017		CUM 3803933	KIT,Piston(w/ Rings)(.030in)	
45	131368		CUM 4026171	GASKET,Fuel Pump(Mounting)	

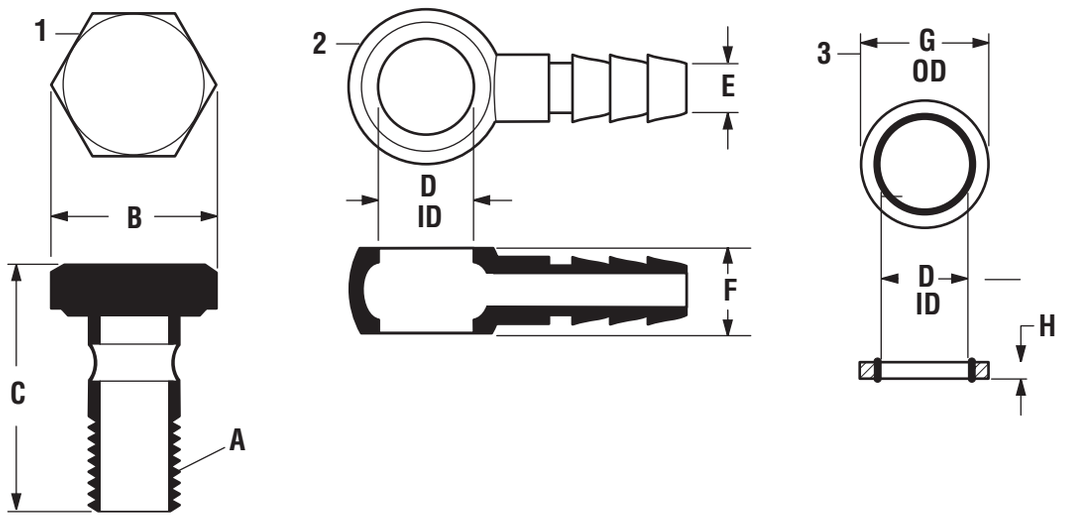
Twin Cylinder ST676 / ST773

FIGURE 6852

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	220037		CUM 3801731	KIT,Overhaul(Major)	

Compression Assembly Fuel Fittings

FIGURE 6865

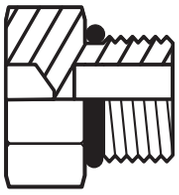


KEY	PAI/EXCEL REFERENCE	OEM REFERENCE	DESCRIPTION	A THREAD	B HEX	C LENGTH	D ID	E TUBE SIZE	F HEIGHT	G OD	H THICKNESS
1	042180	CUM 3924725	SCREW	14mm x 1.5	20mm	25mm	—	—	—	—	—
2	**042171**	**CUM 3911447**	**FITTING**	—	—	—	**14mm**	**8mm(5/16in)**	**14mm**	—	—
2	042170	CUM 3355095	FITTING	—	—	—	14mm	12mm(1/2in)	14mm	—	—
3	**336060**	**CAT 114-3364**	**SEAL**	—	—	—	**3mm**	—	—	**9.7mm**	**.96mm**
3	**136063**	**CUM 3918188**	**SEAL**	—	—	—	**8mm**	—	—	**13.4mm**	**1.3mm**
3	136101	CUM 3918190	SEAL	—	—	—	10mm	—	—	16.4mm	2mm
3	136102	CUM 3918191	SEAL	—	—	—	12mm	—	—	18.3mm	1.2mm
3	136103	CUM 3918192	SEAL	—	—	—	14mm	—	—	20.3mm	1.2mm
3	**836005**	**MAK 20852765**	**SEAL**	—	—	—	**16mm**	—	—	**24mm**	**1.5mm**
3	**136100**	**CUM 3963991**	**SEAL**	—	—	—	**16mm**	—	—	**27mm**	**1.52mm**

PAI Copyright 2017

Straight Thread O-Ring Boss Plugs(Metric)

FIGURE 6867



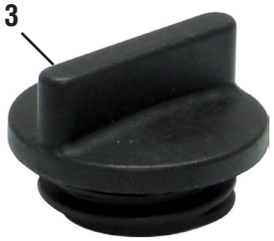
PAI REFERENCE	EXCEL NO.	OEM REFERENCE	THREAD SIZE	HEX DRIVE (Internal)	O-RING PART NO.	MATERIAL	REFERENCE INFORMATION
Call		N/A	x 1	4	---	Steel	
Call		N/A	M10 x 1	5	---	Steel	
050570* 050571**		CUM 3678610 CUM 3678602	M12 x 1.5	6	121289 ---	Steel	MAK 6635-VSTI12X15OR
050572* 050573**		CUM 3680420 CUM 3680419	M14 x 1.5	6	121210 ---	Steel	MAK 6635-VSTI14X15OR
050574* **050575****		**CUM 3089567** **CUM 3089568**	**M16 x 1.5**	**8**	**121321**	**Steel**	**MAK 6635-VSTI16X150R**
050576* **050577****		**CUM 3678873** **CUM 3678791**	**M18 x 1.5**	**8**	**121298** ---	**Steel**	**MAK 6635-VSTI18X150R**
050578* **050579****		**CUM 3089238** **CUM 3089239**	**M22 x 1.5**	**10**	**121205** ---	**Steel**	**MAK 6635-VSTI22X150R**
Call		N/A	M26 x 1.5	12	---	Steel	
050580* 050581**		CUM 3678611 CUM 3678605	M27 x 2	12	121366 ---	Steel	MAK 6635-VSTI27X2OR CUM 4926564
050582* **050583****		**PKR VSTI33X20R71** **N/A**	**M33 x 2**	**14**	**121374** ---	**Steel**	**MAK 6635-VSTI33X20R71**
Call		N/A	M42 x 2	22	---	Steel	
Call		N/A	M48 x 2	24	---	Steel	

*Supplied w/ O-Ring - **Supplied w/o O-Ring

FIGURE 6868





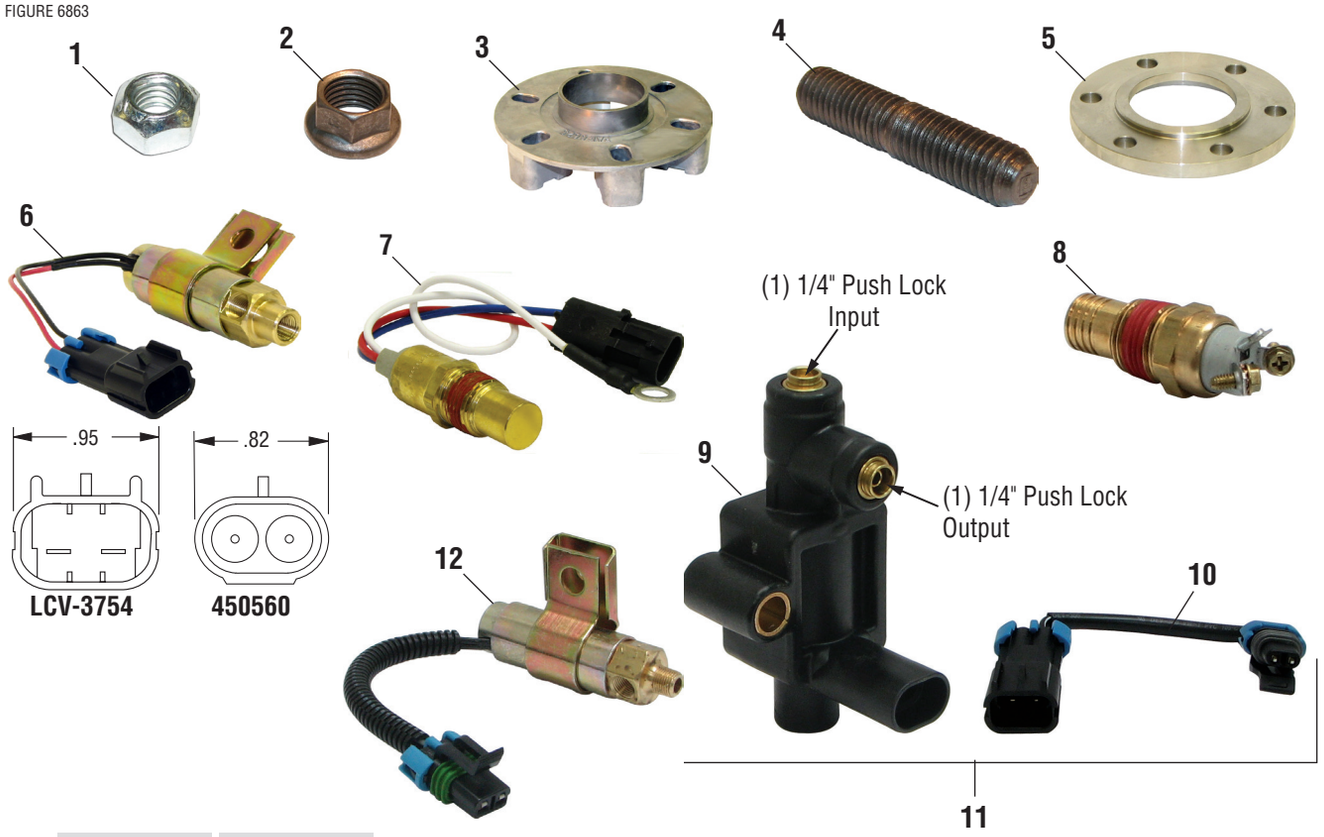




KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	EFC-8551		CUM 107981	CAP,Oil Fill(2in, w/ chain)(Bottle Stopper type) (855, N14, K Series)	MAK 222GB214
1	EFC-8552		CUM 101322	CAP,Oil Fill(2in, w/o chain)(Bottle Stopper type) (L10, 4B, QSB, ISB, ISF, ISD Series)	MAK 222GB27A
2	040081		CUM 3902468	CAP,Oil Fill (6C, ISC, ISL, QSL Series)	
3	**141380**		**CUM 4962608**	**CAP,Oil Fill (4B, ISB, QSB, ISD, ISF Series)**	
4	141290		CUM 216484	DIPSTICK,Universal (855, N14, L10, K, QSK, 903 Series)	CUM 155015

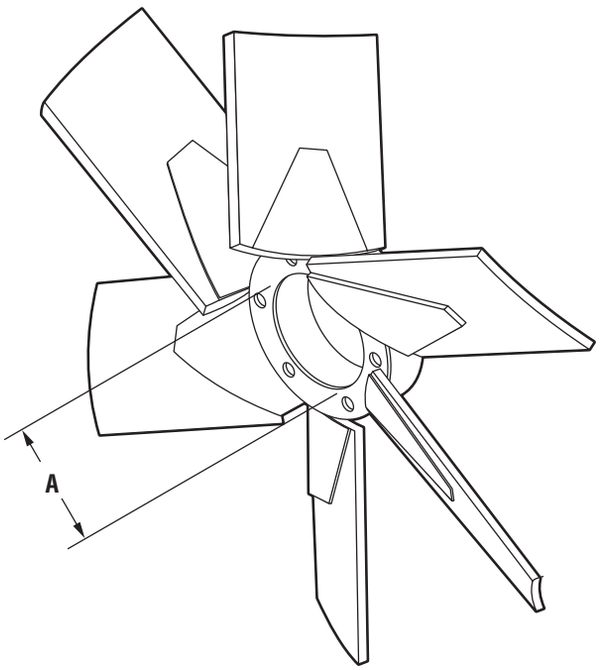
PAI Copyright 2017

FIGURE 6863



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	040064		CUM 142176	NUT,Locking(1-1/8in-12)	CUM 3874844
1	BNU-0278		MAK 8235-NL251	NUT,Locking(5/16in-18)	MAK 23AX332
2	ENU-0202		MAK 21AX856	NUT(3/8in x 24)(E6)	
2	ENU-0422		MAK 191AM2	NUT(M8-1.25)(E7)	
3	ESP-8625		N/A	ADAPTER(For use w/Fiberglass Fan)	
4	EST-0042		MAK 16AX824	STUD,Fan Clutch Mounting(E6) (3/8in-24NF x 1-7/16in)	MAK 16AX883
4	EST-0414		MAK 107AM5019	STUD,Fan Clutch Mounting(E7) (M8 x 1.25 x 40)	
5	ESP-8621		MAK 24MH163	SPACER(5/16in thk) (Used w/Fan EFN-8638 to replace Fan EFN-1650)	
6	450560	**450560E**	NAV 1689785C91	VALVE,Air Solenoid	
6	LCV-3754	**EM37540**	MAK 20QE3373	VALVE,Air Solenoid,Complete (For Horton)(12V)	
7	450541		NAV 1684560C92	SWITCH,Fan(1/2in Thread)	
8	450542		NAV 1685132C92	SWITCH,Fan(1/2in Thread)(N/C 195 deg)	
8	**853731**		**MAK 3912-993603**	**SWITCH,Fan(1/2in thread)(N/C 190 deg)**	**MAK 3912-983617**
8	**853732**		**MAK 3912-993606**	**SWITCH,Fan(1/2in thread)(N/C 200 deg)**	**MAK 3912-983620**
8	**853733**		**MAK 3912-993607**	**SWITCH,Fan(1/2in thread)(N/C 205 deg)**	**NAV 1653652C91**
8	**853734**		**MAK 3912-993610**	**SWITCH,Fan(3/8in thread)(N/O 195 deg)**	**MAK 3912-983624**
8	**853735**		**MAK 3912-993615**	**SWITCH,Fan(1/2in thread)(N/O 180 deg)**	**MAK 3912-983629**
8	**853736**		**MAK 3912-993616**	**SWITCH,Fan(1/2in thread)(N/O 185 deg)**	**MAK 3912-983630**
8	**853737**		**MAK 3912-993617**	**SWITCH,Fan(1/2in thread)(N/O 190 deg)**	**MAK 3912-983631**
8	**853738**		**MAK 3912-993619**	**SWITCH,Fan(1/2in thread)(N/C 185 deg)**	**MAK 3912-983651**
8	**853739**		**MAK 3912-993653**	**SWITCH,Fan(1/2in thread)(N/O 195 deg)**	**MAK 3912-983659**
8	**853740**		**MAK 3912-993654**	**SWITCH,Fan(1/2in thread)(N/O 200 deg)**	**MAK 3912-983660**
8	**853741**		**MAK 3912-993655**	**SWITCH,Fan(1/2in thread)(N/O 205 deg)**	**MAK 3912-983661**
9	845050		MAK 9538-5030111	VALVE,Air Solenoid (12 VDC)(2 Pin)(N/C Input)	MAK 20QE3408M, MAK 9538-5030111B
10	845051		MAK 20856026	HARNESS,Solenoid(2 Pin)	
11	845052		N/A	KIT,Air Solenoid Includes Valves (1)845050 & Harness (1)845051	
12	**740420**	**740420E**	**FTL A06-26631-000**	**VALVE,Air Solenoid(12 VDC)(N/O) (2)1/8in NPTF Female (1)1/8in NPTF Male**	

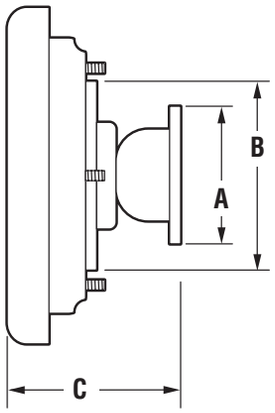
FIGURE 6860



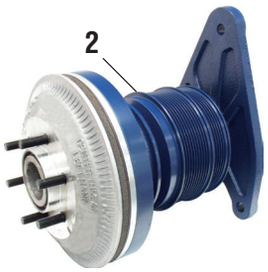
 PAI Copyright 2017

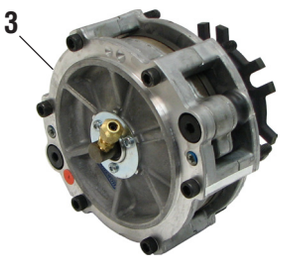
PAI REFERENCE	EXCEL NO.	OEM REFERENCE	MATERIAL	FAN PILOT DIA. (A)	BLADES	FAN DIAMETER
EFN-8615		MAK 2MH414P23	Steel	2.56in	5	21in
EFN-8616		MAK 2MH414P56	Fiberglass	2in	6	23in
EFN-8618		MAK 2MH414P70 SCH 911901	Steel	2.56in	5	23in
EFN-8636		MAK 2MH48P41	Fiberglass	2.56in	6	23in
181945		CUM 3911320	Nylon	1in	7	24in
EFN-8617		MAK 2MH414P64	Fiberglass	2in	6	24in
EFN-8637		MAK 2MH48P40	Steel	2.56in	6	24in
EFN-8707		MAK 2MH460	Fiberglass	2.56in	9	24in
EFN-8767		MAK 2MH443	Nylon	5in	6	24in
EFN-8577		MAK 2MH360M SCH 917239	Nylon	5in	7	24in
EFN-8638		MAK 2MH429 SCH 916535	Aluminum	5in	8	24in
EFN-8768		MAK 2MH453	Nylon	5in	8	26in
801120		**MAK 2MH365**	**Nylon**	**5in**	**8**	**26in**
801121		MAK 2MH368	Nylon	2.50in	9	26in
EFN-8709		MAK 2MH444	Nylon	2.56in	8	26in
801122		**MAK 2MH446**	**Nylon**	**5in**	**8**	**26in**
EFN-8685		MAK 2MH445	Steel	5in	8	26in
EFN-8571		**MAK 2MH367M**	**Nylon**	**7in**	**8**	**26.75in**
EFN-8759		NAV 1610891C2 NAV 481976C1	Nylon	2in	8	28in
801124		**MAK 85111558**	**Nylon**	**10in**	**11**	**29.50in**
801125		**MAK 2MH517M**	**Nylon**	**2.56in**	**11**	**29in**
801123		**VOL 20477428**	**Fiberglass**	**2.56in**	**11**	**29.75in**
EFN-8755		NAV 2010884C1	Nylon	2in	9	30in
801126		**VOL 3973733**	**Nylon**	**2.56in**	**8**	**30in**
EFN-8754		NAV 2005452C1	Nylon	2.56in	9	30in
450464		**NAV 2022048C1**	**Nylon**	**3in**	**9**	**30in**
EFN-8756		NAV 2000729C2	Nylon	5in	9	30in
EFN-8758		NAV 3507486C1	Nylon	2.56in	9	31in
EFN-8757		NAV 3507485C1	Nylon	5in	9	31in
450466		**NAV 1647411C3**	**Nylon**	**5in**	**6**	**32in**
EFN-8706		MAK 2MH29304	Steel	7in	8	32in
450465		**NAV 3625639C1**	**Nylon**	**2.56in**	**9**	**32in**

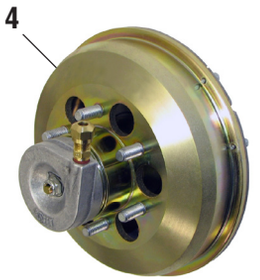
FIGURE 6861



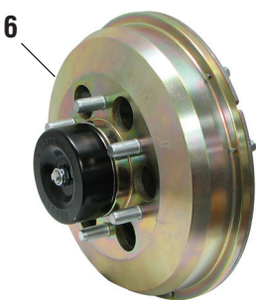












PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	APPLICATION	ACTUATION	HUB DIA. (A)	FAN PILOT DIA. (B)	LENGTH (C)	MAXIMUM FAN DIA (D)
1	**EFC-1556**		**MAK 38MH322M2**	**Mack**		**4.14in**	**5in**	**4.37in**	**26in**
1	**EFC-1562**		**NAV 2601973C1**	**International**		**2.58in**	**6in**		
1	**EFC-1563**		**NAV 2602193C1**	**International**		**2.85in**	**6in**		
1	EFC-1584	**EM15840**	MAK 38MH423AM	Mack E-Tech		2.56in	5in	3.48in	26in
1	EFC-1592 **EFC-1592B**		NAV 2001023C1	International DT466,175-250hp		1-1/4in-16 thd	5in	5.30in	26in
1	EFC-1628		MAK 7536-167118 NAV 1689481C1	International DT466,170hp		3/4in-16 thd	5in	4.50in	23-26in
1	EFC-1629		MAK 7536-197879 NAV 1651724C1	International DT466,250hp		2in	5in	3.48in	23-26in
1	EFC-1638		MAK 7536-187242	Caterpillar		2in	5in	3.18in	23-24in
1	EFC-1640 EFC-1640B		MAK 38MH416 SCH 183125	Mack E6	155	2.56in	5in	3.48in	21-26in
1	EFC-1642		MAK 1MH29305P2 SCH 183145	Cummins		2in	7in	3.73in	30-32in
1	EFC-1643 EFC-1643B		MAK 38MH416P2	Mack E6, E7	175	2.56in	5in	3.48in	21-26in
1	EFC-1645 EFC-1645B		MAK 38MH414M	Mack E7		2.56in	5in	4.19in	26in
1	EFC-1646		MAK 38MH315A SCH 197876	Mack E9-500		1.62in	7in	1.97in	32in
1	**450530**		**NAV 3522786C4**	**International**		**1-1/4in-16 thd**	**5in**	**5.31in**	
1	**450531**		**NAV 3540116C4**	**International**		**1-1/4in-16 thd**	**5in**	**5.56in**	
1	**450532**		**NAV 3584438C3**	**International**		**1-1/4in-16 thd**	**5in**	**4.71in**	
2	**EFC-1564** **EFC-1564X***		**MAK 40MH441M** **HTN 999474**	**Mack ASET**		**2.56in**	**3.50in**	**7.37in**	**26in**
2	EFC-1565		MAK 40MH440M HTN 999473	Mack ASET		2.56in	3.50in	7.37in	32in
2	EFC-1594		HTN 999357 MAK 3912-999357	Mack ASET		2.56in	3.50in	9.40in	26in
3	EFC-1607	**EM16070**	HTN 991451 MAK 40MH48	Mack E7		2.56in	5in	4.74in	26in
4	**EFC-1492***		**MAK 40MH52**	**Mack**			**2.56in**	**4in**	
4	EFC-1593	EM15930	MAK 40MH51	Mack E-Tech		2.56in	2.56in	–	26in
5	EFC-1567		MAK 38MH425AM	Mack ASET		4.18in	7in	5.25in	26in
5	**EFC-1558**		**MAK 38MH428M**	**Mack ASET**		**4.18in**	**7in**	**5.25in**	**26in**
5	**801094**		**MAK 85115602** **HTN 376791221**	**Mack / Volvo MP**		**4.96in**		**6.63in**	
5	**801095**		**MAK 85115603**	**Mack MP**		**4.96in**		**6.5in**	
5	**801096**		**MAK 85115604** **HTN 376791241**	**Mack / Volvo MP**			**9.25in**	**6.63in**	
5	**801097**		**MAK 85111561** **HTN 376791201**	**Mack / Volvo MP**		**4.96in**	**7.00in**	**6.38in**	
5	**801098**		**MAK 85111563** **HTN 376791211**	**Mack / Volvo MP**		**4.96in**	**7.00in**	**6.25in**	
6	**EFC-1454***		**MAK 4769-** **1090095001**				**2.56in**	**4in**	
6	**450533**		**NAV 2602141C91**				**2.50in**	**3.85in**	

* Reman

Part numbers with 'B' note PAI brand Fan clutch.

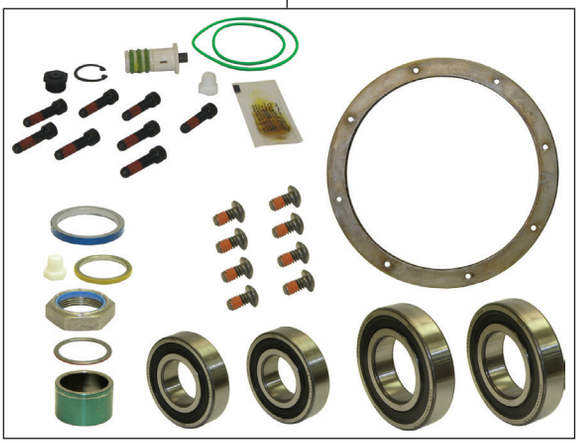
Repair Kits

FIGURE 6864

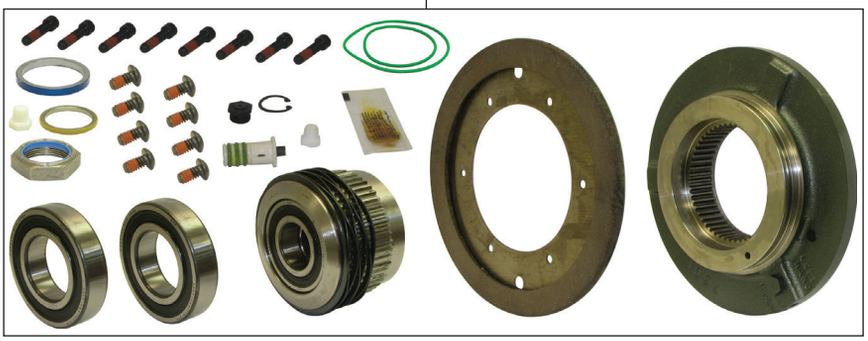
1



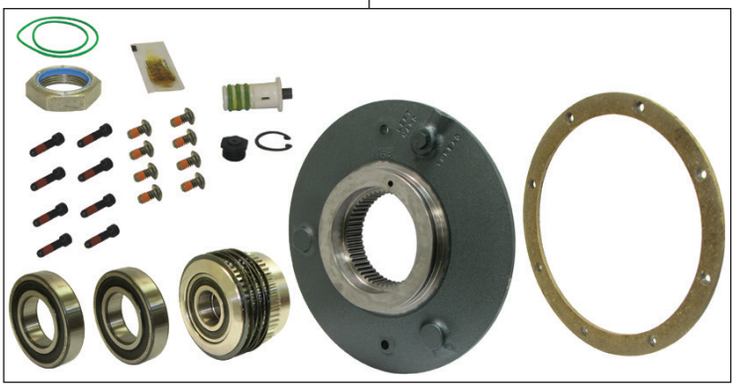
3



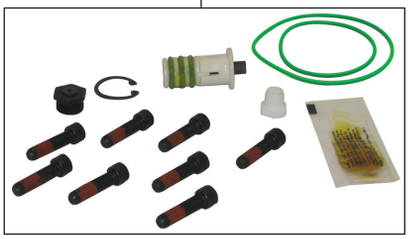
2



4



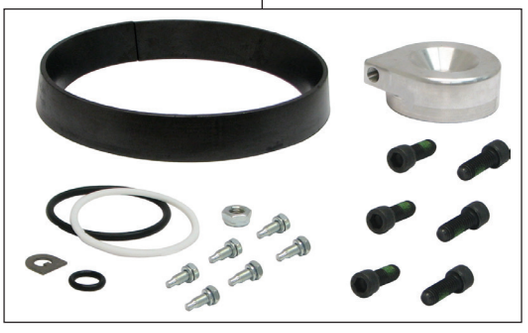
5



6



7



New Parts are in BOLD text

PAI Copyright 2017

Fan Clutch Repair Kits

8



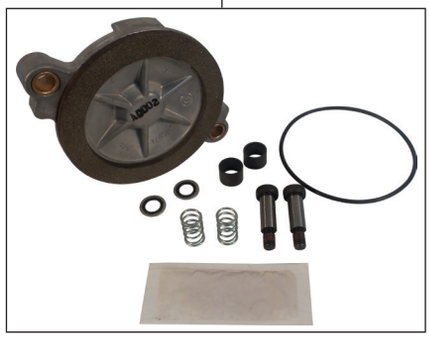
9



10



11



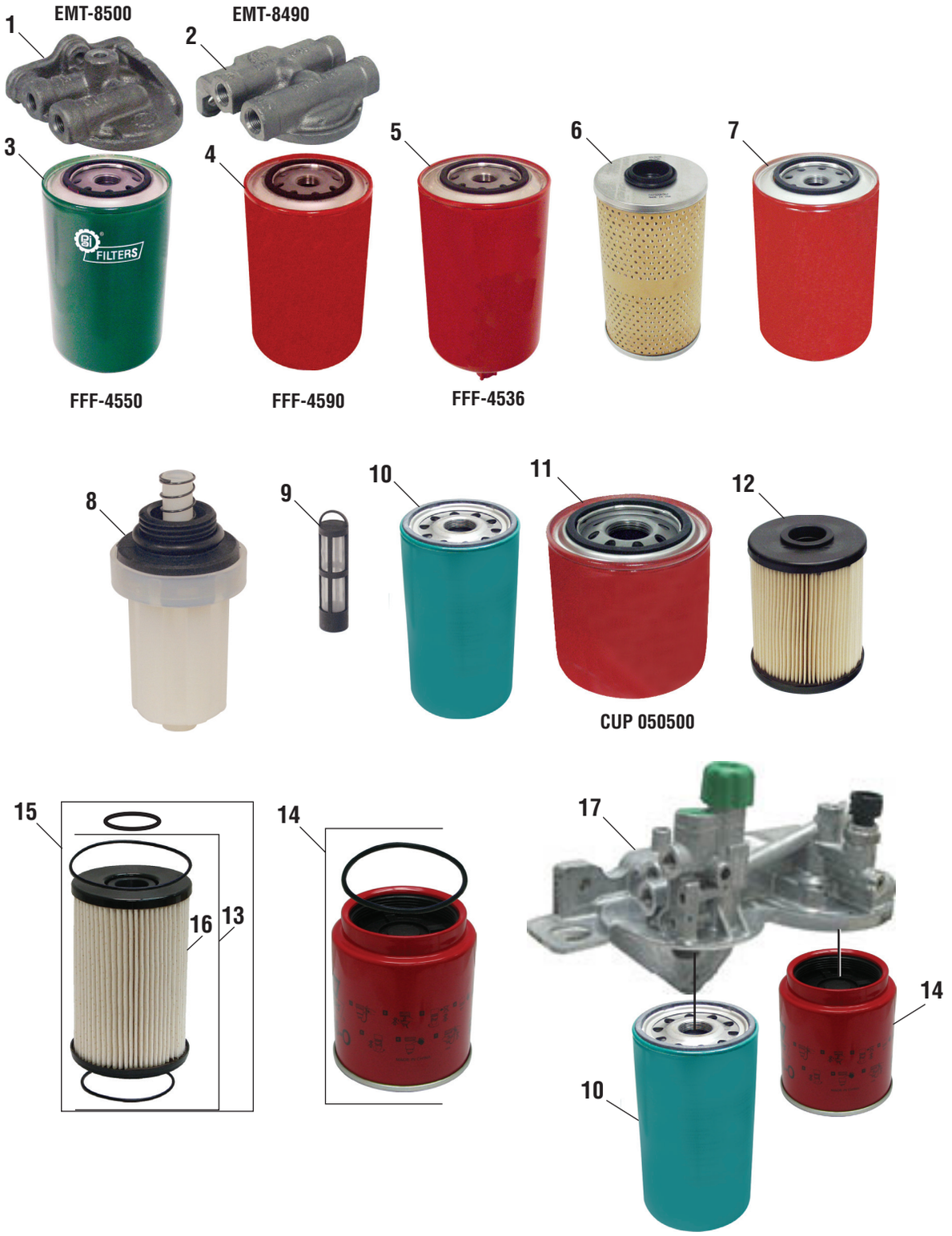
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	ECK-1573		HTN 995033	KIT,Fan Clutch Repair	
2	ECK-1576	EM15760	HTN 994307	KIT,Fan Clutch Repair (Fits 7.5in S Series)	MAK 3912-994307
3	ECK-1577		HTN 994206	KIT,Fan Clutch Repair	
4	ECK-1578	EM15780	HTN 994305	KIT,Fan Clutch Repair (Fits 9.5in Fan Clutch)	MAK 3912-994305
5	ECK-1579	EM15790	HTN 994205	KIT,Fan Clutch Repair (Fits any S & ST Series)	
6	ECK-1569		HTN 994900	KIT,Fan Clutch Repair (Gold Top Post)	MAK 3912-994900, MAK 3912-994985
7	ECK-1568		NAV 1681030C91	KIT,Fan Clutch Repair (For 1593 Fan Clutch)	MAK 4769-10330543502
8	ECK-1519		HTN 9908300	KIT,Fan Clutch	NAV 1695793C91
9	ECK-1539		HTN 994902	KIT,Fan Clutch	
10	ECK-1404		HTN 994346	KIT,Fan Clutch	
11	ECK-1396		HTN 994317	KIT,Fan Clutch Minor Repair (For HT650 Fan Clutch)	

PAI Copyright 2017

New Parts are in BOLD text

Fuel Filters and Brackets

FIGURE 6853



PAI Copyright 2017

Fuel Filters and Brackets

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	EMT-8500		MAK 32GB160P2	BRACKET,Secondary Fuel Filter	MAK 32GB38
1	EMT-8515		MAK 32GB258P2	BRACKET,Secondary Fuel Filter	MAK 32GB414
2	**EMT-8489**		**MAK 32GB39P2**	**BRACKET,Primary Fuel Filter (Used w/ FFF-5531 Filter)**	
2	EMT-8490		MAK 32GB163	BRACKET,Primary Fuel Filter	MAK 32GB39
3	050501		CUM 3903640	FILTER,Secondary Fuel	
3	450521		NAV 672603C3	FILTER,Secondary Fuel(Red)	
3	FFF-4550		MAK 483GB218B	FILTER,Secondary Fuel(Green)	MAK 483GB441
3	FFF-4551		MAK 483GB431	FILTER,Secondary Fuel(Green)	MAK 483GB440
3	FFF-5486		MAK 483GB476M	FILTER,Secondary Fuel(Green)	
3	FFF-5532		MAK 483GB471M	FILTER,Secondary Fuel(Green)	
4	450520		NAV 625627C1	FILTER,Primary Fuel(Red)	
4	FFF-4590		MAK 483GB219A	FILTER,Primary Fuel(Red)	MAK 483GB444
4	FFF-5531		MAK 483GB470AM	FILTER,Primary Fuel(Red)	MAK 483GB470M
5	**050524**		**CUM 3331096**	**FILTER,Fuel/Water Separator(ISX)**	**CUM 4010650**
5	050532		CUM 3903410	FILTER,Fuel/Water Separator	
5	**050533**		**CUM 3329289**	**FILTER,Fuel/Water Separator**	
5	**050534**		**CUM 3308638**	**FILTER,Fuel/Water Separator**	
5	FFF-4536		MAK 483GB465	FILTER,Primary Fuel (w/ Water Separator Drain)	MAK 483GB433
6	FFF-4094		MAK 301SD19B	FILTER,Fuel	
7	450522		NAV 1822588C1	FILTER,Final Fuel	NAV 1809789C1
8	FFF-5485		MAK 483GB372M	FILTER,Fuel	
9	450523		NAV 1825181C91	FILTER,Prescreen Fuel	
10	**350505**		**CAT 1R0750**	**FILTER,Fuel(Spin-On)**	**CAT 2Y8670**
10	**650490**		**DDC 23518481**	**FILTER,Primary Fuel**	**DDC 6438839, DDC 25010793**
10	**650491**		**DDC 23518482**	**FILTER,Secondary Fuel**	**DDC 23530707, DDC 23518530**
10	FFF-5329		MAK 483GB477M	FILTER,Secondary Fuel	
10	804099		MAK 20972295	FILTER,Secondary Fuel	
11	050500		CUM 3315844	FILTER,Fuel	
11	050505		CUM 3315847	FILTER,Fuel	
12	050502		CUM 3945213	FILTER,Fuel(ISB)	
13	450525		NAV 1842638C92	FILTER,Fuel	
13	**450527**		**NAV 1873917C91**	**FILTER,Fuel Includes Filter (1)450519 O-Rings (1)421236 (1)421235**	**NAV 1878042C91**
14	804097		MAK 21380521	FILTER,Primary Fuel	
15	**450526**		**NAV 1878042C92**	**KIT,Fuel Filter Includes Filter Kit (1)450527 O-Ring (1)421235**	
16	**450519**		**NAV 1874438C1**	**FILTER,Fuel(used in 450527)**	
17	**801087**		**MAK 21023285**	**HOUSING,Fuel Filter(MP 7, MP 8)**	

Oil Filters

FIGURE 6854



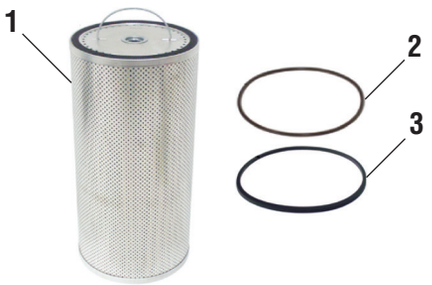
KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	**050513**		**CUM 3401544**	**FILTER,Oil**	
1	450501		NAV 1811953C1	FILTER,Oil	
1	450502		NAV 1833121C1	FILTER,Oil	
1	FOF-4570		MAK 485GB3191C	FILTER,Oil(Spin-On)	MAK 485GB3191B
2	FOF-4571		MAK 57GC2134	FILTER,Oil(Centrifugal Type)	
2	FOF-5534		MAK 57GC2187	FILTER,Oil(Centrifugal Type)	
3	FOF-5538		MAK 485GB3236	FILTER(Spin-on)	
3	804098		MAK 20843764	FILTER,Oil(Bypass)	
4	FOF-5328		MAK 57GC2231	FILTER,Oil(.492in ID Bushing) (Used in EMT-8528)	MAK 236GB42M
4	FKT-5537		MAK 57GC2206	FILTER,Oil Kit(.631in ID Bushing)	
5	450524		NAV 1842639C92	FILTER,Oil	
6	050510		CUM 3889310	FILTER,Oil	
6	050511		CUM 3318853	FILTER,Oil	
6	050515		CUM 3304232	FILTER,Oil	
6	050520		CUM 256838	FILTER,Oil	
6	350500		CAT 1R0716	FILTER,Oil	CAT 8T7452, CAT 2P4005
6	350501		CAT 1R0739	FILTER,Oil	
6	650510		DDC 23527033	FILTER,Oil	DDC 23530573
6	650511		DDC 23518671	FILTER,Oil	DDC 23530407
7	050512		CUM 3932217	FILTER,Oil(ISB)	
8	EMT-8528		MAK 485GB4365M	ASSEMBLY,Oil Filter(ASET)	
9	FKT-4156		MAK 485GB3219D	KIT,Filter(E6/E7)	
				Includes Filter (1)FOF-4571 Canister & Gasket	

New Parts are in BOLD text

PAI Copyright 2017

Oil Filter Element

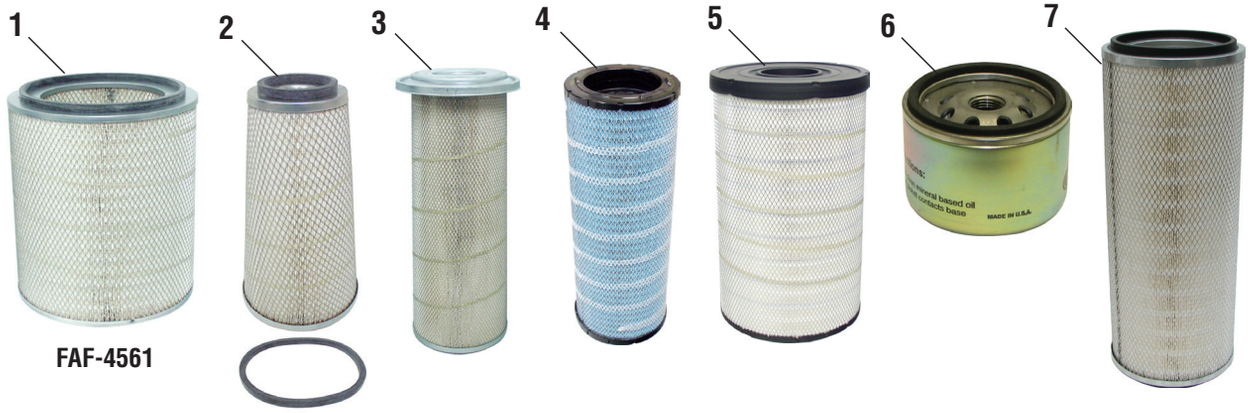
FIGURE 6855



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	FOF-4540		MAK 236GB311A	FILTER,Oil Element	
2	EGA-0470		MAK 343SB87	O-RING,Oil Filter	
3	EGA-1470		MAK 5081-3654	O-RING,Oil Filter	

Air Filters

FIGURE 6856



FAF-4561

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	FAF-4561		MAK 57MD31A	FILTER,Air(Engine)	
1	FAF-4562		MAK 57MD21A	FILTER,Air(Engine)	
1	FAF-4563		MAK 57MD26	FILTER,Air(Engine)	
1	FAF-4564		MAK 57MD33	FILTER,Air(Engine)	
1	FAF-4565		MAK 57MD29301	FILTER,Air(Engine)	
1	FAF-4567		MAK 57MD29305	FILTER,Air(Engine)	
1	FAF-4568		MAK 57MD32	FILTER,Air(Engine)	
1	FAF-4569		MAK 57MD25P2	FILTER,Air(Engine)	
2	FAF-4566		MAK 57MD27	FILTER,Air(Engine)	
3	FAF-4558		MAK 57MD42M	FILTER,Air(Engine)(CH)	
4	FAF-5453		MAK 57MD320M	FILTER,Air(Engine)	
5	FAF-5476		MAK 57MD318	FILTER,Air(Engine)	
5	804100		MAK 57MD46M	FILTER,Air(Engine)	
6	804101		MAK 279GB43M	FILTER,Air(Engine)(ASET)	
7	**804102**		**MAK 57MD24**	**FILTER,Air(Engine)**	

Water Filters and Bracket

FIGURE 6857



FWF-4520

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	REFERENCE INFORMATION
1	050527		CUM 3318201	FILTER,Water/Conditioner(Spin-On)	
1	050528		CUM 3315115	FILTER,Water/Conditioner(Spin-On)	
1	050529		CUM 3316053	FILTER,Water/Conditioner(Spin-On)	
1	050531		CUM 3318318	FILTER,Water/Conditioner(Spin-On)	
1	FWF-4520		MAK 25MF435A	FILTER,Water(Spin-On)	MAK 25MF314B
2	050526		CUM 3315116	FILTER,Water(Spin-On)	
2	650540		DDC 23516489	FILTER,Water(Spin-On)	
2	FWF-4521		MAK 25MF436	FILTER,Water(Spin-On)	MAK 25MF422A
3	EMT-8970		MAK 32GB354P2	BRACKET,Coolant (Use w/ FWF-4520 filter)	
4	EMT-8971		MAK 32GB415	BRACKET,Coolant (Use w/ FWF-4521 Filter)	
5	804091		MAK 387GC32	SCREEN,Coolant	

 PAI Copyright 2017

FIGURE 6858



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTON	APPLICATION
180883		**CUM 4987964 CUM 4891116**	**TENSIONER,Belt**	**Cummins ISB**
180884		**CUM 3947574**	**TENSIONER,Belt**	**Cummins ISB**
180885		CUM 3682946	TENSIONER,Belt	Cummins ISX, QSX
180894		CUM 3400885	TENSIONER,Belt	Cummins M11
180895		CUM 4920105	TENSIONER,Belt	Cummins M11
880880		MAK 21422765	TENSIONER,Belt	Mack MP 7 Volvo D11



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTON	APPLICATION
180886		CUM 3935819 CUM 3912254	TENSIONER,Belt	Cummins ISB, QSB
180888		CUM 3973822 CUM 3918944	TENSIONER,Belt	Cummins C
180889		CUM 4059202 CUM 3681240	TENSIONER,Belt	Cummins ISX
180890		CUM 3936197	TENSIONER,Belt	Cummins B
180891	**180891E**	CUM 3936201	TENSIONER,Belt	Cummins B & C
180893		CUM 3937556 CUM 3936207	TENSIONER,Belt	Cummins B & C
180896		**CUM 2891940**	**TENSIONER,Belt**	**Cummins ISX**
180898		**CUM 4059203 CUM 3680515**	**TENSIONER,Belt**	**Cummins ISB**
381250		CAT 190-0649 CAT 148-1974	TENSIONER,Belt	Caterpillar 3406E, C10, C12, C15
480890		NAV 1830033C1 NAV 1814719C2	TENSIONER,Belt	International DT 466, DT 466E
480891		NAV 1687801C91 DDC 23511252	TENSIONER,Belt	Detroit Diesel Series 40, International DT466
681250		**DDC 23527565 DDC 23520317**	**TENSIONER,Belt**	**Detroit Diesel Series 60**
741401		**FTL 01-27846-000 MAK 2428-89436**	**TENSIONER,Belt**	**Detroit Diesel, Cummins, Caterpillar**
EBT-8683		MAK 87GB41A	TENSIONER,Belt	Mack E7, E-Tech



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTON	APPLICATION
180882		**CUM 5333480 CUM 3973287**	**TENSIONER,Belt (Serpentine Belt)**	**Cummins ISB & ISC**
180887		CUM 3937555 CUM 3936205	TENSIONER,Belt (Serpentine Belt)	Cummins ISB
180892	**180892E**	CUM 3936213 CUM 3945527	TENSIONER,Belt (Serpentine Belt)	Cummins B & C
EBT-8694		MAK 87GB46A MAK 87GB46	TENSIONER,Belt (Serpentine Belt)	Mack ASET

FIGURE 6858



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	APPLICATION
180897		CUM 4059203 CUM 3680194	TENSIONER,Belt	Cummins ISX



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	APPLICATION
880878		MAK 21454379	TENSIONER,Belt	Mack MP 7, MP 8 Volvo D11, D13



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	APPLICATION
880879		MAK 20935523 MAK 21404578	TENSIONER,Belt	Mack MP 7, MP 8, MP10 Volvo D11, D13, D16



PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	APPLICATION
880881		MAK 20860873	TENSIONER,Belt	Mack MP 8 Volvo D13

PAI Copyright 2017

FIGURE 6859



Belts are listed in order by length.
Please see the following pages for keys 3-6.

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	LENGTH	WIDTH	REFERENCE INFORMATION
1	EBT-8807		MAK 2428-425761	BELT,V Notched (1 Pc)	36-7/8in	.47in	NAV 358330R91, NAV 243608R11
1	EBT-8824		MAK 88GB439P376	BELT,V Notched (1 Pc)	37-5/8in	.47in	MAK 88GB354P73
1	EBT-8844		MAK 88GB439P391	BELT,V Notched (1 Pc)	39-1/8in	.47in	NAV 425890C1, NAV 425892C1
1	050465		CUM 178657	BELT,V Notched (1 Pc)	40-5/8in	.87in	CUM 147992
1	EBT-8845		MAK 88GB439P411	BELT,V Notched (1 Pc)	41-1/8in	.47in	NAV 288205C2
1	EBT-8889		MAK 88GB439P421	BELT,V Notched (1 Pc)	42-1/8in	.47in	NAV 143441R2
1	EBT-8846		MAK 88GB439P431	BELT,V Notched (1 Pc)	43-1/8in	.47in	MAK 88GB439P432, NAV 441695C1
1	EBT-8883		MAK 88GB439P436	BELT,V Air Conditioner (1 Pc)	43-5/8in	.47in	MAK 88GB354P68, NAV 358340C91
1	050483		CUM 3058383	BELT,V Notched (1 Pc)	43-5/8in	.41in	CUM 215356
1	EBT-8847		MAK 88GB439P457	BELT,V Notched (1 Pc)	45-3/4in	.47in	NAV 446204C1
1	EBT-8848		MAK 88GB439P462	BELT,V Notched (1 Pc)	46-1/4in	.47in	CUM 178623, NAV 447497C91
1	350401		CAT 9L6653	BELT,V Notched (1 Pc)	48-1/2in	.68in	
1	EBT-8808		MAK 2428-425762	BELT,V Notched (1 Pc)	48-5/8in	.41in	NAV 468460C91
1	050466		CUM 178679	BELT,V Notched (1 Pc)	42-7/8in	.87in	CUM 155031
1	**EBT-8867**		**MAK 88GB439P491**	**BELT,V Notched (1 Pc)**	**49-3/8in**	**.47in**	**MAK 88GB439P492**
1	050487		CUM 134809	BELT,V Notched (1 Pc)	49-7/8in	.87in	CUM S-3115, NAV 488674C1
1	EBT-8823		MAK 88GB439P506	BELT,V Notched (1 Pc)	50-5/8in	.47in	
1	EBT-8888		MAK 88GB439P516	BELT,V Notched (1 Pc)	51-5/8in	.47in	CUM 178662
1	EBT-8849		MAK 88GB439P532	BELT,V Notched (1 Pc)	53-1/4in	.47in	NAV 358318C91, NAV 264757C2
1	EBT-8825		MAK 88GB439P552	BELT,V Notched (1 Pc)	55-1/4in	.47in	
1	350402		CAT 4N8216	BELT,V Notched (1 Pc)	56in	.65in	
1	350403		CAT 9L6639	BELT,V Notched (1 Pc)	57in	.68in	CAT 819416
1	350404		CAT 9L6641	BELT,V Notched (1 Pc)	58-3/4in	.68in	
1	EBT-8851		MAK 88GB439P602	BELT,V Notched (1 Pc)	60-1/4in	.47in	NAV 446707C1, NAV 494532C91
1	350405		CAT 9L6643	BELT,V Notched (1 Pc)	60-3/4in	.68in	
1	350406		CAT 4N2531	BELT,V Notched (1 Pc)	62in	.65in	
1	EBT-8852		MAK 88GB439P622	BELT,V Notched (1 Pc)	62-1/4in	.47in	CUM 204668, NAV 465050C1
1	350407		CAT 9L6645	BELT,V Notched (1 Pc)	62-1/2in	.68in	CAT 821361
1	350408		CAT 6N6657	BELT,V Notched (1 Pc)	63in	.65in	
1	EBT-8853		MAK 88GB439P642	BELT,V Notched (1 Pc)	64-1/4in	.47in	NAV 479217C1, NAV 441418C1
1	350409		CAT 4N8218	BELT,V Notched (1 Pc)	64-3/4in	.68in	
1	EBT-8053		MAK 88GB439P652	BELT,V Notched (1 Pc)	65-1/4in	.47in	MAK 88GB439P651
1	EBT-8052		MAK 88GB354P30	BELT,V Power Steering (1 Pc)	65-3/8in	.47in	NAV 449669C91
1	350415		CAT 7S9859	BELT,V Notched (1 Pc)	66in	.75in	CAT 7S9802, CAT 8M1817

Please see the following pages for keys 2-6.

PAI Copyright 2017

Key 1 continued

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	LENGTH	WIDTH	REFERENCE INFORMATION
1	EBT-8885		MAK 88GB439P662	BELT,V Notched (1 Pc)	66-1/4in	.47in	
1	350410		CAT 9L6647	BELT,V Notched (1 Pc)	66-1/2in	.68in	
1	EBT-8884		MAK 88GB439P672	BELT,V Notched (1 Pc)	67-1/4in	.47in	
1	EBT-8882		MAK 88GB196	BELT,V (1 Pc)	67-3/8in	.47in	NAV 412496C1, NAV 441058C1
1	350411		CAT 9L6649	BELT,V Notched (1 Pc)	69-1/8in	.68in	
1	350412		CAT 6N6654	BELT,V Notched (1 Pc)	70in	.65in	
1	EBT-8887		MAK 88GB439P722	BELT,V Notched (1 Pc)	72-1/4in	.47in	
1	350413		CAT 4N8277	BELT,V Notched (1 Pc)	73in	.65in	
1	EBT-8886		MAK 88GB439P732	BELT,V Notched (1 Pc)	73-1/4in	.47in	MAK 88GB437P13
1	350414		CAT 6N6650	BELT,V Notched (1 Pc)	74in	.65in	



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	LENGTH	WIDTH	REFERENCE INFORMATION
2	350450		CAT 9L6654	SET,V-Belt (2 Piece)	48-1/2in	.68in	
2	350451		CAT 4N8217	SET,V-Belt (2 Piece)	56in	.65in	
2	350452		CAT 9L6640	SET,V-Belt (2 Piece)	57in	.68in	
2	350453		CAT 9L6642	SET,V-Belt (2 Piece)	58-3/4in	.68in	
2	350454		CAT 9L6644	SET,V-Belt (2 Piece)	60-3/4in	.68in	
2	350456		CAT 4N2532	SET,V-Belt (2 Piece)	62in	.65in	
2	350457		CAT 9L6646	SET,V-Belt (2 Piece)	62-1/2in	.68in	
2	350460		CAT 9L3724	SET,V-Belt (2 Piece)	64-3/4in	.68in	
2	350468		CAT 7S9860	SET,V-Belt (2 Piece)	66in	.75in	CAT 7S9435, CAT 8M1714
2	350461		CAT 9L6648	SET,V-Belt (2 Piece)	66-1/2in	.68in	CAT 5R0025
2	EBT-8879		MAK 88GB437P2	SET,V-Belt (2 Piece)	66-3/8in	.47in	MAK 88GB354P2, NAV 3144098R91
2	EBT-8881		MAK 88GB437	SET,V-Belt (2 Piece)	67-3/8in	.47in	MAK 88GB354P74, NAV 371272C91
2	EBT-8050		MAK 88GB354P12	SET,V-Belt (2 Piece)	68-3/8in	.47in	MAK 88GB439P682, CAT 3S9652
2	350463		CAT 9L6650	SET,V-Belt (2 Piece)	69-1/8in	.68in	
2	350465		CAT 9L6725	SET,V-Belt (2 Piece)	73in	.65in	

Belts are listed in order by length.

PAI Copyright 2017



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	LENGTH	WIDTH	REFERENCE INFORMATION
3	350455		CAT 6N6798	SET,V-Belt (3 Piece)	60-3/4in	.68in	CAT 4N6422
3	350458		CAT 6N6656	SET,V-Belt (3 Piece)	63in	.65in	
3	350462		CAT 6N6652	SET,V-Belt (3 Piece)	66-1/2in	.68in	CAT 4N6374, CAT 4N8224
3	EBT-8880		MAK 88GB354P52	SET,V-Belt (3 Piece)	66-3/8in	.47in	NAV 414342C1
3	EBT-8620		MAK 88GB354P50	SET,V-Belt (3 Piece)	67-3/8in	.47in	MAK 88GB439P671
3	350464		CAT 6N6655	SET,V-Belt (3 Piece)	70in	.65in	
3	350466		CAT 4N8278	SET,V-Belt (3 Piece)	73in	.65in	
3	350467		CAT 6N6651	SET,V-Belt (3 Piece)	74in	.65in	



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	LENGTH	WIDTH	REFERENCE INFORMATION
4	350459		CAT 6N6653	SET,V-Belt (4 Piece)	63in	.65in	



KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	LENGTH	WIDTH	REFERENCE INFORMATION
5	EBT-8781		MAK 88GB445P720	BELT,Double V (1 Pc)	72in	.47in	
5	EBT-8816		MAK 88GB445P730	BELT,Double V (1 Pc)	73in	1.25in	

Belts are listed in order by length.



Belts are listed in order by length.

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	EFFECTIVE LENGTH	WIDTH / RIBS	REFERENCE INFORMATION
6	050470		CUM 3037425	BELT,Serpentine (1 Pc)	34.12in	.66in / 5	
6	**050469**		**CUM 206996**	**BELT,Serpentine (1 Pc)**	**37.13in**	**.66in / 5**	**CUM 3807295**
6	050499		CUM 3095880	BELT,Serpentine (1 Pc)	41.50in	.80in / 6	
6	**050488**		**CUM 3076492**	**BELT,Serpentine (1 Pc)**	**42.54in**	**.80in / 6**	
6	050486		CUM 3063817	BELT,Serpentine (1 Pc)	43.15in	.56in / 4	
6	050484		CUM 217638	BELT,Serpentine (1 Pc)	43.62in	.80in / 6	CUM 3019406
6	050493		CUM 3034348	BELT,Serpentine (1 Pc)	48.59in	1.08in / 8	NAV 1648631C1
6	**741410**		**FTL 01-24894-004**	**BELT,Serpentine (1 Pc)**	**50.75in**	**1.08in / 10**	
6	050496		CUM 3911587	BELT,Serpentine (1 Pc)	53.71in	1.08in / 8	CUM 3906384
6	EBT-8776-555		MAK 88GB458P555	BELT,Serpentine (1 Pc)	55.46in	1.36in / 10	MAK 88GB447P555
6	050490		CUM 3911560	BELT,Serpentine (1 Pc)	55.13in	1.08in / 8	CUM 3903090
6	EBT-8776-565		MAK 88GB458P565	BELT,Serpentine (1 Pc)	56.45in	1.36in / 10	MAK 88GB449P565
6	050497		CUM 3911557	BELT,Serpentine (1 Pc)	56.09in	1.08in / 8	CUM 3908037, CUM 3911588
6	050472		CUM 3911568	BELT,Serpentine (1 Pc)	56.45in	1.08in / 8	CUM 3902230
6	EBT-8776-579		MAK 88GB458P579	BELT,Serpentine (1 Pc)	57.96in	1.36in / 10	MAK 88GB449P579
6	EBT-8775-585		MAK 88GB459P585	BELT,Serpentine (1 Pc)	58.50in	.84in / 6	MAK 88GB453P585
6	**880867**		**MAK 21556636**	**BELT,Serpentine (1 Pc)**	**58.50in**	**1.08in / 8**	
6	050471		CUM 3911558	BELT,Serpentine (1 Pc)	58.95in	1.08in / 8	CUM 3903097
6	EBT-8776		MAK 88GB449P605	BELT,Serpentine (1 Pc)	60.75in	1.36in / 10	MAK 88GB447P605
6	050498		CUM 3911563	BELT,Serpentine (1 Pc)	60.59in	1.08in / 8	CUM 3903098
6	050474		CUM 3911573	BELT,Serpentine (1 Pc)	61.51in	1.08in / 8	CUM 3288944, CUM 3905867
6	EBT-8777		MAK 88GB447P615	BELT,Serpentine (1 Pc)	61.83in	1.36in / 10	MAK 88GB449P615
6	050492		CUM 3911572	BELT,Serpentine (1 Pc)	61.22in	1.08in / 8	CUM 3904958
6	**880866**		**MAK 21460409**	**BELT,Serpentine (1 Pc)**	**62.12in**	**1.08in / 8**	
6	050494		CUM 3034946	BELT,Serpentine (1 Pc)	62.56in	1.08in / 8	
6	EBT-8774-630		MAK 88GB457P630	BELT,Serpentine (1 Pc)	63.04in	1.08in / 8	
6	**880868**		**MAK 21556637**	**BELT,Serpentine (1 Pc)**	**63.25in**	**1.08in / 8**	
6	050473		CUM 3911566	BELT,Serpentine (1 Pc)	63.74in	1.08in / 8	CUM 3903100
6	**880865**		**MAK 20582557**	**BELT,Serpentine (1 Pc)**	**64.06in**	**1.65in / 12**	
6	EBT-8806		MAK 88GB449P655	BELT,Serpentine (1 Pc)	65.50in	1.36in / 10	MAK 88GB447P655
6	EBT-8778		MAK 88GB447P666	BELT,Serpentine (1 Pc)	66.53in	1.36in / 10	MAK 88GB449P666

PAI Copyright 2017

KEY	PAI REFERENCE	EXCEL NO.	OEM REFERENCE	DESCRIPTION	EFFECTIVE LENGTH	WIDTH/RIBS	REFERENCE INFORMATION
6	EBT-8775-670		MAK 88GB459P670	BELT,Serpentine (1 Pc)	67.00in	.80in / 6	MAK 88GB453P670
6	050489		CUM 3911567	BELT,Serpentine (1 Pc)	67.00in	1.08in / 8	CUM 3903115
6	EBT-8776-678		MAK 88GB458P678	BELT,Serpentine (1 Pc)	67.71in	1.36in / 10	MAK 88GB449P678
6	EBT-8776-687		MAK 88GB458P687	BELT,Serpentine (1 Pc)	68.66in	1.36in / 10	MAK 88GB449P687
6	050495		CUM 3911582	BELT,Serpentine (1 Pc)	70.00in	1.08in / 8	CUM 3281618, CUM 3939709
6	050491		CUM 3911583	BELT,Serpentine (1 Pc)	70.74in	1.08in / 8	CUM 3905873
6	**450481**		**NAV 1841559C1**	**BELT,Serpentine (1 Pc)**	**71.53in**	**1.08in / 8**	**NAV 1673993C1**
6	EBT-8817		MAK 88GB447P728	BELT,Serpentine (1 Pc)	72.87in	1.40in / 10	
6	450480		NAV 1819391C1	BELT,Serpentine (1 Pc)	73.00in	1.08in / 6	
6	EBT-8779		MAK 88GB447P732	BELT,Serpentine (1 Pc)	73.09in	1.36in / 10	MAK 88GB449P732
6	050476		CUM 3002203	BELT,Serpentine (1 Pc)	73.37in	2.09in / 15	
6	EBT-8775-735		MAK 88GB459P735	BELT,Serpentine (1 Pc)	73.50in	.80in / 6	MAK 88GB453P735
6	EBT-8775-738		MAK 88GB459P738	BELT,Serpentine (1 Pc)	73.97in	.80in / 6	MAK 88GB453P738
6	EBT-8775-746		MAK 88GB459P746	BELT,Serpentine (1 Pc)	74.78in	.80in / 6	MAK 88GB453P746
6	050475		CUM 3289659	BELT,Serpentine (1 Pc)	75.87in	1.08in / 8	CUM 3806083
6	EBT-8771-787		MAK 88GB472P787	BELT,Serpentine (1 Pc)	78.63in	1.65in / 12	MAK 88GB460P787
6	EBT-8775-795		MAK 88GB459P795	BELT,Serpentine (1 Pc)	79.50in	.80in / 6	MAK 88GB453P795
6	**741411**		**FTL 01-29866-094**	**BELT,Serpentine (1 Pc)**	**82.44in**	**1.08in / 8**	**CUM 3289864**
6	EBT-8775-831		MAK 88GB459P831	BELT,Serpentine (1 Pc)	83.19in	.80in / 6	MAK 88GB453P831
6	EBT-8775-847		MAK 88GB459P847	BELT,Serpentine (1 Pc)	84.66in	.80in / 6	MAK 88GB453P847
6	**741412**		**FTL 01-23415-053**	**BELT,Serpentine (1 Pc)**	**93.87in**	**1.08in / 8**	

 PAI Copyright 2017

Cross Reference, Numerical Listing and Index

This Cross Reference was prepared for your convenience to aid in selection of the proper part for the correct application.

Call Customer Service for any numbers not located in the Cross Reference.

The Cross Reference is solely for informational purposes.
PAI does not assume any responsibility or liability for printer errors.
All responsibility for correct application remains that of the end user.

PAI Copyright 2017

Airesearch Reference	PAI Reference	Page
144400-0000	ETC-9294	76
144402-0000	ETC-9291	76
144403-0000	ETC-9293	76
144404-0000	ETC-9292	76
144407-0000	ETC-9255	76
144700-0000	ETC-9256	76
144702-0000	ETC-9257	76
144704-0000	ETC-9258	76

Baldwin Reference	PAI Reference	Page
B76	FOF-4570	430
B95	650511	430
B99	350500	430
B196	050510	430
B309	450501	430
B495	650510	430
B7030	450502	430
B7225	FOF-5538	430
B7409	804098	430
B7577	050515	430
B7600	350501	430
BC110	FOF-4571	430
BC7173	FOF-5534	430
BC7228	FKT-5537	430
BD103	050511	430
BD7250	450524	430
BD7309	**050513**	**430**
BF339	050512	430
BF788	050501	429
BF876	FFF-4550	429
BF877	FFF-4590	429
BF948	050500	429
BF957	050505	429
BF976	FFF-4551	429
BF1212	**050534**	**429**
BF1219	FFF-4536	429
BF1259	**050533**	**429**
BF1274-SP	**050524**	**429**
BF1277-SP	**050524**	**429**
BF1280	050532	429
BF1286	FFF-5329	429
BF1386-0	804097	429
BF5800	650490	429
BF5810	650491	429
BF7339	050512	430
BF7629	450522	429
BF7633	350505	429
BF7656	FFF-5531	429
BF7657	FFF-5532	429
BF7773	FFF-5486	429
BF7943	804099	429
BT9408	804101	431
BW5071	050526	432
BW5072	050527	432
BW5073	050528	432
BW5074	050529	432
BW5075	050531	432
BW5178	FWF-4520	432
BW5179	FWF-4521	432
BW5200	650540	432
C750	050520	430
C750E	050520	430
G-157	EGA-1470	431
OB1369	050610	61
P706M	FOF-4540	431
PA2312	FAF-4563	431
PA2317	FAF-4564	431
PA2438	FAF-4562	431

Baldwin Reference	PAI Reference	Page
PA2439	FAF-4561	431
PA2482	804102	431
PA2493	FAF-4569	431
PA2494	FAF-4565	431
PA2555	FAF-4567	431
PA2558	FAF-4568	431
PA2680	FAF-4558	431
PA-2482	804102	431
PF7654	050502	429
PF7680	FFF-4094	429
PF7777	050502	429
PF7779	450525	429
PF7978	450527	429
RS3936	804100	431
RS4613	FAF-5476	431

(A more complete listing is available on our website or in the Air & Electrical catalog.)

Caterpillar Reference	PAI Reference	Page
1A2029	040071	167
1B3867	**GBG-6601**	**233**
1B4069	EBG-8041	159
1B4070	EBG-8689	390
1C4981	EPP-3573	297
1H5959	136171	398
1H6227	121223	61
1L9392	FPP-3577	359
1P1255	431209	343
1P2299	050505	429
1R0658	350501	430
1R0711	350505	429
1R0716	350500	430
1R0739	350501	430
1R0750	350505	429
1R0763	350505	429
1S4699	EBT-8879	435
1S6595	EGS-2861	390
1S7056	**EBG-6163**	**235**
1W2660	350500	430
1W2715	192022	297
1W3300	350501	430
1W4845	050515	430
1W5253	181830	159
2A4429	192024	393
2A5271	EBG-8689	390
2B0858	EPP-3575	385
2B5558	GCP-3495	285
2B5559	040086	315
2D6392	**121378**	**395**
2D8540	136025	392
2F5721	EBG-8041	159
2H2212	136129	396
2H2665	121307	390
2H3849	136025	392
2H3928	GGA-2992	363
2H3934	GGA-2991	363
2J6274	121226	63
2K8199	121224	138
2L5271	EBG-8689	390
2M6471	GKP-3498	317
2N8947	350415	435
2P4004	FOF-4570	430
2P4005	350500	430
2P6532	EBT-8050	435
2P8720	EBT-8052	435
2R2911	181830	159
2S7905	EPP-3572	415
2S8727	350415	435
2U5316	321239	195

Caterpillar Reference	PAI Reference	Page
2W0712	181845	159
2Y5042	350415	435
2Y8096	350501	430
2Y8670	350505	429
3B0623	040086	315
3B0645	GCP-3495	285
3B4670	040086	315
3D5261	136025	392
3D8309	EPP-3573	297
3F5791	136025	392
3H0107	121233	323
3H5552	340082	191
3H8275	EPP-3573	297
3I0750	050505	429
3I0757	FFF-4550	429
3I0825	FAF-4567	431
3I0833	FAF-4568	431
3I1143	050505	429
3I1159	FFF-4550	429
3I1206	050515	430
3I1292	050531	432
3I1305	**050534**	**429**
3I1365	**050534**	**429**
3I1367	**050534**	**429**
3I1376	050512	430
3J7354	321239	195
3K0360	EGA-3061	165
3K0715	121277	235
3K4060	EBG-8688	157
3K6222	EPP-3573	297
3K9121	136025	392
3L1850	EPP-3575	385
3L3352	EPP-3575	385
3P5859	121248	415
3S1210	**EBG-6163**	**235**
3S9643	EOS-3305	390
3S9652	EBT-8050	435
3Y2789	350501	430
4B4865	136171	398
4B6853	131618	264
4D2922	136025	392
4D6592	136002	134
4F1216	FPP-3577	359
4F7388	EGA-1470	431
4F7391	121208	61
4J2209	321239	195
4K1388	121252	137
4K9841	136103	418
4L7615	181836	235
4L8089	EOS-3305	390
4N1059	131618	264
4N2212	181830	159
4N2531	350406	435
4N2532	350456	435
4N6374	350462	435
4N6422	350455	435
4N8216	350402	435
4N8217	350451	435
4N8218	350409	435
4N8224	350462	435
4N8277	350413	435
4N8278	350466	435
4P4661	192020	392
4S6209	EBT-8052	435
4W4011	181833	247
4W4794	181830	159
5A6026	GKP-3498	317
5C6781	131618	264
5E2374	EPP-3575	385
5E8159	FPP-3577	359

PAI Copyright 2017

Caterpillar Reference	PAI Reference	Page	Caterpillar Reference	PAI Reference	Page	Caterpillar Reference	PAI Reference	Page
5F1678	121211	197	7X5145	FPP-3577	359	9Y4473	650511	430
5F7054	EGS-3905-021	318	7X5364	121297	201	9Y4527	FWF-4521	432
5H6733	121212	134	7X5422	EPP-3573	297	9Y4530	FWF-4520	432
5L6326	EBG-8041	159	7X5561	FPP-3577	359	9Y7145	GCP-3495	285
5M5346	350415	435	7X7731	EPP-3576	297	0C7248	EPP-3575	385
5N6242	181830	159	7X8720	321239	195	0L1021	340082	191
5P3456	121231	134	008-3214	111095	15	0S1588	GSC-0009	73
5P3863	GGA-2947	201	8B5355	EBG-8689	390	001-0939	EPP-3573	297
5P5600	121196	392	8C5230	121308	204	030-4605	121213	49
5P7813	321241	315	8C8134	FPP-3577	359	032-1305	EPP-3573	297
5P7818	**121421**	**390**	8F9537	EPP-3573	297	033-6027	121284	161
5P8907	121246	417	8J1699	121296	264	034-3441	FPP-3577	359
5R0025	350461	435	8L2746	121244	287	044-4650	EPP-3573	297
5R7136	136103	418	8L2779	EF30130	297	044-4687	EPP-3573	297
5S1817	EBT-8052	435	8M1714	350468	435	044-4854	EPP-3573	297
5S3244	EBT-8881	435	8M1817	350415	435	63-5854	040071	167
5X0226	**GBG-6601**	**233**	8M4433	121434	392	077-7458	EPP-3573	297
6F5559	121426	390	8M8997	EGA-3877	163	081-6698	EPP-3573	297
6I4954	181830	159	8M9689	350468	435	081-8963	FPP-3577	359
6J2244	**121424**	**206**	8S5154	EBT-8052	435	082-1553	EPP-3573	297
6J2419	121209	134	8S6959	136140	398	082-1656	FPP-3577	359
6L3294	EBT-8879	435	8T0659	336060	418	092-2570	136101	418
6L5851	181837	49	8T1919	121307	390	093-8888	121220	343
6L7817	**121422**	**206**	8T4461	321239	195	095-1759	321239	195
6N6650	350414	435	8T6757	EPP-3573	297	098-0311	EPP-3573	297
6N6651	350467	435	8T6762	EPP-3575	385	098-1190	FPP-3577	359
6N6652	350462	435	8T7253	121367	343	100-7045	040071	167
6N6653	350459	435	8T7317	121434	392	101-3953	121424	206
6N6654	350412	435	8T7452	350500	430	108-5803	321241	315
6N6655	350464	435	8T7524	121298	315	114-3364	336060	418
6N6656	350458	435	**8T8970**	**121421**	**390**	114-4427	121284	161
6N6657	350408	435	8U0220	121297	201	117-3036	121292	235
6N6798	350455	435	**9B6580**	**GBG-6601**	**233**	121-0145	131360	134
6R1733	FPP-3577	359	**9B6850**	**GBG-6601**	**233**	137-8101	121318	197
6V1394	EBG-8688	157	9F2247	EPP-3573	297	148-1974	381250	433
6V2317	040049	333	9H6761	BGA-3004	137	152-2939	121284	161
6V3251	121284	161	9L1129	EBT-8620	435	161-6149	121297	201
6V3685	**121377**	**395**	9L3724	350460	435	189-2492	121306	390
6V3865	121362	343	9L6639	350403	435	190-0649	381250	433
6V4589	121284	161	9L6640	350452	435	210-9246	321426	385
6V5029	136129	396	9L6641	350404	435	**226-6556**	**050533**	**429**
6V5049	121282	251	9L6642	350453	435	**226-6561**	**050534**	**429**
6V5555	121293	215	9L6643	350405	435	**238-3438**	**050533**	**429**
6V6228	121256	210	9L6644	350454	435	**238-3463**	**050534**	**429**
6V6560	121210	315	9L6645	350407	435	**238-4011**	**050513**	**430**
6V6921	121317	206	9L6646	350457	435	256-8753	050533	429
6V7618	350501	430	9L6647	350410	435	362-7629	050533	429
6V7970	121205	343	9L6648	350461	435	083214	111095	15
6V8398	121297	201	9L6649	350411	435	0304605	121213	49
6V9028	121289	191	9L6650	350463	435	335879	121254	178
7B5932	EGS-2861	390	9L6653	350401	435	**0336028**	**121379**	**395**
7C8304	FAF-4564	431	9L6654	350450	435	619455	121250	159
7C8313	FAF-4569	431	9L6725	350465	435	0619457	121367	343
7E6013	050529	432	9M2419	EBT-8879	435	619457	121367	343
7F0439	342070	381	9N1329	EBT-8883	435	772930	121297	201
7F8361	EPP-3573	297	9N3711	181830	159	0773100	321239	195
7H3171	FPP-3577	359	9N3718	050529	432	0777260	350500	430
7H3842	**EBG-6163**	**235**	9S4185	ECP-3475	165	777321	121297	201
7J0204	121251	137	9S9160	181833	247	815186	350501	430
7L2449	EBT-8883	435	9X7382	121306	390	0819416	350403	435
7L2894	121285	241	9X7684	121427	387	819416	350403	435
7M3842	**EBG-6163**	**235**	**9X7704**	**121429**	**378**	0821361	350407	435
7S9435	350468	435	9X7734	121372	390	821361	350407	435
7S9802	350415	435	9Y4402	050505	429	0938888	121220	343
7S9859	350415	435	9Y4406	FFF-4550	429	981164	121297	201
7S9860	350468	435	9Y4429	450520	429	**1013953**	**121424**	**206**
7W6536	EPP-3573	297	**9Y4431**	**050534**	**429**	1090073	121308	204
7W7422	FAF-4564	431	**9Y4432**	**050534**	**429**	1143364	336060	418
7X4744	121220	343	9Y4468	050515	430	1144427	121284	161
7X5126	EPP-3575	385	9Y4472	650511	430	1173036	121292	235

Caterpillar Reference	PAI Reference	Page
1378101	121318	197
1481974	381250	433
1558725	131618	264
1616149	121297	201
1892492	121306	390
1900649	381250	433
2109246	321426	385
2266552	650511	430
2266554	050515	430
2266556	**050533**	**429**
2266561	**050534**	**429**
2383438	**050533**	**429**
2383454	650511	430
2383456	050515	430
2383463	**050534**	**429**
2383711	050512	430
2383767	650510	430
2383892	450502	430
2384011	**050513**	**430**
2385081	121284	161
2432646	121220	343
2437450	FAF-4564	431
2437633	FAF-4569	431
2437701	FAF-4567	431
2437705	FAF-4568	431
2438466	804100	431
2438828	FFF-4550	429
2438913	050505	429
2438931	450520	429
2439031	FFF-4536	429
2439192	FFF-4094	429
2439809	050529	432
2439810	050531	432
2439831	FWF-4520	432
2439832	FWF-4521	432
2439833	650540	432
2491348	FOF-5538	430
2568753	050533	429
2721788	350500	430
2918148	121252	137
3107257	121305	235
3627629	050533	429
3790174	192024	393
3939855	EPP-3573	297
4334080	131618	264

(A more complete listing is available on our website or in the Caterpillar catalog.)

Cummins Reference	PAI Reference	Page
S-692-E	042220	390
S-715	040086	315
S-901	FPP-3577	359
S-910-B	FPP-3577	359
S-911-B	EPP-3573	297
S911B	EPP-3573	297
S-915-A	EPP-3575	385
S-962	EPP-3566	210
S-965-E	EPP-3572	53
S-971	042220	390
S-995	EPP-3576	297
S-1003-A	136017	63
AR1176	162015	141
S-2037	192024	393
AR2213	040085	153
S-2286	**045062**	**396**
S2286	**045062**	**396**
S-2394	131960	394
AR02883	131433	393
AR3034	180031	57
S-3050	131391	138
S-3115	050487	435
AR3560	111667	17
AR3636	141352	163
AR3640	171730	395
AR3641	171731	395
AR3642	171732	395
AR4130	220060	417
AR4131	220061	417
AR4132	220062	417
AR4133	220063	417
AR4220	171860	397
AR4284	181803	51
4797	060070	157
AR-5019	220037	418
AR5019	220037	418
AR5499	180208	161
AR7110	171720	139
AR7111	171721	139
AR7112	171722	139
AR7113	171723	139
AR7240	171720	393
AR7241	171721	393
AR7242	171722	393
AR7243	171723	393
7348	045045	45
AR7383	101085	393
AR7440	111307	393
AR7510	111305	393
AR7983	181192	396
AR8069	161611	395
8078	042002	178
AR-8613	220037	418
AR8613	220037	418
AR8851	180900	49
AR-8854	181898	49
AR8854	181898	49
FN9052	181945	73
9097	131574	393
9221	131385	61
9245	060016	230
9260	045044	45
9266	131386	45
9266-A	131387	45
9267	131963	394
9284	131993	398
9300	040150	13
9426	042088	394
9427	171695	13
AR9469	060085	141

Cummins Reference	PAI Reference	Page
AR9473	060085	141
AR9931	181867	395
AR9932	181849	53
AR10171	141292	59
AR10172	141292	59
AR10319	202000	13
AR10575	171900	378
AR10582	161640	383
AR10588	141293	390
11445	EWA-0052	13
AR11908	111112	395
AR11909	101086	395
AR11930	505010	395
AR12098	505005	393
AR12250	171880	378
AR12251	171881	378
AR12252	171882	378
AR12270	171900	378
AR12271	171910	378
AR12272	171920	378
AR12719	220030	417
AR12732	181845	159
AR12789	ETC-9296	399
S-16002	**EBG-6163**	**235**
S-16054	**GBG-6601**	**233**
S-16069	EBG-8689	390
S-16073	EBG-8041	159
S-16255	042060	159
26712	131283	51
BM27253	151490	393
AR36406	171730	395
40662	131362	157
40662-A	131362	157
42376	131997	398
43067	151516	393
43219	171700	139
43463-A	121236	159
43569	132006	398
43696	121237	134
43696-B	131294	7
43696A	**121380**	**395**
43828-B	ECL-1953	247
43828A	ECL-1958	69
44329	060070	157
44814	131773	398
AR45184	181807	53
AR45189	180901	53
AR45428	ETC-9296	399
AR45724	180915	167
AR50014	131581	397
BM50745	131425	393
AR50790	180031	57
AR51477	121201	137
AR51478	162006	8
60575	171692	13
60985	121057	391
BM61234	045100	153
61629	042004	229
AR62181	141301	392
AR62495	181845	53
63842	EWA-0068	70
64376	131382	134
64413	131779	397
64420	131986	398
64436	132018	398
64436A	132019	398
64502	131768	397
64565	131991	398
64775	121056	134
65259	162015	141

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
65259A	162026	141	9333-1	131388	157	121779	131311	61
65259B	162025	141	9426-2	042088	394	121932	151513	167
65259C	162024	141	BM97214	131581	397	122981	121307	390
65260	136021	141	BM98021	131581	397	123078	131999	398
65399	131662	178	BM98224	161615	393	123146	131988	398
66292	EWA-2441	137	**100099**	**121360**	**396**	123291	181013	393
66665	042096	398	100328	121208	61	123558	192063	229
BM66758	131581	397	100478	EF30130	297	123733	131575	393
66890	192025E	393	100670	151544	7	123982	060102	157
67270	121238	134	**100764**	**131837**	**397**	124246	131772	398
67360	180991	75	100918	131777	397	124410	181803	51
67362	131572	397	101071	101071	356	125547	131784	398
67396	132010	398	101092	060102	157	125548	131785	398
67932	141330	367	101322	EFC-8552	420	125549	131786	398
67946	131391	138	101432	045052	397	126295	131282	134
67963	131383	7	101732	131778	398	126476	121196	392
68061A	**121378**	**395**	101754	121196	392	127475	192085	229
68193	EPP-3573	297	102086	131661	75	127554	192017	40
68274	141330	367	102371	181013	393	127558	141302	61
BM68356	131258	397	102522	121045	51	127936	136029	415
68365	141353	163	102791	131782	398	127940	220030-001	417
68445	045020	385	102867	131769	398	128080	220030-002	417
68513	045003	45	102953	131774	398	128085	121245	417
69163	132003	398	103009	BSC-0011	73	128086	121246	417
69164	131981	398	103835	141304	58	129373	131964	393
69165	131976	398	**104978**	**131835**	**395**	**129484**	**050574**	**398**
69203	121364	343	104998	EBG-8688	157	129527	131992	398
69216	EPP-3573	297	105199	045022	169	129768	180225	161
69316	131365	61	**105375**	**045071**	**396**	129839	180230	161
69521	151488	163	106276	136002	134	129858	121284	161
69615	042090	249	106339	136171	398	**129859**	**050547**	**264**
69651	131764	397	106425	131576	393	129888	121352	57
69654	131982	398	107371	131433	393	130083	151532	398
69699	040023	153	107981	EFC-8551	420	130226	131308	53
69901	EPP-3573	297	108692	131436	393	130240	131283	51
69936	040018	15	109080	121211	197	130394	181920	42
69938	040024	61	109333	141304	58	130914	342070	381
69965	191992	393	109365	121056	134	130972	131284	134
70183	111082	390	109557	220030-007	417	131026	121214	153
70295	EPP-3573	297	110065	131986	398	131289	111325	291
70437	151495	397	110453	131280	134	132770	151513	167
70441	131573	393	110522	181013	393	**133115**	**050503**	**245**
70550	045024	167	110542	181015	393	133831	131285	134
AR70577	121325	383	110841	121223	61	133844	131286	134
70624	131384	42	110848	141406	61	133851	131287	134
70690	210055	397	**110855**	**131835**	**395**	134083	131581	397
70705	**131833**	**396**	111446	192043	393	134208	131583	397
70732	**131855**	**397**	113749	045052	397	134285	131288	134
70772	040026	153	113750	045053	397	134767	131770	397
70809	136140	398	113914	132002	397	134809	050487	435
70815	131371	134	114016	191854	142	135308	045101	153
70854	136146	393	114123	131618	264	135528	121213	49
AR73308	131430	417	114753	131661	75	135600	131289	49
AR73350	220060	417	**115512**	**EBG-6163**	**235**	135675	181836	235
AR73351	220061	417	115519	EBG-8042	51	135957	191950	40
AR73352	220062	417	116024	121212	134	135978	131581	397
AR73353	220063	417	116209	141406	61	136171	131994	398
7348-2	045045	45	116391	151489	167	136265	131590	397
BM75859	180201	57	116690	151532	398	136995	131975	398
BM76411	141290	420	116982	042000	75	138887	191958	395
BM76506	181804	393	117909	181013	393	138937	192026	395
BM77410	220010	417	117911	181015	393	138948	192063	229
BM79541	131424	393	118350	121227	167	139118	181013	393
BM79542	131425	393	118377	151529	45	139119	181015	393
9195-3	040014	15	118378	151530	45	139266	131960	394
9229-2	151544	7	118939	045008	45	139867	131995	398
9230-2	151545	7	119810	220005	415	**139988**	**121390**	**396**
9235-1	151524	33	119859	042062	417	140330	151535	35
9260-1	045044	45	120819	131281	45	142176	040064	421
9300-1	040150	13	121057	131977	398	142324	131771	397

PAI Copyright 2017

New Parts are in BOLD text

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
142608	141405	61	154391	192090	392	178662	EBT-8888	435
142616	042001	61	154392	192091	392	178679	050466	435
142689	180925	167	154393	192092	392	178788	131347	137
142804	171733	13	154967	EBG-8042	51	178937	121434	392
143793	180200	57	154996	131438	417	179122	220102	417
143795	180207	57	155015	141290	420	179901	MSV-4119	161
144042	131934	398	155031	050466	435	180280	171865	397
144308	220030-005	417	155267	111096	395	180730	131980	398
144714	220033	417	155441	192058	392	180735	131983	398
144911	191957	393	155789	121041	70	180740	131974	398
144948	220030-003	417	156089	131293	134	180748	132007	398
145028	220034	417	156420	151537	395	180760	132012	398
145504	EGA-3877	163	156541	191988	392	180769	131987	398
145506	121213	49	156545	131294	7	181085	132015	398
145537	121209	134	157088	141303	57	181187	132013	398
145540	121427	387	157098	MHV-4223	50	181213	042100	153
145551	121299	159	157280	171700	139	181243	132016	398
145564	121277	235	157551	131295	138	181256	131582	397
145582	**121388**	**264**	157870	151545	7	181271	132009	398
145583	**121387**	**264**	158556	136052	395	181272	136108	397
145600	121430	390	160112	131998	398	181293	136107	397
145614	**121421**	**390**	160196	121403	394	181415	132008	398
145623	121328	390	**160514**	**042027**	**396**	181449	121242	393
145701	191955	41	160586	ESR-2831	235	182706	040040	159
145922	181015	393	162426	180927	167	183237	191854	142
145924	181013	393	162679	131978	398	183429	220030-004	417
146076	181835	49	163027	131451	163	183475	131990	398
146077	181837	49	163369	220031	417	183787	131570	153
146250	220006	418	163532	132017	398	184240	220088	415
146309	131291	61	163607	131969	398	184400	161614	393
146483	**050503**	**245**	163815	045053	397	185138	192125	57
146731	192044	395	**163945**	**042059**	**396**	185573	162027	141
146732	192045	395	164428	191855	142	185677	136003	134
146733	192057	395	164890	111667	17	186208	132005	398
147056	192085	153	164976	131989	398	186348	141415	395
147100	045100	153	165430	220006	418	186714	131973	398
147263	131962	394	165431	220007	418	186780	131289	331
147389	042004	229	165432	220008	418	186907	136052	395
147610	151485	415	165433	220009	418	186917	042009	73
147992	050465	435	**166630**	**111665**	**15**	187420	151510	15
148203	136010	49	166774	191939	392	188329	040003	393
148295	121221	61	168209	192070	392	189763	151538	395
149589	131583	397	168306	042005	35	189770	171890	395
149876	181013	393	169351	192071	395	189771	171891	395
150002	151482	11	169630	192083	392	189772	171892	395
150187	220030-002	417	169960	171730	395	189773	171893	395
150288	191951	393	170296	192060	41	190334	220030-005	417
151037	181013	393	170664	040022	167	190397	136022	167
151039	181015	393	**172049**	**121379**	**395**	191037	220032	417
151478	181013	393	172205	321426	385	191916	045002	57
151479	181013	393	172271	060016	230	191970	111094	15
151487	181013	393	172648	121397	390	193136	042021	167
151489	181015	393	172723	131996	398	193295	131781	397
151496	181015	393	173161	131296	134	193301	136136	397
151498	181015	393	173287	141410	392	193660	171730	395
151499	181013	393	173368	121230	61	193670	171730	395
151506	181015	393	173718	180031	57	193736	121196	392
151900	**121333**	**396**	174213	192027E	41	193793	040021	13
151911	131292	134	174298	210025	57	193946	131569	397
152082	045029	395	174345	180030	57	193947	131569	397
152199	121269	377	175755	111095	15	193949	131570	153
152946	121214	153	175831	040085	153	193958	131571	153
153518	**121396**	**381**	175833	040071	167	194037	042006	35
153964	220100	417	176023	220090	415	194106	131961	394
153965	220102	417	177086	171734	392	194115	121259	395
154018	131439	417	177420	141351	163	194840	171707	392
154078	191939	392	177734	040002	397	195000	191993	392
154087	121278	161	178440	EBT-8848	435	195001	192087	392
154088	**121357**	**396**	178623	EBT-8848	435	195002	192088	392
154390	192006	392	178657	050465	435	195003	192089	392

PAI Copyright 2017

Cummins Reference	PAI Reference	Page
195240	171702	392
195736	131979	398
195866	131598	376
195950	131297	69
195952	121216	69
196337	132005	398
196641	121195	153
196844	181846	159
196943	210001	57
197230	161606	134
199104	060005	157
199180	191931	395
199348	151523	417
199349	180928	415
199410	180907	51
199569	131788	398
199572	131774	398
199593	141314	163
199821	111305	393
200258	131765	397
200259	131767	397
200260	131787	398
200307	136004	178
200354	191994	41
200400	111104	15
200517	121042	69
200566	181014	393
200600	171640	397
200601	171641	397
200602	171642	397
200603	171643	397
200712	191854	142
200713	191855	142
200722	191854	142
200780	151546	395
200790	151547	395
200808	131366	167
200844	042121	249
200861	040024	157
200919	180991	75
200998	131701	397
201017	121140	117
201048	131298	390
201049	EGS-2861	390
201698	131663	134
201701	131664	134
201737	181830-001	159
201747	131766	397
201950	171718	392
201978	131583	397
202174	181014	393
202180	171708	13
202457	EGS-3900-027	117
202557	121314	191
202605	192084	393
202873	131775	398
202903	045043	139
202994	045001	169
203070	111093	393
203097	136159	158
203100	136012	49
203101	136013	158
203131	040060	229
203145	131299	134
203170	161610	395
203660	171745	15
203661	171746	15
203662	171747	15
203663	171748	15
203670	171750	393
203671	171751	393
203672	171752	393
203673	171753	393
203922	131302	61
204048	141314	163
204090	161600E	137
204165	040021	157
204253	131987	398
204586	181833	247
204668	EBT-8852	435
204829	136001	157
204832	141355	58
205061	131924	389
205068	045050	379
205071	045049	379
205086	180291	390
205091	192018	385
205093	192007E	385
205094	192061	385
205112	171905	378
205114	191945	385
205115	121263	383
205119	040042	383
205145	151553	390
205147	151552	390
205169	192064	385
205181	121262	383
205182	121261	383
205196	131758	389
205200	111356	383
205204	136096	378
205230	151542	390
205233	131514	389
205239	**121398**	**378**
205241	**131912**	**381**
205247	**121429**	**378**
205258	111081	390
205269	111357	383
205288	131516	389
205289	131515	389
205303	131949	389
205326	131925	389
205342	131598	376
205374	131937	389
205391	131934	398
205401	GCP-3484	385
205410	131680	389
205438	045070	379
205462	180290	390
205479	131558	385
205615	141413	387
205633	**131890**	**389**
205637	**131890**	**389**
205656	131927	389
205750	191921	390
205776	131525	381
205782	131921	389
205788	131922	389
205789	**131926**	**381**
205791	131938	389
205794	131947	389
205795	131951	389
205827	131948	389
205840	171875	383
205841	171876	383
205842	171877	383
205875	131560	385
205898	121428	390
206021	131458	387
206098	131527	381
206160	171885	383
206161	171886	383
206162	171887	383
206224	040091	38
206277	131759	389
206279	131760	389
206286	192028	385
206428	131257	389
206435	131968	389
206443	131259	389
206460	131965	389
206515	191946	385
206576	EGS-3890-020	390
20663-2	121364	343
206741	040088	229
206808	136085	390
206830	191921	390
206861	131939	389
206904	191815	378
206967	131455	387
206969	141412	387
206973	131457	387
206978	121274	390
206996	**050469**	**435**
207049	131951	389
207056	131946	389
207058	131949	389
207075	131934	398
207082	131937	389
207117	131925	389
207135	**121391**	**390**
207226	151552	390
207241	191945	385
207244	136079	390
207344	151553	390
207346	131940	389
207515	131966	389
207524	121262	383
207525	121263	383
207542	136133	390
207543	136134	390
207546	131526	381
207722	136077	378
207770	191921	390
208119	180909	53
208128	131290	49
208132	131339	159
208134	181870	49
208138	180908	53
208149	141420	61
208326	042003	75
208423	210002	57
208470	171708	13
208579	136000	141
208739	210004	57
208746	191855	142
209700	040000	41
209919	060102	157
210130	161600E	137
210179	040151	139
210218	136141	398
210411	131326	11
210412	131279	11
210713	060085	141
210797	209979	57
210859	131323	50
210865	131307	60
210884	ECP-3476	137
211027	181921	63
211052	131277	60

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
211053	131321	60	217911	060005	157	2881804	181932	331
211126	121217	50	218153	151536	35	2881805	181823	331
211194	131770	397	218245	131307	60	2881837	ISX107-017	202
211375	121334	117	218264	136138	392	2881873	111652	202
211662	151523	415	218318	131581	397	2881876	111655	186
211891	121219	7	218793	220102	417	2881878	111658	186
211915	202000	13	218808	171630	15	2881879	111661	202
211916	202005	139	219153	040015	15	2881886	ISX107-017	202
211918	181896	13	256838	050520	430	**2881920**	**141440**	**199**
211939	141331	58	288207	172045	186	2881921	141439	197
211980	171701	13	299086	050529	432	**2881955**	**131881**	**336**
211999	192047	40	299670	050510	430	2881993	181204E	201
212161	121217	61	300140	171701	13	2881993NX	181204E	201
212217	191996	395	303286	131495	247	2881993RX	181204E	201
212224	131505	395	391392	131707	343	2881994	181201	201
212227	136008	11	554311	161641	392	2881997	181193	201
212603	136129	396	64433-1	131984	398	2881998	181210	201
212607	210050	397	66912-1	040040	159	2882044	181942	363
212613	180931	396	70089-1	131365	61	**2882049**	**131859**	**376**
212767	141292	59	708124	151481	11	2882080	111732	186
212832	136023	157	11232-41	136171	398	2882087	172045	186
212940	192008	395	2069678	131456	387	2882120	111565	186
213058	045037	395	2830409	121361	343	**2882630**	**111659**	**185**
213061	045028	395	2830476	171624	323	**2882631**	**111656**	**202**
213079	121358	161	2830477	171623	323	**2882635**	**111650**	**185**
213395	040086	315	2830559	131735	334	**2882636**	**111653**	**185**
213467	136018	141	**2830704**	**131866**	**317**	2882764	161648	185
213559	045060	379	**2830705**	**131866**	**317**	2884909	131582	397
213740	161600E	137	**2830706**	**131862**	**317**	**2885050**	**131837**	**397**
213768	**121377**	**395**	**2830707**	**131862**	**317**	**2888640**	**121391**	**390**
213811	181869	49	2830977	121364	343	2888695	171905	378
214147	180245	390	2831066	172029	321	**2888747**	**131915**	**381**
214237	171735	139	2831077	131790	334	2891924	131385	61
214633	131303	134	2831362	050631	406	2891940	180896	433
214719	111406	397	2831474	060172	318	2892304	141400	195
214751	040004	395	2831475	060171	318	2897331	050653	403
214836	181825	69	2836554	181170	201	2897333	050634	410
214950	171765	15	2843887	181204E	201	2897334	050626	410
214951	171766	15	**2864024**	**060176**	**229**	2897691	050691	408
214952	171767	15	**2864028**	**060177**	**229**	3000171	180906	167
214953	171768	15	2864072	141313	193	3000173	040025	167
214954	171769	15	2864073	141312	193	3000174	180926	415
215044	131304	69	2864080	131267	228	3000175	180930	167
215045	131411	69	2868820	151526	215	3000850	191925	33
215199	181014	393	2869133	141438	197	3000889	180908	53
215233	151525	142	2871292	180885	433	3000896	181806	49
215356	050483	435	2871314	131622	209	3001138	136050	378
215390	111091	395	2871452	131971	343	3001281	EBG-3808-TIM	237
215560	151505	8	2871453	131972	206	3001304	131556	389
215570	151505	8	2872057	192143	206	3001305	131553	389
215580	191932	395	**2872195**	**131931**	**193**	3001306	131554	389
215705	136021	141	2872277	050695	404	3001318	131951	389
215966	191880	33	2872279	050696	404	3001340	121254	178
215983	121241	393	2872362	050700	404	3001562	131985	398
216056	131763	397	2872717	192143	206	3001588	171708	13
216484	141290	420	2872784	050626	410	**3001706**	**121382**	**390**
216486	131410	69	2872858	050730	411	3001708	171940	378
216487	131306	169	2878071	141437	197	3001709	171950	378
216524	GCP-3495	41	2878168	151506	209	3001771	136125	397
216707	191952	395	2881682	505175	202	3001772	136023	157
216737	**042210**	**161**	2881688	181938	331	3002022	045034	390
216879	121243	393	2881719	161649	202	3002067	060004	157
217037	121218	69	2881757	141313	193	3002150	136135	390
217052	131550	395	**2881766**	**131851**	**205**	3002158	EPP-3573	297
217196	180120	161	**2881767**	**131906**	**204**	3002203	050476	435
217321	202010	13	2881783	141438	197	3002330	131941	389
217322	202015	13	2881783NX	141438	197	3002369	121426	390
217323	202005	139	2881785	181193	201	3002385	131308	53
217557	220030-006	417	2881786	181210	201	3002723	ETC-9296	399
217638	050484	435	2881797	105001	360	3002734	132009	398

PAI Copyright 2017

Cummins Reference	PAI Reference	Page
3002834	151550	390
3002901	191882	142
3003156	136150	396
3003353	136092	397
3003602	192073	395
3003708	ETC-9295	399
3003834	219931	117
3003876	136033	397
3004316	136006	167
3004317	136018	141
3004673	131315	132
3004686	151551	390
3005133	180905	167
3005145	060045	157
3005357	171648	378
3005506	181898	49
3005592	131309	178
3005874	136094	390
3005875	136093	390
3005883	136078	378
3005885	136096	378
3005886	136078	378
3005887	136125	397
3005949	161639	383
3005956	131560	385
3005972	131936	389
3005984	161637	383
3006127	131633	132
3006132	131262	388
3006134	**131892**	**388**
3006135	131261	388
3006136	**131892**	**388**
3006237	136169	378
3006456	192027E	41
3006696	180291	390
3006736	136000	141
3006737	136001	157
3006738	136023	157
3006739	136052	395
3006742	136038	141
3006743	136039	157
3006745	042001	61
3007075	181898	49
3007120	045048	379
3007121	045047	379
3007225	191946	385
3007238	040005	385
3007338	181801	49
3007376	131935	389
3007380	131921	389
3007442	121219	7
3007517	045034	390
3007525	161640	383
3007632	040089	317
3007635	040086	315
3007688	ETC-9297	399
3007689	151505	8
3007713	121221	183
3007723	060003	157
3007759	121195	153
3007976	045000	7
3008017	131311	61
3008024	131665	69
3008400	131444	313
3008401	131680	389
3008403	**131926**	**381**
3008404	131939	389
3008406	131525	381
3008465	EPP-3573	297
3008466	FPP-3577	359
3008468	EPP-3575	385
3008469	EWA-0049	387
3008470	EPP-3566	387
3008530	151483	141
3008591	131312	168
3008689	ECH-8692	61
3008690	042123	247
3008706	210025	57
3008710	121404	390
3008947	136019	167
3008965	131974	398
3008966	131973	398
3009109	192159	385
3009213	171695	13
3009324	131459	389
3009330	040034	241
3009467	209973X	57
3009625	136138	392
3010030	131321	60
3010146	141332	163
3010150	EBG-8041	159
3010242	131504	390
3010457	136008	393
3010459	136025	392
3010464	136036	392
3010465	136037	390
3010550	ECL-1954	50
3010622	**131907**	**390**
3010646	181869	49
3010914	040009	169
3010915	040008	75
3010918	131942	389
3010926	131802	390
3010937	121222	134
3011076	121262	383
3011272	131313	45
3011273	131314	45
3011297	131257	389
3011580	131257	389
3011627	131455	387
3011818	131940	389
3011876	131666	206
3011884	161639	383
3011885	161637	383
3011891	220090	415
3011900	220090	415
3011902	ETC-9296	399
3011931	131318	50
3011934	192085	153
3011951	151504	137
3011952	042011	137
3012307	191856	142
3012333	131581	397
3012468	040030	159
3012469	040031	53
3012526	040061	167
3012528	141335	163
3012529	141305	209
3012531	141349	58
3012532	141350	163
3012536	210001	57
3012537	210002	57
3012538	210000	57
3012972	131319	73
3013036	180205	57
3013265	040042	383
3013330	045006	45
3013331	045007	45
3013471	171731	395
3013472	171732	395
3013479	**131896**	**132**
3013497	131681	395
3013591	045000	7
3013623	040001	41
3013646	**131834**	**395**
3013679	ETC-9295	399
3013786	EPP-3574	381
3013811	180245	390
3013930	171630	15
3014040	171730	395
3014051	171720	393
3014054	171880	378
3014055	171881	378
3014103	042020	167
3014205	**131893**	**397**
3014292	141352	163
3014304	136132	390
3014404	045000	7
3014435	121307	390
3014449	131927	389
3014458	131682	395
3014459	131331	118
3014614	171735	139
3014668	121261	383
3014756	141335	163
3014778	131322	163
3014783	141351	163
3014937	180110	161
3014965	141352	163
3014970	151504	7
3015026	**042210**	**161**
3015067	121426	390
3015238	**050680**	**409**
3015239	**131892**	**388**
3015446	**131826**	**388**
3015447	**131825**	**388**
3015865	340082	191
3016246	131605	368
3016495	060045	157
3016650	111174	219
3016652	111178	221
3016760	171780	221
3016761	171781	221
3016762	171782	221
3016763	171783	221
3016788	136094	390
3016789	136093	390
3016791	136048	390
3016792	136077	378
3016793	136050	378
3016794	136058	390
3016799	136074	134
3016800	136075	134
3016825	045048	379
3016826	045047	379
3016983	121275	134
3017276	121053	239
3017348	111181	16
3017349	111182	16
3017544	045004	45
3017564	131810	397
3017656	121282	251
3017729	131290	49
3017730	131506	249
3017750	131390	34
3017759	192009E	41
3017930	131545	45
3017961	192074	379
3018059	ECH-8692	61
3018066	ETC-9297	399

Cummins Reference	PAI Reference	Page
3018067	ETC-9295	399
3018068	ETC-9295	399
3018103	045046	227
3018147	136150	396
3018151	220090	415
3018210	171925	378
3018211	171935	378
3018212	171945	378
3018219	209931	57
3018324	209930	397
3018352	209973X	57
3018453	180208	161
3018682	**040122**	**396**
3018695	136009	63
3018813	210003	397
3018814	210005	397
3018818	192028	385
3018835	209979X	57
3018854	209980X	57
3018862	210004	57
3019116	121223	61
3019158	131323	50
3019218	171700	139
3019219	171699	139
3019227	131669	206
3019287	111112	395
3019406	050484	435
3019600	136080	235
3019641	040011	229
3019932	209978X	57
3019955	162000	137
3019956	162001	137
3019957	162002	137
3019958	162003	8
3019959	162004	137
3019960	162005	137
3019962	136138	392
3020182	136034	397
3020183	136018	141
3020184	136052	395
3020185	136076	11
3020187	136032	397
3020188	136033	397
3020190	136033	397
3020191	136052	395
3020211	192221	297
3020741	**121382**	**390**
3020943	131324	169
3021421	**121421**	**390**
3021581	141420	61
3021588	191925	33
3021592	191851	142
3021593	191854	142
3021594	191855	142
3021595	191854	142
3021596	191852	142
3021597	191853	142
3021598	191855	142
3021600	191856	142
3021601	191850	142
3021660	060046	157
3021693	192036	385
3021704	131279	141
3021705	131326	11
3021710	171885	383
3022157	161637	383
3022229	180919	390
3022400	171890	395
3022471	181801	49
3022474	181807	53
3022480	181801	49
3022483	181806	49
3022530	161641	392
3023062	192007	385
3023066	121365	390
3023101	220030-006	417
3023129	136133	390
3023130	136134	390
3023177	191915	33
3023473	181895	167
3023512	181864	61
3023867	136053	395
3023868	131327	134
3023870	**121382**	**390**
3023900	ETC-9296	399
3024012	121275	134
3024013	131545	45
3024075	136075	134
3024165	180031	57
3024386	181805	53
3024395	191946	385
3024442	060085	141
3024468	121303	238
3024469	121291	238
3024471	131617	239
3024666	181921	63
3024676	111109	15
3024709	136010	42
3024740	ETC-9297	399
3024741	ETC-9296	399
3024923	171701	13
3024960	131339	159
3025127	131311	61
3025130	131623	264
3025152	EIH-1979	249
3025153	131622	209
3025296	131621	209
3025378	131958	212
3025391	ETC-9296	399
3025458	EPP-3573	42
3025479	042182	209
3025511	121276	134
3025874	121044	70
3026134	131625	184
3026146	181874	235
3026156	136098	242
3026163	**131834**	**395**
3026188	151519	215
3026189	151520	215
3026192	131551	233
3026296	191997E	385
3026310	045055	209
3026396	042125	313
3026421	**121421**	**390**
3026556	151521	167
3026557	151522	167
3026804	ECL-1962	247
3026806	042124	239
3026972	191909	33
3027105	151511	221
3027106	171693	153
3027107	171636	221
3027108	040017	221
3027223	181918	235
3027277	131509	229
3027278	131626	227
3027297	141424	239
3027421	141295	163
3027445	131585	242
3027546	060050	230
3027641	131619	264
3027653	180990	75
3027658	136055	211
3027660	136087	211
3027681	EBG-3807-TIM	237
3027692	136060	211
3027714	131477	211
3027718	131620	264
3027769	151526	215
3027881	131276	229
3027924	131565	235
3027949	136062	217
3027950	136088	217
3027983	131347	137
3028070	192011	228
3028071	192097	228
3028072	192098	228
3028073	192099	228
3028074	192100	228
3028075	151502	137
3028098	045051	227
3028105	045042	227
3028106	045041	227
3028122	161636	383
3028123	**131890**	**389**
3028196	131616	264
3028269	151503	137
3028272	040012	229
3028279	040058	57
3028295	121344	264
3028311	131471	243
3028324	**042209**	**245**
3028325	**042210**	**161**
3028333	121181	61
3028385	131507	249
3028434	161638	383
3028533	040013	229
3028539	131508	249
3028673	131550	395
3028685	111183	16
3029099	181845	159
3029171	151526	215
3029188	**131826**	**388**
3029340	171708	13
3029341	171703	393
3029416	131545	45
3029514	ETC-9296	399
3029515	ETC-9295	399
3029820	EGS-3905-021	318
3029847	121224	138
3029920	045046	227
3030038	192067	35
3030221	171720	393
3030257	141281	138
3030445	209986X	57
3030802	141338	63
3030803	141334	63
3030804	141429	63
3030806	141308	63
3030808	121226	63
3030889	181896	13
3030969	131341	134
3031007	131618	264
3031124	040007	75
3031125	BSC-0011	73
3031227	111107	15
3031278	**121401**	**45**
3031446	136167	211
3031448	136060	211
3031449	136062	217

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3031459	151561	213	3035331	136136	397	3042787	060050	230
3031460	191878	213	3035342	180200	57	3042827	180918	390
3031469	131347	137	3035344	180207	57	3043097	131758	389
3031560	ECH-8692	61	3035346	180201	57	3043211	131527	381
3031768	131471	243	3035361	180201	57	3043212	131526	381
3031805	131551	233	3035580	121085	165	3043647	040007	75
3031858	131311	61	3035679	181874A	235	3043650	111406	397
3031959	141281	138	3035738	180199	390	3043909	151534	383
3032008	136055	211	3035812	161597	7	3043945	220033	417
3032010	136087	211	3035977	060004	157	3043995	121248	415
3032011	136060	211	3035996	192050	40	3044389	220102	417
3032012	136062	217	3036005	060003	157	3044448	111177	222
3032013	136088	217	3036011	060003	157	3044475	131495	247
3032061	ETC-9297	399	3036073	111355	383	3044489	040033	215
3032068	ETC-9296	399	3036100	131763	397	3044502	131267	228
3032161	131554	389	3036933	045011	45	3044580	131267	228
3032287	192094	41	3036934	045010	45	3044593	131360	134
3032288	192095	41	3037045	171694	139	3044762	131935	389
3032289	192096	41	3037282	131936	389	3044795	121260	395
3032291	192093	41	3037349	131477	211	3044819	121054	117
3032348	131342	69	3037400	045055	209	**3044942**	**121382**	**390**
3032623	162010	209	3037413	111111	395	3045173	136138	392
3032633	040005	385	3037421	131343	134	**3045442**	**131835**	**395**
3032787	121256	210	3037425	050470	435	3045483	141407	63
3032850	121296	264	3037523	191926	213	3045533	131415	37
3032861	131347	137	3037536	ECP-3474	165	3045534	121239	37
3032871	**042210**	**161**	3037537	121227	167	3045617	141351	163
3032874	121204	395	3037573	131588	397	3045622	141352	163
3032896	180191	57	3037575	131569	397	3045670	220006	418
3033215	131783	397	**3037821**	**131889**	**389**	3045671	220007	418
3033226	192068	229	3038081	EPP-3572	415	3045672	220008	418
3033230	192144	229	3038178	045051	227	3045673	220009	418
3033231	192158	229	3038903	042007	35	3045801	181872	159
3033232	192048	229	3038989	191878	213	3045846	136165	161
3033233	192049	229	3038991	181918	235	3045849	040011	229
3033234	191977	229	3038997	136012	49	3045850	040010	229
3033235	191965	229	3038998	136013	158	3045883	180203	57
3033247	121303	238	3039114	131276	229	3045907	111175	222
3033248	121291	238	**3039267**	**042031**	**138**	3045913	181829	247
3033293	045051	227	3039296	141338	63	3045941	131780	397
3033314	192029	229	3039390	181892	55	3045943	181805	53
3033315	192029	229	3039396	181891	55	3045948	111188	16
3033324	191977	229	3040056	131348	55	3045979	121181	385
3033403	131581	397	3040057	131349	55	3046200	180929	167
3033525	121280	55	3040180	131970	153	**3046201**	**121379**	**395**
3033677	181845	159	3040720	131680	389	3046202	ECP-3475	165
3033740	180233	161	3040721	131939	389	3046298	220031	417
3033898	121179	178	3040730	131583	397	3046306	131583	397
3033915	121436	390	3040813	ECP-3474	167	3046325	161596	137
3034217	180110	161	3040817	121284	161	3046418	192075	45
3034243	180110	161	3040818	ECP-3477	137	3046419	192076	397
3034263	131588	397	3040830	191956	41	3046420	192077	45
3034348	050493	435	3040832	180919	390	3046430	192078	45
3034375	**040109**	**249**	3041503	131568	155	3046431	192079	45
3034412	121251	137	3041965	141352	163	3046432	192080	397
3034438	045021	147	3042002	121055	117	3046865	181892	55
3034510	181874	235	3042004	042165	157	3046943	121265	165
3034579	121180	63	3042318	111185	16	3046947	141318	138
3034663	162011	209	3042319	111186	16	3046948	141325	138
3034791	192068	229	3042320	111187	16	3046951	141282	138
3034827	191963	385	3042401	121178	178	3047159	131438	417
3034855	131268	229	3042551	131351	37	3047188	121203	209
3034856	**042151**	**229**	3042586	131922	389	3047390	171885	383
3034946	050494	435	**3042589**	**131918**	**381**	3047391	171886	383
3034986	136011	138	3042590	131525	381	3047392	171887	383
3035026	121373	331	3042612	131937	389	3047464	131352	63
3035110	191946	385	3042745	192062	40	3047465	131353	63
3035228	121252	137	3042759	EOS-3305	390	3047469	180910	55
3035253	131276	229	3042763	161600E	137	3047549	141293	390
3035306	ETC-9267	390	3042786	060050	230	3047924	042008	41

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3047964	209931	57	3053764	209972X	57	3063053	131702	264
3047973	209986X	57	3053805	131702	264	3063166	121253	137
3048066	131347	137	3054219	209980X	57	**3063245**	**EBG-6163**	**235**
3048294	180030	57	3054228	209973X	57	3063246	EBG-8042	51
3048296	180031	57	3054250	209979X	57	3063510	180191	57
3048353	040041	157	3054254	209978X	57	3063618	136016	42
3048620	192069	385	3054260	180270	41	3063817	050486	435
3048650	111189	16	3054445	131547	63	3063843	111092	221
3048766	060005	157	3054532	209930	397	3064194	131369	65
3048784	181865	65	3054590	192000	153	3064195	131486	65
3048808	111190	16	3054600	192001	41	3064196	131423	65
3048809	111191	16	3054608	180204	161	3064200	180940	55
3048819	180270	41	3054610	180210	161	3064201	180941	55
3049000	181840	55	3054611	180211	161	3064230	181896	13
3049018	060102	157	3054841	131358	36	3064247	192163	153
3049024	191924	33	3054866	171646	13	3064281	191989	153
3049092	050700	404	3054947	161998	137	3064291	171719	139
3049093	050700	404	3054948	162003	137	3064294	171635	147
3049187	131354	35	3054949	161999	137	3064295	151512	147
3049215	121279	55	3055069	042010	138	3064304	111170	147
3049221	121228	197	3055099	161600E	137	3064305	111171	204
3049302	136014	65	3055145	171784	176	3064309	045013	155
3049333	040102	57	3055146	171785	147	3064312	192031E	153
3049364	131909	389	3055147	171786	147	3064313	131464	159
3049408	131346	7	3055148	171787	147	3064381	131434	53
3049467	136060	211	3055622	111179	222	3064389	180913	159
3049468	136062	217	3056100	136074	134	3064390	180914	159
3049553	141336	415	3056138	121044	70	3064392	180911	159
3049685	131541	155	3056155	040111	169	3064406	EBG-8041	159
3049998	131355	153	3056344	050691	251	3064453	181839	55
3050366	111192	16	3057120	840135	57	3064454	181838	55
3050369	192030E	41	3057139	192082	379	3064455	181841	55
3050394	180908	53	3058148	131477	211	3064634	042063	235
3050396	180909	53	3058346	131590	397	3064823	131487	65
3050480	111193	16	3058347	131581	397	3064919	180901	53
3050667	121229	178	3058383	050483	435	3064920	180900	49
3050677	**131836**	**397**	3058396	045015	69	3064974	180916	55
3050685	**040100**	**138**	3058397	045023	73	3065000	180912	55
3050867	136015	41	3058469	192120	45	3065022	181003	169
3051348	180901	53	3058471	192072	45	3065024	181004	169
3051351	181809	53	**3058512**	**131836**	**397**	3065061	121054	117
3051354	181806	49	3058532	131359	36	3065062	121055	117
3051372	181806	49	**3058566**	**111663**	**15**	3065115	131497	141
3051384	181807	53	3058645	060085	141	3065125	045005	45
3051553	111194	16	3058653	121233	323	3065151	060070	157
3051554	111195	16	3058655	121141	117	3065405	161598	137
3051555	111196	16	3058952	131543	415	3065406	162008	137
3051556	111197	16	3059408	181865	165	3065790	131456	387
3051557	111198	16	3059424	209985X	57	3065791	131455	387
3051991	131369	65	3059860	162008	8	3065830	136152	391
3051993	131486	65	3060538	131544	415	3065900	191944	229
3051997	141430	65	3060613	045019	73	3065903	191943	229
3052127	131468	65	3060912	131598	376	3065936	192056	385
3052136	131356	65	3061649	181842	55	3066186	191895	142
3052513	131363	63	3061998	162012	8	3066211	121255	168
3052514	141403	63	3062096	045045	45	3066217	045016	155
3052534	060085	141	3062123	191892	390	3066220	045009	155
3052586	121231	134	3062148	209972X	57	3066285	131466	159
3052587	121232	41	3062355	131541	155	3066291	192115	155
3052794	111199	16	3062356	131568	155	3066298	131470	165
3052819	191999	385	3062566	181025	75	3066311	131275	153
3052820	191978	385	3062568	181002	169	3066323	ECP-3478	137
3052877	131357	55	3062602	180904	237	3066330	180903	158
3052906	131908	389	3062676	136138	392	3066369	131524	249
3053132	131389	37	3062694	040139	55	3066842	141430	65
3053368	171719	139	3062866	050690	390	3066843	162007	137
3053377	192081	45	3062929	180910	55	3066844	162012	137
3053430	180202	57	3062931	180902	55	3066877	191921E	390
3053500	111101	15	3062989	040130	55	3066882	191892	390
3053526	111139	15	**3063052**	**131836**	**397**	3067259	136151	391

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3067405	181019	244	3070478	131468	65	3076189	131555	153
3067406	181018	244	3070484	192019	153	3076203	136073	141
3067459	131475	36	3070486	192085	153	3076225	131567	167
3067460	131476	36	3070499	171635	147	3076226	131591	415
3067515	131369	65	3070703	111376	383	3076343	180206	161
3067568	171700	139	3070706	111355	383	3076489	181830-001	159
3067613	131361	163	3070707	111359	383	3076491	181941	159
3067616	131362	157	3070789	131560	385	**3076492**	**050488**	**435**
3067618	131497	141	3071032	045055	209	3076496	060086	141
3067804	111371	221	3071075	040023	153	3076500	180921	167
3067830	192134	227	3071085	181845	159	3076515	192002	153
3067897	**040122**	**396**	3071147	192086	41	3076522	131434	159
3067928	131568	155	3071159	121043	65	**3076706**	**050545**	**249**
3067930	040027	169	3071161	040006	153	3076767	191922E	390
3067932	192116	155	3071181	ECP-3468	137	3077198	131583	397
3067973	050710	153	3071485	181026	75	3077199	132009	398
3067988	180905	167	3071494	209972X	57	3077200	131763	397
3067997	181903	158	3071535	060046	157	3077201	131410	69
3067999	181897	159	3071575	050650	408	**3077507**	**050545**	**249**
3068036	111355	383	3071614	060051	230	**3077508**	**050546**	**249**
3068090	111361	222	3071615	060051	230	3077743	180940	55
3068135	131428	153	3071643	136164	161	3078124	132008	398
3068390	192131	227	3072321	192032	153	3078150	050700	404
3068443	060085	141	3072322	192033	153	3078151	050700	404
3068460	141295	163	3072341	131499	165	3078221	136082	141
3068463	131347	137	3072369	192019	153	3078274	060086	141
3068466	131469	7	3072375	121257	165	3078292	136046	141
3068473	131460	155	3072491	050650	408	3078307	180920	167
3068475	131541	155	3072919	131479	249	3078310	180970	167
3068476	131568	155	**3073213**	**131918**	**381**	3078322	NSS	169
3068510	121177	178	3073343	191883	142	3078323	NSS	169
3068514	131434	159	3073344	171738	139	3078324	NSS	169
3068519	191953	152	3073346	141356	163	3078330	171635	147
3068527	BGA-3004	137	3073499	192117	155	3078395	191987	152
3068537	131434	159	3073509	192010	229	3078399	191960	152
3068724	181827	69	3073510	192010	229	3078407	141404	165
3068822	181020	244	3073511	192034E	229	3079585	191842	213
3068828	191948	229	3073512	192034E	229	3079590	191858	227
3068848	181821E	235	3073522	171636	221	**3079754**	**131926**	**381**
3068897	040006	153	3073587	202027	217	3079883	131807	389
3069014	131363	63	3073650	045038	227	3080405	050649	403
3069017	**131834**	**395**	3073693	181821-100	235	3080406	050650	408
3069053	042023	313	3073707	171650	217	3080708	045035	209
3069097	131364	137	3073894	050700	404	**3080726**	**111598**	**222**
3069098	131365	61	3073895	050700	404	3080760	161625	262
3069101	131366	167	3073966	121250	159	3080769	121285	241
3069102	131367	415	3073995	209970X	162	3080770	121341	247
3069176	131369	65	3074108	111370	221	3080809	180190	161
3069177	131370	169	3074118	192035	229	**3080837**	**131834**	**395**
3069182	131371	134	3074361	171699	139	3080975	191948	229
3069212	111200	16	3074381	060003	157	3080976	191949	229
3069672	191959	152	3074400	131373	155	3081076	131770	397
3069678	131472	165	3074401	131374	155	3081081	192056	385
3069692	192013	153	3074402	131375	155	3081212	192050	40
3069767	209985X	57	3074403	131426	155	3081248	045010	45
3069786	131524	249	3074404	131376	155	3081266	111156	145
3069844	**131912**	**381**	3074482	136051	159	3081267	111157	145
3069890	131771	397	3074493	111663	15	3081268	111166	145
3070100	131584	249	3074690	131935	389	3081269	111167	145
3070136	121197	162	3074982	131255	153	3081311	050670	411
3070137	121198	162	3075273	050650	408	3081315	209970X	162
3070138	121199	162	3075531	060085	141	3081359	141426	241
3070174	192105	229	**3076042**	**121432**	**249**	3081480	131806	389
3070175	192068	229	3076046	192134	227	3081489	121263	383
3070218	**045061**	**209**	3076091	151517	141	3081494	121418	390
3070384	505060	221	3076095	121372	390	3081506	131913	389
3070393	042182	209	3076096	121336	191	**3081611**	**131923**	**381**
3070460	192051	153	3076102	121244	287	3081621	131910	389
3070473	191960	152	3076121	191842	213	3081695	121307	390
3070477	131498	165	3076146	060085	141	3081702	131916	379

Cummins Reference	PAI Reference	Page
3081724	136149	391
3081824	131803	390
3081895	131804	385
3081898	131805	385
3082550	121234	134
3082563	131970	153
3083662	209982X	162
3083726	050649	403
3083825	136164	161
3083846	209974X	162
3083848	209987X	162
3083849	209981X	245
3083932	191886	142
3083981	**060160X**	**153**
3083991	191995	153
3084020	192014	153
3084023	111380	147
3084024	181919	159
3084041	192130	153
3084044	111378	147
3084045	191954	152
3084445	171739	217
3084521	050652	251
3084539	121306	390
3084564	191918	213
3084568	191918	213
3084589	209975X	245
3084656	181019	244
3084713	136165	161
3084848	121249	168
3084879	131289	331
3084899	151526	215
3084980	191995	153
3085185	050671	411
3085198	050671	411
3085218	180190	161
3085709	EGA-3877	163
3085713	131916	379
3085867	136153	391
3085989	131924	389
3085992	131913	389
3085998	131457	387
3086100	136155	378
3086120	121399	389
3086202	131911	389
3086279	136154	390
3086292	131917	389
3086362	192069	385
3086443	060085	141
3087557	209975X	245
3087558	209987X	162
3087560	209974X	162
3087634	111378	147
3087635	111380	147
3087654	191895	142
3087692	FAD-4099	161
3087740	121214	153
3087788	209990X	162
3087807	209988X	162
3087856	191919	213
3088178	209991X	162
3088298	162028	383
3088389	191973	385
3088391	191946	385
3088393	191976	385
3088468	EPP-3575	42
3088978	192170	228
3088980	192175	228
3088984	131552	249
3089025	**121385**	**195**
3089238	**050578**	**419**
3089239	**050579**	**419**
3089240	121205	343
3089567	**050574**	**419**
3089568	**050575**	**419**
3090127	**121419**	**395**
3090170	131914	389
3090194	180840	391
3090299	131806	389
3090320	131919	389
3090391	136155	378
3090435	136155	378
3090703	192011	228
3090704	192011	228
3090742	180191	57
3092345	**050578**	**419**
3093805	840005	192
3093950	136101	418
3093956	040047	212
3095040	209976X	245
3095050	141325	138
3095064	111139	15
3095086	209990X	162
3095723	**040100**	**138**
3095737	111107	15
3095746	111641	15
3095755	111104	15
3095756	111109	15
3095880	050499	435
3096077	**131834**	**395**
3096260	**121398**	**378**
3096362	171651	378
3096478	136155	378
3096681	111358	383
3096682	111354	383
3096685	111375	383
3097267	191897	213
3098697	181908	159
3098985	131970	153
3099083	131347	137
3100445	141312	193
3100895	040055	191
3100980	132024	181
3101054	131808	331
3101215	**121392**	**377**
3101268	131670	201
3101331	181881	192
3101569	132024	181
3101655	202005	139
3101771	060003	157
3101871	**050524**	**429**
3101872	**050524**	**429**
3102234	131639	205
3102314	131673	201
3102317	131955	206
3102361	131629	264
3102392	**131900**	**206**
3102423	161627	209
3102500	121292	235
3102646	121290	235
3102745	141452	206
3102802	121299	159
3102807	111583	221
3102808	111584	221
3102901	191841	213
3102933	**131900**	**206**
3103077	131955	206
3103085	040147	244
3103086	040147	244
3103116	181937	235
3103361	141452	206
3103584	060009	184
3103752	111700	221
3103753	**111699**	**221**
3103765	141452	206
3103824	141452	206
3104149	180896	433
3104227	**050713**	**406**
3104229	131674	197
3104230	**131675**	**197**
3104232	131667	195
3104263	136130	181
3104345	050654	403
3104392	**131840**	**191**
3104445	192160	191
3104874	141453	197
3104875	141452	206
3150015	171769	15
3150032	181896	13
3160924	136157	389
3161407	050533	429
3161423	**045027**	**155**
3161473	191858	227
3161515	040011	229
3161520	171698	217
3161653	171697	217
3161742	136056	212
3161772	136056	212
3161781	141426	241
3161871	141426	241
3161942	202027	217
3163713	121300	264
3163714	121301	264
3163715	121302	264
3166288	131558	385
3166289	131559	385
3166307	131451	163
3166388	045040	155
3166410	191961	152
3166428	045039	155
3171368	EGS-3890-020	390
3175517	131967	389
3175705	136170	390
3175805	151542	390
3176770	**131907**	**390**
3177235	141413	387
3177942	**131907**	**390**
3178359	111355	383
3179026	131968	389
3179027	**131890**	**389**
3200287	136049	67
3200550	131456	387
3200764	131937	389
3200944	131936	389
3200945	131911	389
3200977	131940	389
3201082	171648	378
3201119	141293	390
3201311	192036E	385
3201386	131377	418
3201388	131928	389
3201517	131560	385
3201659	121343	215
3201693	131911	389
3201785	141412	387
3202007	180919	390
3202210	192036E	385
3202240	161636	383
3202259	**131918**	**381**
3202283	131514	389

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3226009	**111674**	**15**	3315847	050505	429	3357480	171811	322
3226010	**111451**	**15**	3316053	050529	432	3357693	136026	323
3253137	191896	142	3318201	050527	432	3357993	101170	18
3255122	050668	405	3318318	050531	432	3390113	181856	53
3275176	180030	57	3318853	050511	430	3390114	181851	49
3275354	192020	392	3324435	650490	429	3390115	181852	49
3275356	191964	392	3328328	BWA-0066	229	3394112	192146	41
3275779	191939	392	3328379	040012	229	3394114	131943	385
3277462	191906	392	3328628	191858	227	3394116	192233	153
3277463	191903	392	3328634	131267	228	3394117	195020	385
3278029	191904	392	3328689	060051	230	**3394459**	**111671**	**350**
3278031	191907	392	3328698	136061	212	3395612	192225	297
3278173	192038	392	3328740	121340	264	3400710	171866	217
3278723	505055	392	3328760	131958	212	3400711	171867	217
3280102	191888	330	3328761	131795	212	3400712	171868	217
3280510	141298	280	3328781	192010	229	3400713	171869	217
3281583	180892	433	3328785	192034	229	3400813	180922	235
3281618	050495	435	3328786	191947E	229	3400885	180894	433
3281838	180108	278	3328925	131267	228	**3401006**	**050640**	**410**
3282113	131480	313	**3329289**	**050533**	**429**	3401009	181883	235
3282266	042026	360	**3329617**	**050644**	**403**	3401186	141296	238
3283000	131578	297	**3329899**	**045064**	**349**	3401290	040053	210
3283001	131577	277	3330141	050660	410	3401439	191878	213
3283002	131686	297	3330159	121282	251	**3401544**	**050513**	**430**
3283003	**131882**	**317**	3330202	121210	315	3404232	131654	195
3283179	191887	330	3330527	050645	339	3406669	131347	137
3283333	131417	317	3330537	121314	191	**3406742**	**060161X**	**153**
3283335	131418	297	3330538	121313	191	3408324	180190	161
3283336	131577	277	**3330953**	**050640**	**410**	3408328	180191	57
3283337	131578	297	**3330954**	**050640**	**410**	3408345	050675	411
3283338	**131882**	**317**	3330998	050646	406	3408377	050646	406
3283339	131686	297	**3331017**	**050703**	**404**	**3408430**	**050705**	**404**
3283589	181843	299	3331044	050651	403	**3408438**	**121376**	**343**
3283767	131549	267	**3331096**	**050524**	**429**	3408503	050700	404
3284102	**060054**	**323**	3331230	050661	409	3408531	050696	404
3284377	192122	297	3331231	050661	409	3408607	050691	408
3284623	131538	285	3331663	136005	378	3408631	050690	390
3285323	181868	363	3331672	131916	379	3410141	131936	389
3285324	181813	363	3335044	040052	249	3410171	131911	389
3285325	181922	363	3335341	045041	227	3410209	131560	385
3285414	181817	331	3335342	045042	227	3410348	131787	398
3285747	131480	313	3335343	045038	227	3411327	191874	142
3286278	181823	331	3335548	136106	159	3411389	151517	141
3286293	181819	363	3335549	181831	159	3411401	209977X	245
3286312	060093	287	3335550	181831	159	3411458	060086	141
3286499	121072	343	3347569	171648	378	3411691	209993X	162
3287277	180882	433	3347937	121312	191	3411752	209975X	245
3287561	136104	315	3347938	121314	191	3411753	209976X	245
3288464	050489	435	3347939	121336	191	3411756	209981X	245
3288689	050496	435	3348319	121417	206	3411758	209977X	245
3288790	050472	435	**3348332**	**042211**	**161**	3411759	209974X	162
3289146	050489	435	3348374	191872	213	3411760	209987X	162
3289659	050475	435	3348579	050607	407	3411761	209988X	162
3289864	741411	435	**3348747**	**050644**	**403**	3411763	209990X	162
3300426	050610	61	**3349417**	**121387**	**264**	3411764	209991X	162
3300908	050610	61	**3349425**	**111626**	**324**	3411766	209993X	162
3300917	121273	61	**3349503**	**121420**	**264**	3411767	209982X	162
3302026	650511	430	**3349504**	**121388**	**264**	**3411817**	**060161X**	**153**
3304232	050515	430	**3349541**	**131887**	**264**	3411878	121338	183
3305487	121273	61	**3349635**	**040132**	**244**	3412284	191894	183
3308638	**050534**	**429**	**3349744**	**121389**	**264**	3412352	192123	191
3308958	121273	61	3349806	040016	147	3412857	141414	165
3310445	650511	430	3349811	192163	153	3412860	045056	186
3313279	050510	61	3349819	131555	153	3412895	192104	191
3313280	650511	430	3349820	131347	137	3413082	131497	141
3315115	050528	432	3352395	151501	8	3413091	141414	165
3315116	050526	432	3353977	136024	347	**3415012**	**EFC-1492**	**425**
3315788	050529	432	3354829	111510	15	**3415013**	**EFC-1454**	**425**
3315843	**050534**	**429**	3355068	141284	313	3415030	450465	423
3315844	050500	429	3355095	042170	418	3415038	450464	423

Cross Reference

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3415699	180107	332	3525238	ETC-9287	249	3593623	181198	201
3417142	050669	403	3525325	ETC-9289	399	3594027	ETC-9267	390
3417183	050669	403	3526801	ETC-9257	76	**3594521**	**042058**	**249**
3417185	050661	409	3527046	ETC-9257	76	**3595782**	**040099**	**249**
3417189	**050640**	**410**	3527184	040077	300	3596047	181198	201
3417190	**050639**	**410**	3527547	ETC-9258	76	3596613	181198	201
3417195	050682	410	3527693	ETC-9256	76	3597911	181206	303
3417645	191858	227	3528281	ETC-9289	399	3597912	181206	303
3417713	191966	229	3528639	181197	249	3598821	181201	201
3417715	191949	229	3528741	ETC-9253	303	3598824	181201	201
3417717	192127	229	3528742	ETC-9253	303	3599574	ETC-9229	249
3417775	191878	213	3528743	ETC-9252	303	3599627	181201	201
3417778	191948	229	3528744	ETC-9252	303	3599755	181169	201
3417779	191949	229	3528777	ETC-9254	386	3600471	131958	212
3418020	191948	229	3528778	ETC-9254	386	3600880	141424	239
3418021	191949	229	3529032	ETC-9257	76	3600882	131509	229
3418040	192011	228	3529035	ETC-9258	76	3600883	131507	249
3418044	192097	228	3529040	ETC-9256	76	3600925	131478	215
3418045	192098	228	3529041	ETC-9289	399	3602788	181873	53
3418046	192099	228	3529257	181197	249	**3606672**	**111598**	**222**
3418047	192100	228	3529610	042095	300	**3606677**	**111598**	**222**
3418052	192011	228	3529629	ETC-9259	170	**3606732**	**111598**	**222**
3500681	EGS-2861	390	3531267	ETC-9278	170	3606766	192107	229
3504696	ETC-9286	249	3531728	ETC-9259	170	3606856	192148	229
3504934	219971	117	3531733	ETC-9278	170	**3607353**	**111646**	**350**
3518301	ETC-9285	250	3532053	ETC-9288	249	**3607354**	**111668**	**350**
3519092	ETC-9286	249	3532054	ETC-9288	249	3608786	191929	33
3519095	ETC-9285	250	3532819	ETC-9293	76	3608787	191930	33
3519106	ETC-9286	250	3533010	181207	368	3608833	171701	13
3519402	219970	117	3533955	121368	343	3608889	171658	182
3519622	181160	390	3534501	181196	170	3609796	209990X	162
3519623	181161	390	3534923	181195	335	3609824	141356	163
3519762	EGS-2861	368	3534924	181195	335	3609828	141294	163
3520030	ETC-9252	303	3535635	181205	386	3609829	141295	163
3520600	ETC-9291	76	3535665	181207	368	3609832	141294	163
3520659	ETC-9292	76	3535833	181206	303	3609833	141295	163
3520698	ETC-9293	76	3536095	ETC-9278	170	3609838	141354	163
3521052	ETC-9292	76	3536149	181200	249	3609920	181845	159
3521053	ETC-9291	76	3537132	181194	335	3612521	050673	405
3521054	ETC-9293	76	3538400	181196	170	3613114	050670	411
3521439	219970	117	3539911	181206	303	**3613547**	**050679**	**412**
3521440	219971	117	3545677	181191	390	3613604	050670	411
3521442	219972	117	3558515	131451	163	3613819	050670	411
3521551	ETC-9294	76	3558664	220126	415	3626756	040135	390
3521802	ETC-9286	249	3558665	220125	415	3626971	131560	385
3521830	ETC-9291	76	3558677	220140	415	3627095	040135	390
3522777	ETC-9253	303	3558691	141337	415	3627295	141413	387
3522778	ETC-9253	303	3558703	220102	417	3627695	121297	201
3522861	ETC-9294	76	3558723	131700	415	3628330	131560	385
3522862	ETC-9294	76	3558754	042062	415	3628894	136156	390
3522865	ETC-9291	76	3558762	220102	417	3628895	136094	390
3522866	ETC-9291	76	3558799	220085	415	3629006	192052	385
3522867	ETC-9293	76	3558828	220087	415	3629007	192053	385
3522871	ETC-9292	76	3558830	220086	415	3629140	131680	389
3522872	ETC-9292	76	3558899	220127	415	3630628	192053	385
3522900	ETC-9252	303	3558947	131544	415	3630839	131560	385
3523272	ETC-9291	76	3558982	220090	415	3630969	131458	387
3523273	ETC-9291	76	3559049	220140	415	3631245	111358	383
3523415	ETC-9294	76	3559096	220141	415	3631248	505095	383
3523417	ETC-9255	76	3559133	220141	415	3631805	136016	42
3523822	ETC-9294	76	3559549	220027	415	3633046	136135	390
3523850	ETC-9267	390	3559557	220028	415	3633840	192053	385
3523980	181160	390	3559568	220038	415	3634007	136148	390
3524034	ETC-9254	386	3575169	181190	368	3634664	131559	385
3524035	ETC-9254	386	3580745	181190	368	3637727	131459	389
3524178	ETC-9255	76	3590044	181200	249	3637730	131458	387
3524202	ETC-9292	76	3591182	181196	170	3652542	209970X	162
3524206	ETC-9291	76	3591522	181161	390	3652542X	209970X	162
3524208	ETC-9294	76	3592545	181198	201	3654108	050650	408
3525237	ETC-9287	249	3592766	181206	303	**3678506**	**040136**	**191**

New Parts are in BOLD text

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3678536	121353	191	3680780	191894	183	**3684359**	**131878**	**201**
3678574	040076	186	3680867	192126E	191	**3684360**	**136161**	**199**
3678590	111090	189	3680873	192123	191	**3684384**	**121384**	**192**
3678602	050571	419	3680876	131655	181	3684449	181904	192
3678603	121289	191	3680883	492062	191	3684450	181914	192
3678605	050581	419	3680884	192103	191	**3685060**	**131905**	**206**
3678606	121366	191	**3680913**	**060069**	**184**	**3685124**	**121424**	**206**
3678610	050570	419	**3680922**	**060055**	**184**	3685173	136139	182
3678611	050580	419	3681001	192155	191	**3685234**	**121400**	**185**
3678724	121316	192	3681071	192160	191	**3685235**	**161650**	**185**
3678737	121310	185	3681106	181876	192	**3685456**	**131898**	**206**
3678738	121311	185	3681145	131655	181	3685510	131959	181
3678756	121308	204	3681240	180889	433	**3685535**	**131904**	**201**
3678762	136109	206	3681580	181881	192	**3685614**	**131852**	**181**
3678770	131644	206	3681689	040056	195	**3685639**	**131860**	**191**
3678786	121298	315	3681710	191889	183	3685690	151558	191
3678791	**050577**	**419**	3681911	171658	182	**3686368**	**131903**	**181**
3678804	**040137**	**191**	3682025	161646	189	**3686525**	**121394**	**206**
3678873	**050576**	**419**	3682076	121318	197	**3686589**	**131853**	**181**
3678912	121210	315	3682142	191938	183	**3686758**	**131842**	**206**
3678921	050572	285	3682177	GGA-2947	201	3686938	141312	193
3678922	050573	419	3682255	180896	433	**3687007**	**131853**	**181**
3678925	321241	315	3682311	181875	192	3687051	136144	206
3679102	**040142**	**206**	**3682552**	**042030**	**197**	3687058	045056	186
3679139	121321	343	**3682554**	**042029**	**197**	3687130	181933	192
3679445	**040083**	**191**	3682577	131677	206	3687414	141283	180
3679551	192155	191	3682673	131676	206	3687415	141283	180
3679573	121338	183	3682683	180896	433	3687605	111730	185
3679637	131660	181	3682710	131671	191	3687897	111730	185
3679659	192165	191	3682789	131654	195	**3688347**	**131905**	**206**
3679913	131660	181	3682805	141453	197	3688405	111730	185
3679931	131642	183	3682806	141438	197	**3689035**	**141441**	**199**
3679932	131643	183	**3682826**	**121393**	**206**	3689296	111089	204
3679933	GGA-2941	183	3682863	060163X	191	**3689567**	**131860**	**191**
3679934	121221	183	3682863X	060163X	191	3689755	131667	195
3679937	**131901**	**191**	3682940	131672	191	3709737	EGS-2861	390
3679943	131656	202	3682946	180885	433	3709749	EGS-3890-020	390
3679945	141283	180	**3682949**	**040143**	**206**	3755843	131605	368
3679978	492062	191	3682954	141453	197	3768267	181204E	201
3680063	060009	184	3682974	141453	197	3770742	181170	201
3680095	136131	184	3682984	804101	431	3772122	181169	201
3680194	180897	433	3683002	060163X	191	3774569	181206	303
3680284	131645	206	3683002X	060163X	191	3774626	181193	201
3680344	181876	192	**3683144**	**042029**	**197**	3780526	181193	201
3680348	**060055**	**184**	**3683145**	**042030**	**197**	3792786	181193	201
3680376	042033	230	3683253	141438	197	3795162	181193	201
3680411	181876	192	3683305	141453	197	3800140	111163	219
3680413	121224	138	3683435	141438	197	3800174	121201	137
3680419	050573	419	3683446	141453	197	3800232	180984	73
3680420	050572	419	3683458	804101	431	3800256	111360	221
3680453	181925	195	**3683537**	**131894**	**199**	3800298	171980	202
3680496	045056	186	**3683607**	**131897**	**206**	3800316	111482	351
3680504	202007	182	3683651	181914	192	3800317	101096	356
3680515	180898	433	3683652	181904	192	3800318	111482	351
3680530	141283	180	3683653	181911	192	3800319	101096	356
3680531	141283	180	**3683940**	**131877**	**206**	3800320	111515	351
3680534	050580	419	3683986	060163X	191	3800321	101097	356
3680579	151558	191	3683986X	060163X	191	3800323	111603	327
3680580	151559	191	3684004	141453	197	3800324	111603	327
3680581	151560	191	**3684014**	**040143**	**206**	3800325	111603	327
3680582	111090	189	3684079	131972	206	3800326	111606	327
3680602	131646	206	**3684255**	**131878**	**201**	3800327	111609	327
3680706	136130	181	**3684256**	**131895**	**201**	3800328	161634	372
3680712	131654	195	3684269	121214	153	3800333	111603	327
3680713	132001	195	3684284	136143	343	3800336	111606	327
3680714	131641	195	**3684320**	**141490**	**199**	3800337	111609	327
3680731	192126E	191	**3684322**	**141491**	**199**	3800338	060165	277
3680759	192147	191	3684336	131647	206	3800340	192216	359
3680760	192145	191	3684338	131658	206	3800341	192218	359
3680779	191937	183	**3684355**	**131895**	**201**	3800342	131684	372

PAI Copyright 2017

New Parts are in BOLD text

Cross Reference

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3800343	131722	372	3801135	136055	211	3801627	136060	211
3800345	111442	327	3801136	136168	211	3801628	136062	217
3800419	181196	170	3801137	136087	211	3801629	136088	217
3800453	161645	189	3801138	136060	211	3801631	220015	418
3800471	181200	249	3801139	136062	217	3801632	220016	418
3800479	181883	235	3801140	136088	217	3801633	220017	418
3800487	131726	336	3801150	171725	217	3801640	131416	37
3800495	181877	192	3801151	171726	217	**3801643**	**131891**	**388**
3800609	505120	189	3801152	171727	217	3801666	111407	397
3800616	136066	141	3801153	171728	217	3801668	191913	33
3800617	136083	141	3801154	171729	217	3801669	181191	390
3800618	131539	179	3801179	181859A	233	3801676	131266	264
3800638	191943	229	3801198	131431	61	3801697	ETC-9267	390
3800639	191944	229	3801199	131432	63	3801702	181807	53
3800643	136062	217	3801229	111165	15	3801703	111145	15
3800687	180221	279	3801233	111108	15	3801708	181805	53
3800704	131530	258	3801235	131332	118	3801710	181849	53
3800726	**131892**	**388**	3801260	171720	393	3801712	181850	53
3800727	131728	388	3801261	171721	393	3801714	181851	49
3800728	131729	388	3801262	171722	393	3801715	181806	49
3800729	**131891**	**388**	3801263	171723	393	3801716	181852	49
3800730	131723	388	3801264	171724	393	**3801717**	**131826**	**388**
3800731	**131825**	**388**	3801265	131537	388	3801718	131825	388
3800737	181821E	235	3801328	131633	132	3801719	131537	388
3800745	181883	235	3801329	131378	132	3801728	220035	417
3800747	131721	376	3801330	131315	132	3801731	220037	418
3800748	131741	376	3801335	131800	133	3801733	220036	417
3800751	162017	193	3801348	131316	118	3801740	220010	417
3800756	111628	327	3801356	191984	229	3801741	220011	417
3800761	111632	327	3801357	191971	229	3801742	220012	417
3800781	111457	327	3801377	181849	53	3801744	111102	15
3800782	111457	327	3801380	181850	53	3801746	100986	18
3800783	111457	327	3801382	181851	49	3801749	191927	33
3800784	111458	339	3801384	181852	49	3801753	131380	132
3800785	111463	327	3801387	161597	137	3801754	131329	132
3800799	181206	303	3801393	111120	15	3801763	191925	33
3800801	101061	222	**3801403**	**131893**	**397**	3801764	100990	18
3800822	220103	343	3801426	191908	33	3801765	100991	18
3800828	141317	366	3801437	111354	383	3801766	111128	15
3800833	131608	336	3801448	191928	33	3801768	101002	18
3800834	131809	336	3801451	131317	132	3801769	101100	18
3800838	111467	327	3801453	131379	132	3801770	111135	15
3800841	111470	327	3801454	131333	118	3801771	101006	18
3800842	111473	327	3801463	131334	118	3801773	111115	15
3800846	111672	351	3801464	131336	118	3801774	101008	18
3800853	131566	336	3801466	131421	393	3801775	101009	18
3800855	191916	142	3801468	131337	118	3801776	101011	18
3800861	**131888**	**264**	3801469	131422	118	3801777	101012	18
3800891	191995	153	3801475	ETC-9292	76	3801779	101014	18
3800912	505184	350	3801476	ETC-9291	76	3801780	101015	18
3800929	**131263**	**376**	3801477	ETC-9293	76	3801781	101025	18
3800947	191890	330	3801482	ETC-9294	76	3801782	101042	18
3800968	136062	217	3801519	136054	211	3801784	181806	49
3800969	136088	217	3801520	111176	219	3801787	181809	53
3800974	181868	363	**3801529**	**131933**	**133**	3801788	181807	53
3800975	181923	363	3801533	111153	15	3801795	101010	18
3800976	181824	363	3801534	111130	15	3801796	100983	18
3800984	181878	331	3801535	111125	15	3801798	101059	18
3801005	131557	388	3801591	ETC-9255	76	3801817	101030	18
3801007	131535	388	3801594	131727	178	3801818	111151	15
3801030	191920	33	3801597	ETC-9294	76	3801819	111147	15
3801056S	505070	15	3801598	ETC-9294	76	3801820	111149	15
3801057	111105	15	3801599	ETC-9292	76	3801822	101033	18
3801058	111110	15	3801606	131429	37	3801823	101028	18
3801063	191925	33	3801613	ETC-9291	76	3801824	101026	18
3801069	**121410**	**134**	3801614	ETC-9293	76	3801826	161601E	176
3801096	181192	396	3801617	ETC-9291	76	3801872	101031	18
3801097	219931	117	3801624	136055	211	3801873	101032	18
3801106	151501	137	3801625	136054	211	3801874	100994	18
3801108	505095	383	3801626	136087	211	3801875	100995	18

New Parts are in BOLD text

PAI Copyright 2017

Cummins Reference	PAI Reference	Page
3801876	111133	15
3801888	**040109**	**368**
3801904	ETC-9296	399
3801916	181000	73
3801936	ETC-9297	399
3801954	111122	15
3801956	101003	18
3801989	ETC-9295	399
3802004	181815	299
3802005	191983	297
3802006	191970	297
3802010	171806	321
3802011	171807	321
3802012	171808	321
3802013	171809	321
3802014	171810	321
3802015	131401	338
3802017	131613	281
3802018	**131883**	**336**
3802027	131635	312
3802028	131687	312
3802040	505083	308
3802042	505084	308
3802044	505085	308
3802060	111217	292
3802062	111212	292
3802064	111207	292
3802070	171811HP	322
3802071	171812HP	322
3802072	171813HP	322
3802073	171814HP	322
3802074	171815HP	322
3802075	131437	393
3802076	131424	393
3802077	131425	393
3802081	181818	363
3802085	191969	359
3802100	111222	292
3802102	111227	292
3802104	111232	292
3802105	131721	376
3802106	131741	376
3802115	ETC-9253	303
3802132	111242	292
3802134	111247	292
3802160	111237	292
3802170	111252	292
3802172	111257	292
3802174	111262	292
3802210	171821	372
3802211	171822	349
3802212	171823	349
3802213	171824	349
3802214	171825	349
3802217	131613	281
3802218	**131883**	**336**
3802228	131687	312
3802230	505080	308
3802232	505081	308
3802234	505082	308
3802241	131613	281
3802242	**131883**	**336**
3802244	131635	312
3802245	131687	312
3802248	111312	292
3802249	111315	292
3802250	111318	292
3802251	111323	292
3802252	111326	292
3802253	111329	292
3802263	111267	351
3802273	181844	299
3802275	191982	359
3802278	141317	366
3802280	111277	351
3802289	ETC-9253	303
3802290	ETC-9252	303
3802303	ETC-9254	386
3802339	060165	277
3802340	060170	297
3802342	131721	376
3802343	131741	376
3802344	111272	351
3802354	131408	376
3802355	191983	297
3802356	191970	297
3802362	131613	281
3802364	131635	312
3802370	161632	372
3802372	101072	356
3802375	131402	338
3802376	131405	336
3802388	101070	356
3802389	131408	372
3802396	111292	351
3802397	111282	351
3802398	111287	351
3802399	101075	356
3802400	101073	356
3802401	101074	356
3802402	101081	356
3802403	101079	356
3802404	101080	356
3802405	101078	356
3802406	101076	356
3802429	505090	372
3802450	131721	376
3802451	131741	376
3802452	131407	376
3802460	111387	351
3802461	111387	351
3802462	111387	351
3802474	111436	351
3802484	111476	351
3802488	111333	292
3802494	111336	292
3802496	111339	292
3802538	505140	372
3802561	111424	273
3802564	111428	273
3802565	111432	273
3802568	111387	351
3802573	111387	351
3802601	111297	351
3802619	181207	368
3802622	131721	376
3802623	131741	376
3802624	131407	372
3802630	111679	292
3802651	181205	386
3802657	111302	351
3802658	192220	297
3802659	192214	297
3802660	101089	356
3802743	101087	356
3802750	505075	308
3802757	111396	292
3802758	111398	292
3802759	111400	292
3802770	181194E	335
3802773	111343	292
3802775	111349	292
3802776	111346	292
3802778	181195E	335
3802790	505154	308
3802812	192151	359
3802813	192154	359
3802820	136084	323
3802831	505180	324
3802863	505076	308
3802864	505077	308
3802881	181206	303
3802882	181206	303
3802912	101091	356
3802917	505172	339
3802918	505174	339
3802919	505170	339
3802924	192138	317
3802925	111577	327
3802926	111580	327
3802927	111574	327
3802951	505154	308
3802952	111688	292
3802967	192140	317
3802968	181844	299
3802970	181815	299
3802980	131608	312
3802981	131566	336
3803017	**121410**	**134**
3803040	131328	132
3803041	131338	118
3803042	219932	117
3803055	ETC-9257	76
3803108	ETC-9257	76
3803109	ETC-9285	250
3803138	181808	55
3803139	181848	55
3803140	181853	55
3803150	131381	132
3803153	181858	390
3803156	121100	247
3803157	121101	247
3803199	ETC-9258	76
3803202	181856	53
3803209	100984	18
3803210	101034	18
3803211	100992	18
3803212	101013	18
3803213	101035	18
3803214	101036	18
3803215	101024	18
3803216	101038	18
3803217	101029	18
3803218	101041	18
3803219	161599	137
3803221	100988	18
3803223	100996	18
3803225	101017	18
3803226	101040	18
3803228	101044	18
3803233	100987	18
3803242	131266	264
3803257	181191	390
3803260	181821E	235
3803261	181857A	235
3803265	111354	383
3803270	ETC-9289	399
3803271	181010	169
3803273	136081	212
3803279	ETC-9256	76

Cross Reference

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3803287	ETC-9256	76	3803698	141294	163	3804308	ETC-9278	170
3803293	131482	262	3803703	161626	262	3804309	181196	170
3803294	131530	258	3803705	505100	221	3804442	101159	18
3803310	191943	229	3803710	181203	249	3804472	101160	18
3803311	191944	229	**3803714**	**131886**	**179**	3804500	505065	147
3803312	111375	383	3803715	131274	179	3804503	181200	249
3803314	111354	383	3803722	181209	170	3804557	219933	249
3803330	141296	238	3803726	191974	153	3804630	111381	147
3803344	111140	15	3803727	136062	217	3804633	141294	163
3803346	101027	18	3803728	136081	212	3804634	191840	142
3803348	191972	229	3803730	191944	229	3804635	131539	172
3803354	136062	217	3803738	191886	142	3804636	101095	148
3803355	136088	217	3803739	111379	147	3804641	181209	170
3803360	191985	152	3803740	101094	148	**3804666**	**131902**	**388**
3803362	181847	159	3803741	111377	147	3804667	131815	388
3803363	181854	159	3803752	111203	145	3804668	131816	388
3803369	141295	163	3803753	101063	148	3804694	505051	219
3803379	141296	238	380	111201	145	3804695	111600	219
3803389	181197	249	3803755	101064	148	3804696	101183	222
3803389RX	181197	249	3803756	111204	145	3804703	136155	378
3803389X	181197	249	3803757	101066	148	3804740	131264	176
3803402	181820	233	3803758	111202	145	3804741	131720	179
3803403	181821E	235	3803759	101065	148	3804744	136061	212
3803404	131266	254	3803766	220038	415	3804749	131530	258
3803425	191916	142	3803767	220039	415	3804805	181209	170
3803445	**131886**	**179**	3803770	191975	153	3804806	181196	170
3803453	131530	258	3803852	136162	390	3804821	191842	213
3803463	131265	264	3803854	191987	152	3804823	191926	213
3803471	505025	15	3803880	220065	415	3804826	181909	158
3803472	505095	383	3803881	220066	415	3804843	131265	264
3803477	136163	161	3803882	220067	415	3804896	131401	338
3803487	136056	212	3803883	220068	415	3804897	131404	336
3803488	136081	212	3803884	136083	141	3804899	136105	339
3803495	045017	209	3803890	220070	415	3804927	181822	363
3803512	191940	41	3803891	220071	415	3804930	505130	338
3803515	191945	385	3803892	220072	415	3804931	505131	338
3803518	191986	385	3803893	220073	415	3804932	505132	338
3803519	191942	41	3803894	136056	212	3804935	141412	387
3803524	191941	41	3803900	191895	142	3804947	505105	324
3803528	191973	385	3803902	191916	142	3804964	181206	303
3803529	191946	385	3803930	220014	418	3804971	111457	327
3803553	ETC-9278	170	3803931	220015	418	3804979	505109	324
3803572	131530	258	3803932	220016	418	3804980	111442	327
3803573	136055	211	3803933	220017	418	3804981	111445	327
3803574	136054	211	3803938	181200	249	3804982	111448	327
3803575	136087	211	3803961	505060	221	3804983	111457	327
3803576	136060	211	3803962	111367	219	3804986	505113	324
3803585	ETC-9278	170	3803963	101068	222	3804990	505105	339
3803596	**131892**	**388**	3803966	111176	219	**3805174**	**050488**	**435**
3803597	131261	388	3803968	111363	219	3806083	050475	435
3803598	131729	388	3803977	505100	221	3806183	131408	376
3803599	**131891**	**388**	3803981	131679	132	3806201	505109	339
3803600	131262	388	3803995	191971	229	3806203	505113	339
3803601	**131825**	**388**	3803996	191966	229	3806204	111457	327
3803605	181812	158	3804275	131633	132	3806229	505181	324
3803607	**131886**	**179**	3804276	131564	132	3806230	505182	324
3803613	131273	176	3804284	131678	132	3806239	111682	292
3803622	101183	222	3804286	131272	179	3806240	111685	292
3803623	101067	222	3804287	131271	179	3806241	505084	308
3803624	111173	219	**3804290**	**131886**	**179**	3806242	505085	308
3803625	111176	219	**3804294**	**131892**	**388**	3806249	111691	292
3803626	111172	219	3804295	131728	388	**3806250**	**111694**	**292**
3803629	101062	222	3804296	131729	388	3806251	505084	308
3803631	111372	221	**3804297**	**131891**	**388**	3806252	505085	308
3803632	101061	222	3804298	131723	388	**3807295**	**050469**	**435**
3803633	101060	222	**3804299**	**131825**	**388**	3807359	050472	435
3803647	191842	213	**3804300**	**131826**	**388**	3812090	040093	315
3803650	191926	213	3804301	131537	388	3818060	040033	242
3803670	ETC-9293	76	3804303	131394	176	3818101	840135	57
3803697	131260	397	3804304	136081	212	3818121	FSC-0373	191

PAI Copyright 2017

Cummins Reference	PAI Reference	Page
3818122	**040132**	**244**
3818124	040070	244
3818224	121303	238
3818271	121053	239
3818272	121047	247
3818273	151561	213
3818520	191965	229
3818823	040110	335
3818824	040062	335
3818843	131506	249
3818844	131507	249
3818845	131622	209
3818846	131508	249
3818847	131619	264
3819184	141326	210
3819378	131480	313
3819452	131627	242
3819624	171649	217
3819632	180917	235
3819724	121295	264
3819751	121340	264
3819760	131452	244
3819774	136042	217
3819822	**060017**	**230**
3819900	EGS-2861	390
3819957	042182	209
3819989	171704	217
3820007	131267	228
3820030	121354	390
3820039	131795	212
3820302	171636	221
3820303	151511	221
3820320	141307	195
3820566	151506	209
3820629	131542	241
3820662	121050	247
3820663	121051	247
3820664	121052	247
3820666	121053	239
3820667	121046	247
3820672	042122	247
3820700	192011	228
3820791	121277	235
3820872	131509	229
3820917	136044	217
3820918	136043	217
3820945	121345	215
3820946	121346	215
3821065	131622	209
3821234	192035	229
3821272	040013	243
3821384	136055	211
3821388	136062	217
3821389	136088	217
3821572	141300	58
3821575	141300	58
3821579	141295	163
3822062	171697	217
3822069	131509	229
3822728	180290	390
3823234	136166	161
3823921	042025	297
3824010	050710	153
3824894	151487	209
3825970	050511	65
3831132	**050534**	**429**
3863107	181030	313
3864178	181940	331
3864458	131709	334
3864459	131735	334
3865113	111382	147
3865153	141294	163
3865195	131484	159
3865235	131400	169
3865236	131485	159
3865237	045026	155
3865312	050670	411
3865323	050670	411
3865345	050675	411
3865346	050672	411
3865366	050675	411
3866105	505181	324
3866106	505182	324
3866410	**111626**	**324**
3866413	**111630**	**324**
3866414	**111634**	**324**
3867481	**121431**	**206**
3867646	121362	343
3867651	121372	390
3870890	136096	378
3871472	131750	229
3874844	040064	421
3880945	111666	118
3882324	141425	239
3882346	141326	210
3882433	131269	210
3882451	131795	212
3882467	045055	209
3882512	121342	215
3882536	131624	264
3882568	131267	228
3882586	141333	195
3882590	060006	230
3882591	060006	230
3882615	181821-001	235
3882670	181821	235
3882671	181821E	235
3882733	131270	210
3882774	121305	235
3882885	040013	243
3883042	121294	215
3883102	131276	229
3883117	136081	212
3883150	121293	215
3883220	131496	229
3883223	**042151**	**229**
3883284	121264	313
3883287	191966	229
3883363	131627	242
3883365	131551	233
3883390	131471	243
3883458	121341	247
3883472	131622	209
3883510	121342	215
3883519	131267	228
3883524	141333	195
3883620	136062	217
3883621	136088	217
3883718	131267	228
3883736	ECL-1953	247
3883774	136062	217
3883775	136088	217
3883791	060006	230
3883910	141296	238
3884126	141306	163
3889310	050510	430
3889716	050533	429
3890063	050532	429
3892021	136061	212
3892081	131795	212
3892083	131958	212
3892095	121304	235
3892170	192113	227
3892251	192114	227
3892347	042121	249
3892625	131513	241
3892667	131276	229
3892794	136081	212
3892965	141286	210
3893690	131604	242
3893691	131473	247
3893692	131474	247
3893751	111365	222
3893774	131502	247
3893812	131592	212
3893927	131267	228
3895034	136055	211
3895065	136060	211
3895477	191965	229
3895478	191966	229
3895487	045012	227
3895488	045051	227
3895491	191858	227
3895621	191933	213
3895630	141286	210
3895638	191933	213
3895650	191901	213
3895679	191902	213
3895756	141296	238
3895789	141285	210
3895792	191933	213
3895801	191901	213
3895860	192105	229
3896251	141286	210
3896253	141285	210
3896327	141285	210
3896328	141286	210
3896335	151561	213
3896408		**192**
3896414	181020	244
3896697	131276	229
3896723	**040138**	**197**
3896839	040012	229
3896853	060006	230
3897673	505180	324
3899229	131628	242
3899343	131494	249
3899378	131267	228
3899450	171636	221
3899703	060006	230
3899746	131471	243
3899798	**042151**	**229**
3899942	045012	227
3899950	191918	213
3900046	040045	297
3900216	136071	315
3900227	040075	330
3900250	192022	297
3900257	045066	385
3900267	431215	285
3900276	192054	297
3900299	192059	297
3900544	131549	267
3900545	131538	285
3900630	040127	206
3900631	**040129**	**318**
3900677	040049	333
3900687	040090	315
3900709	136105	339
3900919	040035	329

Cross Reference

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3900948	040038	285	3902627	042013	287	3905595	131534	287
3900955	040089	317	3902628	042064	287	3905619	171711	289
3900956	040084	315	3902629	131534	287	3905730	171713	289
3900957	040086	153	3902666	131419	297	3905731	060089	287
3900958	GCP-3495	285	**3902702**	**045090**	**360**	3905873	050491	435
3900960	141284	313	3902717	180891	433	3905928	045030	345
3900965	040093	315	3902734	131533	376	3906080	136035	289
3901020	045032	267	3903037	136102	418	3906081	136040	322
3901049	141287	267	3903090	050490	435	3906202	131522	345
3901085	151514	294	3903097	050471	435	3906206	192041E	297
3901117	191980	297	3903098	050498	435	3906208	111205	308
3901170	171801	338	3903100	050473	435	3906209	111210	308
3901171	171802	329	**3903112**	**040128**	**180**	3906223	111215	308
3901172	171803	329	3903115	050489	435	3906252	121359	343
3901173	171804	329	3903242	151556	285	3906384	050496	435
3901174	171805	329	3903258	141434	334	3906412	192055	359
3901177	192023	359	3903264	050512	430	3906413	141298	280
3901187	192042E	358	3903276	060089	287	3906456	141434	334
3901212	191911	298	**3903309**	**060072**	**323**	3906619	EPP-3573	347
3901220	040046	297	3903410	050532	429	3906659	042092	318
3901224	171632	350	3903450	042019	323	3906694	121271	377
3901235	**040048**	**212**	3903463	042018	287	3906695	121269	377
3901306	151508	285	3903475	136030	287	3906696	121268	315
3901356	131447	313	3903640	050501	429	3906697	121272	377
3901380	040032	350	3903652	042023	313	3906698	121258	331
3901381	040059	350	3903654	131578	297	3906700	181843	299
3901383	171632	350	3903664	131532	315	3906773	136065	313
3901384	141298	280	3903794	060093	287	**3906807**	**060054**	**323**
3901430	171816	354	3903797	060020	285	3906854	192003E	297
3901431	171817	354	3903837	131549	267	3907055	131577	277
3901432	171818	354	3903924	042013	287	**3907056**	**131882**	**317**
3901433	171819	354	3903925	042064	287	3907058	131578	297
3901434	171820	354	3903926	131534	287	3907059	131686	297
3901448	040028	317	3903938	040045	297	3907156	111220	308
3901467	121272	377	3903939	040046	297	3907157	111225	308
3901568	171631	329	**3903990**	**ESC-0365**	**197**	3907158	111230	308
3901569	171631	329	3904044	131532	315	3907163	111235	308
3901597	111268	350	3904056	131549	267	3907177	136020	345
3901607	191968	297	3904105	192015E	297	3907233	040044	359
3901647	192121	361	3904166	161630	315	3907234	040043	359
3901683	181030	313	3904217	040038	285	3907242	181860	363
3901685	151509	345	3904300	131449	376	3907469	180891	433
3901693	192136	343	3904335	131577	277	3907535	060100	349
3901706	111209	325	**3904336**	**131882**	**317**	3907541	042180	418
3901761	151527	330	**3904341**	**040129**	**318**	3907617	131538	285
3901774	060071	323	3904353	136105	339	3907677	191885	361
3901793	111208	290	3904354	136123	338	3907738	042126	313
3901845	181860	363	3904369	151555	285	3907741	121125	279
3901895	141380	420	3904370	180891	433	3907792	161631	345
3901898	192122	297	3904382	192121	361	3907803	171736	271
3901937	040080	300	3904385	141434	334	3907824	191911	298
3901967	191885	361	3904408	192039E	297	3907860	040145	315
3901969	040094	345	3904409	192040E	297	3907990	192102	359
3901996	111269	354	3904446	040067	237	3908031	171737	271
3902089	GGA-2991	363	3904470	042019	323	3908032	171713	289
3902113	131519	363	3904483	171717	322	3908037	050497	435
3902127	**060073**	**349**	**3904485**	**045063**	**361**	3908049	045081	318
3902133	**060072**	**323**	3904686	131521	376	3908096	131533	376
3902173	042179	313	3904716	192016	358	3908119	131579	359
3902230	050472	435	3904776	131538	285	3908120	131740	359
3902254	191967	359	3904849	042064	287	3908163	180891	433
3902332	191830	330	3904958	050492	435	3908277	136045	349
3902338	141433	334	**3905033**	**131813**	**368**	**3908546**	**060074**	**349**
3902343	045067	315	3905073	131686	297	**3908612**	**045062**	**396**
3902363	136047	313	3905117	180320	301	3908615	050512	430
3902425	136057	315	3905194	192121	361	3908815	111240	308
3902465	181843	299	3905307	042179	313	3908816	111245	308
3902466	136068	377	3905401	ECP-3487	315	3908830	192004E	358
3902468	040081	420	3905449	131420	376	3909356	121287	318
3902606	ECP-3485	297	3905471	131528	347	3909376	141434	334

New Parts are in BOLD text

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3909397	121240	178	3914192	180280	335	3918076	180103	301
3909408	042126	313	3914284	180121	301	**3918109**	**040129**	**318**
3909410	136026	323	3914301	131462	349	3918163	042126	313
3909411	136123	338	3914302	131522	345	3918174	131453	367
3909696	180320	301	3914304	131532	315	3918175	141408	367
3909886	136070	359	3914305	131579	359	3918180	060090	287
3909923	**045090**	**360**	3914306	131740	359	3918188	136063	418
3910055	131521	376	3914308	131454	367	3918190	136101	418
3910248	042019	323	3914310	131519	363	3918191	136102	418
3910260	121233	323	3914311	131449	376	3918192	136103	418
3910279	**045090**	**360**	3914384	131440	287	3918211	141298	280
3910411	060089	287	3914385	131441	287	3918213	141297	366
3910505	131519	363	3914388	131480	313	3918303	131577	277
3910530	121286	313	3914395	050512	430	3918306	131578	297
3910624	191911	298	3914454	202021	289	3918332	131529	367
3910706	181843	299	3914638	191914	275	3918340	131531	376
3910707	180882	433	3914639	191911	298	3918343	180212	377
3910739	180935	313	3914640	191912	361	3918345	180213	377
3910779	131449	376	3914641	151527	330	3918380	171714	349
3910824	EF30130	297	3914653	162016	345	3918428	141434	334
3910959	FNU-0436	300	3914708	042012	368	3918450	060094	347
3911315	180891	433	3914854	180882	433	3918471	040045	297
3911320	181945	73	3914956	040029	368	3918472	040046	297
3911400	111250	308	3915069	202022	323	3918532	141289	366
3911410	131589	285	3915501	180213	377	3918539	180310	332
3911422	202021	289	3915502	180212	377	3918614	045081	318
3911447	042171	418	3915506	191979	359	3918673	131481	287
3911535	131403	267	3915594	180131	287	3918675	060091	287
3911536	131406	315	3915703	141284	313	3918776	171714	349
3911557	050497	435	3915707	191991	359	3918777	191885	361
3911558	050471	435	3915720	131577	277	3918778	180130	347
3911560	050490	435	**3915721**	**131882**	**317**	3918779	131523	376
3911563	050498	435	3915723	131578	297	3918872	060089	287
3911566	050473	435	3915724	131686	297	3918944	180888	433
3911567	050489	435	3915727	131577	277	3918986	171712	349
3911568	050472	435	3915731	131578	297	3918999	202022	323
3911572	050492	435	3915772	121266	287	3919002	045033	285
3911573	050474	435	3915800	121267	377	3919015	181880	367
3911582	050495	435	3916042	131444	313	3919038	191998	359
3911583	050491	435	3916255	060020	285	3919041	111310	308
3911587	050496	435	3916289	180280	335	3919042	111310	308
3911588	050497	435	**3916300**	**131813**	**368**	3919043	111310	308
3911621	180893	433	3916349	ETC-9253	303	3919044	111313	308
3911805	131480	313	3916369	040039	345	3919045	111316	308
3911870	**131879**	**343**	3916436	202021	289	3919047	111324	308
3911941	131518	368	3916588	192106	359	3919048	111327	308
3912049	111255	308	3917320	171709	349	3919127	ETC-9253	303
3912050	111260	308	3917324	181843	299	3919247	101077	356
3912246	180891	433	3917328	191885	361	3919358	042081	297
3912254	180886	433	3917332	121351	377	3919369	131603	335
3912473	136031	323	3917355	131577	277	3919422	180215	300
3912772	042045	287	3917359	131578	297	3919449	045057	300
3912884	191879	330	3917440	180887	433	3919566	101078	356
3912913	**060057**	**349**	3917443	171712	349	3919601	131707	343
3912976	192102	359	3917485	180891E	433	3919638	180131	287
3913028	181862	363	3917619	111321	308	3920065	191912	361
3913032	131716	376	3917707	101076	356	3920147	136123	338
3913287	131920	389	3917728	040036	359	3920305	180131	287
3913389	060165	277	3917729	040037	359	3920326	181880	367
3913391	060170	297	3917747	042155	313	3920404	136112	349
3913429	131528	347	3917759	060089	287	3920408	136045	349
3913447	060101	323	3917779	131528	347	3920443	040092	297
3913990	151515	354	3917780	131501	347	3920518	060089	287
3913994	121244	287	3917800	060091	287	3920519	060090	287
3914005	141298	280	3917801	060091	287	3920611	060165	277
3914017	131409	345	**3917883**	**045063**	**361**	3920612	060170	297
3914035	040086	315	3917892	131520	376	3920706	GCP-3484	385
3914086	180891E	433	3917998	180100	365	3920758	060089	287
3914095	121270	377	3917999	180100	365	3920773	136071	315
3914136	141380	420	3918000	180104	301	3920779	040045	297

Cummins Reference	PAI Reference	Page
3920780	040046	297
3920781	040050	297
3920867	191980	297
3920868	191968	297
3920978	**045062**	**396**
3921042	060100	349
3921043	060101	323
3921067	141297	366
3921176	191912	361
3921263	060053	289
3921394	131418	297
3921395	131577	277
3921396	131578	297
3921397	**131882**	**317**
3921398	131686	297
3921440	131517	376
3921524	180890	433
3921605	131699	367
3921640	192005	317
3921787	131512	368
3921852	131579	359
3921853	131740	359
3921880	111341	308
3921881	111347	308
3921882	111344	308
3921926	**131813**	**368**
3921927	136024	349
3921928	136112	349
3921961	**131879**	**343**
3921978	180212	377
3921980	180213	377
3922072	040093	315
3922078	131549	267
3922476	101089	356
3922477	181861	363
3922480	180310	332
3922556	202006	349
3922560	202026	349
3922577	111331	308
3922578	101082	356
3922580	111334	308
3922581	111337	308
3922599	136099	289
3922645	**060056**	**349**
3922687	**111677**	**308**
3922713	192219	297
3922714	192213	297
3922715	192221	297
3922716	192225	297
3922794	321239	195
3922900	180891E	433
3922901	180893	433
3923054	131532	315
3923060	042023	281
3923163	101079	356
3923164	101080	356
3923165	101081	356
3923201	180198	300
3923257	180222	364
3923258	180224	364
3923261	042093	297
3923331	136028	299
3923388	191912	361
3923477	181880	367
3923478	191912	361
3923537	111436	351
3923564	192042E	358
3923578	180130	347
3923898	060091	287
3924021	181922	363
3924026	180890	433
3924109	191923E	330
3924147	042024	267
3924148	042026	360
3924350	171632	350
3924405	180131	287
3924435	202013	289
3924445	162016	345
3924446	162013	345
3924447	162014	345
3924448	162009	345
3924471	191912	361
3924605	121415	287
3924644	141297	366
3924719	141298	280
3924725	042180	418
3924986	136113	349
3924987	136114	349
3925021	121415	287
3925031	191860	298
3925232	171631	329
3925274	050532	429
3925343	136118	349
3925466	121348	343
3925467	121330	343
3925530	136127	323
3925532	136128	322
3925540	181813	363
3925566	202006	349
3925570	202026	349
3925582	191914	275
3925626	136111	349
3925666	192101	297
3925667	192184	297
3925673	111474	350
3925709	180105	365
3925863	192183	358
3925864	192182	358
3925878	101087	356
3925937	060175E	359
3926047	121335	315
3926048	121320	345
3926126	136126	323
3926201	141297	366
3926202	141298	280
3926518	060092	347
3926596	121397	390
3926631	111422	308
3926634	111426	308
3926635	111430	308
3926671	191923E	330
3926700	192128	297
3926722	121351	377
3926760	131443	302
3926789	505140	372
3926847	060094	347
3927063	040054	317
3927152	180215	300
3927154	131467	318
3927155	151527	330
3927253	**111646**	**350**
3927254	192150	359
3927255	192152	359
3927256	192200	358
3927257	192195	358
3927299	060169	297
3927305	121330	343
3927622	141433	334
3927683	136116	323
3927948	**040133**	**315**
3928031	045031	345
3928143	180102	301
3928144	180108	278
3928160	180222	364
3928161	180224	364
3928174	192012E	358
3928180	131579	359
3928181	131740	359
3928288	191912	361
3928493	131463	323
3928499	181888	331
3928639	181860	363
3928640	181861	363
3928673	111410	308
3928674	111414	308
3928675	111418	308
3928759	136069	315
3928796	060020	285
3928831	131549	267
3928832	131538	285
3928870	040032	350
3928919	131480	313
3929011	131529	367
3929012	131512	368
3929027	171716	323
3929028	191879	330
3929031	180131	287
3929036	171736	271
3929037	171711	289
3929038	191898	275
3929039	191914	275
3929040	191923E	330
3929042	191911	298
3929161	101088	356
3929537	040029	368
3929613	181922	363
3929615	181818	363
3929734	191923E	330
3929736	060165	277
3929792	131445	334
3929881	131600	297
3929885	191898	275
3929886	191899	298
3930016	**111646**	**350**
3930057	192124	359
3930134	180105	365
3930139	045033	285
3930187	111395	308
3930188	111397	308
3930189	111399	308
3930249	040146	317
3930324	042094	297
3930336	141298	280
3930338	141297	366
3930408	**131857**	**345**
3930450	111310	308
3930451	111310	308
3930489	**111680**	**308**
3930490	**111683**	**308**
3930503	**111686**	**290**
3930504	**111689**	**290**
3930505		**290**
3930658	180226	332
3930881	**042028**	**343**
3930906	131419	317
3930907	131536	334
3930911	121323	367
3930913	060165	277
3930915	060165	277
3930942	050532	429

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
3931026	131579	359	**3935591**	**111626**	**324**	3939367	171653	320
3931027	131740	359	**3935594**	**111630**	**324**	3939374	111086	325
3931059	131532	315	**3935595**	**111634**	**324**	3939375	111097	325
3931063	050501	429	3935649	180215	300	3939377	191875	330
3931347	131442	317	3935650	180214	332	3939398	111713	324
3931348	131532	315	3935802	180252	279	3939709	050495	435
3931349	131446	315	3935819	180886	433	3939719	192186	317
3931350	131480	313	3935824	181907	331	3939720	192187	317
3931351	131440	287	3935825	181906	331	3939721	192188	317
3931380	180130	347	3935878	131580	317	3939723	192191	317
3931382	180131	287	**3936027**	**131884**	**376**	3939724	192192	317
3931557	180198	300	3936180	060174E	359	3939725	192193	317
3931570	180198	300	3936197	180890	433	3939859	171801	338
3931601	131589	285	3936201	180891	433	3939898	180111	332
3931604	131511	313	3936202	180888	433	3940052	181819	363
3931605	131448	317	3936205	180887	433	3940059	151528	315
3931607	131461	313	3936207	180893	433	3940123	192021	317
3931608	131707	343	3936210	180882	433	3940152	192205	358
3931622	131618	264	3936213	180892	433	3940245	131704	376
3931623	191860	298	3936256	060090	287	3940279	192156	359
3931716	060000	289	3936260	060101	323	3940386	GGA-2992	363
3931747	**181030**	**313**	3936282	060175E	359	3940632	181890	363
3931967	**131858**	**345**	3936316	180105	365	3940734	192139	317
3932063	131512	368	3936365	141433	334	3940735	192137	317
3932217	050512	430	3936683	040077	300	3940851	131713	359
3932224	180105	365	3936684	040078	300	3941253	192133	330
3932290	050587	343	3936685	040079	300	**3941786**	**060103**	**347**
3932444	**131819**	**343**	3936904	060101	323	**3941966**	**050701**	**405**
3932449	141298	280	3937027	141298	280	3942090	171638	350
3932453	192135	317	3937111	136105	339	3942106	111482	351
3932475	**131817**	**343**	3937145	050512	430	3942137	131580	317
3932512	131797	343	3937155	136103	418	3942292	111458	339
3932514	111443	338	3937171	181907	331	3942298	111575	339
3932529	180226	332	3937212	050512	430	3942348	111578	339
3933088	192195	358	3937214	045033	285	**3942454**	**121375**	**331**
3933252	180105	365	3937234	180251	279	3942470	050502	429
3933325	121330	343	3937235	180252	279	3942535	136142	347
3933384	060100	349	3937236	180253	279	3942565	191862	361
3933393	040140	279	**3937300**	**111646**	**350**	3942567	191935E	330
3933581	111446	338	3937367	131703	376	3942581	171631	329
3933582	111449	338	3937404	141299	302	3942588	192215	359
3933583	505131	324	3937479	131706	368	3942589	192217	359
3933584	505132	324	3937553	180891E	433	3942645	192129	358
3934047	111213	325	3937555	180887	433	3942659	042150	317
3934167	191863	361	3937556	180893	433	3942665	111572	339
3934168	191864	361	3937613	042126	313	3942666	111572	339
3934171	180215	300	3937704	042017	343	3942667	111572	339
3934278	181880	367	3937706	131480	313	3942723	141291	366
3934410	181880	367	**3937726**	**060179**	**318**	3942725	131480	313
3934638	**131819**	**343**	**3937728**	**060178**	**318**	3942755	191881	330
3934730	060170	297	**3937729**	**060179**	**318**	3942801	180112	332
3934814	180890	433	3937743	050512	430	3942891	191877	361
3934817	180888	433	3938077	040063	349	3942902	131715	376
3934818	180891E	433	3938152	131442	317	3942914	131443	302
3934819	180887	433	3938159	131463	323	3942915	131536	334
3934821	180892	433	3938161	131589	285	3942989	192112	317
3934822	180882	433	3938163	191934E	361	3943144	131714	359
3934823	180893	433	3938267	131500	359	3943161	192181	317
3934864	040059	350	3938367	180112	332	3943191	131706	368
3934972	180215	300	3938368	180114	332	3943198	192149	317
3934974	180198	300	3938435	180112	332	3943258	191867	361
3934975	111443	338	3938655	131707	343	3943303	131690	362
3935032	121288	343	3938706	131615	343	3943366	131712	359
3935168	136063	418	3938737	131503	347	3943367	101097	356
3935171	136102	418	3939019	180223	364	**3943409**	**050701**	**405**
3935172	136059	313	3939258	131532	315	3943446	111480	350
3935449	136041	297	3939284	131690	362	3943449	192185	317
3935458	180217	279	3939345	060175E	359	3943450	192190	317
3935586	131579	359	3939356	131618	264	3943460	141435	367
3935587	131740	359	3939357	131797	343	3943476	180112	332

Cummins Reference	PAI Reference	Page
3943628	**060179**	**318**
3943630	**060178**	**318**
3943711	111458	339
3943717	040082	318
3943744	131703	376
3943813	**060095**	**347**
3943857	121254	377
3943864	131690	362
3943888	192118	359
3943889	192118	359
3943892	**060179**	**318**
3943894	**060178**	**318**
3943902	131712	359
3943963	131703	376
3944001	151531	330
3944073	111601	339
3944074	111601	339
3944075	111601	339
3944076	111604	339
3944077	111607	324
3944204	171655	323
3944243	171654	322
3944293	131705	347
3944298	191877	361
3944452	192162	359
3944464	141435	367
3944474	191867	361
3944508	180112	332
3944593	040028	317
3944646	131713	359
3944647	131714	359
3944680	171638	350
3944683	**131827**	**376**
3944711	192156	359
3944818	180112	332
3944984	191868	361
3944991	**060178**	**318**
3944992	**060178**	**318**
3944993	**060179**	**318**
3945094	GKP-3498	317
3945095	GKP-3488	317
3945213	050502	429
3945329	151509	345
3945435	**045058**	**345**
3945438	192111	317
3945524	**060179**	**318**
3945527	180892	433
3945528	172040	321
3945603	131752	363
3945664	172041	321
3945665	172042	321
3945666	172043	321
3945667	172044	321
3945703	171638	350
3945812	180112	332
3945863	191934E	361
3945864	191934E	361
3945866	191861	361
3945917	171821	372
3945918	171822	349
3945919	171823	349
3945920	171824	349
3945967	141289	366
3946050	111465	339
3946053	111468	339
3946054	111471	339
3946151	180112	332
3946153	111455	339
3946156	111458	339
3946157	111461	339
3946168	040082	318
3946169	131580	317
3946188	121193	343
3946200	**060178**	**318**
3946201	**060178**	**318**
3946202	**060179**	**318**
3946275	131599	318
3946437	171657	323
3946532	131696	343
3946689	121339	343
3946847	181906	331
3946849	181907	331
3947007	191936	330
3947269	121227	167
3947270	121194	343
3947308	141315	333
3947328	121349	343
3947413	131709	334
3947530	131693	317
3947574	180884	433
3947678	505133	339
3947759	191859	330
3947814	131695	343
3947871	505133	339
3947872	136101	418
3948070	180114	332
3948071	141297	366
3948072	141291	366
3948095	161633	345
3948096	191934E	361
3948097	191934E	361
3948102	192132	358
3948431	180112	332
3948465	111572	339
3948466	111572	339
3948467	111572	339
3948468	111575	339
3948469	111578	339
3948471	111601	339
3948474	111604	339
3948475	111607	324
3948544	**060179**	**318**
3948578	192118	359
3948612	**111707**	**354**
3949086	180111	332
3949089	191934E	361
3949417	131732	343
3949499	131694	335
3949562	131698	315
3949579	505133	324
3949580	505135	324
3949688	121350	343
3949708	**121425**	**206**
3949808	111540	339
3949841	111543	339
3949842	111546	339
3949843	111503	339
3949844	111506	339
3949889	181817	331
3949910	131733	343
3949916	121355	343
3950161	**040141**	**349**
3950395	**111707**	**354**
3950549	111087	354
3950661	171816	354
3950662	171817	354
3950663	171818	354
3950664	171819	354
3950665	171820	354
3954099	191893	330
3954324	131691	317
3954327	121356	343
3954658	171637	329
3954829	136095	331
3954830	181866	331
3954839	045036	315
3954875	131710	317
3954876	131711	317
3955046	131708	334
3955106	132020	315
3955109	131692	318
3955115	180122	332
3955116	180122	332
3955339	131725	318
3955393	192108	317
3955394	192109	317
3955457	131738	343
3957131	121331	343
3957244	505134	324
3957266	141315	333
3957297	202012	289
3957399	**060178**	**318**
3957400	**060178**	**318**
3957401	**060178**	**318**
3957403	**060179**	**318**
3957404	**060179**	**318**
3957409	**060178**	**318**
3957416	111531	338
3957417	111534	338
3957418	111537	338
3957419	111531	338
3957420	111531	338
3957427	136102	418
3957428	136100	418
3957434	180892	433
3957440	121192	343
3957486	131697	315
3957492	131696	343
3957533	141435	367
3957543	141421	334
3957544	141419	334
3957650	131587	317
3957769	136102	418
3957795	111589	308
3957797	111591	292
3957798	111592	290
3957799	111594	292
3957800	111595	290
3957801	111597	292
3957802	111589	308
3957803	111589	308
3957912	192110	297
3957914	192101	297
3957948	060175E	359
3958165	131697	315
3958258	202021	289
3958414	121329	343
3958644	131710	317
3958645	131711	317
3958675	111500	339
3958716	**131847**	**343**
3959031	141427	334
3959229	181817	331
3959291	**045059**	**345**
3959574	045036	315
3959582	181943	363
3959797	132020	315
3959798	131749	362
3959885	191898	275
3959886	191899	298

PAI Copyright 2017

Cummins Reference	PAI Reference	Page
3963379	131692	318
3963893	136103	418
3963981	136063	418
3963982	136101	418
3963983	136102	418
3963984	136103	418
3963989	136101	418
3963990	136102	418
3963991	136100	418
3963992	136102	418
3964040	171657	323
3964381	180115	332
3964382	180116	193
3964385	**131932**	**365**
3964636	180891E	433
3964715	192142	361
3964791	181819	363
3964792	181935	363
3964817	042181	315
3965006	171757	349
3965007	171758	349
3965008	171759	349
3965010	171625	349
3965259	111716	324
3965260	111719	324
3965385	121356	343
3965494	180250	300
3965497	111540	339
3965966	191857	361
3966155	180108	278
3966244	171895	354
3966245	171896	354
3966246	171897	354
3966247	171898	354
3966248	171899	354
3966342	131717	317
3966343	131717	317
3966365	141435	367
3966430	191866	361
3966431	191865	361
3966601	131708	334
3966675	111543	339
3966676	111546	339
3966678	111521	339
3966679	111524	324
3966680	111527	324
3966708	131748	362
3966721	**111704**	**354**
3966840	141291	366
3966841	181819	363
3967057	**060018**	**230**
3967059	131742	359
3967188	180891E	433
3967192	181885	331
3967195	181884	331
3967250	050780	411
3967251	050638	408
3967444	060165	277
3967444R	060165	277
3967444RX	060165	277
3967891	131747	360
3968074	192210	358
3968164	171621	323
3968183	192153	317
3968188	180122	332
3968247	170990	349
3968381	191875	330
3968559	181890	363
3968877	045054	315
3969036	111721	324
3969609	**131945**	**359**
3969637	192217	359
3969697	121206	343
3969698	121415	287
3970066	181030	313
3970126	111524	324
3970127	111527	324
3970134	**131818**	**359**
3970192	111521	339
3970500	040071	167
3970727	192215	359
3970840	111724	324
3970841	111727	324
3970851	111516	350
3970880	180102	301
3970881	180108	278
3970886	**131827**	**376**
3970951	151515	354
3971212	171637	329
3971394	171632	350
3971544	141309	333
3971793	060171	318
3972345	170990	349
3972757	192102	359
3972764	171657	323
3972880	**111610**	**324**
3972881	**111613**	**324**
3972885	**111613**	**324**
3972886	**111616**	**324**
3973114	181819	363
3973115	181943	363
3973116	181935	363
3973120	045065	345
3973123	045065	345
3973265	111516	350
3973398	141315	333
3973495	**060054**	**323**
3973509	131409	345
3973512	**121363**	**343**
3973822	180888	433
3973827	180882	433
3973945	105003	360
3974092	050631	406
3974127	131736	334
3974147	**060056**	**349**
3974365	050502	429
3974371	181866	331
3974404	111710	354
3974538	171622	323
3974781	141311	333
3974815	141408	367
3974823	181884	331
3975487	**131812**	**360**
3975641	**131832**	**317**
3975818	141428	302
3975868	111555	327
3976089	141309	333
3976119	105002	360
3976371	136145	318
3976372	209965X	318
3976372X	209965X	318
3976831	180892E	433
3976834	180892	433
3977063	131586	317
3977222	060171	318
3977225	060171	318
3977226	060171	318
3977338	**131843**	**343**
3977375	121364	343
3977393	121337	318
3977531	131971	343
3977854	**050574**	**419**
3977895	131971	343
3977913	131737	334
3978021	180890	433
3978022	180891E	433
3978072	131755	318
3978482	171657	323
3979359	105002	360
3979506	191893	330
3979769	131761	343
3990082	180113	332
3990084	121220	343
3990105	180112	332
3990106	180114	332
3990120	042017	343
3990135	**060179**	**318**
3990136	**060179**	**318**
3991123	141310	366
3991152	060175E	359
3991167	180218	332
3991168	180219	332
3991624	180216	332
3991625	180209	332
3991771	**060178**	**318**
3991772	**060178**	**318**
3991773	**060179**	**318**
3992090	131714	359
3992092	131699	367
3992117	**111646**	**350**
3992118	**111668**	**350**
4000436	131913	389
4000504	121281	383
4000595	**131923**	**381**
4001902	**050703**	**404**
4002066	**050701**	**405**
4003603	**040083**	**191**
4003929	181883	235
4003950	141296	238
4003966	192107	229
4003994	181018	244
4004086	**060177**	**229**
4004556	191919	213
4004587	141286	210
4004588	141285	210
4004612	181821-100	235
4004806	192229	228
4004858	141285	210
4004859	141286	210
4009220	161636	383
4009247	045050	379
4009248	045049	379
4010253	180123	161
4010600	121317	206
4010643	121322	343
4010650	**050524**	**429**
4019274	**121389**	**264**
4019275	**121420**	**264**
4019752	**040083**	**191**
4022500	131267	228
4022816	191873	213
4022824	192134	227
4022907	040011	229
4023083	171698	217
4023203	171697	217
4024767	161638	383
4024779	121283	383
4024845	181877	192
4024849	191874	142
4024883	136142	347

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
4024886	181882	192	4026522	121338	183	4059898	111438	221
4024918	131679	132	4026528	042033	230	4059902	111390	221
4024919	131744	132	4026657	192126E	191	**4059948**	**111695**	**221**
4024920	131745	132	4026684	131656	202	4059949	111696	221
4024921	**131828**	**132**	4026694	131655	181	4060483	060006	230
4024922	**131829**	**132**	4026695	131657	184	**4062005**	**131931**	**193**
4024923	131678	132	4026696	FSC-0373	191	**4070462**	**040048**	**197**
4024925	131561	179	4026702	181876	192	4070463	040047	212
4024926	**131886**	**179**	4026776	180898	433	4070529	131276	229
4024928	131264	176	4026791	192119	191	4070653	111391	221
4024929	131720	179	4026799	202007	182	4071444	045053	397
4024935	141313	193	4026884	131648	201	4073137	171865	397
4024938	111698	221	4027996	219934	249	4076420	121254	178
4024946	132025	132	4032806	050621	413	4076493	050653	403
4024948	**131896**	**132**	4033173	181194	335	4076580	180119	193
4024953	131630	132	4034198	050621	413	**4076586**	**131930**	**193**
4024956	131631	132	4035560	ETC-9229	249	4076780	050641	339
4024957	131632	132	4035604	181201	201	**4076848**	**131929**	**193**
4024958	131633	132	4035678	181201	201	**4076866**	**045071**	**396**
4024961	131634	132	4035725	ETC-9229	249	4076902	209984X	206
4024993	131482	262	4036195	181170	201	**4076930**	**050665**	**408**
4025068	131539	179	4036720	181204E	201	4077281	180118	193
4025072	111612	327	4036758	181199	201	4080829	131917	389
4025097	181877	192	4037440	181170	201	4082772	040053	210
4025107	**131863**	**336**	4037480	181198	201	4082897	141327	210
4025108	**131830**	**336**	4038289	181208	335	4083006	131628	242
4025117	171806	321	4038597	181208	335	4083012	191869	213
4025120	171866	262	4038598	181208	335	**4083406**	**060177**	**229**
4025121	171867	217	4039813	181170	201	4083569	171636	221
4025122	171868	217	4040589	181170	201	**4087912**	**121431**	**206**
4025123	171869	217	4040844	181198	201	**4087989**	**050659**	**411**
4025127	171727	217	4040936	181169	201	**4087991**	**050657**	**408**
4025129	171729	217	**4041211**	**131856**	**376**	**4087993**	**050630**	**406**
4025130	050647	339	4041745	181169	201	4088327	209983X	206
4025134	191890	330	4042571	219934	249	4088388	050641	339
4025138	**131867**	**336**	4042573	181169	201	**4088389**	**050642**	**411**
4025139	131799	336	4043225	181204E	201	**4088390**	**050663**	**408**
4025151	131593	212	4043226	181201	201	4088507	180117	332
4025155	131265	264	4044006	ETC-9229	249	4088508	180118	193
4025157	131482	262	4044890	181208	335	4088594	131751	365
4025158	111439	221	4045934	ETC-9229	249	4088665	209984X	206
4025161	111393	221	4046127	181199	201	4088712	050641	339
4025162	101106	225	4046304	181170	201	**4088832**	**050676**	**201**
4025164	101104	226	4058790	131555	153	**4088833**	**050677**	**201**
4025167	101090	222	4058947	045018	137	4089096	141422	195
4025182	**050711**	**332**	4058949	131497	141	4089103	132000	195
4025209	**131902**	**388**	4058956	042016	195	4089137	505133	339
4025238	131684	372	4058981	131427	153	4089138	505133	339
4025245	220040	206	4059170	191937	183	4089139	171970	204
4025247	132022	343	4059172	121315	192	4089140	111542	327
4025270	136115	347	4059182	131660	181	4089153	161647	202
4025271	131407	376	4059183	131660	181	4089154	505120	189
4025274	131730	372	4059198	191894	183	4089158	181879	192
4025275	131731	376	4059202	180889	433	4089166	141438	197
4025287	131636	204	4059203	180897	433	4089169	131638	204
4025290	505185	372	4059215	192160	191	4089170	131640	205
4025295	111669	351	4059252	141422	195	4089172	131683	336
4025297	M11201-001	262	4059254	181876	192	4089173	131685	336
4025300	131637	204	4059331	191937	183	4089173A	131875	336
4025311	161647	185	4059333	191894	183	4089181	505134	339
4025955	191916	142	4059363	111089	204	4089182	505135	339
4025956	045025	155	4059387	131641	195	4089183	111545	327
4026171	131368	418	4059397	111560	202	4089184	111548	327
4026228	192163	153	4059429	171634	186	4089185	111505	327
4026338	192163	153	4059429RX	171634	186	4089186	111508	327
4026420	042015	195	4059448	151539	186	4089208	220103	343
4026423	151558	191	4059449	171634	186	4089238	220040	206
4026489	136130	181	4059460	141402	195	4089238NX	220040	206
4026507	131668	191	4059463	040056	195	4089240	132022	343
4026511	**042149**	**191**	4059464	040057	195	4089240NX	132022	343

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
4089255	042014	206	4089650	131609	312	4094865	121395	387
4089258	505133	339	4089651	131688	312	4095009	111356	383
4089259	111542	327	4089669	111523	327	4096160	131803	390
4089260	111502	327	4089670	111526	327	4101422	136131	184
4089263	131734	336	4089671	111529	327	4101432	191938	183
4089264	131739	336	4089672	192153	317	4101454	192147	191
4089286	050707	197	4089700	181815	299	4101476	191889	183
4089289	141422	195	4089705	050707	197	4101477	111569	202
4089290	060175E	359	4089713	181204E	201	4101478	111550	202
4089342	136026	323	**4089717**	**131902**	**388**	4101479	111566	185
4089344	141422	195	4089724	505130	338	4101504	136130	181
4089346	111670	372	4089726	111723	327	4101507	161648	185
4089348	111648	372	4089731	181815	299	4101867	040056	195
4089351	505185	372	4089737	111726	327	4101868	040057	195
4089369	**131886**	**179**	4089738	111729	327	4101875	111560	202
4089370	131614	179	4089757	131655	181	4101876	111563	185
4089371	131264	176	4089758	131743	372	4101877	111550	202
4089372	131720	179	4089759	131746	372	4101878	111566	185
4089378	ETC-9229	249	4089761	192216	359	4101879	111569	202
4089385	505099	221	4089762	192218	359	4101881	121338	183
4089386	111586	221	**4089780**	**131863**	**336**	4101882	121347	183
4089388	161628	262	**4089781**	**131867**	**336**	4101883	131655	181
4089389	181936	235	4089790	131566	336	4101884	202007	182
4089390	131952	388	4089804	171916	355	4105874	131433	393
4089391	131719	388	4089805	171917	355	4298627	191894	183
4089398	181202	201	4089806	171918	355	4299051	180885	433
4089405	171990	202	4089807	171919	355	**4299099**	**131860**	**191**
4089406	505125	202	4089810	505070	15	4299124	621252	183
4089407	111571	186	4089811	505025	15	**4299125**	**121423**	**183**
4089409	111562	186	4089819	131683	336	**4308682**	**121391**	**390**
4089411	111552	186	4089833	141451	197	4309076	181193	201
4089413	111568	186	4089845	171984	182	4309077	181210	201
4089415	111565	186	4089846	171987	182	4309129	ISX605-017	202
4089420	111615	327	4089865	111702	221	4309344	181942	363
4089421	**111618**	**327**	4089881	131809	336	4309389	161651	202
4089433	111673	372	**4089888**	**131954**	**376**	**4309398NX**	**141442**	**199**
4089436	141438	197	**4089889**	**131856**	**376**	4309417	181934	363
4089458	050707	197	4089894	111562	186	4309418	181822	363
4089460	505150	338	4089895	111565	186	4309434	141438	197
4089461	111533	327	4089896	111552	186	4309434NX	141438	197
4089462	111715	327	4089897	111568	186	4309441	505175	202
4089478	131482	262	4089898	111571	186	4311632	161653	185
4089479	131597	264	4089900	141401	195	4311633	161652	185
4089489	505064	176	4089908	181877	192	4311637	162031	187
4089500	505095	383	4089909	181882	192	4312008	192161	191
4089542	136097	217	4089910	181879	192	4318197	181887	331
4089544	136062	217	4089944	111709	354	4318947	181930	192
4089551	181202	201	4089948	505133	339	4320125	141438	197
4089574	180220	300	4089950	111542	327	4326596	050700	404
4089576	180218	332	**4089956**	**131865**	**336**	4330732	171658	182
4089583	141422	195	**4089957**	**131880**	**336**	4331387	060163X	191
4089584	111562	186	4089958	131684	372	4331387X	060163X	191
4089585	111565	186	4089963	111712	354	4334080	131559	385
4089586	111552	186	4089976	111545	327	4336659	181887	331
4089587	111568	186	4089977	111548	327	4337596	132020	315
4089600	ETC-9229	249	**4089978**	**131814**	**376**	4352145	131638	202
4089608	111492	202	**4089979**	**131811**	**376**	**4352146**	**131906**	**204**
4089614	505151	338	4089995	131593	212	4352290	ISX107-017	202
4089615	505152	338	4089998	131597	264	**4352349**	**131953**	**376**
4089616	111533	327	4090008	ISM101-017	259	4356366	192161	191
4089617	111533	327	4090016	171992	186	**4376104**	**131906**	**204**
4089618	111536	327	4090017	171994	186	4376196	131654	195
4089619	111539	327	4090022	181902	192	4376357	181942	363
4089620	111718	327	4090037	131809	336	4376360	172048	186
4089621	111735	327	4090042	181199	201	4376361	172051	186
4089643	505139	350	4090050	181206	303	4386525	141426	241
4089644	505139	354	4090093	181863	331	**4890189**	**050698**	**405**
4089647	181822	363	4090327	192040	297	**4890190**	**050699**	**404**
4089648	131602	281	4090328	192039	297	4890832	136119	323
4089649	131601	312	4093489	050673	405	4890833	136122	323

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
4890926	121319	318	4907446	131650	206	4923748	111089	204
4890929	121386	318	4907447	131651	206	4923759	181876	192
4891024	**040125**	**317**	4907448	131652	206	4925762	171658	182
4891025	**040126**	**318**	4910190	131916	379	4926069	191948	229
4891116	180883	433	**4910518**	**131912**	**381**	4926316	131653	191
4891176	171633	329	4911903	171860	397	4926527	136131	184
4891177	171633	329	4918787	ISM102-017	259	4926564	050581	419
4891178	151514	329	4919813	181803	51	4926565	050580	191
4891179	040072	329	4919820	181801	49	**4928593**	**050605**	**407**
4891226	191859	330	4919951	161603	315	**4928594**	**050659**	**411**
4891252	181889	331	**4919970**	**121071**	**206**	**4929519**	**050630**	**406**
4891288	131694	335	4920062	131438	417	4929641	181885	331
4891353	**040133**	**315**	4920076	131680	389	4929642	181884	331
4891385	**042091**	**343**	4920082	181801	49	4929643	181863	331
4892438	172031	321	4920086	181803	51	4929644	181866	331
4893386	172036	323	4920093	131428	153	4929656	131753	317
4893741	**042089**	**318**	4920105	180895	433	4929972	060025	315
4894095	**121369**	**343**	4920306	111560	202	4930594	181890	363
4894688	**131862**	**317**	4920307	111563	185	4930770	191936	330
4894722	**131862**	**317**	4920308	111550	202	4931041	111088	325
4894724	**131866**	**317**	4920309	111566	185	4931191	181912	331
4894725	**131866**	**317**	4920310	111569	202	4931365	131694	335
4895461	**131861**	**318**	4920463	181876	192	4931888	111555	327
4895710	121370	343	4920464	181881	192	4932124	131443	334
4895742	131708	334	4920465	181875	192	**4932209**	**131822**	**317**
4896153	045036	315	**4920517**	**060007**	**230**	4932210	131753	317
4896254	**131823**	**343**	4920751	131592	212	4932333	060025	315
4896407	141427	334	4921324	050626	410	4932377	171804	329
4896408	131708	334	4921325	050625	410	4932378	171805	329
4896409	131796	334	4921473	050669	403	4932528	060025	315
4896421	191893	330	4921475	050661	409	4932615	131762	343
4896766	171624	323	**4921477**	**050640**	**410**	4932675	060025	315
4896767	171623	323	4921479	050682	410	4932707	180112	332
4896897	131757	343	4921483	050636	410	4932708	180114	332
4897224	**050678**	**411**	4921485	050649	403	**4932720**	**111637**	**350**
4897481	141316	333	4921487	050650	251	4933120	111516	350
4897568	**131820**	**317**	4921489	050603	407	**4933223**	**131848**	**343**
4897569	131791	317	4921493	050660	251	**4933225**	**131844**	**343**
4897861	131794	315	4921495	050645	339	**4933235**	**131846**	**343**
4897877	**131831**	**315**	**4921497**	**050644**	**403**	4933458	060053	289
4897935	**111610**	**324**	4921499	050646	406	4933628	042017	343
4898301	131793	315	4921501	050652	251	4934040	181931	331
4898412	**131866**	**317**	4921503	050607	407	4934063	192129	358
4898413	**131866**	**317**	4921505	050601	407	**4934266**	**111703**	**354**
4898414	**131862**	**317**	4921511	050656	339	4934278	136101	418
4898415	**131862**	**317**	**4921517**	**050657**	**408**	4934279	136102	418
4898808	171633	329	**4921518**	**050658**	**408**	4934280	136103	418
4898820	**111613**	**324**	**4921519**	**050630**	**406**	4934344	131794	315
4898821	**111616**	**324**	4921574	121210	201	4934418	172030	323
4898850	**131866**	**317**	**4921597**	**050705**	**404**	4934419	172035	323
4898851	**131866**	**317**	**4921599**	**050703**	**404**	4934703	181912	331
4898853	**131862**	**317**	**4921601**	**050701**	**405**	4934816	111556	338
4898854	**131862**	**317**	4921686	050696	404	4934860	111553	338
4898876	121367	343	4921687	050694	404	4934862	171622	323
4899226	131791	317	**4921728**	**050741**	**406**	**4935004**	**131932**	**365**
4899228	**131820**	**317**	**4921737**	**050630**	**406**	4935005	180106	332
4899230	**131821**	**318**	4921744	050657	408	4935006	180111	332
4899231	131792	318	**4921746**	**050659**	**411**	4935013	180115	332
4899239	**042152**	**318**	4921905	141452	206	4935014	180116	193
4899689	042092	318	4922219	131680	389	4935092	180117	332
4902720	050655	403	4922528	131919	389	4935093	180118	193
4902912	050732	411	4923187	040010	229	4935094	180119	193
4902916	180189	365	4923471	191947E	229	4935730	180112	332
4902952	131751	365	4923475	111563	185	4935731	180114	332
4903035	**050742**	**406**	4923646	171658	182	4935792	141319	302
4903282	180189	365	4923743	111560	202	4935793	181815	299
4903479	**050659**	**411**	4923744	111563	185	**4935932**	**111620**	**339**
4903489	050673	405	4923745	111550	202	4936026	181928	363
4903523	180189	365	4923746	111566	185	4936076	192156	359
4905352	141286	210	4923747	111569	202	4936080	192181	317

PAI Copyright 2017

Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page	Cummins Reference	PAI Reference	Page
4936081	060172	318	4953165	191870	378	4955903	181210	201
4936081RX	060172	318	4953319	191870	378	4955955	141313	193
4936646	136123	338	4954245	050627	411	4956007	111625	327
4936940	**131868**	**315**	4954250	050730	411	4956008	141438	197
4936946	**111620**	**339**	4954400	050590	405	4956008NX	141438	197
4936967	136147	363	4954472	131931	193	4956010	181193	201
4937032	**131870**	**359**	**4954473**	**131930**	**193**	4956011	181210	201
4937305	**045059**	**345**	**4954474**	**131929**	**193**	4956084	050707	197
4937308	045054	315	4954574	050731	411	4959089	131559	385
4937311	045065	345	4954880	180123	161	**4962476**	**045102**	**197**
4937408	141298	280	4954905	050672	411	4962603	136131	184
4937472	105002	360	4955133	192143	206	4962608	141380	420
4937829	**131845**	**343**	4955156	181208	335	4962722	131660	181
4938619	**111620**	**339**	4955160	111555	327	4962732	060163X	191
4938620	**111623**	**339**	4955190	111518	351	4962732X	060163X	191
4938639	431209	343	4955210	192141	317	4962745	136137	212
4938761	**131871**	**376**	4955229	131754	336	**4963857**	**131841**	**206**
4938942	172041	321	4955230	131798	336	4965069	131971	343
4939178	131606	317	4955237	111706	354	4965417	181937	235
4939179	040051	318	4955239	191948	229	4965450	181893E	235
4939181	**111620**	**339**	4955251	505160	338	4965456	181893E	235
4939246	**131831**	**315**	4955299	111709	354	4965487	141431	195
4939280	131742	359	4955305	181204E	201	4965569	136131	184
4939586	141311	333	4955306	181202	201	4965688	131657	184
4939587	141299	302	4955337	111622	327	4965689	131649	206
4939588	141309	333	4955352	171811	322	4965690	131659	206
4940794	**111703**	**354**	**4955354**	**131850**	**336**	4965698	FSC-0373	191
4940849	**131849**	**318**	**4955355**	**131869**	**336**	4965868	192145	191
4941393	111710	354	**4955356**	**131824**	**338**	4966084	131360	134
4941395	**111707**	**354**	**4955357**	**131864**	**338**	**4966441**	**131876**	**201**
4941396	**111703**	**354**	4955365	111622	327	4970037	121052	247
4941464	141310	366	4955366	505160	338	4972850	181937	235
4942356	131607	317	4955372	136123	338	4972857	181883	235
4942435	131845	343	4955383	136130	181	4972860	181845	159
4942874	131703	376	4955389	191891	330	4972861	181821-100	235
4943048	180112	332	4955394	181913	331	4972862	181893E	235
4943049	180114	332	4955412	060025	315	4973102	131276	229
4943104	**111637**	**350**	4955421	141450	206	4973373	181887	331
4943167	**131868**	**315**	4955422	141451	197	4973532	131641	195
4943173	181931	331	4955425	181193	201	4975879	141426	241
4943174	181912	331	4955426	181210	201	4980462	171657	323
4943533	**131845**	**343**	4955462	ETC-9229	249	4980942	111516	350
4943979	171637	329	4955480	505164	338	4981330	131742	359
4944137	151533	350	4955481	111558	327	4981794	192270	359
4944337	**045059**	**345**	4955520	111622	327	4981795	192272	359
4944670	171638	350	**4955522**	**131854**	**336**	4981796	131742	359
4944710	180105	365	4955523	131756	336	4983253	151528	315
4944712	180100	365	4955529	181942	363	4983391	181939	331
4944714	180103	301	4955566	136026	323	4983588	141310	366
4944960	321241	315	4955581	111639	351	4984575	050590	405
4945053	181819	363	4955590	131639	205	4985110	131622	209
4945337	**111704**	**354**	4955591	131640	205	4985562	131655	181
4945969X	209965X	318	4955592	131654	195	4985660	121338	183
4946374	192157	359	4955594	131636	204	4985661	121347	183
4946586	060025	315	4955595	131637	202	4987064	202000	13
4946620	131957	317	4955596	131638	202	**4987914**	**111644**	**350**
4947898	171632	350	**4955643**	**131874**	**372**	4987964	180883	433
4952204	181887	331	**4955644**	**131885**	**372**	4988280	131451	163
4952449	**060176**	**229**	4955651	505149	372	4988747	180105	365
4952453	**060177**	**229**	4955661	111676	17	4988748	180107	332
4952490	141437	197	4955662	111453	118	4988749	180100	365
4952540	141283	180	4955665	136117	212	4988751	180103	301
4952541	141283	180	4955698	191950	40	4988769	180108	278
4952629	181925	195	4955705	181821E	235	4988801	141315	333
4952630	181886	165	4955706	181883	235	4989131	105003	360
4952644	121070	197	4955708	181936	235	4989162	171629	329
4952780	141286	210	4955778	141401	195	4989163	171629	329
4952785	141285	210	4955850	105001	360	4989614	121254	178
4952828	**060176**	**229**	4955853	171811	322	4990451	060025	315
4952829	**060177**	**229**	4955855	171806	321	4991099	060025	315

Cross Reference

Cummins Reference	PAI Reference	Page
4991279	060091	287
4992231	181928	363
4992982	**131832**	**317**
4994574	121370	343
4998542	121430	390
5253019	**131872**	**376**
5255450	**131861**	**318**
5257363	151548	329
5257364	171629	329
5257844	181939	331
5259419	192273	359
5259420	192271	359
5259499	136158	323
5260246	050631	406
5260263	181931	331
5260632	180122	332
5260647	**131847**	**343**
5260648	**131843**	**343**
5262784	181912	331
5262785	181939	331
5263174	181817	331
5263262	209965X	318
5263262X	209965X	318
5263672	GCP-3484	385
5264566	**131849**	**318**
5264568	131694	335
5264570	131480	313
5264571	**131819**	**343**
5264572	**131873**	**359**
5264950	**131832**	**317**
5264956	111673	351
5265798	181927	363
5265799	181928	363
5266243	171632	350
5266422	131725	318
5266445	131443	334
5266801	**131845**	**343**
5267132	180209	332
5269131	181890	363
5271613	**042152**	**318**
5272479	131791	317
5272819	121351	377
5272959	131748	362
5273379	181928	363
5273732	191884	330
5274349	181890	363
5274887	181890	363
5282375	181927	363
5282703	060171	318
5282704	**060178**	**318**
5283368	151509	345
5284362	141435	367
5291443	181935	363
5291444	181943	363
5292707	181885	331
5292708	181884	331
5292712	181866	331
5297641	050631	406
5298564	162029	187
5298565	162030	187
5309255	131791	317
5312296	181889	331
5314946	181931	331
5314947	181823	331
5314948	181939	331
5316172	192156	359
5316185	**131944**	**359**
5333480	180882	433
5346204	181943	363
30456986	121329	343

Gates Reference	PAI Reference	Page
6596	050483	435
7430	050483	435
8136-2678	EBT-8882	435
8137-1706	EBT-8879	435
8137-1707	EBT-8880	435
8137-1710	EBT-8883	435
8137-1901	EBT-8849	435
8137-1902	EBT-8851	435
8137-1976	EBT-8825	435
8137-2111	EBT-8807	435
8138-0764	050487	435
8162-0938	050473	435
8162-1362	EBT-8775-847	435
8162-1371	EBT-8776-579	435
8162-3057	EBT-8806	435
8162-3933	050489	435
8162-3936	EBT-8779	435
8162-5082	050499	435
8174-0523	050484	435
8174-0667	050495	435
8174-0668	050496	435
8174-0678	050499	435
8174-0705	EBT-8817	435
8174-0713	EBT-8779	435
8174-0718	EBT-8806	435
8174-0727	050489	435
8178-0116	EBT-8816	435
9390	EBT-8844	435
9430	EBT-8846	435
9435	EBT-8883	435
9455	EBT-8847	435
9463	EBT-8848	435
9490HD	**EBT-8867**	**435**
9530	EBT-8849	435
9600	EBT-8851	435
9620	EBT-8852	435
9640	EBT-8853	435
9660	EBT-8880	435
9670	EBT-8881	435
36091	381250	433
38157	180886	433
38501	681250	433
38503	741401	433
38518	180882	433
38532	180897	433
38610	180896	433
38633	880881	433
81371896	EBT-8844	435
81371899	EBT-8847	435
81372036	050483	435
81372112	EBT-8808	435
81380764	050487	435
81621358	EBT-8775-585	435
81621361	EBT-8775-738	435
81621372	EBT-8776-678	435
81621373	EBT-8776-687	435
81621384	EBT-8775-746	435
81621591	EBT-8775-831	435
81621849	050474	435
81622521	050475	435
81623057	EBT-8806	435
81623936	EBT-8779	435
81625082	050499	435
81740626	050492	435
81740658	050472	435
81740660	050470	435
81740670	050498	435
81740705	EBT-8817	435
81740718	EBT-8806	435
81740727	050489	435

Gates Reference	PAI Reference	Page
81780145	EBT-8781	435
BX53	350402	435
BX59	350406	435
BX60	350408	435
BX67	350412	435
BX70	350413	435
BX71	350414	435
K040430	050486	435
K050340	050470	435
K050370		**435**
K060415	050499	435
K060425	**050488**	**435**
K060435	050484	435
K060670	EBT-8775-670	435
K060735	EBT-8775-735	435
K060739	EBT-8775-738	435
K060747	EBT-8775-746	435
K060795	EBT-8775-795	435
K060832	EBT-8775-831	435
K060846HD	EBT-8775-847	435
K080485	050493	435
K080537	050496	435
K080550	050490	435
K080560	050497	435
K080565	050472	435
K080590	050471	435
K080605	050498	435
K080610	050492	435
K080615	050474	435
K080626	050494	435
K080635	050473	435
K080670	050489	435
K080700	050495	435
K080708	050491	435
K080716	450481	435
K080720HD	450481	435
K080730	450480	435
K080760	050475	435
K080825	741411	435
K080939	741412	435
K100502HD	741410	435
K100564HD	EBT-8776-565	435
K100579	EBT-8776-579	435
K100607	EBT-8776	435
K100618	EBT-8777	435
K100665	EBT-8778	435
K100677	EBT-8776-678	435
K100686HD	EBT-8776-687	435
K100731	EBT-8779	435
K120640HD	880865	435
TR22485	350401	435
TR22570	350403	435
TR22588	350404	435
TR22607	350405	435
TR22625	350407	435
TR22648	350409	435
TR22664	350410	435
TR22692	350411	435
TR24664	350415	435
TR28400	050465	435
TR28423	050466	435
TR28492	050487	435

Horton Reference	PAI Reference	Page
79A9498-2	EFC-1594	425
833050-S	801120	423

New Parts are in BOLD text

PAI Copyright 2017

Horton Reference	PAI Reference	Page	Mack Reference	PAI Reference	Page	Mack Reference	PAI Reference	Page
833050S	801120	423	745-202986	EWA-0049	387	3088-5566505	EBG-8688HP	157
983616	853738	421	745-230111	FPP-3577	359	3313-K100502HD	741410	435
983617	853731	421	745-233057	EPP-3574	381	3316-1444000000	ETC-9294	76
983620	853732	421	745-233410	EPP-3573	297	3316-1444020000	ETC-9291	76
983621	853733	421	**745-235574**	**GBG-6601**	**233**	3316-1444030000	ETC-9293	76
983624	853734	421	745-237648	EWA-0049	387	3316-1444040000	ETC-9292	76
983629	853735	421	745-238822	EPP-3575	385	3316-1444070000	ETC-9255	76
983630	853736	421	745-240543	EF30130	297	3316-1447000000	ETC-9256	76
983631	853737	421	745-246441	EWA-0049	387	3316-1447020000	ETC-9257	76
983641	853733	421	**935-0281002410**	**050698**	**405**	3316-1447040000	ETC-9258	76
983645	853733	421	935-0281002471	050678	411	3543-N6543001	801098	425
983647	853738	421	943-RS3936	804100	431	3912-918901	450466	423
983651	853738	421	1245-853910000	EWA-0049	387	3912-983616	853738	421
983659	853739	421	1458-4260	136140	398	3912-983617	853731	421
983660	853740	421	1458-99362	136038	141	3912-983620	853732	421
983661	853741	421	1577-S212	HNU-0263	35	3912-983621	853733	421
989357	EFC-1594	425	1577-134809	050487	435	3912-983624	853734	421
991435	EFC-1607	425	**1577-206996**	**050469**	**435**	3912-983629	853735	421
991439	EFC-1607	425	1577-3000521	121233	323	3912-983630	853736	421
991451	EFC-1607	425	1577-3063246	EBG-8042	51	3912-983631	853737	421
991813-252	450465	423	**1577-3076492**	**050488**	**435**	3912-983641	853733	421
993602	853738	421	1577-3522871	ETC-9292	76	3912-983645	853733	421
993603	853731	421	1577-3525325	ETC-9289	399	3912-983647	853738	421
993605	450542	421	1577-3528281	ETC-9289	399	3912-983651	853738	421
993606	853732	421	1577-3801591	ETC-9255	76	3912-983659	853739	421
993607	853733	421	1577-3803108	ETC-9257	76	3912-983660	853740	421
993610	853734	421	1577-3803199	ETC-9258	76	3912-983661	853741	421
993615	853735	421	1577-3803279	ETC-9256	76	3912-989357	EFC-1594	425
993616	853736	421	**2104-550009**	**GBG-6601**	**233**	3912-991435	EFC-1607	425
993617	853737	421	**2104-550505**	**GBG-6601**	**233**	3912-991439	EFC-1607	425
993619	853738	421	2104-5003715	HNU-0263	35	3912-991451	EFC-1607	425
993620	853739	421	2104-50035710	EWA-0049	387	**3912-993219**	**LCV-3754**	**421**
993621	853740	421	2104-50035711	FWA-0050	387	3912-993602	853738	421
993646	853739	421	2104-50035712	BWA-0051	163	3912-993603	853731	421
993648	853740	421	2104-50035713	EWA-0052	13	3912-993606	853732	421
993649	853739	421	2104-50035715	BWA-0054	61	3912-993607	853733	421
993651	853740	421	2104-50039810	ESC-0012	55	3912-993610	853734	421
993653	853739	421	2104-50039812	GSC-0009	73	3912-993615	853735	421
993654	853740	421	2104-50039912	BSC-0011	73	3912-993616	853736	421
993655	853741	421	2428-89362	180884	433	3912-993617	853737	421
994205	ECK-1579	427	2428-89415	180882	433	3912-993619	853738	421
994206	ECK-1577	427	2428-89422	180897	433	3912-993620	853739	421
994273	ECK-1577	427	2428-89436	741401	433	3912-993621	853740	421
994305	ECK-1578	427	2428-89440	180885	433	3912-993646	853739	421
994307	ECK-1576	427	2428-89448	180896	433	3912-993648	853740	421
994317	**ECK-1396**	**427**	2428-425761	EBT-8807	435	3912-993649	853739	421
994346	**ECK-1404**	**427**	2428-425762	EBT-8808	435	3912-993651	853740	421
994900	ECK-1569	427	2428-5080940	741412	435	3912-993653	853739	421
994902	**ECK-1539**	**427**	2719-90323	EPP-3574	381	3912-993654	853740	421
994985	ECK-1569	427	2719-90414	EWA-0052	13	3912-993655	853741	421
995033	ECK-1573	427	2719-90416	FWA-0050	387	3912-994205	ECK-1579	427
999024	**EFC-1492**	**425**	2719-90898	EPP-3575	385	3912-994305	ECK-1578	427
999348	EFC-1564	425	3076-CA8932	804100	431	3912-994307	ECK-1576	427
999357	EFC-1594	425	3088-X8L604	GSC-0009	73	**3912-994317**	**ECK-1396**	**427**
999473	EFC-1565	425	3088-X1800	HNU-0263	35	**3912-994346**	**ECK-1404**	**427**
999474	EFC-1564	425	3088-X1803	HNU-0263	35	3912-994900	ECK-1569	427
9902002	EFC-1643B	425	3088-X3500	EWA-0049	387	**3912-994902**	**ECK-1539**	**427**
9908300	**ECK-1519**	**427**	3088-X3600	FWA-0050	387	3912-994985	ECK-1569	427
99311972	450466	423	3088-X3700	BWA-0051	163	3912-995033	ECK-1573	427
376791171	EFC-1567	425	3088-X3801	EWA-0052	13	3912-999357	EFC-1594	425
376791181	**EFC-1558**	**425**	3088-X8604	GSC-0009	73	3912-999473	EFC-1565	425
376791201	801097	425	3088-X9503	BNU-0278	421	3912-9902002	EFC-1643B	425
376791211	801098	425	3088-X12205	EPP-3573	297	**3912-9908300**	**ECK-1519**	**427**
376791221	801094	425	3088-X12208	EPP-3573	297	3912-376791201	801097	425
376791231	801095	425	3088-X12404	FPP-3577	359	3912-376791211	801098	425
376791241	801096	425	3088-X31000	BWA-0054	61	3912-376791221	801094	425
982660251	801121	73	3088-X31006	BWA-0054	61	3912-376791241	801096	425
991762252	450464	423	3088-X121207	EPP-3576	297	3912-982660251	801121	73
992660251	801121	73	3088-8L600	ESC-0012	55	3912-992660251	801121	73
			3088-8L604	GSC-0009	73	4000-AE17171	EWA-0052	13

PAI Copyright 2017

Mack Reference	PAI Reference	Page
4000-17171	EWA-0052	13
4000-47764000	FNU-0280	159
4103-500810802	ESC-0012	55
4103-5000114260	040013	243
4103-5000441335	ECL-1954	50
4103-5000442460	ECL-1954	50
4103-5000442463	ECL-1954	50
4103-5000612684	BWA-0051	163
4103-5000810794	ESC-0012	55
4103-5000811372	GSC-0009	73
4103-5001834876	FWA-0050	387
4103-5001845645	EPP-3576	297
4103-5003057024	BWA-0051	163
4103-5003083016	ECL-1954	50
4103-5003083054	ECL-1954	50
4103-5010284174	EPP-3574	381
4103-5010284186	EOS-3305	390
4103-5010284214	**ESC-0365**	**197**
4103-5010284320	ECP-3487	315
4103-5010284531	ESR-2831	235
4103-5010315993	**EFN-8571**	**423**
4103-5010550600	FOF-4570	430
4103-5010553993	EBT-8683	433
4103-5010571417	EPP-3575	385
4103-5010571646	ECL-1953	247
4103-5200350581	EST-0414	421
4103-7420920460	GWA-0063	381
4103-7703083202	ECL-1954	50
4103-7703083430	ECL-1962	247
4333-232640R91	**050547**	**264**
4333-336018R91	136129	396
4333-381477R91	136140	398
4333-398701R91	136129	396
4333-437085C1	**050547**	**264**
4333-481976C1	EFN-8759	73
4333-545239C1	**131833**	**396**
4333-591588C1	131978	398
4333-598435C1	**050534**	**429**
4333-1617899C91	**EFC-1492**	**425**
4333-1651399C1	050472	435
4333-1653652C91	853733	421
4333-1673785C92	050673	405
4333-1673993C1	450481	435
4333-1678137C1	854053	402
4333-1682692C1	450481	435
4333-1684560C91	450541	421
4333-1684560C92	450541	421
4333-1685132C92	450542	421
4333-1687801C91	480891	433
4333-1689785C91	450560	421
4333-1695793C91	**ECK-1519**	**427**
4333-1819391C1	450480	435
4333-1819391C2	450480	435
4333-1824644C1	492062	191
4333-1825181C91	450523	429
4333-1841559C1	450481	435
4333-1842638C92	450525	429
4333-1842639C92	450524	430
4333-1873917C91	450527	429
4333-1874438C1	450519	429
4333-1878042C92	450526	429
4333-2000729C2	EFN-8756	73
4333-2001023C1	**EFC-1592B**	**425**
4333-2005452C1	EFN-8754	73
4333-2010884C1	EFN-8755	73
4333-2021975C1	**EFC-1592B**	**425**
4333-2033827C1	EFC-1562	425
4333-2509380C91	**EFC-1454**	**425**
4333-2601973C1	EFC-1562	425
4333-2602141C91	450533	425
4333-2602193C1	EFC-1563	425
4333-3507485C1	EFN-8757	73
4333-3507486C1	EFN-8758	73
4333-3522786C4	450530	425
4333-3522788C3	**EFC-1592B**	**425**
4333-3540116C4	450531	425
4333-3540983C3	EFC-1562	425
4333-3584438C3	450532	425
4333-3696123C91	**EFC-1492**	**425**
4769-10330543502	ECK-1568	427
4769-10330778101	**ECK-1519**	**427**
4769-10900800001	**EFC-1492**	**425**
4769-10900950001	**EFC-1454**	**425**
5034-3231	EWA-0049	387
5081-LFP670	050510	430
5081-3654	EGA-1470	431
5181-LAF8691	804100	431
6635-V404P66	MSV-4119	161
6635-3P5ONS	ECP-3468	137
6635-05HP6S	ECP-3474	167
6635-6HP5ONS	ECP-3474	167
6635-6HP50NS	ECP-3474	141
6635-8HP5ONS	ECP-3475	137
6635-8HP50NS	ECP-3475	165
6635-10HP5NS	ECP-3476	137
6635-14HP5ONS	ECP-3477	137
6635-20HP5ONS	ECP-3478	137
6635-638F50GS	FAD-4099	161
6635-2225P4	840135	57
6635-VSTI33X20R71	**050582**	**419**
6635-VSTI12X15OR	050570	419
6635-VSTI14X150R	050572	419
6635-VSTI16X150R	**050574**	**419**
6635-VSTI18X150R	**050576**	**419**
6635-VSTI22X150R	**050578**	**419**
6635-VSTI127X2OR	050580	419
7536-129119	EGS-2861	390
7536-166054	EFC-1592	425
7536-166592	ETC-9253	304
7536-166825	ETC-9288	250
7536-167049	ETC-9255	76
7536-167050	ETC-9256	76
7536-167118	EFC-1628	425
7536-167713	ETC-9257	76
7536-167715	ETC-9258	76
7536-168823	ETC-9286	249
7536-168824	ETC-9287	249
7536-168825	ETC-9288	249
7536-170359	ETC-9259	170
7536-171270	ETC-9252	304
7536-172033	ETC-9275	170
7536-172035	ETC-9278	170
7536-183145	EFC-1642	425
7536-187197	EKT-9261	117
7536-187242	EFC-1638	425
7536-193903	ETC-9295	399
7536-196006	EKT-9260	117
7536-196007	219970	117
7536-196389	ETC-9296	399
7536-196390	ETC-9297	399
7536-196441	ETC-9291	76
7536-196463	ETC-9292	76
7536-196464	ETC-9293	76
7536-196800	ETC-9294	76
7536-197879	EFC-1629	425
7536-197916	ETC-9289	399
7536-316468	ETC-9254	386
7536-317107	ETC-9267	390
7536-318417	EKT-2668	390
7536-472035		**170**
7843-3595985	EPP-3574	381
8226-R0069799	192101	297
8235-A1805Q589	136052	395
8235-NL251	BNU-0278	421
8235-P16	EPP-3574	381
8235-P26	EPP-3574	381
8235-P212	EPP-3576	297
8235-S268	ESC-0012	55
8235-S2710	BSC-0011	73
8235-WA16	FWA-0050	387
8235-1229V516	EWA-0052	13
8235-1828N92	EBG-8041	159
8235-1828P172	**GBG-6601**	**233**
8235-1828Y129	**GBG-6601**	**233**
8274-M3122	EPP-3573	297
8633-49520	741401	433
8633-4080825	741411	435
8813-154129	EGA-3061	165
9032-C5315X8	**050545**	**249**
9032-C35315X8	**050546**	**249**
9032-3750X4	840135	57
9032-7629X7	**121432**	**249**
9383-6205LL	**EBG-6163**	**235**
9424-AF966	804102	431
9424-AF966M	804102	431
9538-50251	450560	421
9538-5030111	845050	421
9538-5030111B	845050	421
420641	EGS-2861	390
420643	131480	313
945512	121206	343
946440	**040048**	**197**
968209	121366	191
968612	050581	419
969397	**121377**	**395**
984728	040079	300
995453	040079	300
1543499	040062	335
3973733	801126	423
8149855	880879	433
20477430	801125	423
20512915	EBG-8688	157
20545619	EBT-8774-630	435
20581364	EBT-8683	433
20582557	880865	435
20582565	880865	435
20704613	FFF-4550	429
20704731	BSC-0011	73
20704867	FFF-4590	429
20705982	**ESC-0365**	**197**
20706077	ENU-0422	421
20739751	880880	433
20762060	880879	433
20765117	801097	425
20784537	EGS-3890-020	390
20807261	845050	421
20821331	EBT-8776-565	435
20843764	804098	430
20851364	EBT-8683	433
20852765	836005	418
20856026	845051	421
20860873	880881	433
20869316	801087	429
20870777	EBT-8778	435
20870833	EBT-8775-795	435
20874680	801095	425
20874682	801096	425
20875672	804099	429
20883502	EBT-8776	435
20883819	801094	425

PAI Copyright 2017

Mack Reference	PAI Reference	Page	Mack Reference	PAI Reference	Page	Mack Reference	PAI Reference	Page
20886339	EBT-8771-787	435	85123189	EFC-1565	425	36 AX 45	BWA-0054	61
20887403	**131841**	**206**	85129485	EFC-1593	425	36 AX 48	EWA-0052	13
20891096	801125	423	85135334	ECL-1962	247	36 AX 52	BWA-0054	61
20910188	801087	429	7400914530	111178	221	37 AX 265	BWA-0066	229
20935521	880880	433	7420852765	836005	418	37 AX 471	FWA-0158	73
20935523	880879	433	8 AB 481	BWA-0054	61	37 AX 472	GWA-0062	417
20966526	880879	433	**26 AM 43**	**040048**	**197**	37 AX 472U	GWA-0062	417
20972295	804099	429	27 AM 12	FSC-0373	244	39 AX 23	EWA-2441	137
20988022	EBT-8683	433	30 AM 7	840005	192	**46 AX 2**	**GBG-6601**	**233**
21023285	801087	429	107 AM 5019	EST-0414	421	46 AX 48	EBG-8041	159
21219337	**121380**	**395**	107 AM 5022	EST-0414	421	46 AX 58	EBG-8041	159
21291243	EBT-8683	433	154 AM 5001	FNU-0436	300	**46 AX 64**	**GBG-6601**	**233**
21336013	801087	429	191 AM 2	ENU-0422	421	46 AX 118	EBG-8689	390
21372815	EBT-8771-787	435	4 AX 1	ESC-0012	55	46 AX 356	EBG-8041	159
21380521	804097	429	4 AX 4	BSC-0011	73	46 AX 474	EBG-8042	51
21404578	880879	433	4 AX 16	GSC-0009	73	**46 AX 475**	**EBG-6163**	**235**
21417563	880881	433	4 AX 31	ESC-0012	55	46 AX 539	EBG-8688	157
21422765	880880	433	4 AX 41C	ESC-0012	55	49 AX 96	EPP-3573	297
21422767	880879	433	4 AX 41N	ESC-0012	55	49 AX 96U	EPP-3573	297
21454379	880878	433	4 AX 65	ESC-0012	55	49 AX 150	EPP-3575	385
21460409	880866	435	4 AX 71	ESC-0012	55	49 AX 205	EPP-3573	297
21461221	880881	433	4 AX 84	BSC-0011	73	49 AX 226	EPP-3566	387
21556636	880867	435	4 AX 154	BSC-0011	73	49 AX 230	EPP-3573	297
21556637	880868	435	4 AX 154A	BSC-0011	73	49 AX 231	EPP-3573	297
21707133	FOF-5538	430	4 AX 154B	BSC-0011	73	49 AX 232	EPP-3574	381
21707135	804098	430	4 AX 154C	BSC-0011	73	49 AX 233	EPP-3574	137
21707136	FOF-4570	430	4 AX 186	BSC-0011	73	49 AX 234	EPP-3575	385
21714847	880881	433	4 AX 194	ESC-0025	387	49 AX 234Z	EPP-3575	385
21870635	801087	429	6 AX 21	GSC-0009	73	49 AX 235	EPP-3576	297
21939298	FOF-5538	430	6 AX 79	ESC-0012	55	49 AX 242	EPP-3572	415
21939324	FOF-4570	430	6 AX 102	ESC-0012	55	49 AX 243	EPP-3573	297
25013754	**EBT-8867**	**435**	6 AX 267	ESC-0012	55	49 AX 244	FPP-3577	359
25021604	853732	421	6 AX 333	BSC-0011	73	49 AX 248	EPP-3575	385
25023135	EFC-1593	425	6 AX 424	ESC-0012	55	49 AX 248Z	EPP-3575	385
25042054	FAF-4558	431	6 AX 734	GSC-0009	73	49 AX 251	EPP-3573	297
25093675	853731	421	6 AX 874	GSC-0009	73	56 AX 347	GGA-2941	183
25099919	804091	432	6 AX 879	BSC-0011	73	56 AX 352	GGA-2991	363
25101176	EMT-8528	430	6 AX 1148	GSC-0009	73	56 AX 356	EGS-2861	390
25105748	EBT-8775-795	435	6 AX 1202	GSC-0009	73	56 AX 410	121284	161
25106893	BGA-3004	137	6 AX 1202X	GSC-0009	73	56 AX 431	GGA-2992	363
25107777	BGA-3004	137	6 AX 1308	GSC-0009	73	56 AX 436	BGA-3004	137
25109354	840005	192	6 AX 1308X	GSC-0009	73	56 AX 456	EGS-3900-027	117
25153358	**EMT-8489**	**429**	6 AX 1317	BSC-0011	73	56 AX 476	EGS-2861	390
25154441	**EBT-8867**	**435**	6 AX 1317X	BSC-0011	73	56 AX 534	GGA-2947	201
25157459	EFN-8767	73	6 AX 1340	GSC-0009	73	56 AX 540	121227	137
25157723	EFC-1643	425	16 AX 824	EST-0042	421	56 AX 573	EGS-2861	390
25158251	EFN-8638	73	16 AX 883	EST-0042	421	56 AX 604	121254	178
25165364	801120	423	20 AX 5	HNU-0263	35	61 AX 57	042220	390
25166866	853733	421	21 AX 313	ENU-0188	75	61 AX 71	042220	390
25173407	801121	73	21 AX 691	ENU-0188	75	61 AX 119	042220	390
25173527	EBT-8775-795	435	21 AX 801	ENU-0188	75	63 AX 3	EPP-3573	297
25175178	EFN-8707	73	21 AX 852	ENU-0188	75	63 AX 4	FPP-3577	359
25195022	EBT-8694	433	21 AX 856	ENU-0202	421	63 AX 27	EPP-3576	297
25496911	EFN-8768	73	23 AX 332	BNU-0278	421	63 AX 45	EPP-3574	381
25501624	FFF-4551	429	23 AX 459	FNU-0280	159	63 AX 45Z	EPP-3574	381
25502421	FFF-5531	429	35 AX 1345	EWA-0068	70	63 AX 51	EPP-3575	385
25502422	FFF-5532	429	35 AX 1542	GWA-0063	381	63 AX 94	EPP-3573	297
25503228	FOF-5534	430	36 AX 1	EWA-0703	300	63 AX 112	EPP-3574	381
25503826	EMT-8528	430	36 AX 3	FWA-0050	387	63 AX 149	EPP-3574	381
85103703	121195	153	36 AX 4	BWA-0051	163	63 AX 212	EPP-3574	381
85111555	801094	425	36 AX 4X	BWA-0051	163	63 AX 444	EPP-3575	385
85111557	801095	425	36 AX 5	EWA-0052	13	63 AX 521	EPP-3573	297
85111558	801124	423	36 AX 5X	EWA-0052	13	79 AX 27	GKP-3498	317
85111559	801096	425	36 AX 7X	BWA-0054	61	79 AX 50	GKP-3498	317
85111561	801097	425	36 AX 22	EWA-0049	387	79 AX 57X	GCP-3484	385
85111563	801098	425	36 AX 23	EWA-0049	387	79 AX 59	GKP-3488	317
85115602	801094	425	36 AX 30	EWA-0049	387	79 AX 60	GKP-3498	317
85115603	801095	425	36 AX 37	EWA-0049	387	79 AX 60Z	GKP-3498	317
85115604	801096	425	36 AX 42	BWA-0051	163	79 AX 63	ECP-3485	297
85123181	EFC-1593	425	36 AX 44	FWA-0050	387	79 AX 67	ECP-3487	315

Mack Reference	PAI Reference	Page
79 AX 71	GCP-3495	285
79 AX 632	ECP-3485	297
83 AX 6	ECL-1954	50
83 AX 7	ECL-1954	50
83 AX 11	ECL-1954	50
83 AX 12	ECL-1954	50
83 AX 32	ECL-1954	50
83 AX 110	ECL-1954	50
83 AX 207	ECL-1954	50
83 AX 240	ECL-1954	50
83 AX 367	ECL-1954	50
83 AX 369	ECL-1954	50
83 AX 385	ECL-1954	50
83 AX 452	ECL-1953	247
83 AX 453	ECL-1954	50
83 AX 627	ECL-1958	69
83 AX 673	ECL-1954	50
83 AX 759	ECL-1962	247
83 AX 836	ECL-1954	50
88 AX 145	136171	398
400 AX 12	FWA-0050	387
32 GB 38	EMT-8500	429
32 GB 39	EMT-8490	429
32 GB 39P2	EMT-8489	429
32 GB 160P2	EMT-8500	429
32 GB 163	EMT-8490	429
32 GB 258P2	EMT-8515	429
32 GB 354P2	EMT-8970	432
32 GB 414	EMT-8515	429
32 GB 415	EMT-8971	432
87 GB 41A	EBT-8683	433
87 GB 45C	EBT-8683	433
87 GB 46	EBT-8694	433
87 GB 46A	EBT-8694	433
87 GB 414AM	EBT-8683	433
87 GB 414BM	EBT-8683	433
87 GB 414M	EBT-8683	433
88 GB 196	EBT-8882	435
88 GB 354	EBT-8851	435
88 GB 354P2	EBT-8879	435
88 GB 354P8	EBT-8881	435
88 GB 354P10	EBT-8881	435
88 GB 354P12	EBT-8050	435
88 GB 354P15	EBT-8883	435
88 GB 354P30	EBT-8052	435
88 GB 354P32	**EBT-8867**	**435**
88 GB 354P44	EBT-8845	435
88 GB 354P48	EBT-8883	435
88 GB 354P50	EBT-8620	435
88 GB 354P52	EBT-8880	435
88 GB 354P68	EBT-8883	435
88 GB 354P73	EBT-8824	435
88 GB 354P74	EBT-8881	435
88 GB 437	EBT-8881	435
88 GB 437P2	EBT-8879	435
88 GB 437P13	EBT-8886	435
88 GB 439P376	EBT-8824	435
88 GB 439P391	EBT-8844	435
88 GB 439P411	EBT-8845	435
88 GB 439P421	EBT-8889	435
88 GB 439P431	EBT-8846	435
88 GB 439P432	EBT-8846	435
88 GB 439P436	EBT-8883	435
88 GB 439P457	EBT-8847	435
88 GB 439P462	EBT-8848	435
88 GB 439P491	**EBT-8867**	**435**
88 GB 439P492	**EBT-8867**	**435**
88 GB 439P506	EBT-8823	435
88 GB 439P516	EBT-8888	435
88 GB 439P532	EBT-8849	435
88 GB 439P552	EBT-8825	435
88 GB 439P602	EBT-8851	435
88 GB 439P622	EBT-8852	435
88 GB 439P642	EBT-8853	435
88 GB 439P651	EBT-8053	435
88 GB 439P652	EBT-8053	435
88 GB 439P661	EBT-8880	435
88 GB 439P662	EBT-8885	435
88 GB 439P671	EBT-8620	435
88 GB 439P672	EBT-8884	435
88 GB 439P682	EBT-8050	435
88 GB 439P722	EBT-8887	435
88 GB 439P732	EBT-8886	435
88 GB 445P720	EBT-8781	435
88 GB 445P730	EBT-8816	435
88 GB 447P555	EBT-8776-555	435
88 GB 447P565	EBT-8776-565	435
88 GB 447P579	EBT-8776-579	435
88 GB 447P605	EBT-8776	435
88 GB 447P615	EBT-8777	435
88 GB 447P655	EBT-8806	435
88 GB 447P666	EBT-8778	435
88 GB 447P678	EBT-8776-678	435
88 GB 447P687	EBT-8776-687	435
88 GB 447P728	EBT-8817	435
88 GB 447P732	EBT-8779	435
88 GB 449P555	EBT-8776-555	435
88 GB 449P565	EBT-8776-565	435
88 GB 449P579	EBT-8776-579	435
88 GB 449P605	EBT-8776	435
88 GB 449P615	EBT-8777	435
88 GB 449P655	EBT-8806	435
88 GB 449P666	EBT-8778	435
88 GB 449P678	EBT-8776-678	435
88 GB 449P687	EBT-8776-687	435
88 GB 449P732	EBT-8779	435
88 GB 450P795	EBT-8775-795	435
88 GB 453P585	EBT-8775-585	435
88 GB 453P670	EBT-8775-670	435
88 GB 453P735	EBT-8775-735	435
88 GB 453P738	EBT-8775-738	435
88 GB 453P746	EBT-8775-746	435
88 GB 453P795	EBT-8775-795	435
88 GB 453P831	EBT-8775-831	435
88 GB 453P847	EBT-8775-847	435
88 GB 456P604	EBT-8776	435
88 GB 457P630	EBT-8774-630	435
88 GB 458P555	EBT-8776-555	435
88 GB 458P565	EBT-8776-565	435
88 GB 458P579	EBT-8776-579	435
88 GB 458P678	EBT-8776-678	435
88 GB 458P687	EBT-8776-687	435
88 GB 459P585	EBT-8775-585	435
88 GB 459P670	EBT-8775-670	435
88 GB 459P735	EBT-8775-735	435
88 GB 459P738	EBT-8775-738	435
88 GB 459P746	EBT-8775-746	435
88 GB 459P795	EBT-8775-795	435
88 GB 459P831	EBT-8775-831	435
88 GB 459P847	EBT-8775-847	435
88 GB 460P640	880865	435
88 GB 460P787	EBT-8771-787	435
88 GB 472P787	EBT-8771-787	435
222 GB 27A	EFC-8552	420
222 GB 214	EFC-8551	420
236 GB 41M	FKT-5537	430
236 GB 42M	FOF-5328	430
236 GB 311A	FOF-4540	431
279 GB 43M	804101	431
364 GB 14	GKP-3488	317
483 GB 218B	FFF-4550	429
483 GB 219A	FFF-4590	429
483 GB 372M	FFF-5485	429
483 GB 431	FFF-4551	429
483 GB 433	FFF-4536	429
483 GB 433A	FFF-4536	429
483 GB 433B	FFF-4536	429
483 GB 440	FFF-4551	429
483 GB 441	FFF-4550	429
483 GB 444	FFF-4590	429
483 GB 465	FFF-4536	429
483 GB 470AM	FFF-5531	429
483 GB 470M	FFF-5531	429
483 GB 471M	FFF-5532	429
483 GB 476M	FFF-5486	429
483 GB 477M	FFF-5329	429
485 GB 3191B	FOF-4570	430
485 GB 3191C	FOF-4570	430
485 GB 3219D	FKT-4156	430
485 GB 3232	FOF-5538	430
485 GB 3236	FOF-5538	430
485 GB 4365AM	EMT-8528	430
485 GB 4365M	EMT-8528	430
590 GB 1189A	EGS-3890-020	390
744 GB 310	EIH-1979	249
57 GC 2134	FOF-4571	430
57 GC 2187	FOF-5534	430
57 GC 2206	FKT-5537	430
57 GC 2231	FOF-5328	430
272 GC 228M	050581	419
325 GC 120	ESR-2831	235
387 GC 32	804091	432
421 GC 279M	**040048**	**197**
421 GC 1125	BSC-0011	73
421 GC 1127	GSC-0009	73
446 GC 290	GGA-2991	363
446 GC 1178	EF30130	297
446 GC 1215	EGS-3905-021	318
446 GC 1225	EGA-3877	163
446 GC 2159M	121366	191
447 GC 216A	EOS-3305	390
561 KC 29	**121380**	**395**
2 MD 2147	FAF-4563	431
2 MD 2151	FAF-4563	431
2 MD 2153	FAF-4564	431
2 MD 3156P3	FAF-4569	431
2 MD 3161P3	FAF-4569	431
2 MD 4004	FAF-4568	431
57 MD 21A	FAF-4562	431
57 MD 24	804102	431
57 MD 25P2	FAF-4569	431
57 MD 26	FAF-4563	431
57 MD 27	FAF-4566	431
57 MD 31A	FAF-4561	431
57 MD 32	FAF-4568	431
57 MD 33	FAF-4564	431
57 MD 42M	FAF-4558	431
57 MD 46M	804100	431
57 MD 48M	FAF-5453	431
57 MD 318	FAF-5476	431
57 MD 320M	FAF-5453	431
57 MD 29301	FAF-4565	431
57 MD 29305	FAF-4567	431
57 MD 29305P1	FAF-4567	431
11 MF 2634P10	ECH-8692	61
25 MF 126	MHV-4223	50
25 MF 314A	FWF-4520	432
25 MF 314B	FWF-4520	432
25 MF 422A	FWF-4521	432
25 MF 430	FWF-4521	432

New Parts are in BOLD text

PAI Copyright 2017

Mack Reference	PAI Reference	Page
25 MF 435A	FWF-4520	432
25 MF 436	FWF-4521	432
1 MH 29305AP3	EFC-1642	425
1 MH 29305BP2	EFC-1642	425
1 MH 29305BP3	EFC-1642	425
1 MH 29305P2	EFC-1642	425
1 MH 29305P3	EFC-1642	425
2 MH 48P40	EFN-8637	73
2 MH 48P41	EFN-8636	73
2 MH 360M	EFN-8577	73
2 MH 365	801120	423
2 MH 367M	**EFN-8571**	**423**
2 MH 368	801121	73
2 MH 414P23	EFN-8615	73
2 MH 414P56	EFN-8616	73
2 MH 414P64	EFN-8617	73
2 MH 414P70	EFN-8618	73
2 MH 424	EFN-8638	73
2 MH 424P1	EFN-8638	73
2 MH 424P2	EFN-8638	73
2 MH 429	EFN-8638	73
2 MH 443	EFN-8767	73
2 MH 444	EFN-8709	73
2 MH 445	EFN-8685	73
2 MH 446	801122	423
2 MH 453	EFN-8768	73
2 MH 460	EFN-8707	73
2 MH 463M	801125	423
2 MH 517M	801125	423
2 MH 29304	EFN-8706	73
24 MH 163	ESP-8621	421
38 MH 311A	EFC-1646	425
38 MH 315A	EFC-1646	425
38 MH 318	EFC-1645B	425
38 MH 318M	EFC-1645B	425
38 MH 322M2	**EFC-1556**	**425**
38 MH 414M	EFC-1645B	425
38 MH 416	EFC-1640B	425
38 MH 416P2	EFC-1643B	425
38 MH 416P3	EFC-1643	425
38 MH 423AM	**EFC-1584**	**425**
38 MH 423BM	**EFC-1584**	**425**
38 MH 425AM	EFC-1567	425
38 MH 425M	EFC-1567	425
38 MH 428M	**EFC-1558**	**425**
40 MH 33	EFC-1593	425
40 MH 48	EFC-1607	425
40 MH 51	EFC-1593	425
40 MH 52	**EFC-1492**	**425**
40 MH 410	EFC-1607	425
40 MH 415AM	EFC-1564	425
40 MH 415AMX	**EFC-1564X**	**425**
40 MH 415M	EFC-1564	425
40 MH 415MX	**EFC-1564X**	**425**
40 MH 418AM	EFC-1564	425
40 MH 418BM	EFC-1564	425
40 MH 418M	EFC-1594	425
40 MH 440M	EFC-1565	425
40 MH 441M	EFC-1564	425
40 MH 441MX	**EFC-1564X**	**425**
40 MH 444M	EFC-1594	425
1 MR 2455	853732	421
1 MR 2455P2	853733	421
1 MR 29344	853731	421
20 QE 2358	**LCV-3754**	**421**
20 QE 2358P2	**LCV-3754**	**421**
20 QE 3373	**LCV-3754**	**421**
20 QE 3408M	845050	421
301 SB 79	EPP-3573	297
343 SB 87	EGA-0470	431

Mack Reference	PAI Reference	Page
301 SD 19	FFF-4094	429
301 SD 19A	FFF-4094	429
301 SD 19B	FFF-4094	429
301 SD 19C	FFF-4094	429
45 SF 20	ECL-1954	50
81 SF 28	804100	431
301 SH 27	EPP-3573	297
21 SZ 148	GSC-0009	73
22 SZ 38	**GBG-6601**	**233**
101 SZ 43	EPP-3574	381
303 SZ 47	EPP-3575	385
304 SZ 17	EPP-3576	297
304 SZ 25	EPP-3575	385
304 SZ 30	EPP-3574	381
304 SZ 31	EPP-3575	385
304 SZ 79	EPP-3575	385
361 SZ 74	ESC-0012	55
361 SZ 89	GSC-0009	73
361 SZ 94	GSC-0009	73
361 SZ 142	GSC-0009	73
361 SZ 475	GSC-0009	73
361 SZ 724	BSC-0011	73
363 SZ 112	ESC-0012	55
363 SZ 112A	ESC-0012	55
441 SZ 33	EWA-0052	13
441 SZ 85	BWA-0054	61
441 SZ 86	EWA-0052	13
441 SZ 87	FWA-0050	387
441 SZ 88	EWA-0049	387
441 SZ 90	BWA-0051	163
441 SZ 98	BWA-0054	61
441 SZ 137	BWA-0054	61
441 SZ 191	BWA-0051	163
441 SZ 193	FWA-0050	387
441 SZ 195	EWA-0049	387
441 SZ 285	BWA-0054	61
441 SZ 309	EWA-0049	387
441 SZ 342	EWA-0052	13

(A more complete listing is available on our website or in the Mack Application catalog.)

Schwitzer Reference	PAI Reference	Page
129119	EGS-2861	390
166592	ETC-9253	303
167049	ETC-9255	76
167050	ETC-9256	76
167118	EFC-1628	425
167421	EFC-1562	425
167713	ETC-9257	76
167715	ETC-9258	76
168823	ETC-9286	249
168824	ETC-9287	250
168825	ETC-9288	249
169417	ETC-9285	250
171270	ETC-9252	303
172033	ETC-9275	170
172035	ETC-9278	170
173736	EKT-9244	170
178017	ETC-9288	249
178022	ETC-9285	250
178370	181203	249
178923	181200	249
182992	EFC-1642	425
183125	EFC-1640	425
183145	EFC-1642	425
183710	EFC-1642	425
184906	EFC-1642	425
184930	EFC-1642	425

Schwitzer Reference	PAI Reference	Page
187197	EKT-9261	117
187604	EFC-1642	425
187781	EFC-1643	425
193903	ETC-9295	399
194986	EFC-1629	425
196006	EKT-9260	117
196007	219970	117
196389	ETC-9296	399
196390	ETC-9297	399
196441	ETC-9291	76
196463	ETC-9292	76
196464	ETC-9293	76
196800	ETC-9294	76
197703	EFC-1646	425
197876	EFC-1646	425
197879	EFC-1629	425
197916	ETC-9289	399
316468	ETC-9254	386
317107	ETC-9267	390
318417	EKT-2668	390
318418	EKT-2663	368
472035	**ETC-9278X**	**170**
766592	ETC-9253	303
911901	EFN-8618	73
916535	EFN-8638	73
917239	EFN-8577	73
53279880001	181206	303
53279887219	181206	303

PAI Reference	OEM Reference	Description	Page
CPL2025-(*)	N/A	ENGINE	178
ISB403-(*)	N/A	KIT	338
ISB404-(*)	N/A	KIT	338
ISB410-(*)	N/A	KIT	338
ISB430-(*)	**N/A**	**KIT**	**338**
ISB440-(*)	N/A	KIT	338
ISB601-(*)	N/A	KIT	339
ISB602-(*)	N/A	KIT	339
ISB604-(*)	N/A	KIT	339
ISB605-(*)	N/A	KIT	339
ISC101-(*)	N/A	KIT	372
ISC102-(*)	N/A	KIT	372
ISC103-(*)	N/A	KIT	372
ISC104-(*)	**N/A**	**KIT**	**372**
ISL101-(*)	**N/A**	**KIT**	**374**
ISL102-(*)	**N/A**	**KIT**	**374**
ISL103-(*)	**N/A**	**KIT**	**374**
ISL140-(*)	**N/A**	**KIT**	**374**
ISM101-(*)	4090008	KIT	262
ISM102-(*)	N/A	KIT	262
ISM103-(*)	**N/A**	**KIT**	**262**
ISM104-(*)	**N/A**	**KIT**	**262**
ISM139-(*)	**N/A**	**KIT**	**262**
ISM140-(*)	N/A	KIT	262
ISX101-(*)	**N/A**	**KIT**	**202**
ISX102-(*)	**N/A**	**KIT**	**202**
ISX103-(*)	**N/A**	**KIT**	**202**
ISX104-(*)	**N/A**	**KIT**	**202**
ISX105-(*)	**N/A**	**KIT**	**202**
ISX106-(*)	**N/A**	**KIT**	**202**
ISX107-(*)	**N/A**	**KIT**	**202**
ISX108-(*)	**N/A**	**KIT**	**202**
ISX121-(*)	**N/A**	**KIT**	**202**
ISX605-(*)	**4309129**	**KIT**	**202**
ISB606-(*)	N/A	KIT	339
ISB607-(*)	N/A	KIT	339
ISB608-(*)	N/A	KIT	339
ISB609-(*)	N/A	KIT	339
ISB610-(*)	**N/A**	**KIT**	**339**
ISB630-(*)	**N/A**	**KIT**	**339**
ISB631-(*)	**N/A**	**KIT**	**339**
ISB640-(*)	N/A	KIT	339
4BS101-(*)	N/A	KIT	282
4BS102-(*)	N/A	KIT	282
4BS103-(*)	N/A	KIT	282
4BS104-(*)	**N/A**	**KIT**	**282**
4BS107-(*)	N/A	KIT	282
4BS108-(*)	N/A	KIT	282
4BS109-(*)	N/A	KIT	282
4BS110-(*)	N/A	KIT	282
4BS111-(*)	N/A	KIT	282
4BS112-(*)	**N/A**	**KIT**	**282**
4BS113-(*)	**N/A**	**KIT**	**282**
6BS101-(*)	N/A	KIT	308
6BS102-(*)	N/A	KIT	308
6BS103-(*)	N/A	KIT	308
6BS104-(*)	N/A	KIT	308
6BS105-(*)	N/A	KIT	308
6BS106-(*)	N/A	KIT	308
6BS107-(*)	N/A	KIT	308
6BS108-(*)	N/A	KIT	308
6BS109-(*)	N/A	KIT	308
6BS110-(*)	N/A	KIT	308
6BS111-(*)	N/A	KIT	308
6BS112-(*)	**N/A**	**KIT**	**310**
6BS113-(*)	**N/A**	**KIT**	**310**
6BS201-(*)	**N/A**	**KIT**	**310**
6BS202-(*)	**N/A**	**KIT**	**310**
6CS105-(*)	N/A	KIT	372
6CS106-(*)	N/A	KIT	372
6CS107-(*)	N/A	KIT	372
6CS108-(*)	N/A	KIT	372
6CS109-(*)	N/A	KIT	372
6CS112-(*)	N/A	KIT	372
6CS113-(*)	N/A	KIT	372
6CS115-(*)	**N/A**	**KIT**	**372**
6CS116-(*)	**N/A**	**KIT**	**372**
6CS117-(*)	**N/A**	**KIT**	**372**
L10101-(*)	N/A	KIT	254
L10102-(*)	N/A	KIT	254
L10103-(*)	N/A	KIT	260
L10123-(*)	N/A	KIT	260
L10124-(*)	N/A	KIT	260
L10125-(*)	N/A	KIT	260
L10126-(*)	N/A	KIT	254
L10127-(*)	N/A	KIT	254
L10128-(*)	**N/A**	**KIT**	**254**
M11127-(*)	N/A	KIT	262
M11201-(*)	N/A	KIT	262
N14101-(*)	N/A	KIT	172
N14102-(*)	N/A	KIT	172
N14103-(*)	N/A	KIT	172
N14104-(*)	N/A	KIT	172
N14222-(*)	**N/A**	**KIT**	**176**
N14223-(*)	**N/A**	**KIT**	**176**
N14124-(*)	N/A	KIT	176
N14125-(*)	**N/A**	**KIT**	**176**
N14221-(*)	N/A	KIT	176
N14222-(*)	N/A	KIT	176
N14223-(*)	N/A	KIT	176
040000	209700	SCREW	41
040001	3013623	SCREW	41
040002	177734	BOLT	397
040003	188329	BOLT	393
040004	214751	BOLT	395
040005	3032633	BOLT	385
040006	3071161	BOLT	41
040006	3071161	BOLT	153
040007	3031124	BOLT	73
040007	3031124	BOLT	75
040008	3010915	STUD	73
040008	3010915	STUD	75
040009	3010914	NUT	73
040009	3010914	NUT	75
040009	3010914	NUT	169
040010	3045850	BOLT	229
040011	3045849	BOLT	229
040012	3028272	BOLT	229
040013	3882885	WASHER	229
040013	3882885	WASHER	233

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
040013	3882885	WASHER	243
040014	9195-3	SCREW	15
040015	219153	SCREW	15
040016	3349806	BOLT	15
040016	3349806	BOLT	145
040016	3349806	BOLT	147
040017	3027108	BOLT	219
040017	3027108	BOLT	221
040018	69936	NUT	15
040021	204165	SCREW	13
040021	204165	SCREW	47
040021	204165	SCREW	139
040021	204165	SCREW	157
040022	170664	WASHER	67
040022	170664	WASHER	55
040022	170664	WASHER	243
040022	170664	WASHER	167
040023	3071075	WASHER	41
040023	3071075	WASHER	153
040024	200861	WASHER	13
040024	200861	WASHER	15
040024	200861	WASHER	47
040024	200861	WASHER	61
040024	200861	WASHER	139
040025	3000173	SCREW	67
040025	3000173	SCREW	243
040025	3000173	SCREW	167
040026	70772	SCREW	41
040026	70772	SCREW	153
040027	3067930	ASSEMBLY	75
040027	3067930	ASSEMBLY	169
040028	3901448	SCREW	277
040028	3901448	SCREW	297
040028	3901448	SCREW	317
040029	3929537	SCREW	368
040030	3012468	SCREW	49
040030	3012468	SCREW	53
040030	3012468	SCREW	159
040031	3012469	SCREW	49
040031	3012469	SCREW	53
040032	3928870	BOLT	350
040033	3818060	BOLT	229
040033	3818060	BOLT	210
040033	3818060	BOLT	215
040033	3818060	BOLT	242
040034	3009330	WASHER	227
040034	3009330	WASHER	239
040034	3009330	WASHER	210
040034	3009330	WASHER	249
040034	3009330	WASHER	241
040035	3900919	BOLT	274
040035	3900919	BOLT	294
040035	3900919	BOLT	329
040036	3917728	SCREW	359
040037	3917729	SCREW	359
040038	3904217	BOLT	267
040038	3904217	BOLT	285
040039	3916369	BOLT	345
040040	182706	SCREW	49
040040	182706	SCREW	53
040040	182706	SCREW	159
040041	3048353	BOLT	47
040041	3048353	BOLT	157
040042	3013265	BOLT	383
040043	3907234	SCREW	359
040044	3907233	SCREW	359
040045	3920779	BOLT	277
040045	3920779	BOLT	297
040046	3920780	BOLT	277
040046	3920780	BOLT	297
040047	4070463	SCREW	212
040048	4070462	SCREW	212
040048	4070462	SCREW	347
040048	4070462	SCREW	197
040049	3900677	SCREW	280
040049	3900677	SCREW	366
040049	3900677	SCREW	302
040049	3900677	SCREW	333
040050	3920781	BOLT	277
040050	3920781	BOLT	297
040051	4939179	ASSEMBLY	318
040052	3335044	SCREW	209
040052	3335044	SCREW	233
040052	3335044	SCREW	235
040052	3335044	SCREW	237
040052	3335044	SCREW	249
040053	4082772	SCREW	210
040054	3927063	BOLT	317
040055	3100895	ASSEMBLY	191
040056	4101867	SCREW	195
040057	4101868	SCREW	195
040058	3028279	SCREW	57
040059	3934864	NUT	350
040060	203131	NUT	41
040060	203131	NUT	35
040060	203131	NUT	229
040061	3012526	NUT	67
040061	3012526	NUT	167
040062	3818824	NUT	249
040062	3818824	NUT	368
040062	3818824	NUT	303
040062	3818824	NUT	335
040063	3938077	NUT	349
040064	142176	NUT	421
040065	N/A	KIT	229
040066	N/A	KIT	297
040067	3904446	SCREW	237
040068	N/A	KIT	360
040069	N/A	KIT	318
040070	3818124	SPACER	244
040071	175833	SCREW	67
040071	175833	SCREW	167
040072	4891179	BOLT	329
040073	N/A	KIT	277
040074	N/A	KIT	360
040075	3900227	SCREW	275
040075	3900227	SCREW	361
040075	3900227	SCREW	298
040075	3900227	SCREW	330
040076	3678574	BOLT	189

PAI Reference	OEM Reference	Description	Page
040076	3678574	BOLT	186
040077	3936683	SCREW	279
040077	3936683	SCREW	364
040077	3936683	SCREW	300
040078	3936684	SCREW	364
040078	3936684	SCREW	300
040079	3936685	SCREW	364
040079	3936685	SCREW	300
040080	3901937	SCREW	279
040080	3901937	SCREW	300
040081	3902468	CAP	377
040081	3902468	CAP	420
040082	3946168	ISOLATOR	318
040083	**3679445**	**SPACER**	**191**
040084	3900956	PLUG	267
040084	3900956	PLUG	285
040084	3900956	PLUG	315
040085	175831	PLUG	41
040085	175831	PLUG	45
040085	175831	PLUG	153
040086	3007635	PLUG	41
040086	3007635	PLUG	267
040086	3007635	PLUG	209
040086	3007635	PLUG	229
040086	3007635	PLUG	360
040088	206741	PLUG	229
040089	3007632	PLUG	267
040089	3007632	PLUG	209
040089	3007632	PLUG	229
040089	3007632	PLUG	285
040089	3007632	PLUG	317
040090	3900687	PLUG	267
040090	3900687	PLUG	285
040090	3900687	PLUG	315
040091	206224	PLUG	385
040092	3920443	PLUG	360
040092	3920443	PLUG	297
040093	3922072	PLUG	267
040093	3922072	PLUG	360
040093	3922072	PLUG	285
040093	3922072	PLUG	315
040094	3901969	PLUG	345
040095	N/A	KIT	267
040096	N/A	KIT	285
040099	**3595782**	**COVER**	**249**
040100	**3095723**	**NUT**	**9**
040100	**3095723**	**NUT**	**138**
040101	N/A	KIT	318
040102	3049333	SCREW	57
040109	**3801888**	**KIT**	**249**
040109	**3801888**	**KIT**	**368**
040110	3818823	STUD	249
040110	3818823	STUD	368
040110	3818823	STUD	303
040110	3818823	STUD	335
040111	3056155	STUD	169
040122	**3067897**	**SCREW**	**396**
040123	N/A	KIT	318
040124	N/A	KIT	318
040125	**4891024**	**BOLT**	**317**
040126	**4891025**	**BOLT**	**318**
040127	**3900630**	**CAPSCREW**	**206**
040128	**3903112**	**CAPSCREW**	**180**
040128	**3903112**	**CAPSCREW**	**199**
040129	**3918109**	**CAPSCREW**	**235**
040129	**3918109**	**CAPSCREW**	**318**
040130	3062989	SCREW	55
040131	N/A	KIT	360
040132	**3818122**	**SCREW**	**244**
040133	**3927948**	**BOLT**	**267**
040133	**3927948**	**SCREW**	**285**
040133	**3927948**	**SCREW**	**315**
040134	**3896408**	**SCREW**	**192**
040135	**3627095**	**SCREW**	**390**
040136	**3678506**	**CAPSCREW**	**191**
040137	**3678804**	**CAPSCREW**	**191**
040138	**3896723**	**SCREW**	**197**
040139	3062694	SPACER	55
040140	3933393	SPACER	279
040141	**3950161**	**SCREW**	**349**
040142	**3679102**	**SCREW**	**206**
040143	**3684014**	**SCREW**	**206**
040145	3907860	BOLT	267
040145	3907860	BOLT	345
040145	3907860	BOLT	345
040145	3907860	BOLT	285
040145	3907860	BOLT	315
040146	3930249	SCREW	297
040146	3930249	SCREW	297
040146	3930249	SCREW	317
040147	3103086	SCREW	244
040150	9300-1	KEY	13
040151	210179	KEY	13
040151	210179	KEY	139
042000	116982	LOCK	75
042001	3006745	RETAINER	61
042002	8078	WASHER	134
042002	8078	WASHER	178
042003	208326	CLAMP	69
042003	208326	CLAMP	73
042003	208326	CLAMP	75
042004	147389	SCREW	41
042004	147389	SCREW	35
042004	147389	SCREW	229
042005	168306	SCREW	41
042005	168306	SCREW	34
042005	168306	SCREW	35
042006	194037	SOCKET	41
042006	194037	SOCKET	34
042006	194037	SOCKET	35
042007	3038903	PLUG	41
042007	3038903	PLUG	34
042007	3038903	PLUG	35
042008	3047924	SCREW	41
042009	186917	CLAMP	73
042010	3055069	PLUG	9
042010	3055069	PLUG	210
042010	3055069	PLUG	138
042011	3011952	PLUG	7
042011	3011952	PLUG	137

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
042012	3914708	LOCK	368
042013	3903924	PIN	268
042013	3903924	PIN	347
042013	3903924	PIN	287
042014	4089255	PLUG	206
042015	4026420	PLUG	195
042016	4058956	PLUG	195
042017	4933628	LOCK	343
042018	3903463	COVER	268
042018	3903463	COVER	347
042018	3903463	COVER	287
042019	3910248	PLUG	271
042019	3910248	PLUG	289
042019	3910248	PLUG	323
042020	3014103	WASHER	67
042020	3014103	WASHER	167
042021	193136	WASHER	67
042021	193136	WASHER	167
042023	3069053	CLAMP	281
042023	3069053	CLAMP	313
042024	3924147	PLUG	267
042025	3823921	GAUGE	277
042025	3823921	GAUGE	360
042025	3823921	GAUGE	297
042026	3924148	PLUG	267
042026	3924148	PLUG	360
042027	**160514**	**WASHER**	**396**
042028	**3930881**	**PLUG**	**343**
042029	**3683144**	**CLAMP**	**206**
042029	**3683144**	**CLAMP**	**197**
042029	**3683144**	**CLAMP**	**199**
042030	**3683145**	**CLAMP**	**197**
042031	**3039267**	**CLAMP**	**9**
042031	**3039267**	**CLAMP**	**138**
042033	4026528	SPACER	230
042045	3912772	RETAINER	268
042045	3912772	RETAINER	287
042058	**3594521**	**RING**	**249**
042059	**163945**	**RING**	**396**
042060	S-16255	RING	49
042060	S-16255	RING	55
042060	S-16255	RING	53
042060	S-16255	RING	51
042060	S-16255	RING	159
042062	3558754	RING	417
042062	3558754	RING	415
042063	3064634	RING	233
042063	3064634	RING	235
042064	3904849	RING	268
042064	3904849	RING	347
042064	3904849	RING	287
042081	3919358	SLEEVE	277
042081	3919358	SLEEVE	297
042088	9426-2	SEAL	394
042089	**4893741**	**WASHER**	**318**
042090	S-684	WASHER	69
042090	S-684	WASHER	249
042091	**4891385**	**WASHER**	**281**
042091	**4891385**	**WASHER**	**313**
042091	**4891385**	**WASHER**	**343**
042092	3906659	WASHER	277
042092	3906659	SEAL	297
042092	3906659	WASHER	318
042093	3923261	WASHER	277
042093	3923261	SEAL	297
042094	3930324	WASHER	277
042094	3930324	SEAL	297
042095	3529610	WASHER	364
042095	3529610	WASHER	300
042096	66665	WASHER	398
042100	181213	FITTING	41
042100	181213	FITTING	153
042121	3892347	CLAMP	249
042122	3820672	CLAMP	247
042123	3008690	CLAMP	61
042123	3008690	CLAMP	247
042124	3026806	CLAMP	65
042124	3026806	CLAMP	247
042124	3026806	CLAMP	239
042125	3026396	CLAMP	281
042125	3026396	CLAMP	377
042125	3026396	CLAMP	313
042126	3937613	CLAMP	281
042126	3937613	CLAMP	377
042126	3937613	CLAMP	313
042149	**4026511**	**ISOLATOR**	**191**
042150	3942659	ISOLATOR	317
042151	**3883223**	**ISOLATOR**	**229**
042152	**5271613**	**ISOLATOR**	**318**
042155	3917747	INSULATOR	281
042155	3917747	INSULATOR	377
042155	3917747	INSULATOR	313
042165	3042004	PLUG	47
042165	3042004	PLUG	157
042170	3355095	FITTING	418
042171	3911447	FITTING	279
042171	3911447	FITTING	418
042179	3905307	SCREW	281
042179	3905307	SCREW	313
042180	3924725	SCREW	418
042181	3964817	SCREW	315
042182	3070393	SCREW	209
042209	**3028324**	**VALVE**	**245**
042210	**3028325**	**VALVE**	**57**
042210	**3028325**	**VALVE**	**245**
042210	**3028325**	**VALVE**	**161**
042211	**3348332**	**VALVE**	**161**
042220	S-692-E	VALVE	390
045000	3013591	NOZZLE	7
045001	202994	HOSE	69
045001	202994	HOSE	75
045001	202994	HOSE	169
045002	191916	LINK	57
045003	68513	PIN	45
045004	3017544	PIN	45
045005	3065125	SHAFT	45
045006	3013330	PIN	45
045007	3013331	PIN	45
045008	118939	PIN	45
045009	3066220	PIN	155

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
045010	3081248	ROLLER	45
045011	3036933	ROLLER	45
045012	3895487	ROLLER	227
045013	3064309	PIN	45
045013	3064309	PIN	155
045015	3058396	HOSE	69
045016	3066217	SHAFT	155
045017	3803495	NOZZLE	209
045018	4058947	NOZZLE	137
045019	3060613	HOSE	69
045019	3060613	HOSE	73
045020	68445	PIN	7
045020	68445	PIN	137
045020	68445	PIN	153
045020	68445	PIN	385
045021	3034438	PIN	15
045021	3034438	PIN	67
045021	3034438	PIN	209
045021	3034438	PIN	145
045021	3034438	PIN	167
045022	105199	PIN	41
045022	105199	PIN	73
045022	105199	PIN	75
045022	105199	PIN	169
045023	3058397	HOSE	69
045023	3058397	HOSE	73
045024	70550	PIN	67
045024	70550	PIN	167
045025	4025956	ROLLER	155
045026	3865237	ROLLER	155
045027	3161423	ROLLER	227
045027	3161423	ROLLER	155
045027E	**3161423**	**ROLLER**	**227**
045027E	**3161423**	**ROLLER**	**155**
045028	213061	ROLLER	395
045029	152082	ROLLER	395
045030	3905928	NOZZLE	345
045031	3928031	NOZZLE	345
045032	3901020	NOZZLE	267
045033	3937214	NOZZLE	285
045034	3007517	NOZZLE	390
045035	3080708	NOZZLE	209
045036	3959574	PLUG	315
045037	213058	PIN	395
045038	3335343	PIN	227
045039	3166428	PIN	155
045040	3166388	PIN	155
045041	3335341	PIN	227
045042	3335342	PIN	227
045043	202903	PIN	13
045043	202903	PIN	139
045044	9260-1	ROLLER	45
045045	3062096	ROLLER	45
045046	3029920	PIN	227
045047	3016826	ROLLER	379
045048	3016825	ROLLER	379
045049	205071	PIN	379
045050	205068	PIN	379
045051	3895488	ROLLER	227
045052	113749	PIN	397
045053	163815	PIN	397
045054	4937308	NOZZLE	315
045055	3071032	NOZZLE	209
045056	3687058	NOZZLE	189
045056	3687058	NOZZLE	186
045057	3919449	PIN	364
045057	3919449	PIN	300
045058	**3945435**	**NOZZLE**	**345**
045059	**4944337**	**NOZZLE**	**345**
045060	213559	SOCKET	45
045060	213559	SOCKET	379
045061	**3070218**	**NOZZLE**	**209**
045062	**3908612**	**PIN**	**396**
045063	**3917883**	**PIN**	**361**
045064	**3329899**	**PIN**	**349**
045065	4937311	NOZZLE	345
045066	3900257	PIN	267
045066	3900257	PIN	285
045066	3900257	PIN	315
045066	3900257	PIN	385
045067	3902343	RING	267
045067	3902343	RING	285
045067	3902343	RING	315
045070	205438	LOCKWIRE	379
045071	**105375**	**NAMEPLATE**	**396**
045081	3918614	HOSE	277
045081	3918614	HOSE	360
045081	3918614	HOSE	297
045081	3918614	HOSE	318
045090	**3910279**	**CLAMP**	**360**
045100	147100	ASSEMBLY	41
045100	147100	ASSEMBLY	153
045101	135308	PLATE	41
045101	135308	PLATE	153
045102	**4962476**	**BRACKET**	**197**
050465	178657	BELT	49
050465	178657	BELT	435
050466	178679	BELT	49
050466	178679	BELT	435
050469	**206996**	**BELT**	**435**
050470	3037425	BELT	237
050470	3037425	BELT	435
050471	3911558	BELT	435
050472	3911568	BELT	435
050473	3911566	BELT	435
050474	3911573	BELT	435
050475	3289659	BELT	435
050476	3002203	BELT	435
050483	3058383	BELT	53
050483	3058383	BELT	435
050484	217638	BELT	53
050484	217638	BELT	159
050484	217638	BELT	435
050486	3063817	BELT	55
050486	3063817	BELT	53
050486	3063817	BELT	435
050487	134809	BELT	49
050487	134809	BELT	435
050488	**3076492**	**BELT**	**435**
050489	3911567	BELT	435

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
050490	3911560	BELT	435
050491	3911583	BELT	435
050492	3911572	BELT	435
050493	3034348	BELT	237
050493	3034348	BELT	435
050494	3034946	BELT	237
050494	3034946	BELT	435
050495	3911582	BELT	435
050496	3911587	BELT	435
050497	3911557	BELT	435
050498	3911563	BELT	435
050499	3095880	BELT	159
050499	3095880	BELT	435
050500	3315844	FILTER	429
050501	3903640	FILTER	429
050502	3945213	FILTER	429
050503	**146483**	**SCREEN**	**245**
050505	3315847	FILTER	429
050510	3889310	FILTER	63
050510	3889310	FILTER	61
050510	3889310	FILTER	430
050511	3318853	FILTER	65
050511	3318853	FILTER	367
050511	3318853	FILTER	430
050512	3932217	FILTER	430
050513	**3401544**	**FILTER**	**430**
050515	3304232	FILTER	63
050515	3304232	FILTER	430
050520	256838	FILTER	430
050524	**3331096**	**FILTER**	**429**
050526	3315116	FILTER	432
050527	3318201	FILTER	432
050528	3315115	FILTER	432
050529	3316053	FILTER	432
050531	3318318	FILTER	432
050532	3903410	FILTER	429
050533	**3329289**	**FILTER**	**429**
050534	**3308638**	**FILTER**	**429**
050545	**3077507**	**FITTING**	**249**
050546	**3077508**	**FITTING**	**249**
050547	**129859**	**FITTING**	**264**
050570	3678610	PLUG	419
050571	3678602	PLUG	419
050572	3680420	PLUG	195
050572	3680420	PLUG	285
050572	3680420	PLUG	315
050572	3680420	PLUG	419
050573	3680419	PLUG	195
050573	3680419	PLUG	315
050573	3680419	PLUG	419
050574	**3089567**	**PLUG**	**419**
050575	**3089568**	**PLUG**	**419**
050576	**3678873**	**PLUG**	**419**
050577	**3678791**	**PLUG**	**419**
050578	**3089238**	**PLUG**	**419**
050579	**3089239**	**PLUG**	**419**
050580	3678611	PLUG	191
050580	3678611	PLUG	419
050581	3678605	PLUG	191
050581	3678605	PLUG	419
050582	**VSTI33X20R71**	**PLUG**	**419**
050583	**N/A**	**PLUG**	**419**
050587	3932290	PLUG	343
050590	4984575	SENSOR	405
050601	4921505	KIT	407
050603	4921489	KIT	407
050604	**4921749**	**SENSOR**	**407**
050605	**4928593**	**KIT**	**407**
050607	4921503	KIT	407
050610	3300908	ADAPTER	61
050621	4032806	KIT	413
050625	4921325	SENSOR	410
050626	2897334	KIT	410
050626	2897334	KIT	410
050627	4954245	KIT	411
050630	**4921519**	**SENSOR**	**406**
050631	5297641	SENSOR	406
050634	2897333	KIT	410
050636	4921483	KIT	410
050638	3967251	SENSOR	408
050639	**3401006**	**KIT**	**410**
050640	**4921477**	**SENSOR**	**410**
050640	**3401006**	**KIT**	**410**
050641	4088712	SENSOR	411
050641	4088712	SENSOR	197
050641	4088712	SENSOR	339
050642	**4088389**	**SENSOR**	**411**
050643	**3348747**	**SENSOR**	**403**
050644	**4921497**	**KIT**	**403**
050645	4921495	SENSOR	406
050645	4921495	SENSOR	339
050646	4921499	SENSOR	406
050647	4025130	KIT	406
050647	4025130	KIT	339
050649	4921485	SENSOR	251
050649	4921485	SENSOR	403
050650	3080406	SENSOR	251
050650	3080406	SENSOR	408
050651	3331044	KIT	251
050651	3331044	KIT	403
050651	3331044	KIT	403
050652	3084521	SENSOR	251
050653	4076493	SENSOR	251
050653	4076493	SENSOR	403
050653	4076493	SENSOR	403
050654	3104345	HARNESS	251
050654	3104345	HARNESS	403
050655	4902720	SENSOR	403
050656	4921511	SENSOR	408
050656	4921511	SENSOR	339
050657	**4921517**	**KIT**	**408**
050658	**4921518**	**SENSOR**	**408**
050659	**4928594**	**KIT**	**199**
050659	**4928594**	**KIT**	**411**
050660	3330141	SENSOR	251
050660	3330141	SENSOR	410
050661	4921475	SENSOR	409
050663	**4088390**	**SENSOR**	**403**
050664	**4076931**	**SENSOR**	**408**
050665	**4076930**	**SENSOR**	**408**

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
050668	3255122	SENSOR	251
050668	3255122	SENSOR	405
050669	4921473	SENSOR	403
050670	3865312	SENSOR	251
050670	3865312	SENSOR	411
050671	3085185	SENSOR	251
050671	3085185	SENSOR	411
050672	3865346	SENSOR	411
050673	4903489	SENSOR	251
050673	4903489	SENSOR	405
050675	3408345	KIT	411
050676	**4088832**	**KIT**	**411**
050676	**4088832**	**KIT**	**201**
050677	**4088833**	**SENSOR**	**201**
050678	**4897224**	**SENSOR**	**411**
050679	**3613547**	**SENSOR**	**412**
050679	**3613547**	**SENSOR**	**411**
050680	**3015238**	**SENSOR**	**409**
050682	4921479	KIT	410
050690	3408631	SWITCH	411
050690	3408631	SWITCH	390
050691	3408607	SWITCH	251
050691	3408607	SWITCH	408
050694	4921687	SENSOR	404
050695	2872277	KIT	404
050696	2872279	KIT	404
050696	2872279	KIT	404
050698	**4890189**	**SENSOR**	**405**
050699	**4890190**	**SENSOR**	**404**
050700	3408503	SENSOR	251
050700	3408503	SENSOR	404
050701	**4921601**	**SENSOR**	**405**
050702	**4921602**	**SENSOR**	**405**
050703	**4921599**	**SENSOR**	**404**
050704	**4921600**	**SENSOR**	**404**
050705	**4921597**	**KIT**	**404**
050706	**4921598**	**KIT**	**404**
050707	4956084	KIT	405
050707	4956084	KIT	197
050710	3824010	CONNECTOR	251
050710	3824010	CONNECTOR	153
050711	**4025182**	**HARNESS**	**332**
050713	**3104227**	**HARNESS**	**406**
050730	2872858	SENSOR	411
050731	4954574	SENSOR	411
050732	4902912	SENSOR	411
050740	**4921729**	**SENSOR**	**406**
050741	**4921728**	**KIT**	**199**
050741	**4921728**	**KIT**	**406**
050742	**4903035**	**KIT**	**406**
050780	3967250	SENSOR	411
060000	3931716	HOUSING	271
060000	3931716	HOUSING	289
060003	3036011	HOUSING	47
060003	3036011	HOUSING	157
060004	3002067	HOUSING	47
060004	3002067	HOUSING	157
060005	3048766	HOUSING	47
060005	3048766	HOUSING	157
060006	3882591	HOUSING	230
060007	**4920517**	**HOUSING**	**230**
060009	3680063	HOUSING	184
060009E	3680063	HOUSING	184
060016	9245	SPACER	230
060017	**3819822**	**SLEEVE**	**230**
060018	**3967057**	**SPACER**	**230**
060020	3903797	ASSEMBLY	285
060025	4946586	ASSEMBLY	315
060045	3016495	ASSEMBLY	47
060045	3016495	ASSEMBLY	157
060046	3021660	ASSEMBLY	47
060046	3021660	ASSEMBLY	157
060050	3042787	ASSEMBLY	230
060051	3071615	FLYWHEEL	230
060053	4933458	FLYWHEEL	289
060054	**3906807**	**ASSEMBLY**	**323**
060055	**3680922**	**ASSEMBLY**	**184**
060056	**3922645**	**ASSEMBLY**	**349**
060057	**3912913**	**ASSEMBLY**	**349**
060069	**3680913**	**GEAR**	**184**
060070	4797	GEAR	47
060070	4797	GEAR	230
060070	4797	GEAR	157
060071	3901774	GEAR	271
060071	3901774	GEAR	289
060071	3901774	GEAR	323
060072	**3903309**	**GEAR**	**289**
060072	**3903309**	**GEAR**	**323**
060073	**3902127**	**GEAR**	**349**
060074	**3908546**	**GEAR**	**349**
060085	3024442	COVER	11
060085	3024442	COVER	141
060086	3076496	COVER	141
060089	3920758	HOUSING	287
060090	3936256	HOUSING	268
060090	3936256	HOUSING	287
060091	3923898	COVER	268
060091	3923898	COVER	287
060092	3926518	HOUSING	347
060093	3903794	COVER	268
060093	3903794	COVER	287
060094	3926847	COVER	347
060095	**3943813**	**COVER**	**347**
060100	3933384	COVER	349
060101	3921043	COVER	271
060101	3921043	COVER	289
060101	3921043	COVER	323
060102	3049018	COVER	47
060102	3049018	COVER	157
060103	**3941786**	**COVER**	**347**
060140	**N/A**	**KIT**	**153**
060160X	**3083981**	**HEAD**	**153**
060161X	**3411817**	**ASSEMBLY**	**153**
060163X	4962732	ASSEMBLY	191
060165	3920611	HEAD	277
060169	3920612	ASSEMBLY	297
060170	3802340	HEAD	297
060171	3977225	HEAD	318
060172	4936081	ASSEMBLY	318
060174	3936180	ASSEMBLY	359

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
060174E	3936180	ASSEMBLY	359	101070	3802388	KIT	356
060174E	3936180	ASSEMBLY	359	101071	N/A	KIT	356
060175	4089290	ASSEMBLY	359	101072	3802372	KIT	356
060175E	4089290	ASSEMBLY	359	101073	3802400	KIT	356
060175E	4089290	ASSEMBLY	359	101074	3802401	KIT	356
060176	**2864024**	**HEAD**	**229**	101075	3802399	KIT	356
060177	**2864028**	**HEAD**	**229**	101076	3802406	KIT	356
060178	**3944992**	**HEAD**	**318**	101077	N/A	KIT	356
060179	**3991773**	**ASSEMBLY**	**318**	101078	3802405	KIT	356
100983	3801796	KIT	18	101079	3802403	KIT	356
100984	3803209	KIT	18	101080	3802404	KIT	356
100986	3801746	KIT	18	101081	3802402	KIT	356
100987	3803233	KIT	18	101082	N/A	KIT	356
100988	3803221	KIT	18	101083	N/A	KIT	356
100990	3801764	KIT	18	101084	N/A	KIT	356
100991	3801765	KIT	18	101085	AR7383	KIT	393
100992	3803211	KIT	18	101086	AR11909	KIT	395
100994	3801874	KIT	18	101087	3802743	KIT	356
100995	3801875	KIT	18	101088	N/A	KIT	356
100996	3803223	KIT	18	101089	3802660	KIT	356
101002	3801768	KIT	18	101090	4025167	KIT	222
101003	3801956	KIT	18	101091	3802912	KIT	356
101006	3801771	KIT	18	101092	N/A	KIT	148
101008	3801774	KIT	18	101094	3803740	KIT	148
101009	3801775	KIT	18	101095	3804636	KIT	148
101010	3801795	KIT	18	101096	3800319	KIT	356
101011	3801776	KIT	18	101097	3800321	KIT	356
101012	3801777	KIT	18	**101098**	**N/A**	**KIT**	**148**
101013	3803212	KIT	18	**101099**	**N/A**	**KIT**	**148**
101014	3801779	KIT	18	101100	3801769	KIT	18
101015	3801780	KIT	18	**101101**	**N/A**	**KIT**	**148**
101017	3803225	KIT	18	**101102**	**N/A**	**KIT**	**148**
101024	3803215	KIT	18	**101103**	**N/A**	**KIT**	**356**
101025	3801781	KIT	18	101104	4025164	KIT	262
101026	3801824	KIT	18	101104	4025164	KIT	226
101027	3803346	KIT	18	101106	4025162	KIT	225
101028	3801823	KIT	18	101107	N/A	KIT	226
101029	3803217	KIT	18	**101108**	**N/A**	**KIT**	**226**
101030	3801817	KIT	18	101110	N/A	KIT	148
101031	3801872	KIT	18	101111	N/A	KIT	148
101032	3801873	KIT	18	101112	N/A	KIT	148
101033	3801822	KIT	18	101113	N/A	KIT	148
101034	3803210	KIT	18	101114	N/A	KIT	148
101035	3803213	KIT	18	101115	N/A	KIT	148
101036	3803214	KIT	18	101116	N/A	KIT	148
101038	3803216	KIT	18	**101117**	**N/A**	**KIT**	**148**
101040	3803226	KIT	18	101140	N/A	KIT	383
101041	3803218	KIT	18	101141	N/A	KIT	383
101042	3801782	KIT	18	101142	N/A	KIT	383
101044	3803228	KIT	18	101143	N/A	KIT	18
101059	3801798	KIT	18	101144	N/A	KIT	18
101060	3803633	KIT	222	101145	N/A	KIT	18
101061	3803632	KIT	222	101146	N/A	KIT	18
101062	3803629	KIT	222	101147	N/A	KIT	18
101063	3803753	KIT	148	101148	N/A	KIT	18
101064	3803755	KIT	148	101150	N/A	KIT	225
101065	3803759	KIT	148	101151	N/A	KIT	18
101066	3803757	KIT	148	101152	N/A	KIT	18
101067	3803623	KIT	222	101153	N/A	KIT	18
101068	3803963	KIT	222	101159	3804442	KIT	18

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
101160	3804472	KIT	18	111115	3801773	KIT	15
101164	N/A	KIT	186	111119	3051557	PISTON	15
101165	**N/A**	**KIT**	**186**	111120	3801393	KIT	15
101166	**N/A**	**KIT**	**186**	111121	3052794	PISTON	15
101167	**N/A**	**KIT**	**186**	111122	3801954	KIT	15
101168	**N/A**	**KIT**	**189**	111124	3042320	PISTON	15
101169	**N/A**	**KIT**	**186**	111125	3801535	KIT	15
101170	3357993	KIT	18	111127	3051553	PISTON	15
101171	**N/A**	**KIT**	**186**	111128	3801766	KIT	15
101172	**N/A**	**KIT**	**186**	111129	3045948	PISTON	15
101173	**N/A**	**KIT**	**186**	111130	3801534	KIT	15
101174	**N/A**	**KIT**	**186**	111132	3051554	PISTON	15
101175	**N/A**	**KIT**	**186**	111133	3801876	KIT	15
101176	**N/A**	**KIT**	**186**	111134	3051555	PISTON	15
101177	**N/A**	**KIT**	**186**	111135	3801770	KIT	15
101178	**N/A**	**KIT**	**186**	111137	N/A	KIT	147
101179	**N/A**	**KIT**	**186**	111139	3069212	PISTON	15
101181	**N/A**	**KIT**	**186**	111140	3803344	KIT	15
101182	**N/A**	**KIT**	**356**	111141	3042319	PISTON	15
101183	N/A	KIT	222	111144	3048650	PISTON	15
101184	**N/A**	**KIT**	**356**	111145	3801703	KIT	15
101185	**N/A**	**KIT**	**356**	111146	3048808	PISTON	15
101186	**N/A**	**KIT**	**356**	111147	3801819	KIT	15
101187	**N/A**	**KIT**	**356**	111148	3048809	PISTON	15
101188	**N/A**	**KIT**	**356**	111149	3801820	KIT	15
101189	**N/A**	**KIT**	**356**	111150	3050366	PISTON	15
101190	N/A	KIT	356	111151	3801818	KIT	15
101191	N/A	KIT	356	111152	3042318	PISTON	15
105001	4955850	KIT	360	111153	3801533	KIT	15
105002	4937472	PLUG	360	111154	N/A	KIT	147
105003	4989131	BOOT	360	111155	N/A	KIT	147
111081	205258	RING	390	111156	N/A	KIT	176
111082	70183	RING	390	111156	N/A	KIT	145
111086	3939374	PIN	325	111157	N/A	KIT	176
111087	3950549	PIN	350	111157	N/A	KIT	145
111087	3950549	PIN	354	111158	N/A	KIT	260
111088	4931041	PIN	325	111158	N/A	KIT	219
111089	4923748	PIN	185	111159	N/A	KIT	260
111089	4923748	PIN	204	111159	N/A	KIT	219
111090	3678590	PIN	189	111160	N/A	KIT	260
111091	215390	PIN	395	111160	N/A	KIT	219
111092	3063843	PIN	219	111161	N/A	KIT	147
111092	3063843	PIN	262	111162	3081266	PISTON	176
111092	3063843	PIN	221	111162	3081266	PISTON	145
111093	203070	PIN	393	111163	3800140	KIT	219
111094	191970	PIN	15	111164	3081267	PISTON	176
111095	175755	RING	15	111164	3081267	PISTON	145
111096	155267	RETAINER	395	111165	3801229	KIT	15
111097	3939375	RING	325	111166	N/A	KIT	176
111101	3050480	PISTON	15	111166	N/A	KIT	145
111102	3801744	KIT	15	111167	N/A	KIT	176
111104	3017348	PISTON	15	111167	N/A	KIT	145
111105	3801057	KIT	15	111168	3081268	PISTON	176
111107	3028685	PISTON	15	111168	3081268	PISTON	145
111108	3801233	KIT	15	111169	3081269	PISTON	176
111109	3017349	PISTON	15	111169	3081269	PISTON	145
111110	3801058	KIT	15	111170	3064304	PIN	145
111111	3037413	PISTON	395	111170	3064304	PIN	147
111112	3019287	KIT	395	111171	3064305	RETAINER	176
111114	3051556	PISTON	15	111171	3064305	RETAINER	145

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
111171	3064305	RETAINER	147
111171	3064305	RETAINER	176
111171	3064305	RETAINER	189
111172	3803626	KIT	219
111173	3803624	KIT	219
111174	3016650	PIN	219
111175	3045907	PISTON	219
111175	3045907	PISTON	222
111176	3803625	KIT	219
111177	3044448	PISTON	219
111177	3044448	PISTON	222
111178	3016652	RETAINER	219
111178	3016652	RETAINER	262
111178	3016652	RETAINER	221
111179	3055622	PISTON	219
111179	3055622	PISTON	222
111181	N/A	KIT	16
111182	N/A	KIT	16
111183	N/A	KIT	16
111185	N/A	KIT	16
111186	N/A	KIT	16
111187	N/A	KIT	16
111188	N/A	KIT	16
111189	N/A	KIT	16
111190	N/A	KIT	16
111191	N/A	KIT	16
111192	N/A	KIT	16
111193	N/A	KIT	16
111194	N/A	KIT	16
111195	N/A	KIT	16
111196	N/A	KIT	16
111197	N/A	KIT	16
111198	N/A	KIT	16
111199	N/A	KIT	16
111200	N/A	KIT	16
111201	3803754	KIT	145
111202	3803758	KIT	145
111203	3803752	KIT	145
111204	3803756	KIT	145
111205	3906208	PISTON	272
111205	3906208	PISTON	282
111205	3906208	PISTON	290
111205	3906208	PISTON	308
111206	N/A	KIT	272
111206	N/A	KIT	291
111207	3802064	KIT	273
111207	3802064	KIT	292
111208	3901793	PIN	272
111208	3901793	PIN	290
111209	3901706	RETAINER	272
111209	3901706	RING	290
111209	3901706	RETAINERS	325
111210	3906209	PISTON	272
111210	3906209	PISTON	282
111210	3906209	PISTON	290
111210	3906209	PISTON	308
111211	N/A	KIT	272
111211	N/A	KIT	291
111212	3802062	KIT	273
111212	3802062	KIT	292
111213	3934047	PIN	272
111213	3934047	PIN	290
111213	3934047	PIN	325
111215	3906223	PISTON	272
111215	3906223	PISTON	282
111215	3906223	PISTON	290
111215	3906223	PISTON	308
111216	N/A	KIT	272
111216	N/A	KIT	291
111217	3802060	KIT	273
111217	3802060	KIT	292
111220	3907156	PISTON	272
111220	3907156	PISTON	282
111220	3907156	PISTON	290
111220	3907156	PISTON	308
111221	N/A	KIT	272
111221	N/A	KIT	291
111222	3802100	KIT	273
111222	3802100	KIT	292
111225	3907157	PISTON	272
111225	3907157	PISTON	282
111225	3907157	PISTON	290
111225	3907157	PISTON	308
111226	N/A	KIT	272
111226	N/A	KIT	291
111227	3802102	KIT	273
111227	3802102	KIT	292
111230	3907158	PISTON	272
111230	3907158	PISTON	282
111230	3907158	PISTON	290
111230	3907158	PISTON	308
111231	N/A	KIT	272
111231	N/A	KIT	291
111232	3802104	KIT	273
111232	3802104	KIT	292
111235	3907163	PISTON	272
111235	3907163	PISTON	282
111235	3907163	PISTON	290
111235	3907163	PISTON	308
111236	N/A	KIT	272
111236	N/A	KIT	291
111237	3802160	KIT	273
111237	3802160	KIT	292
111240	3908815	PISTON	272
111240	3908815	PISTON	282
111240	3908815	PISTON	290
111240	3908815	PISTON	308
111241	N/A	KIT	272
111241	N/A	KIT	291
111242	3802132	KIT	273
111242	3802132	KIT	292
111245	3908816	PISTON	272
111245	3908816	PISTON	282
111245	3908816	PISTON	290
111245	3908816	PISTON	308
111246	N/A	KIT	272
111246	N/A	KIT	291
111247	3802134	KIT	273
111247	3802134	KIT	292
111250	3911400	PISTON	282

PAI Reference	OEM Reference	Description	Page
111250	3911400	PISTON	290
111250	3911400	PISTON	308
111251	N/A	KIT	291
111252	3802170	KIT	292
111255	3912049	PISTON	282
111255	3912049	PISTON	290
111255	3912049	PISTON	308
111256	N/A	KIT	291
111257	3802172	KIT	292
111260	3912050	PISTON	282
111260	3912050	PISTON	290
111260	3912050	PISTON	308
111261	N/A	KIT	291
111262	3802174	KIT	292
111265	3917707	PISTON	350
111266	N/A	KIT	351
111266	N/A	KIT	372
111267	3802263	KIT	351
111268	3901597	PIN	350
111269	3901996	RING	350
111269	3901996	RETAINER	354
111270	3919247	PISTON	350
111271	N/A	KIT	351
111271	N/A	KIT	372
111272	3802344	KIT	351
111275	3919566	PISTON	350
111276	N/A	KIT	351
111276	N/A	KIT	372
111277	3802280	KIT	351
111280	3923163	PISTON	350
111281	N/A	KIT	351
111281	N/A	KIT	372
111282	3802397	KIT	351
111285	3923164	PISTON	350
111286	N/A	KIT	351
111286	N/A	KIT	372
111287	3802398	KIT	351
111290	3923165	PISTON	350
111291	N/A	KIT	351
111291	N/A	KIT	372
111292	3802396	KIT	351
111295	3925878	PISTON	350
111296	N/A	KIT	351
111296	N/A	KIT	372
111297	3802601	KIT	351
111300	3929161	PISTON	350
111301	N/A	KIT	351
111301	N/A	KIT	372
111302	3802657	KIT	351
111305	AR7510	KIT	393
111307	AR7440	KIT	393
111310	3919041	PISTON	272
111310	3919041	PISTON	282
111310	3919041	PISTON	290
111310	3919041	PISTON	308
111311	N/A	KIT	272
111311	N/A	KIT	291
111312	3802248	KIT	273
111312	3802248	KIT	292
111313	3919044	PISTON	272
111313	3919044	PISTON	282
111313	3919044	PISTON	290
111313	3919044	PISTON	308
111314	N/A	KIT	272
111314	N/A	KIT	291
111315	3802249	KIT	273
111315	3802249	KIT	292
111316	3919045	PISTON	272
111316	3919045	PISTON	282
111316	3919045	PISTON	290
111316	3919045	PISTON	308
111317	N/A	KIT	272
111317	N/A	KIT	291
111318	3802250	KIT	273
111318	3802250	KIT	292
111321	3917619	PISTON	290
111321	3917619	PISTON	308
111322	N/A	KIT	291
111323	3802251	KIT	292
111324	3919047	PISTON	290
111324	3919047	PISTON	308
111325	N/A	KIT	291
111326	3802252	KIT	292
111327	3919048	PISTON	290
111327	3919048	PISTON	308
111328	N/A	KIT	291
111329	3802253	KIT	292
111331	3922577	PISTON	290
111331	3922577	PISTON	308
111332	N/A	KIT	291
111333	3802488	KIT	292
111334	3922580	PISTON	290
111334	3922580	PISTON	308
111335	N/A	KIT	291
111336	3802494	KIT	292
111337	3922581	PISTON	290
111337	3922581	PISTON	308
111338	N/A	KIT	291
111339	3802496	KIT	292
111341	3921880	PISTON	272
111341	3921880	PISTON	282
111341	3921880	PISTON	290
111341	3921880	PISTON	308
111342	N/A	KIT	272
111342	N/A	KIT	291
111343	3802773	KIT	273
111343	3802773	KIT	292
111344	3921882	PISTON	272
111344	3921882	PISTON	282
111344	3921882	PISTON	290
111344	3921882	PISTON	308
111345	N/A	KIT	272
111345	N/A	KIT	291
111346	3802776	KIT	273
111346	3802776	KIT	292
111347	3921881	PISTON	272
111347	3921881	PISTON	282
111347	3921881	PISTON	290
111347	3921881	PISTON	308
111348	N/A	KIT	272

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
111348	N/A	KIT	291
111349	3802775	KIT	273
111349	3802775	KIT	292
111354	3803314	KIT	383
111355	3096682	PISTON	383
111356	205200	PIN	383
111357	205269	RETAINER	383
111358	3631245	KIT	383
111359	3096681	PISTON	383
111360	3800256	KIT	219
111360	3800256	KIT	221
111361	3068090	PISTON	219
111361	3068090	PISTON	222
111362	N/A	KIT	260
111362	N/A	KIT	219
111363	3803968	KIT	219
111365	3893751	PISTON	219
111365	3893751	PISTON	222
111366	N/A	KIT	260
111366	N/A	KIT	219
111367	3803962	KIT	219
111370	3074108	CROWN	221
111371	3067804	SKIRT	221
111372	3803631	KIT	260
111372	3803631	KIT	221
111375	3803312	KIT	383
111376	3096685	PISTON	383
111377	3803741	KIT	176
111377	3803741	KIT	147
111378	3087634	PISTON	147
111379	3803739	KIT	147
111380	3087635	PISTON	147
111381	3804630	KIT	147
111382	3865113	PISTON	147
111386	N/A	KIT	372
111387	3802460	KIT	351
111390	4059902	CROWN	221
111391	4070653	SKIRT	262
111391	4070653	SKIRT	221
111393	4025161	KIT	222
111393	4025161	KIT	262
111393	4025161	KIT	221
111395	3930187	PISTON	272
111395	3930187	PISTON	282
111395	3930187	PISTON	290
111395	3930187	PISTON	308
111396	3802757	KIT	273
111396	3802757	KIT	292
111397	3930188	PISTON	272
111397	3930188	PISTON	282
111397	3930188	PISTON	290
111397	3930188	PISTON	308
111398	3802758	KIT	273
111398	3802758	KIT	292
111399	3930189	PISTON	272
111399	3930189	PISTON	282
111399	3930189	PISTON	290
111399	3930189	PISTON	308
111400	3802759	KIT	273
111400	3802759	KIT	292
111401	N/A	KIT	291
111402	N/A	KIT	291
111403	N/A	KIT	291
111406	3043650	INSERT	397
111407	3801666	KIT	397
111408	N/A	KIT	397
111410	3928673	PISTON	282
111410	3928673	PISTON	308
111414	3928674	PISTON	282
111414	3928674	PISTON	308
111418	3928675	PISTON	282
111418	3928675	PISTON	308
111422	3926631	PISTON	272
111422	3926631	PISTON	282
111422	3926631	PISTON	308
111423	N/A	KIT	272
111424	3802561	KIT	273
111426	3926634	PISTON	272
111426	3926634	PISTON	282
111426	3926634	PISTON	308
111427	N/A	KIT	272
111428	3802564	KIT	273
111430	3926635	PISTON	272
111430	3926635	PISTON	282
111430	3926635	PISTON	308
111431	N/A	KIT	272
111432	3802565	KIT	273
111434	3923537	PISTON	350
111435	N/A	KIT	351
111436	3802474	KIT	351
111438	4059898	CROWN	221
111439	4025158	KIT	262
111439	4025158	KIT	226
111439	4025158	KIT	221
111441	N/A	KIT	325
111442	3804980	KIT	327
111443	3932514	PISTON	324
111443	3932514	PISTON	338
111444	N/A	KIT	325
111445	3804981	KIT	327
111446	3933581	PISTON	324
111446	3933581	PISTON	338
111447	N/A	KIT	325
111448	3804982	KIT	327
111449	3933582	PISTON	324
111449	3933582	PISTON	338
111451	**3226010**	**PISTON**	**15**
111452	**N/A**	**KIT**	**16**
111452	**N/A**	**KIT**	**118**
111453	**4955662**	**KIT**	**17**
111453	**4955662**	**KIT**	**118**
111455	3946153	PISTON	324
111455	3946153	PISTON	339
111456	N/A	KIT	325
111457	3800781	KIT	327
111458	3946156	PISTON	324
111458	3946156	PISTON	339
111459	N/A	KIT	325
111460	3800784	KIT	327
111461	3946157	PISTON	324

PAI Reference	OEM Reference	Description	Page
111461	3946157	PISTON	339
111462	N/A	KIT	325
111463	3800785	KIT	327
111465	3946050	PISTON	324
111465	3946050	PISTON	339
111466	N/A	KIT	325
111467	3800838	KIT	327
111468	3946053	PISTON	324
111468	3946053	PISTON	339
111469	N/A	KIT	325
111470	3800841	KIT	327
111471	3946054	PISTON	324
111471	3946054	PISTON	339
111472	N/A	KIT	325
111473	3800842	KIT	327
111474	3925673	PISTON	350
111475	N/A	KIT	351
111476	3802484	KIT	351
111480	3942106	PISTON	350
111481	N/A	KIT	351
111481	N/A	KIT	372
111482	3800318	KIT	351
111483	N/A	CROWN	176
111486	N/A	KIT	147
111491	N/A	KIT	189
111492	4089608	KIT	189
111492	4089608	KIT	202
111496	N/A	KIT	147
111500	3958675	PISTON	324
111500	3958675	PISTON	339
111501	N/A	KIT	325
111502	4089260	KIT	327
111503	3949843	PISTON	324
111503	3949843	PISTON	339
111504	N/A	KIT	325
111505	4089185	KIT	327
111506	3949844	PISTON	324
111506	3949844	PISTON	339
111507	N/A	KIT	325
111508	4089186	KIT	327
111510	3354829	PISTON	15
111511	N/A	KIT	16
111513	3943367	PISTON	350
111514	N/A	KIT	351
111514	N/A	KIT	372
111515	3800320	KIT	351
111516	3973265	PISTON	350
111517	N/A	KIT	351
111517	N/A	KIT	372
111518	4955190	KIT	351
111521	3970192	PISTON	324
111521	3970192	PISTON	339
111522	N/A	KIT	325
111523	4089669	KIT	308
111523	4089669	KIT	327
111524	3970126	PISTON	324
111525	N/A	KIT	325
111526	4089670	KIT	308
111526	4089670	KIT	327
111527	3970127	PISTON	324
111528	N/A	KIT	325
111529	4089671	KIT	308
111529	4089671	KIT	327
111531	3957416	PISTON	324
111531	3957416	PISTON	339
111531	3957416	PISTON	338
111532	N/A	KIT	325
111533	4089461	KIT	327
111534	3957417	PISTON	324
111534	3957417	PISTON	339
111534	3957417	PISTON	338
111535	N/A	KIT	325
111536	4089618	KIT	327
111537	3957418	PISTON	324
111537	3957418	PISTON	339
111537	3957418	PISTON	338
111538	N/A	KIT	325
111539	4089619	KIT	327
111540	3965497	PISTON	324
111540	3965497	PISTON	339
111541	N/A	KIT	325
111542	4089259	KIT	327
111543	3949841	PISTON	324
111543	3949841	PISTON	339
111544	N/A	KIT	325
111545	4089976	KIT	327
111546	3949842	PISTON	324
111546	3949842	PISTON	339
111547	N/A	KIT	325
111548	4089977	KIT	327
111550	4923745	PISTON	185
111550	4923745	PISTON	202
111551	N/A	KIT	185
111551	N/A	KIT	202
111552	4089896	KIT	186
111553	4934860	PISTON	324
111553	4934860	PISTON	339
111553	4934860	PISTON	338
111554	N/A	KIT	325
111555	4955160	KIT	327
111556	4934816	PISTON	324
111556	4934816	PISTON	339
111556	4934816	PISTON	338
111557	N/A	KIT	325
111558	4955481	KIT	327
111560	4923743	PISTON	185
111560	4923743	PISTON	202
111561	N/A	KIT	185
111561	N/A	KIT	202
111562	4089894	KIT	186
111563	4923744	PISTON	185
111564	N/A	KIT	185
111564	N/A	KIT	202
111565	4089895	KIT	186
111566	4923746	PISTON	185
111567	N/A	KIT	185
111568	4089897	KIT	186
111569	4923747	PISTON	185
111569	4923747	PISTON	202
111570	N/A	KIT	185

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
111570	N/A	KIT	202
111571	4089898	KIT	186
111572	3948465	PISTON	324
111572	3948465	PISTON	339
111573	N/A	KIT	325
111574	3802927	KIT	327
111575	3948468	PISTON	324
111575	3948468	PISTON	339
111576	N/A	KIT	325
111577	3802925	KIT	327
111578	3948469	PISTON	324
111578	3948469	PISTON	339
111579	N/A	KIT	325
111580	3802926	KIT	327
111583	3102807	CROWN	221
111584	3102808	KIT	226
111584	3102808	KIT	221
111585	N/A	KIT	221
111586	4089386	KIT	262
111586	4089386	KIT	221
111589	3957795	PISTON	290
111589	3957795	PISTON	308
111590	N/A	KIT	291
111591	N/A	KIT	282
111591	3957797	KIT	292
111592	3957798	PISTON	290
111593	N/A	KIT	291
111594	3957799	KIT	292
111595	3957800	PISTON	290
111596	N/A	KIT	291
111597	3957801	KIT	292
111598	**3606677**	**PISTON**	**219**
111598	**3606677**	**PISTON**	**222**
111599	**N/A**	**KIT**	**260**
111599	**N/A**	**KIT**	**219**
111600	**3804695**	**KIT**	**219**
111601	3944073	PISTON	324
111601	3944073	PISTON	339
111602	N/A	KIT	325
111603	3800323	KIT	327
111604	3944076	PISTON	324
111604	3944076	PISTON	339
111605	N/A	KIT	325
111606	3800326	KIT	327
111607	3944077	PISTON	324
111608	N/A	KIT	325
111609	3800327	KIT	327
111610	**3972880**	**PISTON**	**324**
111611	**N/A**	**KIT**	**325**
111612	**4025072**	**KIT**	**327**
111613	**3972885**	**PISTON**	**324**
111614	**N/A**	**KIT**	**325**
111615	**4089420**	**KIT**	**327**
111616	**3972886**	**PISTON**	**324**
111617	**N/A**	**KIT**	**325**
111618	**4089421**	**KIT**	**327**
111620	**4938619**	**PISTON**	**324**
111620	**4938619**	**PISTON**	**339**
111621	**N/A**	**KIT**	**325**
111622	**4955365**	**KIT**	**327**
111623	**4938620**	**PISTON**	**324**
111623	**4938620**	**PISTON**	**339**
111624	**N/A**	**KIT**	**325**
111625	**4956007**	**KIT**	**327**
111626	**3935591**	**PISTON**	**282**
111626	**3935591**	**PISTON**	**324**
111627	**N/A**	**KIT**	**325**
111628	**N/A**	**KIT**	**327**
111630	**3935594**	**PISTON**	**282**
111630	**3935594**	**PISTON**	**324**
111631	**N/A**	**KIT**	**325**
111632	**N/A**	**KIT**	**327**
111634	**3935595**	**PISTON**	**282**
111634	**3935595**	**PISTON**	**324**
111635	**N/A**	**KIT**	**325**
111636	**N/A**	**KIT**	**327**
111637	**4932720**	**PISTON**	**350**
111638	**N/A**	**KIT**	**351**
111638	**N/A**	**KIT**	**372**
111639	**4955581**	**KIT**	**351**
111641	3095746	PISTON	15
111642	N/A	KIT	16
111643	N/A	KIT	17
111644	**4987914**	**PISTON**	**350**
111645	**N/A**	**KIT**	**351**
111646	**3992117**	**PISTON**	**350**
111647	**N/A**	**KIT**	**351**
111648	**4089348**	**KIT**	**351**
111648	**4089348**	**KIT**	**372**
111650	**2882635**	**PISTON**	**185**
111651	**N/A**	**KIT**	**185**
111652	**2881873**	**KIT**	**186**
111652	**2881873**	**KIT**	**202**
111653	**2882636**	**PISTON**	**185**
111654	**N/A**	**KIT**	**185**
111655	**2881876**	**KIT**	**186**
111656	**2882631**	**PISTON**	**185**
111656	**2882631**	**PISTON**	**202**
111657	**N/A**	**KIT**	**185**
111658	**2881878**	**KIT**	**186**
111659	**2882630**	**PISTON**	**185**
111660	**N/A**	**KIT**	**185**
111661	**2881879**	**KIT**	**186**
111661	**2881879**	**KIT**	**202**
111663	**3058566**	**PISTON**	**15**
111664	**N/A**	**KIT**	**16**
111665	**166630**	**PISTON**	**15**
111666	**3880945**	**KIT**	**16**
111666	**3880945**	**KIT**	**118**
111667	**AR3560**	**KIT**	**17**
111668	**3992118**	**PISTON**	**350**
111669	**4025295**	**KIT**	**351**
111670	**4089346**	**KIT**	**351**
111670	**4089346**	**KIT**	**372**
111671	**3394459**	**PISTON**	**350**
111672	**3800846**	**KIT**	**351**
111673	**4089433**	**KIT**	**351**
111673	**4089433**	**KIT**	**372**
111674	**3226009**	**PISTON**	**15**
111675	**N/A**	**KIT**	**16**

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
111675	**N/A**	**KIT**	**118**
111676	**4955661**	**KIT**	**17**
111677	**3922687**	**PISTON**	**290**
111677	**3922687**	**PISTON**	**308**
111678	**N/A**	**KIT**	**291**
111679	**3802630**	**KIT**	**292**
111680	**3930489**	**PISTON**	**290**
111680	**3930489**	**PISTON**	**308**
111681	**N/A**	**KIT**	**291**
111682	**3806239**	**KIT**	**292**
111683	**3930490**	**PISTON**	**290**
111683	**3930490**	**PISTON**	**308**
111684	**N/A**	**KIT**	**291**
111685	**3806240**	**KIT**	**292**
111686	**3930503**	**PISTON**	**290**
111687	**N/A**	**KIT**	**291**
111688	**3802952**	**KIT**	**292**
111689	**3930504**	**PISTON**	**290**
111690	**N/A**	**KIT**	**291**
111691	**3806249**	**KIT**	**292**
111692	**3930505**	**PISTON**	**290**
111693	**N/A**	**KIT**	**291**
111694	**3806250**	**KIT**	**292**
111695	**4059948**	**CROWN**	**221**
111696	**4059949**	**KIT**	**221**
111697	**N/A**	**KIT**	**221**
111698	**4024938**	**KIT**	**221**
111699	**3103753**	**CROWN**	**221**
111700	**3103752**	**KIT**	**226**
111700	**3103752**	**KIT**	**221**
111701	**N/A**	**KIT**	**221**
111702	**4089865**	**KIT**	**221**
111703	**4941396**	**CROWN**	**354**
111704	**3966721**	**SKIRT**	**354**
111705	**N/A**	**KIT**	**354**
111706	**4955237**	**KIT**	**354**
111707	**4941395**	**CROWN**	**354**
111708	**N/A**	**KIT**	**354**
111709	**4089944**	**KIT**	**354**
111710	4941393	CROWN	354
111711	N/A	KIT	354
111712	4089963	KIT	354
111713	3939398	PISTON	324
111714	N/A	KIT	325
111715	4089462	KIT	327
111716	3965259	PISTON	324
111717	N/A	KIT	325
111718	4089620	KIT	327
111719	3965260	PISTON	324
111720	N/A	KIT	325
111721	3969036	PISTON	324
111722	N/A	KIT	325
111723	4089726	KIT	327
111724	3970840	PISTON	324
111725	N/A	KIT	325
111726	4089737	KIT	327
111727	3970841	PISTON	324
111728	N/A	KIT	325
111729	4089738	KIT	327
111730	3687897	PISTON	185
111731	N/A	KIT	185
111732	2882080	KIT	186
111735	4089621	KIT	327
121041	155789	HOSE	70
121042	200517	HOSE	69
121043	3071159	HOSE	65
121044	3056138	HOSE	70
121045	102522	HOSE	51
121046	3820667	HOSE	247
121047	3818272	HOSE	247
121050	3820662	HOSE	247
121051	3820663	HOSE	247
121052	3820664	HOSE	247
121053	3820666	HOSE	247
121053	3820666	HOSE	239
121054	3065061	HOSE	117
121055	3065062	HOSE	117
121056	64775	HOSE	134
121057	60985	HOSE	391
121070	4952644	HOSE	197
121071	**4919970**	**HOSE**	**206**
121072	3286499	HOSE	343
121085	3035580	ASSEMBLY	61
121085	3035580	ASSEMBLY	165
121100	3803156	KIT	247
121101	3803157	KIT	247
121125	3907741	CLAMP	279
121140	201017	FLANGE	117
121141	3058655	FLANGE	117
121177	3068510	SEAL	178
121178	3042401	GROMMET	178
121179	3033898	SEAL	178
121180	3034579	SEAL	63
121181	3045979	O-RING	63
121181	3045979	O-RING	61
121181	3045979	O-RING	385
121190	N/A	KIT	245
121190	N/A	KIT	162
121192	3957440	O-RING	343
121193	3946188	O-RING	343
121194	3947270	O-RING	343
121195	3007759	O-RING	41
121195	3007759	O-RING	153
121196	193736	O-RING	57
121196	193736	O-RING	245
121196	193736	O-RING	392
121197	3070136	O-RING	245
121197	3070136	O-RING	162
121198	3070137	O-RING	245
121198	3070137	O-RING	162
121199	3070138	O-RING	245
121199	3070138	O-RING	162
121201	AR51477	KIT	7
121201	AR51477	KIT	137
121202	N/A	KIT	189
121202	N/A	KIT	186
121203	3047188	SEAL	209
121204	3032874	O-RING	395
121205	3089240	O-RING	343
121206	3969697	O-RING	343

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
121208	100328	O-RING	50	121244	3913994	SEAL	287
121208	100328	O-RING	61	121245	128085	O-RING	417
121209	145537	O-RING	134	121246	128086	O-RING	417
121210	3678912	O-RING	195	121248	3043995	O-RING	417
121210	3678912	O-RING	201	121248	3043995	O-RING	415
121210	3678912	O-RING	315	121249	3084848	O-RING	168
121211	109080	O-RING	69	121250	3073966	O-RING	159
121211	109080	O-RING	55	121251	3034412	O-RING	243
121211	109080	O-RING	241	121251	3034412	O-RING	137
121211	109080	O-RING	165	121252	3035228	O-RING	137
121211	109080	O-RING	197	121253	3063166	O-RING	137
121212	116024	O-RING	134	121254	3001340	O-RING	377
121213	145506	O-RING	49	121254	3001340	O-RING	178
121214	131026	O-RING	41	121255	3066211	O-RING	168
121214	131026	O-RING	153	121256	3032787	O-RING	209
121216	195952	O-RING	69	121256	3032787	O-RING	210
121217	212161	O-RING	63	121257	3072375	O-RING	165
121217	212161	O-RING	50	121258	3906698	O-RING	278
121217	212161	O-RING	61	121258	3906698	O-RING	299
121218	217037	O-RING	69	121258	3906698	O-RING	331
121219	3007442	O-RING	7	121259	194115	O-RING	395
121220	3990084	O-RING	343	121260	3044795	SEAL	395
121221	3007713	O-RING	61	121261	3014668	O-RING	383
121221	3007713	O-RING	183	121262	3011076	O-RING	383
121222	3010937	O-RING	134	121263	3081489	SEAL	383
121223	3019116	O-RING	61	121264	3883284	O-RING	281
121224	3029847	O-RING	9	121264	3883284	O-RING	313
121224	3029847	O-RING	138	121265	3046943	SEAL	241
121226	3030808	O-RING	63	121265	3046943	O-RING	165
121227	3037537	SEAL	11	121266	3915772	RING	268
121227	3037537	O-RING	67	121266	3915772	SEAL	347
121227	3037537	SEAL	209	121266	3915772	SEAL	287
121227	3037537	SEAL	247	121267	3915800	RING	377
121227	3037537	O-RING	239	121268	3906696	O-RING	267
121228	3049221	O-RING	55	121268	3906696	O-RING	285
121228	3049221	O-RING	197	121268	3906696	RING	315
121229	3050667	O-RING	134	121269	3906695	RING	377
121229	3050667	O-RING	178	121270	3914095	RING	377
121230	173368	O-RING	61	121271	3906694	RING	377
121231	3052586	O-RING	134	121272	3906697	RING	377
121232	3052587	O-RING	41	121273	3308958	GASKET	61
121233	3058653	O-RING	34	121274	206978	SEAL	390
121233	3058653	O-RING	35	121275	3024012	O-RING	134
121233	3058653	SEAL	271	121276	3025511	O-RING	134
121233	3058653	SEAL	289	121277	3820791	O-RING	233
121233	3058653	SEAL	323	121277	3820791	O-RING	235
121234	3082550	O-RING	134	121278	154087	RING	57
121236	43463-A	O-RING	49	121278	154087	RING	161
121236	43463-A	O-RING	53	121279	3049215	RING	55
121236	43463-A	O-RING	61	121280	3033525	RING	55
121236	43463-A	O-RING	159	121281	4000504	RING	383
121237	43696	O-RING	134	121282	3330159	O-RING	251
121238	67270	O-RING	134	121283	4024779	KIT	383
121239	3045534	O-RING	37	121284	3040817	O-RING	57
121240	3909397	O-RING	178	121284	3040817	O-RING	239
121241	215983	SEAL	393	121284	3040817	O-RING	241
121242	181449	O-RING	393	121284	3040817	O-RING	161
121243	216879	O-RING	393	121285	3080769	RING	241
121244	3913994	O-RING	268	121286	3910530	RING	281
121244	3913994	O-RING	347	121286	3910530	RING	313

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
121287	3909356	RING	318	121339	3946689	SEAL	343
121288	3935032	D-RING	343	121340	3328740	RING	264
121289	3678603	O-RING	191	121341	3080770	SEAL	247
121290	3102646	O-RING	235	121342	3883510	SEAL	215
121291	3033248	O-RING	238	121343	3201659	RING	215
121292	3102500	O-RING	235	121344	3028295	RING	264
121293	3883150	O-RING	215	121345	3820945	RING	215
121294	3883042	O-RING	215	121346	3820946	RING	215
121295	3819724	RING	264	121347	4101882	RING	183
121296	3032850	O-RING	264	121348	3925466	SEAL	343
121297	3627695	O-RING	201	121349	3947328	SEAL	343
121298	3678786	O-RING	181	121350	3949688	SEAL	343
121298	3678786	O-RING	201	121351	3926722	SEAL	377
121298	3678786	O-RING	315	121352	129888	SEAL	57
121299	3102802	O-RING	264	121353	3678536	SEAL	191
121299	3102802	O-RING	159	121354	3820030	SEAL	390
121300	3163713	O-RING	264	121355	3949916	SEAL	343
121301	3163714	O-RING	264	121356	3965385	SEAL	343
121302	3163715	O-RING	264	**121357**	**154088**	**RING**	**396**
121303	3033247	O-RING	238	121358	213079	O-RING	161
121304	3892095	O-RING	233	121359	3906252	RING	343
121304	3892095	O-RING	235	**121360**	**100099**	**RING**	**396**
121305	3882774	O-RING	235	121361	2830409	O-RING	343
121306	3084539	O-RING	390	121362	3867646	O-RING	343
121307	3014435	O-RING	134	**121363**	**3973512**	**O-RING**	**343**
121307	3014435	O-RING	178	121364	2830977	O-RING	343
121307	3014435	O-RING	390	121365	3023066	O-RING	390
121308	3678756	O-RING	180	121366	3678606	O-RING	195
121308	3678756	O-RING	204	121366	3678606	O-RING	180
121309	N/A	KIT	191	121366	3678606	O-RING	191
121310	3678737	SEAL	189	121367	4898876	O-RING	343
121310	3678737	SEAL	185	121368	3533955	O-RING	343
121311	3678738	SEAL	189	**121369**	**4894095**	**O-RING**	**343**
121311	3678738	SEAL	185	121370	4895710	O-RING	343
121312	3347937	O-RING	191	121371	N/A	KIT	377
121313	3330538	O-RING	191	121372	3867651	O-RING	390
121314	3330537	O-RING	191	121373	3035026	O-RING	229
121315	4059172	O-RING	192	121373	3035026	O-RING	331
121316	3678724	O-RING	192	**121375**	**3942454**	**D-RING**	**331**
121317	4010600	O-RING	206	**121376**	**3408438**	**O-RING**	**343**
121318	3682076	O-RING	197	**121377**	**213768**	**O-RING**	**395**
121319	4890926	O-RING	318	**121378**	**68061A**	**O-RING**	**395**
121320	3926048	O-RING	345	**121379**	**3046201**	**O-RING**	**395**
121321	3679139	O-RING	343	**121380**	**43696A**	**O-RING**	**395**
121322	4010643	O-RING	343	**121382**	**3044942**	**O-RING**	**390**
121323	3930911	O-RING	377	**121384**	**3684384**	**O-RING**	**192**
121323	3930911	O-RING	367	**121385**	**3089025**	**O-RING**	**195**
121325	AR70577	KIT	383	121386	4890929	O-RING	318
121326	N/A	KIT	396	**121387**	**145583**	**O-RING**	**264**
121327	N/A	KIT	393	**121388**	**145582**	**O-RING**	**264**
121328	145623	O-RING	390	**121389**	**4019274**	**O-RING**	**264**
121329	3958414	O-RING	343	**121390**	**139988**	**RING**	**396**
121330	3927305	RING	343	**121391**	**4308682**	**RING**	**390**
121331	3957131	O-RING	343	**121392**	**3101215**	**RING**	**377**
121333	**151900**	**RING**	**396**	**121393**	**3682826**	**RING**	**206**
121334	211375	O-RING	117	**121394**	**3686525**	**GASKET**	**206**
121335	3926047	O-RING	315	**121395**	**4094865**	**RING**	**387**
121336	3347939	O-RING	191	**121396**	**153518**	**RING**	**381**
121337	3977393	O-RING	318	**121397**	**172648**	**RING**	**390**
121338	4985660	RING	183	**121398**	**3096260**	**RING**	**378**

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
121399	3086120	RING	389
121400	**3685234**	**SEAL**	**185**
121401	**3031278**	**RING**	**45**
121403	160196	RING	394
121404	3008710	RING	390
121410	**3803017**	**KIT**	**134**
121415	3969698	O-RING	268
121415	3969698	O-RING	347
121415	3969698	O-RING	287
121417	3348319	O-RING	206
121418	3081494	O-RING	395
121418	3081494	O-RING	390
121419	**3090127**	**O-RING**	**395**
121420	**4019275**	**O-RING**	**264**
121421	**3026421**	**O-RING**	**390**
121422	3683814	O-RING	198
121422	3683814	O-RING	206
121423	**4299125**	**O-RING**	**183**
121424	**3685124**	**O-RING**	**206**
121425	**3949708**	**O-RING**	**206**
121426	3015067	O-RING	390
121427	145540	O-RING	387
121428	205898	O-RING	390
121429	**205247**	**O-RING**	**378**
121430	4998542	O-RING	390
121431	**3867481**	**O-RING**	**206**
121432	**3076042**	**O-RING**	**249**
121434	178937	O-RING	395
121434	178937	O-RING	392
121436	3033915	O-RING	390
131255	3074982	GASKET	41
131255	3074982	GASKET	153
131257	3011580	GASKET	389
131258	BM68356	SET	390
131258	BM68356	SET	397
131259	206443	GASKET	389
131260	3803697	SET	397
131260E	3803697	SET	397
131261	3803597	KIT	388
131262	3803600	KIT	388
131263	**3800929**	**SET**	**376**
131264	4024928	SET	176
131264	4089371	SET	179
131264	4089371	KIT	176
131265	4025155	SET	260
131265	4025155	SET	264
131266	3803404	SET	264
131266	3803404	SET	254
131267	2864080	GASKET	228
131268	3034855	GASKET	229
131269	3882433	GASKET	260
131269	3882433	GASKET	209
131269	3882433	GASKET	210
131270	3882733	GASKET	260
131270	3882733	GASKET	209
131270	3882733	GASKET	210
131271	3804287	SET	176
131271	3804287	SET	179
131272	3804286	SET	176
131272	3804286	SET	179
131273	3803613	SET	176
131273	3803613	SET	179
131273	3803613	SET	172
131273	3803613	SET	176
131274	3803715	SET	179
131275	3066311	GASKET	153
131276	4070529	GASKET	229
131277	211052	GASKET	60
131279	3021704	GASKET	11
131279	3021704	GASKET	141
131280	110453	GASKET	134
131281	120819	GASKET	45
131282	126295	GASKET	134
131283	130240	GASKET	51
131284	130972	GASKET	134
131285	133831	GASKET	134
131286	133844	GASKET	134
131287	133851	GASKET	134
131288	134285	GASKET	134
131289	186780	SEAL	49
131289	186780	SEAL	247
131289	186780	SEAL	159
131289	186780	SEAL	331
131290	208128	GASKET	49
131291	146309	GASKET	61
131292	151911	GASKET	134
131293	156089	GASKET	134
131294	156545	O-RING	7
131295	157551	GASKET	9
131295	157551	GASKET	138
131296	173161	GASKET	134
131297	195950	GASKET	69
131298	201048	GASKET	178
131298	201048	GASKET	390
131299	203145	GASKET	134
131302	203922	GASKET	61
131303	214633	GASKET	134
131304	215044	GASKET	69
131306	216487	GASKET	69
131306	216487	GASKET	73
131306	216487	GASKET	75
131306	216487	GASKET	169
131307	218245	GASKET	60
131308	3002385	GASKET	49
131308	3002385	GASKET	55
131308	3002385	GASKET	53
131309	3005592	GASKET	178
131311	3008017	GASKET	63
131311	3008017	GASKET	61
131312	3008591	GASKET	69
131312	3008591	GASKET	168
131313	3011272	GASKET	45
131314	3011273	GASKET	45
131315	3801330	SET	132
131316	3801348	SET	132
131316	3801348	SET	118
131317	3801451	SET	132
131318	3011931	GASKET	50
131319	3012972	GASKET	73
131321	3010030	GASKET	60

PAI Reference	OEM Reference	Description	Page
131322	3014778	GASKET	58
131322	3014778	GASKET	163
131323	3019158	GASKET	50
131324	3020943	GASKET	73
131324	3020943	GASKET	75
131324	3020943	GASKET	169
131326	3021705	GASKET	11
131327	3023868	GASKET	134
131328	3803040	SET	132
131329	3801754	SET	132
131331	3014459	SET	133
131331	3014459	SET	118
131332	3801235	SET	133
131332	3801235	SET	118
131333	3801454	SET	133
131333	3801454	SET	118
131334	3801463	SET	133
131334	3801463	SET	118
131336	3801464	SET	133
131336	3801464	SET	118
131337	3801468	SET	133
131337	3801468	SET	118
131338	3803041	SET	133
131338	3803041	SET	118
131339	3024960	GASKET	49
131339	3024960	GASKET	53
131339	3024960	GASKET	159
131341	3030969	SEAL	134
131342	3032348	GASKET	69
131343	3037421	GASKET	134
131346	3049408	GASKET	7
131347	3032861	GASKET	7
131347	3032861	GASKET	9
131347	3032861	GASKET	138
131347	3032861	GASKET	137
131348	3040056	GASKET	55
131349	3040057	GASKET	55
131350	N/A	SET	132
131351	3042551	GASKET	37
131352	3047464	GASKET	63
131353	3047465	GASKET	63
131354	3049187	GASKET	36
131354	3049187	GASKET	35
131355	3049998	GASKET	41
131355	3049998	GASKET	153
131356	3052136	GASKET	65
131357	3052877	GASKET	55
131358	3054841	GASKET	36
131359	3058532	GASKET	36
131360	3044593	O-RING	134
131361	3067613	GASKET	11
131361	3067613	GASKET	59
131361	3067613	GASKET	58
131361	3067613	GASKET	141
131361	3067613	GASKET	163
131362	3067616	GASKET	47
131362	3067616	GASKET	157
131363	3069014	GASKET	63
131364	3069097	GASKET	7
131364	3069097	GASKET	137
131365	3069098	GASKET	7
131365	3069098	GASKET	70
131365	3069098	GASKET	61
131366	3069101	GASKET	11
131366	3069101	GASKET	67
131366	3069101	GASKET	141
131366	3069101	GASKET	167
131367	3069102	GASKET	11
131367	3069102	GASKET	67
131367	3069102	GASKET	141
131367	3069102	GASKET	167
131367	3069102	GASKET	417
131368	4026171	GASKET	11
131368	4026171	GASKET	67
131368	4026171	GASKET	57
131368	4026171	GASKET	141
131368	4026171	GASKET	161
131369	3069176	GASKET	65
131370	3069177	GASKET	73
131370	3069177	GASKET	75
131370	3069177	GASKET	169
131371	3069182	WASHER	134
131373	3074400	GASKET	45
131373	3074400	GASKET	155
131374	3074401	GASKET	45
131374	3074401	GASKET	155
131375	3074402	GASKET	45
131375	3074402	GASKET	155
131376	3074404	GASKET	45
131376	3074404	GASKET	155
131377	3201386	GASKET	418
131378	3801329	SET	132
131379	3801453	SET	132
131380	3801753	SET	132
131381	3803150	SET	132
131382	64376	GASKET	134
131383	67963	GASKET	7
131384	70624	O-RING	49
131384	70624	O-RING	42
131385	9221	GASKET	61
131386	9266	GASKET	45
131387	9266-A	GASKET	45
131388	9333-1	GASKET	47
131388	9333-1	GASKET	157
131389	3053132	GASKET	37
131390	3017750	GASKET	36
131390	3017750	GASKET	34
131391	67946	WASHER	9
131391	67946	WASHER	209
131391	67946	WASHER	210
131391	67946	WASHER	138
131392	N/A	KIT	45
131392	N/A	KIT	155
131393	N/A	KIT	45
131394	3804303	KIT	9
131394	3804303	KIT	138
131394	3804303	KIT	176
131395	N/A	SET	11
131395	N/A	SET	141
131396	N/A	KIT	47

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
131396	N/A	KIT	157	131436	108692	GASKET	393
131397	N/A	KIT	61	131437	3802075	SET	393
131398	N/A	KIT	61	131438	3047159	GASKET	417
131399	N/A	KIT	61	131439	154018	GASKET	417
131400	3865235	GASKET	169	131440	3931351	GASKET	268
131401	3804896	SET	282	131440	3931351	GASKET	287
131401	3804896	SET	281	131441	3914385	GASKET	268
131401	3804896	SET	336	131441	3914385	GASKET	287
131401	3804896	SET	338	131442	3931347	GASKET	297
131402	3802375	SET	282	131442	3931347	GASKET	317
131402	3802375	SET	281	131443	3942914	GASKET	280
131402	3802375	SET	336	131443	3942914	GASKET	302
131402	3802375	SET	338	131443	4932124	GASKET	334
131403	3911535	GASKET	267	131444	3008400	GASKET	281
131404	3804897	SET	308	131444	3008400	GASKET	313
131404	3804897	SET	312	131445	3929792	GASKET	280
131404	3804897	SET	339	131445	3929792	GASKET	302
131404	3804897	SET	336	131445	3929792	GASKET	334
131405	3802376	SET	308	131446	3931349	GASKET	267
131405	3802376	SET	312	131446	3931349	GASKET	281
131405	3802376	SET	339	131446	3931349	GASKET	313
131405	3802376	SET	336	131446	3931349	GASKET	315
131406	3911536	GASKET	285	131447	3901356	GASKET	281
131406	3911536	GASKET	315	131447	3901356	GASKET	313
131407	3802624	SET	376	131448	3931605	GASKET	277
131407	3802624	SET	372	131448	3931605	GASKET	317
131408	3802389	SET	376	131449	3914311	GASKET	376
131408	3802389	SET	372	131450	3017564	SET	397
131409	3914017	GASKET	345	131451	3558515	GASKET	59
131410	216486	GASKET	69	131451	3558515	GASKET	58
131411	215045	GASKET	69	131451	3558515	GASKET	163
131412	N/A	KIT	69	131452	3819760	GASKET	229
131413	N/A	KIT	70	131452	3819760	GASKET	244
131414	N/A	KIT	75	131453	3918174	GASKET	367
131415	3045533	GASKET	37	131454	3914308	GASKET	367
131416	3801640	SET	37	131455	3065791	GASKET	387
131417	3283333	GASKET	277	131456	3065790	GASKET	387
131417	3283333	GASKET	317	131457	206973	GASKET	387
131418	3283335	GASKET	297	131458	3630969	GASKET	387
131419	3902666	GASKET	277	131459	3009324	GASKET	389
131419	3930906	GASKET	297	131460	3068473	GASKET	155
131419	3930906	GASKET	317	131461	3931607	GASKET	281
131420	3905449	GASKET	376	131461	3931607	GASKET	313
131421	3801466	SET	393	131462	3914301	GASKET	349
131422	3801469	SET	133	131463	3938159	GASKET	271
131422	3801469	SET	118	131463	3938159	GASKET	289
131423	3064196	GASKET	65	131463	3938159	GASKET	323
131424	3802076	SET	393	131464	3064313	GASKET	55
131425	3802077	SET	393	131464	3064313	GASKET	159
131426	3074403	GASKET	45	131466	3066285	GASKET	159
131426	3074403	GASKET	155	131467	3927154	GASKET	277
131427	4058981	GASKET	153	131467	3927154	GASKET	297
131428	3068135	GASKET	153	131467	3927154	GASKET	318
131429	3801606	SET	37	131468	3070478	GASKET	65
131430	AR73308	SET	417	131469	3068466	GASKET	7
131431	3801198	KIT	61	131470	3066298	GASKET	165
131432	3801199	KIT	63	131471	3899746	GASKET	243
131433	107371	GASKET	393	131472	3069678	GASKET	165
131434	3076522	GASKET	53	131473	3893691	GASKET	247
131434	3076522	GASKET	159	131474	3893692	GASKET	247

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
131475	3067459	GASKET	36	131520	3917892	GASKET	376
131476	3067460	GASKET	36	131521	3916042	GASKET	376
131477	3058148	GASKET	211	131522	3914302	GASKET	345
131478	3600925	GASKET	215	131523	3918779	GASKET	376
131479	3072919	GASKET	249	131524	3069786	GASKET	249
131480	3937706	GASKET	281	131525	3042590	GASKET	381
131480	3937706	GASKET	249	131526	3043212	GASKET	381
131480	3937706	GASKET	368	131527	3043211	GASKET	381
131480	3937706	GASKET	313	131528	3917779	GASKET	347
131481	3918673	GASKET	268	131529	3929011	GASKET	367
131481	3918673	GASKET	287	131530	3800704	KIT	258
131482	4025157	SET	260	131531	3918340	GASKET	376
131482	4025157	SET	264	131532	3939258	GASKET	267
131482	4025157	SET	262	131532	3939258	GASKET	278
131482	4089478	KIT	262	131532	3939258	GASKET	365
131484	3865195	GASKET	159	131532	3939258	GASKET	285
131485	3865236	GASKET	159	131532	3939258	GASKET	301
131486	3064195	GASKET	65	131533	3908096	GASKET	376
131487	3064823	GASKET	65	131534	3905595	GASKET	268
131488	N/A	KIT	36	131534	3905595	GASKET	347
131489	N/A	KIT	36	131534	3905595	GASKET	287
131490	N/A	KIT	36	131535	3801007	SET	388
131491	N/A	KIT	153	131536	3942915	GASKET	280
131492	N/A	KIT	260	131536	3942915	GASKET	302
131492	N/A	KIT	209	131536	3942915	GASKET	334
131492	N/A	KIT	210	131537	3801719	SET	388
131493	N/A	KIT	260	131538	3284623	GASKET	285
131493	N/A	KIT	209	131539	3804635	SET	179
131493	N/A	KIT	210	131539	3804635	SET	172
131493	N/A	KIT	262	131540	N/A	SET	260
131493	N/A	KIT	262	131540	N/A	SET	264
131494	3899343	GASKET	249	131541	3068475	GASKET	155
131495	3044475	GASKET	247	131542	3820629	GASKET	239
131496	3883220	GASKET	229	131542	3820629	GASKET	241
131497	4058949	GASKET	141	131543	3058952	GASKET	417
131498	3070477	GASKET	165	131543	3058952	GASKET	415
131499	3072341	GASKET	165	131544	3558947	GASKET	417
131500	3938267	GASKET	359	131544	3558947	GASKET	415
131501	3917780	GASKET	347	131545	3029416	GASKET	45
131502	3893774	GASKET	247	131546	N/A	SET	37
131503	3938737	GASKET	347	131547	3054445	GASKET	63
131504	3010242	KIT	395	131549	3283767	GASKET	267
131504	3010242	KIT	390	131550	3028673	GASKET	395
131505	212224	GASKET	395	131551	3883365	GASKET	233
131506	3818843	GASKET	249	131552	3088984	GASKET	249
131507	3818844	GASKET	249	131553	3001305	GASKET	389
131508	3818846	GASKET	249	131554	3032161	GASKET	389
131509	3820872	GASKET	229	131555	4058790	GASKET	41
131511	3931604	GASKET	281	131555	4058790	GASKET	153
131511	3931604	GASKET	313	131556	3001304	GASKET	389
131512	3932063	GASKET	359	131557	3801005	KIT	388
131512	3932063	GASKET	368	131558	3166288	GASKET	385
131513	3892625	GASKET	239	131559	3634664	GASKET	385
131513	3892625	GASKET	241	131560	3630839	GASKET	385
131514	3202283	GASKET	389	131561	4024925	SET	179
131515	205289	GASKET	389	131564	3804276	SET	132
131516	205288	GASKET	389	131565	3027924	GASKET	233
131517	3921440	GASKET	376	131565	3027924	GASKET	235
131518	3911941	GASKET	368	131566	4089790	SET	312
131519	3914310	GASKET	363	131566	4089790	SET	339

PAI Reference	OEM Reference	Description	Page
131566	4089790	SET	336
131567	3076225	GASKET	167
131568	3068476	GASKET	155
131569	193946	GROMMET	397
131570	193949	GROMMET	41
131570	193949	GROMMET	153
131571	193958	GROMMET	41
131571	193958	GROMMET	153
131572	67362	GASKET	397
131573	70441	GASKET	393
131574	9097	GASKET	393
131575	123733	GASKET	393
131576	106425	GASKET	393
131577	3283336	GASKET	277
131578	3283337	GASKET	297
131579	3935586	GASKET	359
131580	3935878	GASKET	317
131581	BM98021	ASSEMBLY	397
131582	181256	GASKET	397
131583	3077198	GASKET	397
131584	3070100	GASKET	249
131585	3027445	GASKET	242
131586	3977063	ASSEMBLY	317
131587	3957650	ASSEMBLY	317
131588	3037573	GASKET	397
131589	3938161	GASKET	285
131590	3058346	GASKET	397
131591	3076226	GASKET	417
131591	3076226	GASKET	415
131592	4920751	GASKET	212
131593	4089995	KIT	212
131594	N/A	KIT	165
131595	N/A	SET	141
131596	N/A	SET	141
131597	4089998	SET	264
131597	4089998	KIT	254
131597	4089998	KIT	254
131598	3060912	GASKET	376
131599	3946275	GASKET	318
131600	3929881	GASKET	277
131600	3929881	GASKET	297
131601	4089649	KIT	312
131602	4089648	KIT	282
131602	4089648	KIT	281
131603	3919369	GASKET	303
131603	3919369	GASKET	335
131604	3893690	GASKET	242
131605	3755843	GASKET	368
131606	4939178	GASKET	317
131607	4942356	KIT	317
131608	3800833	SET	312
131608	3800833	KIT	339
131608	3800833	KIT	336
131609	4089650	KIT	312
131610	N/A	KIT	285
131610	N/A	KIT	315
131611	N/A	KIT	267
131612	N/A	KIT	345
131613	3802362	SET	281
131614	4089370	KIT	179
131615	3938706	GASKET	343
131616	3028196	GASKET	264
131617	3024471	GASKET	239
131618	3031007	GASKET	264
131619	3818847	GASKET	264
131620	3027718	GASKET	264
131621	3025296	GASKET	209
131622	3883472	GASKET	209
131623	3025130	GASKET	264
131624	3882536	GASKET	264
131625	3026134	GASKET	230
131625	3026134	GASKET	184
131626	3027278	GASKET	227
131627	3883363	GASKET	242
131628	4083006	GASKET	242
131629	3102361	GASKET	264
131630	4024953	SET	132
131631	4024956	SET	132
131632	4024957	SET	132
131633	4024958	SET	132
131634	4024961	SET	132
131635	3802364	SET	312
131636	4955594	SET	204
131637	4955595	SET	204
131637	4955595	SET	204
131637	4955595	SET	202
131638	4955596	SET	204
131638	4955596	SET	204
131638	4955596	SET	202
131639	4955590	SET	205
131640	4955591	SET	205
131641	4973532	GASKET	195
131642	3679931	GASKET	183
131643	3679932	GASKET	183
131644	3678770	GASKET	206
131645	3680284	GASKET	206
131646	3680602	GASKET	206
131647	3684336	GASKET	206
131648	4026884	GASKET	201
131649	4965689	GASKET	206
131650	4907446	GASKET	206
131651	4907447	GASKET	206
131652	4907448	GASKET	206
131653	4926316	GASKET	191
131654	4955592	SET	195
131655	4089757	GASKET	181
131656	4026684	GASKET	180
131656	4026684	GASKET	204
131656	4026684	GASKET	202
131657	4965688	GASKET	184
131658	3684338	GASKET	206
131659	4965690	GASKET	206
131660	4962722	GASKET	181
131661	114753	GASKET	75
131662	65399	GASKET	178
131663	201698	GASKET	134
131664	201701	GASKET	134
131665	3008024	GASKET	69
131666	3011876	GASKET	134
131666	3011876	GASKET	206

PAI Reference	OEM Reference	Description	Page
131667	3104232	GASKET	195
131668	4026507	GASKET	191
131669	3019227	GASKET	206
131670	3101268	GASKET	201
131671	3682710	GASKET	191
131672	3682940	GASKET	191
131673	3102314	GASKET	201
131674	3104229	GASKET	197
131675	3104230	GASKET	197
131676	3682673	GASKET	206
131677	3682577	GASKET	206
131678	4024923	SET	132
131679	4024918	SET	132
131680	4922219	GASKET	389
131681	3013497	SET	395
131682	3014458	SET	395
131683	4089819	SET	339
131683	4089819	SET	336
131684	4089958	SET	376
131684	4089958	SET	372
131685	4089173	SET	339
131685	4089173	SET	336
131686	3283339	GASKET	297
131687	3802245	SET	312
131688	4089651	SET	312
131689	N/A	KIT	315
131690	3939284	GASKET	362
131691	3954324	GASKET	317
131692	3963379	GASKET	318
131693	3947530	GASKET	317
131694	4931365	GASKET	303
131694	4931365	GASKET	335
131695	3947814	GASKET	343
131696	3957492	GASKET	343
131697	3958165	GASKET	315
131698	3949562	GASKET	315
131699	3992092	GASKET	376
131699	3992092	GASKET	367
131700	3558723	GASKET	415
131701	200998	GASKET	397
131702	3063053	GASKET	264
131703	4942874	GASKET	376
131704	3940245	GASKET	376
131705	3944293	GASKET	347
131706	3937479	GASKET	359
131706	3937479	GASKET	368
131707	3938655	GASKET	343
131708	4895742	GASKET	334
131709	3947413	GASKET	334
131710	3958644	GASKET	317
131711	3958645	GASKET	317
131712	3943366	GASKET	359
131713	3944646	GASKET	359
131714	3992090	GASKET	359
131715	3942902	GASKET	376
131716	3913032	GASKET	376
131717	3966342	GASKET	317
131718	N/A	KIT	336
131719	4089391	KIT	388
131720	4089372	KIT	179
131721	3800747	KIT	376
131722	3800343	SET	376
131722	3800343	SET	372
131723	3804298	KIT	388
131724	N/A	SET	268
131724	N/A	SET	287
131725	3955339	GASKET	318
131726	3800487	KIT	312
131726	3800487	KIT	336
131727	3801594	KIT	178
131728	3800727	KIT	388
131729	3800728	KIT	388
131730	4025274	KIT	376
131730	4025274	KIT	372
131731	4025275	SET	376
131732	3949417	GASKET	343
131733	3949910	GASKET	343
131734	4089263	KIT	336
131735	2830559	GASKET	302
131735	2830559	GASKET	334
131736	3974127	GASKET	302
131736	3974127	GASKET	334
131737	3977913	KIT	302
131737	3977913	KIT	334
131738	3955457	GASKET	343
131739	4089264	KIT	336
131740	3935587	GASKET	359
131741	3800748	KIT	376
131742	4981796	GASKET	359
131743	4089758	KIT	376
131743	4089758	KIT	372
131744	4024919	KIT	132
131745	4024920	KIT	132
131746	4089759	KIT	376
131746	4089759	KIT	372
131747	3967891	GASKET	360
131748	3966708	GASKET	362
131749	3959798	GASKET	362
131750	3871472	GASKET	229
131751	4902952	GASKET	365
131752	3945603	GASKET	363
131753	4932210	GASKET	317
131754	4955229	KIT	339
131754	4955229	KIT	336
131755	3978072	GASKET	318
131756	4955523	KIT	336
131757	4896897	GASKET	343
131758	3043097	GASKET	389
131759	206277	GASKET	389
131760	206279	GASKET	389
131761	3979769	GASKET	343
131762	4932615	GASKET	343
131763	3077200	GASKET	397
131764	69651	GASKET	397
131765	200258	GASKET	397
131766	201747	GASKET	397
131767	200259	GASKET	397
131768	64502	GASKET	397
131769	102867	GASKET	398
131770	3081076	GASKET	397

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
131771	3069890	GASKET	397
131772	124246	GASKET	398
131773	44814	GASKET	398
131774	199572	GASKET	398
131775	202873	GASKET	398
131777	100918	GASKET	397
131778	101732	GASKET	398
131779	64413	GASKET	397
131780	3045941	GASKET	397
131781	193295	GASKET	397
131782	102791	GASKET	398
131783	3033215	GASKET	397
131784	125547	GASKET	398
131785	125548	GASKET	398
131786	125549	GASKET	398
131787	3410348	GASKET	398
131788	199569	GASKET	398
131790	2831077	GASKET	334
131791	4899226	GASKET	317
131792	4899231	GASKET	318
131793	4898301	GASKET	315
131794	4934344	GASKET	315
131795	3328761	GASKET	212
131796	4896409	GASKET	334
131797	3939357	GASKET	343
131798	4955230	SET	339
131798	4955230	SET	336
131799	4025139	KIT	336
131800	3801335	SET	133
131801	N/A	KIT	235
131802	3010926	GASKET	390
131803	3081824	GASKET	390
131804	3081895	GASKET	385
131805	3081898	GASKET	385
131806	3090299	GASKET	389
131807	3079883	GASKET	389
131808	3101054	GASKET	331
131809	4090037	KIT	336
131810	3017564	SET	397
131811	**4089979**	**KIT**	**376**
131812	**3975487**	**GASKET**	**360**
131813	**3921926**	**GASKET**	**368**
131814	**4089978**	**KIT**	**376**
131815	3804667	KIT	388
131816	3804668	KIT	388
131817	**3932475**	**GASKET**	**343**
131818	**3970134**	**GASKET**	**359**
131819	**3934638**	**GASKET**	**343**
131820	**4899228**	**GASKET**	**317**
131821	**4899230**	**GASKET**	**318**
131822	**4932209**	**GASKET**	**317**
131823	**4896254**	**GASKET**	**343**
131824	**4955356**	**KIT**	**336**
131824	**4955356**	**KIT**	**338**
131825	**3800731**	**KIT**	**388**
131826	**3804300**	**KIT**	**388**
131827	**3970886**	**GASKET**	**376**
131828	**4024921**	**SET**	**132**
131829	**4024922**	**SET**	**132**
131830	**4025108**	**SET**	**336**
131831	**4939246**	**GASKET**	**315**
131832	**5264950**	**GASKET**	**317**
131833	**70705**	**GASKET**	**396**
131834	**3096077**	**GASKET**	**395**
131835	**110855**	**GASKET**	**395**
131836	**3063052**	**GASKET**	**397**
131837	**2885050**	**GASKET**	**397**
131838	**N/A**	**KIT**	**180**
131839	**N/A**	**KIT**	**315**
131840	**3104392**	**GASKET**	**191**
131841	**4963857**	**GASKET**	**206**
131842	**3686758**	**GASKET**	**206**
131843	**5260648**	**GASKET**	**343**
131844	**4933225**	**GASKET**	**343**
131845	**5266801**	**GASKET**	**343**
131846	**4933235**	**GASKET**	**343**
131847	**5260647**	**GASKET**	**343**
131848	**4933223**	**GASKET**	**343**
131849	**5264566**	**GASKET**	**318**
131850	**4955354**	**KIT**	**336**
131851	**2881766**	**KIT**	**205**
131852	**3685614**	**GASKET**	**181**
131853	**3687007**	**GASKET**	**181**
131854	**4955522**	**KIT**	**336**
131855	**70732**	**GASKET**	**397**
131856	**4089889**	**KIT**	**376**
131857	**3930408**	**GASKET**	**345**
131858	**3931967**	**GASKET**	**345**
131859	**2882049**	**KIT**	**376**
131860	**3685639**	**GASKET**	**191**
131861	**5255450**	**GASKET**	**318**
131862	**2830706**	**GASKET**	**317**
131863	**4089780**	**KIT**	**336**
131864	**4955357**	**KIT**	**336**
131864	**4955357**	**KIT**	**338**
131865	**4089956**	**KIT**	**336**
131866	**2830704**	**GASKET**	**317**
131867	**4089781**	**KIT**	**336**
131868	**4943167**	**GASKET**	**315**
131869	**4955355**	**KIT**	**336**
131870	**4937032**	**GASKET**	**359**
131871	**4938761**	**GASKET**	**376**
131872	**5253019**	**GASKET**	**376**
131873	**5264572**	**GASKET**	**359**
131874	**4955643**	**KIT**	**376**
131874	**4955643**	**KIT**	**372**
131875	4089173A	KIT	336
131876	**4966441**	**GASKET**	**201**
131877	**3683940**	**GASKET**	**206**
131878	**3684359**	**GASKET**	**201**
131879	**3921961**	**GASKET**	**343**
131880	**4089957**	**KIT**	**336**
131881	**2881955**	**KIT**	**308**
131881	**2881955**	**KIT**	**312**
131881	**2881955**	**KIT**	**336**
131882	**3283338**	**GASKET**	**317**
131883	**3802242**	**KIT**	**282**
131883	**3802242**	**KIT**	**336**
131884	**3936027**	**GASKET**	**376**
131885	**4955644**	**KIT**	**376**

PAI Reference	OEM Reference	Description	Page
131885	**4955644**	**KIT**	**372**
131886	**4089369**	**KIT**	**179**
131887	**3349541**	**GASKET**	**264**
131888	**3800861**	**KIT**	**264**
131889	**3037821**	**GASKET**	**389**
131890	**3179027**	**GASKET**	**389**
131891	**3800729**	**KIT**	**388**
131892	**3800726**	**KIT**	**388**
131893	**3801403**	**KIT**	**397**
131894	**3683537**	**GASKET**	**199**
131895	**3684355**	**GASKET**	**201**
131896	**4024948**	**SET**	**132**
131897	**3683607**	**GASKET**	**199**
131897	**3683607**	**GASKET**	**206**
131898	**3685456**	**GASKET**	**206**
131900	**3102392**	**GASKET**	**264**
131900	**3102392**	**GASKET**	**206**
131901	**3679937**	**GASKET**	**191**
131902	**4089717**	**KIT**	**388**
131903	**3686368**	**GASKET**	**181**
131904	**3685535**	**GASKET**	**201**
131905	**3688347**	**GASKET**	**206**
131906	**2881767**	**KIT**	**204**
131907	**3177942**	**GASKET**	**390**
131908	3052906	GASKET	389
131909	3049364	GASKET	389
131910	3081621	GASKET	389
131911	3410171	GASKET	389
131912	**4910518**	**GASKET**	**381**
131913	**4000436**	**GASKET**	**389**
131914	3090170	GASKET	389
131915	**2888747**	**GASKET**	**381**
131916	4910190	GASKET	379
131917	4080829	GASKET	389
131918	**3073213**	**GASKET**	**381**
131919	4922528	GASKET	389
131920	3913287	GASKET	389
131921	3007380	GASKET	389
131922	3042586	GASKET	389
131923	**4000595**	**GASKET**	**381**
131924	3085989	GASKET	389
131925	207117	GASKET	389
131926	**3079754**	**GASKET**	**381**
131927	3014449	GASKET	389
131928	3201388	GASKET	389
131929	**4954474**	**GASKET**	**193**
131930	**4954473**	**GASKET**	**193**
131931	**2872195**	**GASKET**	**193**
131932	**4935004**	**GASKET**	**365**
131933	3801529	KIT	133
131934	144042	GASKET	398
131935	3074690	GASKET	389
131936	3410141	GASKET	389
131937	3042612	GASKET	389
131938	205791	GASKET	389
131939	3040721	GASKET	389
131940	3200977	GASKET	389
131941	3002330	GASKET	389
131942	3010918	GASKET	389
131943	3394114	GASKET	41
131943	3394114	GASKET	153
131943	3394114	GASKET	385
131944	**5316185**	**GASKET**	**359**
131945	**3969609**	**GASKET**	**359**
131946	207056	GASKET	389
131947	205794	GASKET	389
131948	205827	GASKET	389
131949	207058	GASKET	389
131951	3001318	GASKET	389
131952	4089390	KIT	388
131953	**4352349**	**KIT**	**376**
131954	**4089888**	**KIT**	**376**
131955	3103077	GASKET	264
131955	3103077	GASKET	206
131956	**5292265**	**ISOLATOR**	**199**
131957	4946620	GASKET	317
131958	**3328760**	**GASKET**	**211**
131958	**3328760**	**GASKET**	**212**
131959	**3685510**	**GASKET**	**181**
131960	139266	GASKET	394
131961	194106	GASKET	394
131962	147263	GASKET	394
131963	9267	GASKET	394
131964	129373	GASKET	393
131965	206460	GASKET	389
131966	207515	GASKET	389
131967	3175517	GASKET	389
131968	3179026	GASKET	389
131969	**163607**	**GASKET**	**398**
131970	**3098985**	**GASKET**	**41**
131970	**3098985**	**GASKET**	**153**
131971	2871452	GASKET	343
131972	2871453	GASKET	206
131973	3008966	GASKET	398
131974	3008965	GASKET	398
131975	136995	GASKET	206
131975	136995	GASKET	398
131976	69165	GASKET	398
131977	121057	GASKET	398
131978	162679	GASKET	398
131979	195736	GASKET	398
131980	180730	GASKET	398
131981	69164	GASKET	398
131982	69654	GASKET	398
131983	180735	GASKET	398
131984	64433-1	GASKET	398
131985	3001562	GASKET	398
131986	64420	GASKET	398
131987	204253	GASKET	398
131988	123146	GASKET	398
131989	164976	GASKET	398
131990	183475	GASKET	398
131991	64565	GASKET	398
131992	129527	GASKET	398
131993	9284	GASKET	398
131994	136171	GASKET	398
131995	139867	GASKET	398
131996	172723	GASKET	398
131997	42376	GASKET	398
131998	160112	GASKET	398

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
131999	123078	GASKET	398	136020	3907177	SEAL	345
132000	4089103	KIT	195	136021	215705	O-RING	11
132001	3680713	GASKET	195	136021	215705	O-RING	141
132002	113914	GASKET	397	136022	190397	SLEEVE	67
132003	69163	GASKET	398	136022	190397	SLEEVE	167
132005	196337	GASKET	398	136023	3006738	SEAL	47
132006	43569	GASKET	398	136023	3006738	SEAL	157
132007	180748	GASKET	398	136024	3353977	SEAL	349
132008	3078124	GASKET	398	136024	3353977	SEAL	347
132009	3077199	GASKET	398	136025	3010459	SEAL	392
132010	67396	GASKET	398	136026	3909410	SEAL	271
132011	129484	GASKET	398	136026	3909410	SEAL	349
132012	180760	GASKET	398	136026	3909410	SEAL	289
132013	181187	GASKET	398	136026	3909410	SEAL	339
132015	181085	GASKET	398	136026	3909410	SEAL	323
132016	181243	GASKET	398	136028	3923331	SEAL	278
132017	163532	GASKET	398	136028	3923331	SEAL	299
132018	64436	GASKET	398	136029	127936	SEAL	417
132019	64436A	GASKET	398	136029	127936	SEAL	415
132020	4337596	GASKET	315	136030	3903475	RING	268
132021	N/A	KIT	315	136030	3903475	SEAL	347
132022	4089240	KIT	281	136030	3903475	SEAL	287
132022	4089240	KIT	313	136031	3912473	O-RING	271
132022	4089240	KIT	343	136031	3912473	O-RING	349
132023	N/A	KIT	264	136031	3912473	O-RING	289
132024	3101569	GASKET	181	136031	3912473	O-RING	323
132025	4024946	KIT	132	136032	3020187	SEAL	397
136000	3006736	SEAL	11	136033	3020188	SEAL	397
136000	3006736	SEAL	141	136034	3020182	SEAL	397
136001	3006737	SEAL	47	136035	3906080	RING	271
136001	3006737	SEAL	157	136035	3906080	RING	289
136002	106276	SEAL	134	136036	3010464	RING	392
136003	185677	O-RING	134	136037	3010465	RING	392
136004	200307	SEAL	134	136037	3010465	RING	390
136004	200307	SEAL	178	136038	3006742	RING	11
136005	3331663	SHIELD	378	136038	3006742	RING	141
136006	3004316	SEAL	11	136039	3006743	RING	47
136006	3004316	SEAL	67	136039	3006743	RING	157
136006	3004316	SEAL	141	136040	3906081	RING	271
136006	3004316	SEAL	167	136040	3906081	RING	349
136008	3010457	SEAL	11	136040	3906081	RING	289
136008	3010457	SEAL	393	136040	3906081	RING	322
136009	3018695	SEAL	63	136041	3935449	SEAL	277
136010	3024709	SEAL	49	136041	3935449	SEAL	297
136010	3024709	SEAL	42	136042	3819774	RING	217
136011	3034986	SEAL	9	136043	3820918	RING	217
136011	3034986	SEAL	138	136044	3820917	RING	217
136012	3038997	SEAL	49	136045	3908277	RING	349
136013	3038998	SEAL	49	136046	3078292	SEAL	141
136013	3038998	SEAL	158	136047	3902363	SEAL	281
136014	3049302	SEAL	65	136047	3902363	SEAL	313
136015	3050867	SEAL	41	136048	3016791	SEAL	390
136016	3063618	SEAL	42	136049	3200287	SEAL	67
136017	S-1003-A	SLEEVE	63	136050	3016793	SEAL	378
136018	3020183	SEAL	11	136051	3074482	SEAL	159
136018	3020183	SEAL	141	136052	3020184	SEAL	395
136019	3008947	SEAL	11	136053	3023867	SEAL	395
136019	3008947	SEAL	67	136054	3803574	KIT	211
136019	3008947	SEAL	141	136055	3803573	KIT	211
136019	3008947	SEAL	167	136056	3803894	KIT	211

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
136056	3803894	KIT	212
136057	3902425	SEAL	267
136057	3902425	SEAL	345
136057	3902425	SEAL	359
136057	3902425	SEAL	315
136058	3016794	KIT	390
136059	3935172	SEAL	281
136059	3935172	SEAL	313
136060	3803576	KIT	211
136061	3804744	KIT	212
136062	4089544	KIT	217
136063	3918188	SEAL	418
136065	3906773	SEAL	281
136065	3906773	SEAL	313
136066	3800616	KIT	141
136068	3902466	SEAL	377
136069	3928759	SEAL	267
136069	3928759	SEAL	285
136069	3928759	SEAL	315
136070	3909886	SEAL	359
136071	3920773	SEAL	267
136071	3920773	SEAL	345
136071	3920773	SEAL	315
136073	3076203	SHIELD	141
136074	3056100	SEAL	134
136075	3024075	SEAL	134
136076	3020185	SEAL	11
136077	3016792	SEAL	378
136078	3005886	SEAL	378
136079	207244	SEAL	390
136080	3019600	SEAL	233
136080	3019600	SEAL	235
136081	3804304	KIT	211
136081	3804304	KIT	212
136082	3078221	SEAL	141
136083	3800617	KIT	141
136084	3802820	SEAL	268
136084	3802820	SEAL	287
136084	3802820	KIT	320
136084	3802820	KIT	323
136085	206808	SEAL	390
136087	3803575	KIT	211
136088	3800969	KIT	217
136092	3003353	SEAL	397
136093	3016789	SEAL	390
136094	3628895	SEAL	390
136095	3954829	SEAL	331
136096	3870890	SEAL	378
136097	4089542	KIT	217
136098	3026156	WASHER	242
136099	3922599	RING	271
136099	3922599	RING	289
136100	**3963991**	**SEAL**	**418**
136101	3918190	SEAL	418
136102	3918191	SEAL	418
136103	3918192	SEAL	418
136104	**3287561**	**SEAL**	**315**
136105	3937111	SEAL	268
136105	3937111	SEAL	287
136105	3937111	SEAL	339
136106	3335548	SEAL	159
136107	181293	SEAL	397
136108	181272	RETAINER	397
136109	3678762	SEAL	206
136111	3925626	KIT	349
136112	3921928	SEAL	349
136113	3924986	RING	349
136114	3924987	SHIELD	349
136115	4025270	KIT	349
136115	4025270	KIT	347
136116	3927683	KIT	271
136116	3927683	KIT	289
136116	3927683	KIT	323
136117	4955665	KIT	212
136118	3925343	KIT	349
136119	4890832	SEAL	323
136122	4890833	SEAL	323
136123	4955372	SEAL	349
136123	4955372	SEAL	338
136125	3005887	KIT	397
136126	3926126	KIT	271
136126	3926126	KIT	289
136126	3926126	KIT	320
136126	3926126	KIT	323
136127	3925530	SEAL	271
136127	3925530	SEAL	289
136127	3925530	SEAL	320
136127	3925530	SEAL	323
136128	3925532	RING	271
136128	3925532	RING	289
136128	3925532	RING	320
136128	3925532	RING	322
136129	**212603**	**SEAL**	**396**
136130	4955383	KIT	181
136131	4965569	KIT	184
136132	3014304	SEAL	390
136133	3023129	SEAL	390
136134	3023130	SEAL	390
136135	3633046	SEAL	390
136136	3035331	GROMMET	397
136137	4962745	SEAL	212
136138	**3062676**	**SEAL**	**57**
136138	**3062676**	**SEAL**	**278**
136138	**3062676**	**SEAL**	**161**
136138	**3062676**	**SEAL**	**396**
136138	**3062676**	**SEAL**	**392**
136139	**3685173**	**SEAL**	**181**
136139	**3685173**	**SEAL**	**182**
136140	**70809**	**SEAL**	**398**
136141	**210218**	**SEAL**	**398**
136142	**4024883**	**KIT**	**347**
136143	**3684284**	**SEAL**	**377**
136143	**3684284**	**SEAL**	**206**
136143	**3684284**	**SEAL**	**343**
136144	**3687051**	**SEAL**	**206**
136145	3976371	SEAL	318
136146	**70854**	**SEAL**	**393**
136147	**4936967**	**SEAL**	**363**
136148	3634007	SEAL	390
136149	3081724	SEAL	391

PAI Reference	OEM Reference	Description	Page
136150	3003156	SEAL	396
136151	3067259	SEAL	391
136152	3065830	SEAL	391
136153	3085867	SEAL	391
136154	3086279	SHIELD	390
136155	3804703	KIT	378
136156	3628894	SHIELD	390
136157	3160924	SHIELD	389
136158	**5259499**	**SEAL**	**271**
136158	**5259499**	**SEAL**	**349**
136158	**5259499**	**SEAL**	**289**
136158	**5259499**	**SEAL**	**323**
136159	**203097**	**RING**	**49**
136159	**203097**	**RING**	**158**
136161	**3684360**	**SEAL**	**199**
136162	3803852	KIT	390
136163	3803477	KIT	161
136164	3071643	SEAL	161
136165	3084713	SEAL	161
136166	3823234	SLEEVE	161
136167	**3031446**	**SEAL**	**211**
136168	**3801136**	**KIT**	**211**
136169	3006237	RING	378
136170	3175705	SEAL	390
136171	106339	SEAL	398
141281	3031959	PAN	9
141281	3031959	PAN	138
141282	3046951	PAN	9
141282	3046951	PAN	138
141283	4952540	PAN	180
141284	3915703	PAN	313
141285	**4952785**	**PAN**	**210**
141286	**4952780**	**PAN**	**210**
141287	**3901049**	**PAN**	**267**
141289	**3945967**	**PLUNGER**	**367**
141289	3945967	PLUNGER	366
141290	216484	DIPSTICK	7
141290	216484	DIPSTICK	209
141290	216484	DIPSTICK	137
141290	216484	DIPSTICK	420
141291	3966840	PUMP	366
141292	AR10172	PUMP	59
141292E	AR10172	PUMP	59
141293	3047549	PUMP	390
141293E	3047549	PUMP	390
141294	3803698	ASSEMBLY	163
141294E	3803698	ASSEMBLY	163
141295	3803369	ASSEMBLY	163
141295E	3803369	ASSEMBLY	163
141296	4003950	PUMP	238
141296E	4003950	PUMP	238
141297	3930338	PUMP	366
141298	3937027	PUMP	280
141299	3937404	PUMP	302
141300	3821572	ASSEMBLY	58
141300E	3821572	ASSEMBLY	58
141301	AR62181	PUMP	392
141302	127558	PLUNGER	61
141303	157088	CAP	57
141304	109333	PLUNGER	58
141305	3012529	PLUNGER	58
141305	3012529	PLUNGER	209
141306	3884126	PLUNGER	58
141306	3884126	PLUNGER	163
141307	3820320	PLUNGER	239
141307	3820320	PLUNGER	241
141307	3820320	PLUNGER	195
141308	3030806	PLUNGER	63
141309	3971544	PUMP	333
141310	4941464	PUMP	366
141311	4939586	PUMP	333
141312	3686938	PUMP	193
141313	2881757	KIT	193
141314	204048	COVER	59
141314	204048	COVER	58
141314	204048	COVER	163
141315	4988801	PUMP	333
141316	4897481	PUMP	333
141317	**3800828**	**KIT**	**366**
141318	**3046947**	**PAN**	**9**
141318	**3046947**	**PAN**	**138**
141319	**4935792**	**PUMP**	**302**
141320	N/A	KIT	58
141325	**3095050**	**TUBE**	**9**
141325	**3095050**	**TUBE**	**138**
141326	3882346	TUBE	210
141327	4082897	TUBE	210
141330	68274	SPRING	58
141330	68274	SPRING	367
141331	211939	SPRING	58
141332	3010146	SPRING	58
141332	3010146	SPRING	209
141332	3010146	SPRING	163
141333	**3882586**	**SPRING**	**239**
141333	**3882586**	**SPRING**	**241**
141333	**3882586**	**SPRING**	**195**
141334	3030803	SPRING	63
141335	3014756	SPRING	58
141335	3014756	SPRING	209
141335	3014756	SPRING	163
141336	3049553	SPRING	415
141337	3558691	SPRING	415
141338	3039296	SPRING	63
141349	3012531	SHAFT	58
141350	3012532	SHAFT	58
141350	3012532	SHAFT	163
141351	3045617	GEAR	163
141352	3045622	GEAR	163
141353	68365	BUSHING	163
141354	3609838	GEAR	58
141354	3609838	GEAR	163
141355	204832	GEAR	58
141356	3609824	GEAR	163
141380	**4962608**	**CAP**	**420**
141400	**2892304**	**COOLER**	**195**
141401	4089900	KIT	195
141402	4059460	COOLER	195
141403	3052514	CORE	63
141404	3078407	COOLER	165
141405	142608	COOLER	61

PAI Reference	OEM Reference	Description	Page
141406	110848	COOLER	61
141407	3045483	CORE	63
141408	3918175	CORE	367
141410	173287	COOLER	392
141412	3201785	COOLER	387
141413	3627295	COOLER	387
141414	3413091	COOLER	165
141415	186348	COOLER	395
141416	N/A	KIT	280
141418	N/A	KIT	65
141419	3957544	COOLER	302
141419	3957544	COOLER	334
141420	3021581	COOLER	61
141421	3957543	COOLER	280
141421	3957543	COOLER	334
141422	4089583	KIT	195
141424	3600880	COOLER	239
141425	3882324	COOLER	239
141426	3081359	COOLER	241
141427	3959031	COOLER	334
141428	**3975818**	**COOLER**	**302**
141429	3030804	VALVE	63
141430	3066842	COOLER	65
141431	**4965487**	**COOLER**	**195**
141433	3936365	VALVE	280
141433	3936365	VALVE	367
141433	3936365	VALVE	302
141433	3936365	VALVE	334
141434	**3918428**	**PLUNGER**	**280**
141434	**3918428**	**PLUNGER**	**302**
141434	**3918428**	**PLUNGER**	**334**
141435	**3966365**	**COOLER**	**367**
141436	**N/A**	**KIT**	**367**
141437	**2878071**	**COOLER**	**197**
141438	**4309434NX**	**KIT**	**197**
141439	**2881921**	**KIT**	**197**
141440	**2881920**	**KIT**	**199**
141441	**3689035**	**COOLER**	**199**
141442	**4309398NX**	**KIT**	**199**
141450	4955421	KIT	206
141451	**4955422**	**KIT**	**197**
141452	3104875	VALVE	206
141453	**3104874**	**VALVE**	**197**
141490	**3684320**	**PLATE**	**199**
141491	**3684322**	**PLATE**	**199**
151481	708124	HOUSING	11
151482	150002	HOUSING	11
151483	3008530	HOUSING	11
151483	3008530	HOUSING	141
151485	147610	BUSHING	417
151485	147610	BUSHING	415
151487	3824894	SLEEVE	209
151488	69521	BUSHING	58
151488	69521	BUSHING	163
151489	116391	BUSHING	67
151489	116391	BUSHING	167
151490	BM27253	SET	8
151490	BM27253	SET	393
151495	70437	BEARING	397
151501	3801106	SET	8
151501	3801106	SET	137
151502	3028075	BEARING	7
151502	3028075	BEARING	137
151503	3028269	BEARING	7
151503	3028269	BEARING	137
151504	3011951	BEARING	7
151504	3011951	BEARING	137
151505	3007689	BEARING	8
151506	3820566	BEARING	209
151508	3901306	BEARING	267
151508	3901306	BEARING	285
151509	3945329	BEARING	345
151510	187420	BUSHING	15
151511	3027105	BUSHING	219
151511	3027105	BUSHING	221
151512	3064295	BUSHING	145
151512	3064295	BUSHING	147
151513	132770	BUSHING	11
151513	132770	BUSHING	141
151513	132770	BUSHING	167
151514	3901085	BUSHING	274
151514	3901085	BUSHING	294
151514	4891178	BUSHING	329
151515	3913990	BUSHING	350
151515	3913990	BUSHING	354
151515A	N/A	BUSHING	350
151516	43067	BUSHING	393
151517	3411389	BUSHING	141
151519	3026188	BUSHING	215
151520	3026189	BUSHING	215
151521	3026556	WASHER	67
151521	3026556	WASHER	167
151522	3026557	WASHER	67
151522	3026557	WASHER	167
151523	211662	WASHER	417
151523	211662	WASHER	415
151524	9235-1	WASHER	33
151525	215233	WASHER	33
151525	215233	WASHER	142
151526	3084899	THRUST	215
151527	3927155	SUPPORT	275
151527	3927155	SUPPORT	361
151527	3927155	SUPPORT	298
151527	3927155	THRUSTWASHER	330
151528	3940059	BEARING	267
151528	3940059	BEARING	285
151528	3940059	BEARING	315
151529	118377	BUSHING	45
151530	118378	BUSHING	45
151531	3944001	T'WASHER	330
151532	130083	WASHER	398
151533	**4944137**	**BUSHING**	**350**
151534	3043909	BUSHING	383
151535	140330	BUSHING	34
151535	140330	BUSHING	35
151536	218153	BUSHING	34
151536	218153	BUSHING	35
151537	156420	BUSHING	395
151538	189763	BUSHING	395
151539	**4059448**	**BUSHING**	**186**

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
151540	N/A	KIT	67
151540	N/A	KIT	167
151541	N/A	KIT	67
151542	205230	BUSHING	390
151544	100670	BEARING	7
151545	157870	BEARING	7
151546	200780	BEARING	395
151547	200790	BEARING	395
151548	5257363	BUSHING	329
151550	3002834	BEARING	390
151551	3004686	BUSHING	390
151552	207226	BUSHING	390
151553	205145	BUSHING	390
151555	3904369	BEARING	267
151555	3904369	BEARING	285
151556	3903242	BEARING	267
151556	3903242	BEARING	285
151557	N/A	KIT	191
151558	4026423	BEARING	191
151559	3680580	BEARING	191
151560	3680581	BEARING	191
151561	3896335	T'WASHER	213
151565	**N/A**	**KIT**	**209**
151570	N/A	KIT	191
161596	3046325	LINER	7
161596	3046325	LINER	137
161597	3801387	KIT	7
161597	3801387	KIT	137
161598	3065405	LINER	7
161598	3065405	LINER	137
161599	3803219	KIT	7
161599	3803219	KIT	137
161600	3055099	LINER	7
161600	3055099	LINER	137
161600E	3055099	LINER	7
161600E	3055099	LINER	7
161600E	3055099	LINER	137
161600E	3055099	LINER	137
161601	3801826	KIT	7
161601	3801826	KIT	176
161601	3801826	KIT	137
161601	3801826	KIT	176
161601E	3801826	KIT	7
161601E	3801826	KIT	7
161601E	3801826	KIT	176
161601E	3801826	KIT	176
161601E	3801826	KIT	137
161603	**4919951**	**SLEEVE**	**315**
161606	197230	GROMMET	134
161610	203170	LINER	395
161611	AR8069	KIT	395
161614	184400	LINER	393
161615	BM98224	KIT	393
161625	3080760	LINER	209
161625	3080760	LINER	262
161626	3803703	KIT	260
161626	3803703	KIT	209
161626	3803703	KIT	262
161627	3102423	LINER	209
161628	4089388	KIT	209
161628	4089388	KIT	262
161630	3904166	SLEEVE	267
161630	3904166	SLEEVE	285
161630	3904166	SLEEVE	315
161631	3907792	LINER	345
161632	3802370	KIT	345
161632	3802370	KIT	372
161633	3948095	LINER	345
161634	3800328	KIT	345
161634	3800328	KIT	372
161636	4009220	LINER	383
161637	3022157	LINER	383
161638	3028434	KIT	383
161639	3011884	INSERT	383
161640	3007525	KIT	383
161641	3022530	LINER	392
161645	3800453	KIT	189
161646	3682025	LINER	189
161647	4089153	KIT	189
161647	4089153	KIT	185
161647	4089153	KIT	204
161647	4089153	KIT	202
161648	4101507	LINER	189
161648	4101507	LINER	185
161649	**2881719**	**KIT**	**185**
161649	**2881719**	**KIT**	**202**
161650	**3685235**	**LINER**	**185**
161651	**4309389**	**KIT**	**185**
161651	**4309389**	**KIT**	**202**
161652	**4311633**	**LINER**	**185**
161653	**4311632**	**LINER**	**185**
161998	**3054947**	**SHIM**	**8**
161998	**3054947**	**SHIM**	**137**
161999	**3054949**	**SHIM**	**8**
161999	**3054949**	**SHIM**	**137**
162000	3019955	SHIM	8
162000	3019955	SHIM	137
162001	3019956	SHIM	8
162001	3019956	SHIM	137
162002	3019957	SHIM	8
162002	3019957	SHIM	137
162003	3054948	SHIM	8
162003	3054948	SHIM	137
162004	3019959	SHIM	8
162004	3019959	SHIM	137
162005	3019960	SHIM	8
162005	3019960	SHIM	137
162006	AR51478	KIT	8
162007	3066843	SHIM	8
162007	3066843	SHIM	137
162008	3065406	SHIM	8
162008	3065406	SHIM	137
162009	**3924448**	**SHIM**	**345**
162010	3032623	SHIM	209
162011	3034663	SHIM	209
162012	3066844	SHIM	8
162012	3066844	SHIM	137
162013	3924446	SHIM	345
162014	3924447	SHIM	345
162015	AR1176	KIT	11

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
162015	AR1176	KIT	141
162016	3924445	SHIM	345
162017	3800751	KIT	193
162024	65259C	SHIM	11
162024	65259C	SHIM	141
162025	65259B	SHIM	11
162025	65259B	SHIM	141
162026	65259A	SHIM	11
162026	65259A	SHIM	141
162027	185573	SHIM	11
162027	185573	SHIM	141
162028	3088298	SHIM	383
162029	**5298564**	**SHIM**	**187**
162030	**5298565**	**SHIM**	**187**
162031	**4311637**	**SHIM**	**187**
170990	**3972345**	**RING**	**349**
171621	3968164	CRANKSHAFT	323
171622	4934862	ASSEMBLY	323
171623	2830477	CRANKSHAFT	323
171624	2830476	ASSEMBLY	323
171625	3965010	CRANKSHAFT	349
171629	5257364	ROD	329
171630	3013930	ROD	15
171631	3942581	ROD	274
171631	3942581	ROD	294
171631	3942581	ROD	329
171632	3971394	ROD	350
171633	4898808	ROD	329
171634	4059429	ROD	189
171634	4059429	ROD	186
171635	3078330	ROD	145
171635	3078330	ROD	147
171636	4083569	ROD	221
171637	**4943979**	**ROD**	**329**
171638	4944670	ROD	350
171640	200600	BEARING	397
171641	200601	BEARING	397
171642	200602	BEARING	397
171643	200603	BEARING	397
171646	3054866	ASSEMBLY	13
171648	3347569	ASSEMBLY	378
171649	3819624	CRANKSHAFT	217
171650	3073707	CRANKSHAFT	217
171650E	3073707	CRANKSHAFT	217
171651	3096362	CRANKSHAFT	378
171652	N/A	ASSEMBLY	320
171653	3939367	CRANKSHAFT	320
171654	3944243	ASSEMBLY	322
171655	3944204	CRANKSHAFT	323
171657	**4980462**	**CRANKSHAFT**	**323**
171658	**4925762**	**ASSEMBLY**	**182**
171692	60575	DOWEL	13
171693	3027106	DOWEL	219
171693	3027106	DOWEL	221
171693	3027106	PIN	153
171694	3037045	DOWEL	13
171694	3037045	DOWEL	139
171695	3009213	LOCKPLATE	7
171695	3009213	LOCKPLATE	13
171697	4023203	WASHER	217
171698	4023083	WASHER	217
171699	3019219	WASHER	13
171699	3019219	BEARING	139
171700	3019218	WASHER	13
171700	3019218	BEARING	139
171701	3608833	CRANKSHAFT	13
171701E	3608833	CRANKSHAFT	13
171702	195240	CRANKSHAFT	392
171703	3029341	CRANKSHAFT	393
171704	3819989	CRANKSHAFT	217
171707	194840	CRANKSHAFT	392
171708	3029340	CRANKSHAFT	13
171709	3917320	CRANKSHAFT	349
171711	3929037	CRANKSHAFT	289
171711E	3929037	CRANKSHAFT	289
171712	3918986	KIT	349
171712E	3918986	KIT	349
171713	3908032	CRANKSHAFT	289
171714	3918776	GEAR	349
171716	3929027	GEAR	271
171716	3929027	GEAR	289
171716	3929027	GEAR	320
171716	3929027	GEAR	323
171717	3904483	PIN	271
171717	3904483	PIN	349
171717	3904483	PIN	289
171717	3904483	PIN	320
171717	3904483	PIN	322
171718	201950	CRANKSHAFT	392
171719	3064291	CRANKSHAFT	139
171719E	3064291	CRANKSHAFT	139
171720	3801260	KIT	13
171720	3801260	KIT	176
171720	3801260	KIT	139
171720	3801260	KIT	176
171720	3801260	KIT	393
171721	3801261	KIT	13
171721	3801261	KIT	139
171721	3801261	KIT	393
171722	3801262	KIT	13
171722	3801262	KIT	139
171722	3801262	KIT	393
171723	3801263	KIT	13
171723	3801263	KIT	139
171723	3801263	KIT	393
171724	3801264	KIT	13
171724	3801264	KIT	139
171724	3801264	KIT	393
171725	3801150	KIT	260
171725	3801150	KIT	217
171726	3801151	KIT	217
171727	3801152	KIT	217
171728	3801153	KIT	217
171729	3801154	KIT	217
171730	AR3640	KIT	395
171731	AR3641	KIT	395
171732	AR3642	KIT	395
171733	142804	GEAR	13
171734	177086	GEAR	392
171735	3014614	GEAR	13

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
171735	3014614	GEAR	139
171736	3929036	CRANKSHAFT	271
171736E	3929036	CRANKSHAFT	271
171737	3908031	CRANKSHAFT	271
171738	3073344	GEAR	139
171739	3084445	GEAR	217
171745	203660	BEARING	15
171746	203661	BEARING	15
171747	203662	BEARING	15
171748	203663	BEARING	15
171750	203670	BEARING	393
171751	203671	BEARING	393
171752	203672	BEARING	393
171753	203673	BEARING	393
171757	**3965006**	**CRANKSHAFT**	**349**
171758	**3965007**	**ASSEMBLY**	**349**
171759	**3965008**	**ASSEMBLY**	**349**
171765	214950	BEARING	15
171766	214951	BEARING	15
171767	214952	BEARING	15
171768	214953	BEARING	15
171769	214954	BEARING	15
171780	3016760	BEARING	260
171780	3016760	BEARING	219
171780	3016760	BEARING	262
171780	3016760	BEARING	262
171780	3016760	BEARING	221
171781	3016761	BEARING	219
171781	3016761	BEARING	221
171782	3016762	BEARING	219
171782	3016762	BEARING	221
171783	3016763	BEARING	219
171783	3016763	BEARING	221
171784	3055145	BEARING	176
171784	3055145	BEARING	145
171784	3055145	BEARING	147
171784	3055145	BEARING	176
171785	3055146	BEARING	145
171785	3055146	BEARING	147
171786	3055147	BEARING	145
171786	3055147	BEARING	147
171787	3055148	BEARING	145
171787	3055148	BEARING	147
171801	3901170	BEARING	274
171801	3901170	BEARING	282
171801	3901170	BEARING	294
171801	3901170	BEARING	308
171801	3901170	BEARING	329
171802	3901171	BEARING	274
171802	3901171	BEARING	294
171802	3901171	BEARING	329
171803	3901172	BEARING	274
171803	3901172	BEARING	294
171803	3901172	BEARING	329
171804	3901173	BEARING	274
171804	3901173	BEARING	294
171804	3901173	BEARING	329
171805	3901174	BEARING	274
171805	3901174	BEARING	294
171805	3901174	BEARING	329
171806	3802010	KIT	271
171806	3802010	KIT	282
171806	3802010	KIT	320
171806	3802010	KIT	338
171806	3802010	KIT	321
171807	3802011	KIT	271
171807	3802011	KIT	320
171807	3802011	KIT	321
171808	3802012	KIT	271
171808	3802012	KIT	320
171808	3802012	KIT	321
171809	3802013	KIT	271
171809	3802013	KIT	320
171809	3802013	KIT	321
171810	3802014	KIT	271
171810	3802014	KIT	320
171810	3802014	KIT	321
171811	3802070	KIT	289
171811	3802070	KIT	308
171811	3802070	SET	339
171811	3802070	KIT	322
171811HP	3802070	SET	289
171811HP	3802070	KIT	308
171811HP	3802070	KIT	339
171811HP	3802070	KIT	322
171812	3802071	KIT	289
171812	3802071	KIT	322
171812HP	3802071	SET	289
171812HP	3802071	KIT	322
171813	3802072	KIT	289
171813	3802072	KIT	322
171813HP	3802072	KIT	289
171813HP	3802072	KIT	322
171814	3802073	KIT	289
171814	3802073	KIT	322
171814HP	3802073	KIT	289
171814HP	3802073	KIT	322
171815	3802074	KIT	289
171815	3802074	KIT	322
171815HP	3802074	KIT	289
171815HP	3802074	KIT	322
171816	3901430	BEARING	350
171816	3901430	BEARING	372
171816	3901430	BEARING	354
171817	3901431	BEARING	350
171817	3901431	BEARING	354
171818	3901432	BEARING	350
171818	3901432	BEARING	354
171819	3901433	BEARING	350
171819	3901433	BEARING	354
171820	3901434	BEARING	350
171820	3901434	BEARING	354
171821	3945917	SET	349
171821	3945917	KIT	372
171822	3945918	SET	349
171823	3945919	SET	349
171824	3945920	SET	349
171825	3802214	SET	349
171860	AR4220	SET	397
171865	4073137	BEARING	397

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
171866	4025120	KIT	217
171866	4025120	KIT	262
171866	4025120	KIT	262
171867	4025121	KIT	217
171868	4025122	KIT	217
171869	4025123	KIT	217
171875	205840	BEARING	383
171876	205841	BEARING	383
171877	205842	BEARING	383
171880	AR12250	KIT	378
171881	AR12251	KIT	378
171882	AR12252	KIT	378
171885	3047390	BEARING	383
171886	3047391	BEARING	383
171887	3047392	BEARING	383
171890	189770	BEARING	395
171891	189771	BEARING	395
171892	189772	BEARING	395
171893	189773	BEARING	395
171895	**3966244**	**BEARING**	**352**
171895	**3966244**	**BEARING**	**354**
171896	**3966245**	**BEARING**	**352**
171896	**3966245**	**BEARING**	**354**
171897	**3966246**	**BEARING**	**352**
171897	**3966246**	**BEARING**	**354**
171898	**3966247**	**BEARING**	**352**
171898	**3966247**	**BEARING**	**354**
171899	**3966248**	**BEARING**	**352**
171899	**3966248**	**BEARING**	**354**
171900	AR12270	KIT	378
171905	205112	WASHER	378
171910	AR12271	KIT	378
171915	**N/A**	**KIT**	**352**
171915	**N/A**	**KIT**	**355**
171916	**4089804**	**KIT**	**352**
171916	**4089804**	**KIT**	**355**
171917	**4089805**	**KIT**	**352**
171917	**4089805**	**KIT**	**355**
171918	**4089806**	**KIT**	**352**
171918	**4089806**	**KIT**	**355**
171919	**4089807**	**KIT**	**352**
171919	**4089807**	**KIT**	**355**
171920	AR12272	KIT	378
171925	3018210	KIT	378
171935	3018211	KIT	378
171940	3001708	BEARING	378
171945	3018212	KIT	378
171950	3001709	WASHER	378
171952	N/A	KIT	274
171952	N/A	KIT	282
171952	N/A	KIT	294
171952	N/A	KIT	308
171952	N/A	KIT	329
171955	N/A	KIT	274
171955	N/A	KIT	294
171955	N/A	KIT	329
171958	N/A	KIT	274
171958	N/A	KIT	294
171958	N/A	KIT	329
171961	N/A	KIT	274
171961	N/A	KIT	294
171961	N/A	KIT	329
171964	N/A	KIT	274
171964	N/A	KIT	294
171964	N/A	KIT	329
171970	4089139	KIT	189
171970	4089139	KIT	204
171980	3800298	KIT	204
171980	3800298	KIT	182
171980	3800298	KIT	202
171984	4089845	KIT	182
171987	4089846	KIT	182
171990	4089405	KIT	189
171990	4089405	KIT	186
171990	4089405	KIT	204
171990	4089405	KIT	202
171992	4090016	KIT	189
171992	4090016	KIT	186
171994	4090017	KIT	189
171994	4090017	KIT	186
172029	2831066	COLLAR	323
172029	2831066	COLLAR	321
172030	4934418	GEAR	323
172031	4892438	GEAR	323
172031	4892438	GEAR	321
172035	4934419	GEAR	323
172036	4893386	GEAR	323
172040	3945528	BEARING	323
172040	3945528	BEARING	321
172041	3945664	BEARING	323
172041	3945664	BEARING	321
172042	3945665	BEARING	323
172042	3945665	BEARING	321
172043	3945666	BEARING	323
172043	3945666	BEARING	321
172044	3945667	BEARING	323
172044	3945667	BEARING	321
172045	288207	KIT	186
172048	4376360	KIT	186
172051	4376361	KIT	186
172080	N/A	KIT	329
172083	N/A	KIT	329
172086	N/A	KIT	329
172089	N/A	KIT	329
172092	N/A	KIT	329
180030	3048294	LEVER	57
180031	3048296	LEVER	57
180100	3917998	PUMP	365
180102	3928143	PUMP	278
180102	3928143	PUMP	301
180103	3918076	PUMP	278
180103	3918076	PUMP	301
180104	3918000	PUMP	301
180105	3936316	PUMP	365
180106	4935005	PUMP	365
180106	4935005	PUMP	332
180107	4988748	PUMP	332
180108	4988769	PUMP	278
180110	3034217	PUMP	161
180111	**4935006**	**ASSEMBLY**	**332**

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
180112	4943048	PUMP	332
180113	**3990082**	**KIT**	**332**
180114	**4943049**	**PUMP**	**332**
180115	**4935013**	**PUMP**	**332**
180116	**4935014**	**PUMP**	**193**
180117	**4935092**	**PUMP**	**193**
180117	**4935092**	**PUMP**	**332**
180118	**4935093**	**ASSEMBLY**	**193**
180119	**4935094**	**PUMP**	**193**
180120	217196	VALVE	245
180120	217196	VALVE	161
180121	**3914284**	**SPACER**	**278**
180121	**3914284**	**SPACER**	**365**
180121	**3914284**	**SPACER**	**301**
180122	**5260632**	**PUMP**	**332**
180123	4954880	ASSEMBLY	161
180130	3931380	GEAR	268
180130	3931380	GEAR	347
180131	3931382	GEAR	287
180189	4903523	ACTUATOR	365
180190	**3408324**	**ACTUATOR**	**161**
180191	**3408328**	**ACTUATOR**	**57**
180198	**3931570**	**SOLENOID**	**300**
180199	3035738	VALVE	390
180200	3035342	VALVE	57
180201	3035346	VALVE	57
180202	3053430	VALVE	57
180203	3045883	VALVE	57
180204	3054608	VALVE	161
180205	3013036	SHAFT	57
180206	3076343	VALVE	161
180207	3035344	VALVE	57
180208	3018453	VALVE	57
180208	3018453	VALVE	161
180209	**5267132**	**SOLENOID**	**332**
180210	3054610	SOLENOID	57
180210	3054610	SOLENOID	161
180211	3054611	SOLENOID	57
180211	3054611	SOLENOID	161
180212	3921978	SOLENOID	377
180213	3921980	SOLENOID	377
180214	3935650	SOLENOID	332
180215	3935649	SOLENOID	364
180215	3935649	SOLENOID	300
180216	3991624	SOLENOID	332
180217	3935458	SOLENOID	279
180218	**3991167**	**SOLENOID**	**332**
180219	**3991168**	**SOLENOID**	**332**
180220	4089574	SOLENOID	364
180220	4089574	SOLENOID	300
180221	3800687	SOLENOID	279
180222	**3928160**	**SOLENOID**	**364**
180223	**3939019**	**SOLENOID**	**364**
180224	**3928161**	**SOLENOID**	**364**
180225	**129768**	**WASHER**	**161**
180226	3932529	SOLENOID	332
180230	129839	SHIELD	57
180230	129839	SHIELD	161
180233	**3033740**	**VALVE**	**161**
180245	3013811	DIAPHRAGM	390
180250	3965494	BRACKET	364
180250	3965494	BRACKET	300
180251	3937234	BRACKET	279
180252	3937235	BRACKET	279
180253	3937236	BRACKET	279
180270	3054260	CONNECTION	41
180280	3916289	HOSE	303
180280	3916289	HOSE	335
180290	205462	LINK	390
180291	3006696	CLAMP	390
180310	3918539	ASSEMBLY	365
180310	3918539	LINE	332
180320	3909696	MANIFOLD	301
180840	3090194	BELLOWS	391
180882	5333480	TENSIONER	433
180883	**4987964**	**TENSIONER**	**433**
180884	**3947574**	**TENSIONER**	**433**
180885	3682946	TENSIONER	433
180886	3935819	TENSIONER	433
180887	3937555	TENSIONER	433
180888	3973822	TENSIONER	433
180889	4059202	TENSIONER	433
180890	3936197	TENSIONER	433
180891	3936201	TENSIONER	433
180891E	**3936201**	**TENSIONER**	**433**
180892	3936213	TENSIONER	433
180892E	**3936213**	**TENSIONER**	**433**
180893	3937556	TENSIONER	433
180894	3400885	TENSIONER	237
180894	3400885	TENSIONER	433
180895	4920105	TENSIONER	433
180896	**2891940**	**TENSIONER**	**433**
180897	**4059203**	**TENSIONER**	**433**
180898	**4059203**	**TENSIONER**	**433**
180900	AR8851	IDLER	49
180901	3064919	IDLER	53
180902	3062931	ASSEMBLY	55
180903	3066330	ASSEMBLY	158
180904	3062602	IDLER	237
180905	3005133	DRIVE	67
180905	3005133	DRIVE	167
180906	3000171	SHAFT	67
180906	3000171	SHAFT	167
180907	199410	SHAFT	51
180908	3050394	SHAFT	49
180908	3050394	SHAFT	53
180909	3050396	SHAFT	49
180909	3050396	SHAFT	53
180910	3047469	SHAFT	55
180911	3064392	ASSEMBLY	159
180912	3065000	ASSEMBLY	55
180913	3064389	SHAFT	159
180914	3064390	SLINGER	159
180915	AR45724	ASSEMBLY	67
180915	AR45724	ASSEMBLY	167
180916	3064974	ASSEMBLY	55
180917	3819632	SHAFT	235
180918	3042827	SHAFT	390
180919	3040832	SHAFT	390
180920	3078307	DRIVE	167

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
180921	3076500	SHAFT	167
180922	**3400813**	**SHAFT**	**235**
180923	N/A	KIT	67
180923	N/A	KIT	167
180925	142689	GEAR	67
180925	142689	GEAR	167
180926	3000174	COUPLING	67
180926	3000174	COUPLING	243
180926	3000174	COUPLING	167
180926	3000174	COUPLING	417
180926	3000174	COUPLING	415
180927	162426	SPIDER	67
180927	162426	SPIDER	57
180927	162426	SPIDER	167
180928	199349	SLEEVE	67
180928	199349	SLEEVE	167
180928	199349	SLEEVE	415
180929	3046200	SPIDER	67
180929	3046200	SPIDER	57
180929	3046200	SPIDER	161
180929	3046200	SPIDER	167
180930	3000175	COUPLING	67
180930	3000175	COUPLING	167
180931	**212613**	**COUPLING**	**396**
180935	3910739	BEARING	281
180935	3910739	BEARING	377
180935	3910739	BEARING	313
180940	3077743	ARM	55
180941	3064201	PULLEY	55
180970	3078310	GEAR	167
180984	**3800232**	**KIT**	**73**
180985	N/A	KIT	75
180986	N/A	KIT	75
180990	3027653	RING	75
180991	200919	CLAMP	75
181000	3801916	KIT	73
181002	3062568	MANIFOLD	75
181002	3062568	MANIFOLD	169
181003	3065022	MANIFOLD	169
181004	3065024	MANIFOLD	75
181004	3065024	MANIFOLD	169
181005	N/A	KIT	169
181006	N/A	KIT	169
181010	3803271	KIT	75
181010	3803271	KIT	169
181011	N/A	KIT	169
181013	151478	MANIFOLD	393
181014	200566	MANIFOLD	393
181015	151489	MANIFOLD	393
181018	4003994	MANIFOLD	244
181019	3084656	MANIFOLD	244
181020	3896414	MANIFOLD	244
181025	3062566	MANIFOLD	75
181026	3071485	KIT	75
181030	3901683	MANIFOLD	313
181160	3523980	SLINGER	390
181161	3591522	COLLAR	390
181169	**3599755**	**ACTUATOR**	**249**
181169	**3599755**	**ACTUATOR**	**368**
181169	**3599755**	**ACTUATOR**	**201**
181170	**3770742**	**VALVE**	**201**
181190	3575169	KIT	368
181190	3575169	KIT	368
181191	3803257	KIT	390
181192	**3801096**	**KIT**	**396**
181193	3792786	TURBOCHARGER	201
181194	3802770	TURBOCHARGER	303
181194	3802770	TURBOCHARGER	335
181194E	3802770	TURBOCHARGER	303
181194E	3802770	TURBOCHARGER	303
181194E	3802770	TURBOCHARGER	335
181194E	3802770	TURBOCHARGER	335
181195	3802778	TURBOCHARGER	303
181195	3802778	TURBOCHARGER	335
181195E	3802778	TURBOCHARGER	303
181195E	3802778	TURBOCHARGER	303
181195E	3802778	TURBOCHARGER	335
181195E	3802778	TURBOCHARGER	335
181196	3800419	TURBOCHARGER	170
181197	3803389	TURBOCHARGER	249
181198	4040844	TURBOCHARGER	201
181199	4090042	KIT	201
181200	3800471	TURBOCHARGER	250
181200	3800471	TURBOCHARGER	249
181200E	3800471	TURBOCHARGER	250
181200E	3800471	TURBOCHARGER	249
181201	4043226	TURBOCHARGER	201
181202	4955306	KIT	201
181203	**3803710**	**TURBOCHARGER**	**250**
181203	**3803710**	**TURBOCHARGER**	**249**
181204	**4955305**	**TURBOCHARGER**	**201**
181204E	**4955305**	**TURBOCHARGER**	**201**
181204E	**2881993**	**TURBOCHARGER**	**201**
181205	**3802651**	**TURBOCHARGER**	**368**
181205	**3802651**	**TURBOCHARGER**	**386**
181206	4090050	TURBOCHARGER	303
181207	**3802619**	**TURBOCHARGER**	**368**
181208	4955156	TURBOCHARGER	335
181209	3803722	TURBOCHARGER	170
181210	2881998	TURBOCHARGER	201
181801	**3022471**	**PUMP**	**49**
181803	AR4284	ASSEMBLY	51
181803E	AR4284	ASSEMBLY	51
181804	BM76506	PUMP	393
181805	3801708	PUMP	53
181806	3801715	PUMP	49
181807	3801788	PUMP	53
181808	3803138	PUMP	55
181809	3801787	PUMP	53
181812	3803605	ASSEMBLY	158
181813	3285324	PUMP	363
181815	3802970	PUMP	278
181815	3802970	PUMP	299
181817	3285414	PUMP	331
181818	3802081	PUMP	363
181819	3973114	PUMP	363
181819E	3973114	PUMP	363
181820	3803402	ASSEMBLY	233
181821	3803403	ASSEMBLY	235
181821-001	3882615	HOUSING	235

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
181821-100	4972861	ASSEMBLY	235
181821E	**3803403**	**ASSEMBLY**	**235**
181822	4089647	KIT	363
181822E	4089647	KIT	363
181823	3286278	KIT	331
181824	3800976	KIT	363
181825	214836	CORE	69
181827	3068724	CORE	69
181827E	3068724	CORE	69
181829	3045913	THERMOSTAT	247
181830	201737	KIT	49
181830	201737	KIT	247
181830	201737	KIT	159
181830-001	201737	THERMOSTAT	50
181830-001	201737	THERMOSTAT	247
181830-001	201737	THERMOSTAT	159
181831	3335550	KIT	159
181833	204586	KIT	49
181833	204586	KIT	247
181835	146076	KIT	49
181836	135675	KIT	49
181836	135675	KIT	235
181837	146077	KIT	49
181838	3064454	THERMOSTAT	55
181839	3064453	THERMOSTAT	55
181840	3049000	THERMOSTAT	55
181841	3064455	THERMOSTAT	55
181842	3061649	THERMOSTAT	55
181843	3917324	THERMOSTAT	278
181843	3917324	THERMOSTAT	299
181843E	3917324	THERMOSTAT	278
181843E	3917324	THERMOSTAT	299
181844	3802968	KIT	278
181844	3802968	KIT	299
181845	3033677	ASSEMBLY	49
181845	3033677	ASSEMBLY	55
181845	3033677	ASSEMBLY	53
181845	3033677	SEAL	51
181845	3033677	SEAL	233
181846	196844	SPACER	49
181846	196844	SPACER	55
181846	196844	SPACER	53
181846	196844	SPACER	51
181846	196844	SPACER	159
181847	3803362	KIT	159
181848	3803139	KIT	55
181849	3801710	KIT	49
181849	3801710	KIT	53
181850	3801712	KIT	53
181851	3801714	KIT	49
181852	3801716	KIT	49
181853	3803140	KIT	55
181854	3803363	KIT	159
181856	3803202	KIT	53
181857	3803261	KIT	235
181857A	3803261	KIT	235
181858	3803153	KIT	390
181859	3801179	KIT	233
181859A	3801179	KIT	233
181860	3928639	THERMOSTAT	363
181861	3928640	THERMOSTAT	363
181862	3913028	THERMOSTAT	363
181863	4090093	THERMOSTAT	331
181864	3023512	VALVE	63
181864	3023512	VALVE	61
181865	3059408	THERMOSTAT	65
181865	3059408	THERMOSTAT	239
181865	3059408	THERMOSTAT	241
181865	3059408	THERMOSTAT	165
181866	3954830	KIT	331
181867	AR9931	KIT	395
181868	3800974	ASSEMBLY	363
181869	3010646	IMPELLER	49
181870	208134	IMPELLER	49
181872	3045801	IMPELLER	55
181872	3045801	IMPELLER	159
181873	3602788	IMPELLER	53
181874	3035679	IMPELLER	233
181874	3035679	IMPELLER	235
181874A	3035679	IMPELLER	233
181874A	3035679	IMPELLER	235
181875	4920465	PUMP	192
181876	4923759	PUMP	192
181877	4089908	KIT	192
181878	3800984	PUMP	331
181879	4089910	KIT	192
181880	3934410	VALVE	377
181880	3934410	VALVE	367
181881	4920464	PUMP	192
181882	4089909	KIT	192
181883	4955706	PUMP	235
181883E	4955706	PUMP	235
181884	3967195	KIT	331
181885	3967192	THERMOSTAT	331
181886	4952630	THERMOSTAT	241
181886	4952630	THERMOSTAT	165
181887	4973373	THERMOSTAT	247
181887	4973373	THERMOSTAT	159
181887	4973373	THERMOSTAT	192
181887	4973373	THERMOSTAT	331
181888	3928499	THERMOSTAT	331
181889	4891252	PUMP	331
181890	3940632	THERMOSTAT	363
181891	3039396	SPRING	55
181892	3046865	SEAT	55
181893E	4972862	PUMP	235
181895	3023473	PULLEY	67
181895	3023473	PULLEY	167
181896	211918	PULLEY	13
181897	**3067999**	**PULLEY**	**159**
181898	3007075	PULLEY	49
181902	4090022	KIT	192
181903	**3067997**	**PULLEY**	**158**
181904	**3684449**	**KIT**	**192**
181906	**3946847**	**THERMOSTAT**	**331**
181907	**3946849**	**KIT**	**331**
181908	**3098697**	**PUMP**	**159**
181909	**3804826**	**KIT**	**158**
181911	**3683653**	**HOUSING**	**192**
181912	**5262784**	**PUMP**	**331**

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
181913	**4955394**	**KIT**	**299**
181913	**4955394**	**KIT**	**331**
181914	**3684450**	**ASSEMBLY**	**192**
181918	3038991	GEAR	233
181918	3038991	GEAR	235
181919	**3084024**	**HOUSING**	**159**
181920	130394	CONNECTION	42
181921	3024666	TUBE	63
181922	**3285325**	**PUMP**	**363**
181923	**3800975**	**KIT**	**363**
181925	**4952629**	**THERMOSTAT**	**195**
181926	**N/A**	**KIT**	**195**
181927	**5282375**	**THERMOSTAT**	**363**
181928	**5273379**	**KIT**	**363**
181929	N/A	KIT	192
181930	**4318947**	**THERMOSTAT**	**192**
181931	**5260263**	**PUMP**	**331**
181932	**2881804**	**KIT**	**331**
181933	**3687130**	**ASSEMBLY**	**192**
181934	**4309417**	**KIT**	**363**
181935	**3973116**	**PUMP**	**363**
181936	4955708	KIT	235
181937	4972850	PUMP	235
181938	**2881688**	**KIT**	**331**
181939	**5257844**	**PUMP**	**331**
181940	**3864178**	**THERMOSTAT**	**331**
181941	3076491	TUBE	159
181942	**4309344**	**KIT**	**363**
181943	5291444	ASSEMBLY	363
181945	3911320	BLADE	423
181945	3911320	BLADE	73
191815	206904	KEY	378
191830	3902332	KEY	275
191830	3902332	KEY	361
191830	3902332	KEY	298
191830	3902332	KEY	330
191840	3804634	CAMSHAFT	142
191841	3102901	CAMSHAFT	213
191842	3804821	KIT	213
191850	3021601	KEY	33
191850	3021601	KEY	142
191851	3021592	KEY	33
191851	3021592	KEY	142
191852	3021596	KEY	33
191852	3021596	KEY	142
191853	3021597	KEY	33
191853	3021597	KEY	142
191854	3021595	KEY	33
191854	3021595	KEY	142
191855	3021598	KEY	33
191855	3021598	KEY	142
191856	3021600	KEY	33
191856	3021600	KEY	142
191857	3965966	TAPPET	361
191858	3417645	FOLLOWER	227
191859	3947759	TAPPET	330
191860	3925031	TAPPET	275
191860	3925031	TAPPET	361
191860	3925031	TAPPET	298
191860E	3925031	TAPPET	275
191860E	3925031	TAPPET	361
191860E	3925031	TAPPET	298
191861	3945866	TAPPET	361
191862	3942565	TAPPET	361
191863	**3934167**	**CAMSHAFT**	**361**
191864	**3934168**	**ASSEMBLY**	**361**
191865	**3966431**	**CAMSHAFT**	**361**
191866	**3966430**	**ASSEMBLY**	**361**
191867	**3944474**	**CAMSHAFT**	**361**
191868	**3944984**	**ASSEMBLY**	**361**
191869	**4083012**	**CAMSHAFT**	**213**
191870	4953165	GEAR	378
191872	**3348374**	**CAMSHAFT**	**213**
191873	**4022816**	**CAMSHAFT**	**213**
191874	**3411327**	**CAMSHAFT**	**142**
191875	**3968381**	**CAMSHAFT**	**330**
191877	**3944298**	**GEAR**	**361**
191878	**3401439**	**GEAR**	**213**
191879	**3929028**	**GEAR**	**330**
191880	215966	GEAR	33
191881	3942755	GEAR	330
191882	3002901	GEAR	33
191882	3002901	GEAR	142
191883	3073343	GEAR	142
191884	5273732	GEAR	330
191885	3918777	GEAR	361
191886	**3803738**	**CAMSHAFT**	**142**
191887	**3283179**	**CAMSHAFT**	**330**
191888	**3280102**	**KIT**	**330**
191889	**4101476**	**CAMSHAFT**	**183**
191890	4025134	KIT	330
191891	4955389	KIT	330
191892	**3066882**	**CAMSHAFT**	**390**
191893	**3979506**	**CAMSHAFT**	**330**
191894	**4059333**	**CAMSHAFT**	**183**
191895	**3803900**	**CAMSHAFT**	**142**
191896	68193	PLUG	33
191896	68193	PLUG	142
191897	**3097267**	**CAMSHAFT**	**213**
191898	3929885	CAMSHAFT	275
191899	3929886	CAMSHAFT	298
191901	**3895801**	**CAMSHAFT**	**213**
191902	3895679	CAMSHAFT	213
191902E	3895679	CAMSHAFT	213
191903	3277463	CAMSHAFT	392
191904	3278029	CAMSHAFT	392
191906	3277462	CAMSHAFT	392
191907	3278031	CAMSHAFT	392
191908	3801426	CAMSHAFT	33
191909	3026972	CAMSHAFT	33
191909E	3026972	CAMSHAFT	33
191911	3914639	CAMSHAFT	298
191911E	3914639	CAMSHAFT	298
191912	3924471	CAMSHAFT	361
191912E	3924471	CAMSHAFT	361
191913	3801668	CAMSHAFT	33
191913E	3801668	CAMSHAFT	33
191914	3929039	CAMSHAFT	275
191914E	3929039	CAMSHAFT	275
191915	3023177	CAMSHAFT	33

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
191915E	3023177	CAMSHAFT	33
191916	3800855	CAMSHAFT	142
191916E	3800855	CAMSHAFT	142
191918	3084568	CAMSHAFT	213
191918E	3084568	CAMSHAFT	213
191919	4004556	CAMSHAFT	213
191920	3801030	CAMSHAFT	33
191920E	3801030	CAMSHAFT	33
191921	3066877	CAMSHAFT	390
191921E	3066877	CAMSHAFT	390
191922E	3076767	CAMSHAFT	390
191923	3929734	CAMSHAFT	330
191923E	**3929734**	**CAMSHAFT**	**330**
191924	3049024	CAMSHAFT	33
191924E	3049024	CAMSHAFT	33
191925	3801763	CAMSHAFT	33
191925E	3801763	CAMSHAFT	33
191926	3037523	CAMSHAFT	213
191926E	3037523	CAMSHAFT	213
191927	3801749	CAMSHAFT	33
191927E	3801749	CAMSHAFT	33
191928	3801448	CAMSHAFT	33
191929	3608786	CAMSHAFT	33
191929E	3608786	CAMSHAFT	33
191930	3608787	CAMSHAFT	33
191930E	3608787	CAMSHAFT	33
191931	199180	CAMSHAFT	395
191932	215580	CAMSHAFT	395
191933	3895792	CAMSHAFT	213
191934	3938163	CAMSHAFT	361
191934E	**3938163**	**CAMSHAFT**	**361**
191935	3942567	CAMSHAFT	330
191935E	**3942567**	**CAMSHAFT**	**330**
191936	4930770	CAMSHAFT	330
191937	4059331	CAMSHAFT	183
191938	**4101432**	**CAMSHAFT**	**183**
191939	3275779	KIT	392
191940	3803512	KIT	41
191941	3803524	KIT	41
191941E	3803524	KIT	41
191942	3803519	KIT	41
191943	3803310	KIT	229
191944	3803730	KIT	229
191945	3803515	KIT	385
191946	3803529	KIT	385
191947	3328786	GUIDE	229
191947E	**3328786**	**GUIDE**	**229**
191948	3417778	VALVE	229
191949	3417779	VALVE	229
191950	135957	VALVE	40
191950E	135957	VALVE	40
191951	150288	VALVE	393
191952	216707	VALVE	395
191953	3068519	VALVE	152
191954	3084045	VALVE	152
191955	145701	VALVE	41
191955E	145701	VALVE	41
191956	3040830	VALVE	41
191957	144911	VALVE	393
191958	138887	VALVE	395
191959	3069672	VALVE	152
191960	3070473	VALVE	152
191961	3166410	VALVE	152
191962	3035110	VALVE	385
191962E	3035110	VALVE	385
191963	3034827	VALVE	385
191963E	3034827	VALVE	385
191964	3275356	VALVE	392
191965	3818520	VALVE	229
191966	3883287	VALVE	229
191967	3902254	VALVE	359
191967E	3902254	VALVE	359
191968	3920868	VALVE	277
191968	3920868	VALVE	297
191968E	3920868	VALVE	277
191968E	3920868	VALVE	297
191969	3802085	KIT	359
191970	3802356	KIT	277
191970	3802356	KIT	297
191971	3801357	KIT	229
191972	3803348	KIT	229
191973	3803528	KIT	385
191974	3803726	KIT	153
191975	3803770	KIT	153
191976	207241	VALVE	385
191976E	207241	VALVE	385
191977	3033234	VALVE	229
191978	3052820	VALVE	385
191979	3915506	VALVE	359
191979E	3915506	VALVE	359
191980	3920867	VALVE	277
191980	3920867	VALVE	297
191980E	3920867	VALVE	277
191980E	3920867	VALVE	297
191982	3802275	KIT	359
191983	3802355	KIT	277
191983	3802355	KIT	297
191984	3801356	KIT	229
191985	3803360	KIT	152
191986	3803518	KIT	385
191987	3803854	KIT	152
191988	156541	SEAL	392
191989	3064281	SEAL	153
191991	3915707	SEAL	359
191992	69965	INSERT	393
191993	195000	INSERT	392
191994	200354	INSERT	41
191995	3800891	KIT	153
191996	212217	INSERT	395
191997	3026296	INSERT	385
191997E	**3026296**	**INSERT**	**385**
191998	3919038	SEAL	359
191999	3052819	INSERT	385
192000	3054590	INSERT	41
192000	3054590	INSERT	153
192001	3054600	INSERT	41
192002	3076515	INSERT	153
192003	3906854	INSERT	277
192003	3906854	INSERT	297
192003E	**3906854**	**INSERT**	**277**

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page	PAI Reference	OEM Reference	Description	Page
192003E	**3906854**	**INSERT**	**297**	**192039E**	**3904408**	**GUIDE**	**297**
192004	3908830	INSERT	358	**192039E**	**3904408**	**GUIDE**	**297**
192004E	**3908830**	**INSERT**	**358**	192040	3904409	GUIDE	277
192005	3921640	SEAL	277	192040	3904409	GUIDE	297
192005	3921640	SEAL	297	**192040E**	**3904409**	**GUIDE**	**277**
192005	3921640	SEAL	317	**192040E**	**3904409**	**GUIDE**	**297**
192006	154390	INSERT	392	192041	3906206	GUIDE	277
192007	205093	INSERT	385	192041	3906206	GUIDE	297
192007E	**205093**	**INSERT**	**385**	**192041E**	**3906206**	**GUIDE**	**277**
192008	212940	INSERT	395	**192041E**	**3906206**	**GUIDE**	**297**
192009	3017759	INSERT	41	192042	3923564	GUIDE	358
192009E	**3017759**	**INSERT**	**41**	**192042E**	**3923564**	**GUIDE**	**358**
192010	3328781	SEAL	229	192043	111446	SPRING	393
192011	3028070	INSERT	228	192044	146731	SPRING	395
192012	3928174	INSERT	358	192045	146732	SPRING	395
192012E	**3928174**	**INSERT**	**358**	192047	211999	SPRING	40
192013	3069692	INSERT	153	192048	3033232	SPRING	229
192014	3084020	INSERT	153	192049	3033233	SPRING	229
192015	3904105	INSERT	277	192050	3081212	SPRING	40
192015	3904105	INSERT	297	192051	3070460	SPRING	153
192015E	**3904105**	**INSERT**	**277**	192052	3629006	SPRING	385
192015E	**3904105**	**INSERT**	**277**	192053	3630628	SPRING	385
192015E	**3904105**	**INSERT**	**297**	192054	3900276	SPRING	277
192015E	**3904105**	**INSERT**	**297**	192054	3900276	SPRING	297
192016	3904716	INSERT	358	192055	3906412	SPRING	359
192017	127554	COLLET	40	192056	3081081	ROTATOR	385
192018	205091	COLLET	385	192057	146733	GUIDE	395
192019	3072369	COLLET	153	192058	155441	RETAINER	392
192020	3275354	COLLET	229	192059	3900299	RETAINER	277
192020	3275354	COLLET	392	192059	3900299	RETAINER	297
192021	3940123	COLLET	317	192060	170296	RETAINER	41
192022	3900250	COLLET	277	192061	205094	RETAINER	385
192022	3900250	COLLET	297	192062	3042745	SEAT	40
192023	3901177	COLLET	359	192063	123558	GUIDE	41
192024	S-2037	COLLET	393	192063	123558	GUIDE	229
192025	66890	GUIDE	393	192064	205169	GUIDE	385
192025E	**66890**	**GUIDE**	**393**	192067	3030038	ASSEMBLY	41
192025E	**66890**	**GUIDE**	**393**	192067	3030038	ASSEMBLY	35
192026	138937	GUIDE	41	**192068**	**3070175**	**VALVE**	**229**
192026	138937	GUIDE	395	192069	3086362	CROSSHEAD	385
192027	3006456	GUIDE	41	192070	168209	PUSHROD	392
192027E	**3006456**	**GUIDE**	**41**	192071	169351	PUSHROD	395
192028	3018818	GUIDE	385	192072	3058471	PUSHROD	45
192029	3033314	GUIDE	229	192073	3003602	PUSHROD	395
192030	3050369	GUIDE	41	192074	3017961	PUSHROD	379
192030E	**3050369**	**GUIDE**	**41**	192075	3046418	PUSHROD	45
192031	3064312	GUIDE	153	192076	3046419	PUSHROD	397
192031E	**3064312**	**GUIDE**	**153**	192077	3046420	PUSHROD	45
192032	3072321	GUIDE	153	192078	3046430	PUSHROD	45
192033	3072322	GUIDE	153	192079	3046431	PUSHROD	45
192034	3073512	GUIDE	229	192080	3046432	PUSHROD	397
192034E	**3073512**	**GUIDE**	**229**	192081	3053377	PUSHROD	45
192035	3074118	GUIDE	229	192082	3057139	PUSHROD	379
192036	3201311	GUIDE	385	192083	169630	TUBE	392
192036E	**3201311**	**GUIDE**	**385**	192084	202605	TUBE	393
192038	3278173	GUIDE	392	192085	3070486	TUBE	41
192039	3904408	GUIDE	277	192085	3070486	TUBE	229
192039	3904408	GUIDE	297	192085	3070486	SLEEVE	153
192039E	**3904408**	**GUIDE**	**277**	192086	3071147	TUBE	41
192039E	**3904408**	**GUIDE**	**277**	192087	195001	INSERT	392

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
192088	195002	INSERT	392
192089	195003	INSERT	392
192090	154391	INSERT	392
192091	154392	INSERT	392
192092	154393	INSERT	392
192093	3032291	INSERT	41
192094	3032287	INSERT	41
192095	3032288	INSERT	41
192096	3032289	INSERT	41
192097	3028071	INSERT	228
192098	3028072	INSERT	228
192099	3028073	INSERT	228
192100	3028074	INSERT	228
192101	3957914	ROTATOR	277
192101	3957914	ROTATOR	297
192102	3972757	RETAINER	359
192103	3680884	RETAINER	191
192104	3412895	KIT	191
192105	3895860	SPRING	229
192106	3916588	SPRING	359
192107	4003966	SEAL	229
192108	3955393	SEAL	317
192109	3955394	SEAL	317
192110	3957912	SEAL	297
192111	3945438	SEAL	317
192112	3942989	SEAL	317
192113	3892170	PUSHROD	227
192114	3892251	PUSHROD	227
192115	3066291	PUSHROD	155
192116	3067932	PUSHROD	155
192117	3073499	PUSHROD	155
192118	3948578	SEAL	359
192119	4026791	SEAL	191
192120	3058469	PUSHROD	45
192121	3905194	PUSHROD	361
192122	3284377	PUSHROD	277
192122	3284377	PUSHROD	297
192123	3412352	TUBE	191
192124	3930057	SEAL	359
192125	185138	RETAINER	57
192126	4026657	GUIDE	191
192126E	**4026657**	**GUIDE**	**191**
192126E	**4026657**	**GUIDE**	**191**
192127	3417717	TUBE	229
192128	3926700	SPRING	277
192128	3926700	SPRING	297
192129	4934063	GUIDE	358
192130	3084041	INSERT	153
192131	3068390	PUSHROD	227
192132	3948102	GUIDE	358
192133	**3941253**	**PUSHROD**	**330**
192134	**3076046**	**PUSHROD**	**227**
192135	**3932453**	**SPRING**	**277**
192135	**3932453**	**SPRING**	**297**
192135	**3932453**	**SPRING**	**317**
192136	3901693	CLAMP	343
192137	3940735	VALVE	317
192138	3802924	KIT	317
192139	3940734	VALVE	317
192140	3802967	KIT	317
192141	4955210	KIT	317
192142	**3964715**	**PUSHROD**	**361**
192143	**2872717**	**SEAL**	**206**
192144	**3033230**	**SEAT/GUIDE**	**229**
192145	4965868	VALVE	191
192146	**3394112**	**VALVE**	**41**
192147	4101454	VALVE	191
192148	**3606856**	**VALVE**	**229**
192149	3943198	RETAINER	317
192150	3927254	VALVE	359
192151	3802812	KIT	359
192152	3927255	VALVE	359
192153	3968183	VALVE	317
192154	3802813	KIT	359
192155	3679551	SPRING	191
192156	**3940279**	**SPRING**	**359**
192157	**4946374**	**SEAL**	**359**
192158	**3033231**	**RETAINER**	**229**
192159	**3009109**	**PLATE**	**385**
192160	3104445	INSERT	191
192161	4356366	SEAL	191
192162	3944452	RETAINER	359
192163	**4026338**	**RETAINER**	**153**
192165	3679659	INSERT	191
192170	3088978	INSERT	228
192175	3088980	INSERT	228
192181	4936080	SPRING	317
192182	**3925863**	**GUIDE**	**358**
192183	**3925863**	**GUIDE**	**358**
192184	**3925667**	**SPRING**	**277**
192184	**3925667**	**SPRING**	**297**
192185	3943449	INSERT	317
192186	3939719	INSERT	317
192187	3939720	INSERT	317
192188	3939721	INSERT	317
192190	3943450	INSERT	317
192191	3939723	INSERT	317
192192	3939724	INSERT	317
192193	3939725	INSERT	317
192195	3933088	INSERT	358
192200	3927256	INSERT	358
192205	3940152	INSERT	358
192210	3968074	INSERT	358
192213	**3922714**	**VALVE**	**277**
192213	**3922714**	**VALVE**	**297**
192214	**3802659**	**KIT**	**277**
192214	**3802659**	**KIT**	**297**
192215	3942588	VALVE	359
192216	3800340	KIT	359
192217	3942589	VALVE	359
192218	3800341	KIT	359
192219	**3922713**	**VALVE**	**277**
192219	**3922713**	**VALVE**	**297**
192220	**3802658**	**KIT**	**277**
192220	**3802658**	**KIT**	**297**
192221	**3922715**	**INSERT**	**277**
192221	**3922715**	**INSERT**	**297**
192225	**3922716**	**INSERT**	**277**
192225	**3922716**	**INSERT**	**297**
192229	**4004806**	**INSERT**	**228**

PAI Copyright 2017

New Parts are in BOLD text

PAI Reference	OEM Reference	Description	Page
192233	**3394116**	**INSERT**	**41**
192233	**3394116**	**INSERT**	**153**
192270	4981794	VALVE	359
192271	5259420	KIT	359
192272	4981795	VALVE	359
192273	5259419	KIT	359
195020	**3394117**	**ADAPTER**	**41**
195020	**3394117**	**ADAPTER**	**153**
195020	3394117	ADAPTER	385
202000	211915	DAMPER	13
202005	3101655	DAMPER	13
202005	3101655	DAMPER	139
202005E	3101655	DAMPER	13
202005E	3101655	DAMPER	139
202006	3925566	DAMPER	349
202007	4101884	DAMPER	182
202010	217321	DAMPER	13
202012	**3957297**	**DAMPER**	**289**
202013	**3924435**	**DAMPER**	**289**
202015	217322	DAMPER	13
202021	3914454	DAMPER	271
202021	3914454	DAMPER	289
202022	3918999	DAMPER	289
202022	3918999	DAMPER	323
202026	**3925570**	**DAMPER**	**349**
202027	3161942	DAMPER	217
209930	3054532	BARREL/PLUNGER	397
209931	3047964	BARREL/PLUNGER	57
209965X	**5263262**	**INJECTOR**	**318**
209970X	**3652542**	**INJECTOR**	**162**
209972X	3054228	ASSEMBLY	57
209973X	**3054228**	**INJECTOR**	**57**
209974X	**3411759**	**INJECTOR**	**162**
209975X	**3411752**	**INJECTOR**	**245**
209976X	**3411753**	**INJECTOR**	**245**
209977X	**3411758**	**INJECTOR**	**245**
209978	**3054254**	**ASSEMBLY**	**57**
209978X	**3054254**	**INJECTOR**	**57**
209979	**3054250**	**ASSEMBLY**	**57**
209979X	**3054250**	**INJECTOR**	**57**
209980	3054219	ASSEMBLY	57
209980X	**3054219**	**INJECTOR**	**57**
209981X	**3411756**	**INJECTOR**	**245**
209982X	**3411767**	**ASSEMBLY**	**162**
209983X	**4088327**	**ASSEMBLY**	**206**
209984X	**4088665**	**ASSEMBLY**	**206**
209985X	**3069767**	**ASSEMBLY**	**57**
209986X	**3047973**	**ASSEMBLY**	**57**
209987X	**3411760**	**INJECTOR**	**162**
209988X	**3411761**	**INJECTOR**	**162**
209990X	**3411763**	**INJECTOR**	**162**
209991X	**3411764**	**INJECTOR**	**162**
209993X	**3411766**	**INJECTOR**	**162**
210000	3012538	INJECTOR	57
210001	3012536	INJECTOR	57
210002	3012537	INJECTOR	57
210003	3018813	INJECTOR	397
210004	3018862	INJECTOR	57
210005	3018814	INJECTOR	397
210025	3008706	SCREEN	57
210050	212607	SHAFT	397
210055	70690	DRIVER	397
219931	3801097	KIT	117
219932	3803042	KIT	117
219933	**3804557**	**KIT**	**249**
219934	**4042571**	**KIT**	**249**
219970	3521439	SLINGER	117
219971	3521440	COLLAR	117
219972	3521442	RING	117
220005	119810	PIN	417
220005	119810	PIN	415
220006	3045670	PISTON	418
220007	3045671	PISTON	418
220008	3045672	PISTON	418
220009	3045673	PISTON	418
220010	3801740	KIT	417
220011	3801741	KIT	417
220012	3801742	KIT	417
220013	N/A	KIT	417
220014	3803930	KIT	418
220015	3803931	KIT	418
220016	3803932	KIT	418
220017	3803933	KIT	418
220027	3559549	KIT	415
220028	3559557	KIT	415
220030	AR12719	KIT	417
220030-001	127940	VALVE	417
220030-002	128080	SPRING	417
220030-003	144948	VALVE	417
220030-004	183429	PLATE	417
220030-005	190334	SPRING	417
220030-006	3023101	SPRING	417
220030-007	109557	WASHER	417
220031	3046298	CAP	417
220032	191037	CAP	417
220033	3043945	SEAT	417
220034	145028	SEAT	417
220035	3801728	KIT	417
220036	3801733	KIT	417
220037	3801731	KIT	418
220038	3803766	KIT	415
220039	3803767	KIT	415
220040	4089238	KIT	206
220060	AR73350	SET	417
220061	AR73351	SET	417
220062	AR73352	SET	417
220063	AR73353	SET	417
220065	3803880	SET	415
220066	3803881	SET	415
220067	3803882	SET	415
220068	3803883	SET	415
220070	3803890	KIT	415
220071	3803891	KIT	415
220072	3803892	KIT	415
220073	3803893	KIT	415
220085	3558799	BODY	415
220086	3558830	HOUSING	415
220087	3558828	BODY	415
220088	184240	CAP	415
220090	3018151	ROD	417

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
220090	3018151	ROD	415
220100	153964	COVER	417
220102	3558762	HEAD	417
220103	4089208	HEAD	343
220125	3558665	VALVE	415
220126	3558664	VALVE	415
220127	3558899	RETAINER	415
220140	3559049	GASKET	415
220141	3559133	GASKET	415
321239	3J7354	O-RING	195
321241	5P7813	O-RING	315
321426	172205	O-RING	41
321426	2109246	O-RING	153
321426	2109246	O-RING	385
336060	1143364	SEAL	418
340082	3H5552	PLUG	191
342070	130914	WASHER	381
350401	9L6653	BELT	435
350402	4N8216	BELT	435
350403	9L6639	BELT	435
350404	9L6641	BELT	435
350405	9L6643	BELT	435
350406	4N2531	BELT	435
350407	9L6645	BELT	435
350408	6N6657	BELT	435
350409	4N8218	BELT	435
350410	9L6647	BELT	435
350411	9L6649	BELT	435
350412	6N6654	BELT	435
350413	4N8277	BELT	435
350414	6N6650	BELT	435
350415	7S9859	BELT	435
350450	9L6654	SET	435
350451	4N8217	SET	435
350452	9L6640	SET	435
350453	9L6642	SET	435
350454	9L6644	SET	435
350455	6N6798	SET	435
350456	4N2532	SET	435
350457	9L6646	SET	435
350458	6N6656	SET	435
350459	6N6653	SET	435
350460	9L3724	SET	435
350461	9L6648	SET	435
350462	6N6652	SET	435
350463	9L6650	SET	435
350464	6N6655	SET	435
350465	9L6725	SET	435
350466	4N8278	SET	435
350467	6N6651	SET	435
350468	7S9860	SET	435
350500	1R0716	FILTER	430
350501	1R0739	FILTER	430
350505	**1R0750**	**FILTER**	**429**
381250	190-0649	TENSIONER	433
431209	670079C2	GASKET	343
431215	677692C2	GROMMET	267
431215	677692C2	GROMMET	285
450464	2022048C1	FAN	423
450465	3625639C1	FAN	423
450466	1647411C3	FAN	423
450480	1819391C1	BELT	435
450481	1841559C1	BELT	435
450501	1811953C1	FILTER	430
450502	1833121C1	FILTER	430
450519	**1874438C1**	**FILTER**	**429**
450520	625627C1	FILTER	429
450521	672603C3	FILTER	429
450522	1822588C1	FILTER	429
450523	1825181C91	FILTER	429
450524	1842639C92	FILTER	430
450525	1842638C92	FILTER	429
450526	**1878042C92**	**KIT**	**429**
450527	**1873917C91**	**FILTER**	**429**
450530	**3522786C4**	**CLUTCH**	**425**
450531	**3540116C4**	**CLUTCH**	**425**
450532	**3584438C3**	**CLUTCH**	**425**
450533	**2602141C91**	**CLUTCH**	**425**
450541	1684560C92	SWITCH	421
450542	1685132C92	SWITCH	421
450560	1689785C91	VALVE	421
480890	1830033C1	TENSIONER	433
480890E	1830033C1	TENSIONER	433
480891	1687801C91	TENSIONER	433
492062	1824644C1	LOCK	191
505005	AR12098	SET	393
505010	AR11930	SET	395
505025	3803471	SET	15
505051	3804694	SET	260
505051	3804694	SET	219
505055	3278723	SET	392
505057	N/A	SET	176
505057	N/A	SET	147
505060	3803961	SET	260
505060	3803961	SET	219
505060	3803961	SET	221
505064	4089489	SET	145
505064	4089489	SET	147
505064	4089489	SET	176
505065	3804500	SET	15
505065	3804500	SET	176
505065	3804500	SET	145
505065	3804500	SET	147
505070	4089810	SET	15
505075	3802750	SET	273
505075	3802750	SET	282
505075	3802750	SET	292
505075	3802750	SET	308
505076	3802863	SET	273
505076	3802863	SET	282
505076	3802863	SET	292
505076	3802863	SET	308
505077	3802864	SET	273
505077	3802864	SET	282
505077	3802864	SET	292
505077	3802864	SET	308
505080	3802230	SET	273
505080	3802230	SET	282
505080	3802230	SET	292
505080	3802230	SET	308

PAI Reference	OEM Reference	Description	Page
505081	3802232	SET	273
505081	3802232	SET	282
505081	3802232	SET	292
505081	3802232	SET	308
505082	3802234	SET	273
505082	3802234	SET	282
505082	3802234	SET	292
505082	3802234	SET	308
505083	3802040	SET	273
505083	3802040	SET	282
505083	3802040	SET	292
505083	3802040	SET	308
505084	3802042	SET	273
505084	3802042	SET	282
505084	3802042	SET	292
505084	3802042	SET	308
505084	3802042	SET	308
505085	3802044	SET	273
505085	3802044	SET	282
505085	3802044	SET	292
505085	3802044	SET	308
505085	3802044	SET	308
505090	3802429	SET	350
505090	3802429	SET	372
505095	3803472	SET	383
505099	4089385	SET	262
505099	4089385	SET	221
505100	3803977	SET	262
505100	3803977	SET	262
505100	3803977	SET	221
505105	3804990	SET	324
505105	3804990	SET	339
505109	3806201	SET	324
505109	3806201	SET	339
505113	3806203	SET	324
505113	3806203	SET	339
505120	4089154	SET	189
505125	4089406	SET	185
505125	4089406	SET	204
505125	4089406	SET	202
505130	3804930	SET	324
505130	3804930	SET	338
505131	3804931	SET	324
505131	3804931	SET	338
505132	3804932	SET	324
505132	3804932	SET	338
505133	4089258	SET	324
505133	4089258	SET	339
505134	4089181	SET	324
505134	4089181	SET	339
505135	4089182	SET	324
505135	4089182	SET	339
505139	4089644	SET	350
505139	4089644	SET	372
505139	4089644	SET	354
505140	3802538	SET	350
505140	3802538	SET	372
505149	**4955651**	**SET**	**350**
505149	**4955651**	**SET**	**372**
505150	4089460	SET	308
505150	4089460	SET	339
505150	4089460	SET	338
505151	4089614	SET	324
505151	4089614	SET	339
505151	4089614	SET	338
505152	4089615	SET	324
505152	4089615	SET	339
505152	4089615	SET	338
505154	3802951	SET	273
505154	3802951	SET	292
505154	3802951	SET	308
505160	4955251	SET	273
505160	4955251	SET	292
505160	4955251	SET	324
505160	4955251	SET	339
505160	4955251	SET	338
505164	4955480	SET	324
505164	4955480	SET	339
505164	4955480	SET	338
505170	3802919	SET	324
505170	3802919	SET	339
505172	3802917	SET	324
505172	3802917	SET	339
505174	3802918	SET	324
505174	3802918	SET	339
505175	**4309441**	**SET**	**185**
505175	**4309441**	**SET**	**202**
505180	**3802831**	**SET**	**282**
505180	**3802831**	**SET**	**324**
505181	**3806229**	**SET**	**282**
505181	**3806229**	**SET**	**324**
505182	**3806230**	**SET**	**282**
505182	**3806230**	**SET**	**324**
505184	**3800912**	**SET**	**350**
505185	**4025290**	**SET**	**350**
505185	**4025290**	**SET**	**372**
621252	4299124	O-RING	181
621252	23527273	O-RING	183
650490	**23518481**	**FILTER**	**429**
650491	**23518482**	**FILTER**	**429**
650510	**23527033**	**FILTER**	**430**
650511	**23518671**	**FILTER**	**430**
650540	23516489	FILTER	432
681250	**23527565**	**TENSIONER**	**433**
681250E	**23527565**	**TENSIONER**	**433**
740420	**A06-26631-000**	**VALVE**	**421**
740420E	**A06-26631-000**	**VALVE**	**421**
741401	**01-27846-000**	**TENSIONER**	**433**
741410	**01-24894-004**	**BELT**	**435**
741411	**01-29866-094**	**BELT**	**435**
741412	**01-23415-053**	**BELT**	**435**
801087	**21023285**	**HOUSING**	**429**
801094	**85115602**	**CLUTCH**	**425**
801095	**85115603**	**CLUTCH**	**425**
801096	**85115604**	**CLUTCH**	**425**
801097	**85111561**	**CLUTCH**	**425**
801098	**85111563**	**CLUTCH**	**425**
801120	**2MH365**	**BLADE**	**423**
801121	**2MH368**	**FAN**	**423**

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
801121	**2MH368**	**FAN**	**73**
801122	**2MH446**	**FAN**	**423**
801123	**20477428**	**FAN**	**423**
801124	**85111558**	**FAN**	**423**
801125	2MH517M	FAN	423
801126	3973733	FAN	423
804091	387GC32	SCREEN	432
804097	21380521	FILTER	429
804098	20843764	FILTER	430
804099	20972295	FILTER	429
804100	57MD46M	FILTER	431
804101	279GB43M	FILTER	431
804102	**57MD24**	**FILTER**	**431**
836005	20852765	SEAL	418
840005	3093805	SCREW	192
840135	PKR2225P-4	FITTING	63
840135	PKR2225P-4	FITTING	57
845050	9538-5030111	VALVE	421
845051	20856026	HARNESS	421
845052	N/A	KIT	421
853731	**3912-993603**	**SWITCH**	**421**
853732	**3912-993606**	**SWITCH**	**421**
853733	**3912-993607**	**SWITCH**	**421**
853734	**3912-993610**	**SWITCH**	**421**
853735	**3912-993615**	**SWITCH**	**421**
853736	**3912-993616**	**SWITCH**	**421**
853737	**3912-993617**	**SWITCH**	**421**
853738	**3912-993619**	**SWITCH**	**421**
853739	**3912-993653**	**SWITCH**	**421**
853740	**3912-993654**	**SWITCH**	**421**
853741	**3912-993655**	**SWITCH**	**421**
854050	N/A	ASSEMBLY	411
854050	N/A	ASSEMBLY	402
854051	N/A	ASSEMBLY	403
854051	N/A	ASSEMBLY	403
854051	N/A	ASSEMBLY	407
854051	N/A	ASSEMBLY	402
854052	N/A	ASSEMBLY	411
854052	N/A	ASSEMBLY	402
854053	N/A	ASSEMBLY	406
854053	N/A	ASSEMBLY	402
854054	N/A	ASSEMBLY	404
854054	N/A	ASSEMBLY	405
854054	N/A	ASSEMBLY	406
854054	N/A	ASSEMBLY	407
854054	N/A	ASSEMBLY	408
854055	N/A	ASSEMBLY	403
854055	N/A	ASSEMBLY	406
854055	N/A	ASSEMBLY	407
854055	N/A	ASSEMBLY	408
854055	N/A	ASSEMBLY	411
855000-(*)	N/A	KIT	118
855001-(*)	N/A	KIT	118
855006-(*)	N/A	KIT	118
855007-(*)	N/A	KIT	118
855008-(*)	N/A	KIT	118
855009-(*)	N/A	KIT	118
855011-(*)	N/A	KIT	118
855013-(*)	N/A	KIT	118
855014-(*)	N/A	KIT	118
855015-(*)	N/A	KIT	118
855016-(*)	N/A	KIT	118
855017-(*)	N/A	KIT	118
855020-(*)	N/A	KIT	118
855022-(*)	N/A	KIT	118
855026-(*)	N/A	KIT	118
855027-(*)	N/A	KIT	118
855028-(*)	N/A	KIT	118
855029-(*)	N/A	KIT	118
855030-(*)	N/A	KIT	118
855031-(*)	N/A	KIT	118
855032-(*)	N/A	KIT	118
855033-(*)	N/A	KIT	118
855034-(*)	N/A	KIT	118
855035-(*)	N/A	KIT	118
855036-(*)	N/A	KIT	118
855037-(*)	N/A	KIT	118
855042-(*)	N/A	KIT	118
855044-(*)	N/A	KIT	118
855045-(*)	N/A	KIT	118
855046-(*)	N/A	KIT	118
855047-(*)	N/A	KIT	118
855049-(*)	N/A	KIT	118
855050-(*)	N/A	KIT	118
855051-(*)	N/A	KIT	118
855052-(*)	N/A	KIT	118
855056-(*)	N/A	KIT	118
855062-(*)	N/A	KIT	118
855067-(*)	N/A	KIT	118
855069-(*)	N/A	KIT	118
855070-(*)	N/A	KIT	118
855072-(*)	N/A	KIT	118
855075-(*)	N/A	KIT	118
855078-(*)	N/A	KIT	118
855079-(*)	N/A	KIT	118
855345-(*)	N/A	KIT	118
880865	**20582557**	**BELT**	**435**
880866	**21460409**	**BELT**	**435**
880867	**21556636**	**BELT**	**435**
880868	**21556637**	**BELT**	**435**
880878	**21454379**	**TENSIONER**	**433**
880879	**20935523**	**TENSIONER**	**433**
880880	**21422765**	**TENSIONER**	**433**
880881	**20860873**	**TENSIONER**	**433**
EF00090	6AX1308X	SCREW	73
ER00110	6AX1317X	SCREW	73
EF00120	4AX1	SCREW	11
EF00120	4AX1	SCREW	69
EF00120	4AX1	SCREW	55
EF00490	36AX22	WASHER	7
EF00490	36AX22	WASHER	69
EF00490	36AX22	WASHER	73
EF00490	36AX22	WASHER	387
EF00500	36AX3	WASHER	7
EF00500	36AX3	WASHER	11
EF00500	36AX3	WASHER	45
EF00500	36AX3	WASHER	69
EF00500	36AX3	WASHER	60
EE00510	36AX4	WASHER	11
EE00510	36AX4	WASHER	163

PAI Reference	OEM Reference	Description	Page
EF00520	36AX5	WASHER	13
EF00540	36AX7X	WASHER	70
EF00540	36AX7X	WASHER	61
ER00620	37AX472U	WASHER	11
ER00620	37AX472U	WASHER	69
ER00620	37AX472U	WASHER	417
EF01120	X-7-603	SCREW	7
EF01120	X-7-603	SCREW	45
EF01120	X-7-603	SCREW	155
EF02630	20AX5	NUT	34
EF02630	20AX5	NUT	35
EM15680	1681030C91	KIT	427
EM15760	994307	KIT	427
EM15780	994305	KIT	427
EM15790	994205	KIT	427
EM15840	**38MH423AM**	**CLUTCH**	**425**
EM15930	40MH51	CLUTCH	425
EM16070	991451	CLUTCH	425
EF30130	13653	O-RING	277
EF30130	13653	O-RING	297
EF35740	49AX233	PLUG	7
EF35740	49AX233	PLUG	11
EF35740	49AX233	PLUG	63
EF35740	49AX233	PLUG	65
EF35740	49AX233	PLUG	49
EF35770	49AX244	PLUG	7
EF35770	49AX244	PLUG	65
EF35770	49AX244	PLUG	61
EF35770	49AX244	PLUG	209
EF35770	49AX244	PLUG	239
EM37540	**20QE3373**	**VALVE**	**421**
EM38770	446GC1225	O-RING	58
EM38770	446GC1225	O-RING	163
EM61630	**9383-6205LL**	**BEARING**	**55**
EM61630	**9383-6205LL**	**BEARING**	**233**
EM61630	**9383-6205LL**	**BEARING**	**235**
EM66010	**46AX64**	**BEARING**	**233**
EM80410	46AX58	BEARING	49
EM80410	46AX58	BEARING	49
EM80410	46AX58	BEARING	159
EM80410	46AX58	BEARING	159
EM80420	46AX474	BEARING	49
EM80420	46AX474	BEARING	55
EM80420	46AX474	BEARING	53
EM80420	46AX474	BEARING	51
EM92520	7536-171270	TURBOCHARGER	304
EM92520	3802290	TURBOCHARGER	304
EM92520	7536-171270	TURBOCHARGER	303
EM92530	3802289	TURBOCHARGER	304
EM92530	7536-166592	TURBOCHARGER	304
EM92530	7536-166592	TURBOCHARGER	303
EM92540	7536-316468	TURBOCHARGER	368
EM92540	7536-316468	TURBOCHARGER	386
EM92560	7536-167050	TURBOCHARGER	76
EM92910	3522865	TURBOCHARGER	76
EM92910	7536-196441	TURBOCHARGER	76
EM92920	3522871	TURBOCHARGER	76
EM92920	7536-196463	TURBOCHARGER	76
EM92930	3522867	TURBOCHARGER	76
EM92930	7536-196464	TURBOCHARGER	76
EM92940	3523415	TURBOCHARGER	76
EM92940	7536-196800	TURBOCHARGER	76
GSC-0009	6AX1308X	SCREW	73
BSC-0011	6AX1317X	SCREW	73
ESC-0012	4AX1	SCREW	11
ESC-0012	4AX1	SCREW	69
ESC-0012	4AX1	SCREW	55
ESC-0025	4AX194	SCREW	60
ESC-0025	4AX194	SCREW	387
EST-0042	16AX824	STUD	421
EWA-0049	36AX22	WASHER	7
EWA-0049	36AX22	WASHER	69
EWA-0049	36AX22	WASHER	73
EWA-0049	36AX22	WASHER	387
FWA-0050	36AX3	WASHER	7
FWA-0050	36AX3	WASHER	11
FWA-0050	36AX3	WASHER	45
FWA-0050	36AX3	WASHER	69
FWA-0050	36AX3	WASHER	60
BWA-0051	36AX4	WASHER	11
BWA-0051	36AX4	WASHER	163
EWA-0052	36AX5	WASHER	13
BWA-0054	36AX7X	WASHER	70
BWA-0054	36AX7X	WASHER	61
GWA-0062	37AX472U	WASHER	11
GWA-0062	37AX472U	WASHER	69
GWA-0062	37AX472U	WASHER	417
GWA-0063	35AX1542	WASHER	11
GWA-0063	35AX1542	WASHER	69
GWA-0063	S-622	WASHER	381
BWA-0066	37AX265	WASHER	229
EWA-0068	35AX1345	WASHER	70
FWA-0158	37AX471	WASHER	73
ENU-0188	21AX852	NUT	75
ENU-0202	21AX856	NUT	421
HNU-0263	20AX5	NUT	34
HNU-0263	20AX5	NUT	35
BNU-0278	8235-NL251	NUT	421
FNU-0280	23AX459	NUT	49
FNU-0280	23AX459	NUT	53
FNU-0280	23AX459	NUT	159
ESC-0365	3903990	SCREW	197
FSC-0373	27AM12	SCREW	244
FSC-0373	4965698	SCREW	191
EST-0414	107AM5019	STUD	421
ENU-0422	191AM2	NUT	421
FNU-0436	154AM5001	NUT	279
FNU-0436	154AM5001	NUT	364
FNU-0436	3910959	NUT	300
EGA-0470	343SB87	O-RING	431
EWA-0703	36AX1	WASHER	7
EWA-0703	36AX1	WASHER	73
EWA-0703	36AX1	WASHER	364
EWA-0703	36AX1	WASHER	300
ECK-1396	**994317**	**KIT**	**427**
ECK-1404	**994346**	**KIT**	**427**
EFC-1454	**4769-10900950001**	**CLUTCH**	**425**
EGA-1470	5081-3654	O-RING	431
EFC-1492	**40MH52**	**CLUTCH**	**425**
ECK-1519	**9908300**	**KIT**	**427**

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
ECK-1539	**994902**	**KIT**	**427**
EFC-1556	**38MH322M2**	**CLUTCH**	**425**
EFC-1558	**38MH428M**	**CLUTCH**	**425**
EFC-1562	4333-2601973C1	CLUTCH	425
EFC-1563	2602193C1	CLUTCH	425
EFC-1564	40MH441M	CLUTCH	425
EFC-1564X	**40MH441MX**	**CLUTCH**	**425**
EFC-1565	40MH440M	CLUTCH	425
EFC-1567	38MH425AM	CLUTCH	425
ECK-1568	1681030C91	KIT	427
ECK-1569	994900	KIT	427
ECK-1573	995033	KIT	427
ECK-1576	994307	KIT	427
ECK-1577	994206	KIT	427
ECK-1578	994305	KIT	427
ECK-1579	994205	KIT	427
EFC-1584	38MH423AM	CLUTCH	425
EFC-1592	2001023C1	CLUTCH	425
EFC-1592B	**2001023C1**	**CLUTCH**	**425**
EFC-1593	40MH51	CLUTCH	425
EFC-1594	999357	CLUTCH	425
EFC-1607	991451	CLUTCH	425
EFC-1628	7536-167118	CLUTCH	425
EFC-1629	7536-197879	CLUTCH	425
EFC-1638	7536-187242	CLUTCH	425
EFC-1640	38MH416	CLUTCH	425
EFC-1640B	38MH416	CLUTCH	425
EFC-1642	1MH29305P2	CLUTCH	58
EFC-1642	1MH29305P2	CLUTCH	425
EFC-1643	38MH416P2	CLUTCH	425
EFC-1643B	9902002	CLUTCH	425
EFC-1645	38MH414M	CLUTCH	425
EFC-1645B	38MH414M	CLUTCH	425
EFC-1646	38MH315A	CLUTCH	425
ECL-1953	83AX452	CLAMP	247
ECL-1954	45SF20	CLAMP	50
ECL-1958	83AX627	CLAMP	69
ECL-1962	83AX759	CLAMP	247
EIH-1979	744GB310	HOSE	249
EWA-2441	39AX23	WASHER	7
EWA-2441	39AX23	WASHER	137
EKT-2663	318418	KIT	249
EKT-2663	318418	KIT	368
EKT-2668	318417	KIT	390
ESR-2831	325GC120	RING	55
ESR-2831	325GC120	RING	233
ESR-2831	325GC120	RING	235
EGS-2861	56AX356	GASKET	249
EGS-2861	56AX356	GASKET	368
EGS-2861	56AX356	GASKET	390
GGA-2941	56AX347	O-RING	183
GGA-2947	56AX534	O-RING	201
GGA-2991	56AX352	O-RING	363
GGA-2992	56AX431	O-RING	363
BGA-3004	56AX436	O-RING	137
EGA-3061	8813-154129	SEAL	239
EGA-3061	8813-154129	SEAL	241
EGA-3061	8813-154129	O-RING	137
EGA-3061	8813-154129	O-RING	165
EOS-3305	447GC216A	SEAL	390
ECP-3468	6635-3P5ONS	PLUG	137
ECP-3474	6635-6HP5ONS	PLUG	11
ECP-3474	6635-6HP5ONS	PLUG	67
ECP-3474	6635-6HP5ONS	PLUG	209
ECP-3474	6635-6HP5ONS	PLUG	247
ECP-3474	6635-6HP5ONS	PLUG	233
ECP-3475	6635-8HP5ONS	PLUG	239
ECP-3475	6635-8HP5ONS	PLUG	241
ECP-3475	6635-8HP5ONS	PLUG	137
ECP-3475	6635-8HP5ONS	PLUG	165
ECP-3476	6635-10HP5NS	PLUG	7
ECP-3476	6635-10HP5NS	PLUG	137
ECP-3477	6635-14HP5ONS	PLUG	63
ECP-3477	6635-14HP5ONS	PLUG	137
ECP-3478	6635-20HP5ONS	PLUG	137
GCP-3484	79AX57X	PLUG	155
GCP-3484	79AX57X	PLUG	285
GCP-3484	79AX57X	PLUG	317
GCP-3484	79AX57X	PLUG	385
ECP-3485	79AX63	PLUG	277
ECP-3485	79AX63	PLUG	297
ECP-3487	79AX67	PLUG	285
ECP-3487	79AX67	PLUG	315
GKP-3488	79AX59	PLUG	317
GCP-3495	79AX71	PLUG	41
GCP-3495	79AX71	PLUG	267
GCP-3495	79AX71	PLUG	285
GKP-3498	79AX60Z	PLUG	317
EPP-3566	49AX226	PLUG	7
EPP-3566	49AX226	PLUG	41
EPP-3566	49AX226	PLUG	70
EPP-3566	49AX226	PLUG	61
EPP-3566	49AX226	PLUG	9
EPP-3572	49AX242	PLUG	41
EPP-3572	49AX242	PLUG	49
EPP-3572	49AX242	PLUG	53
EPP-3572	49AX242	PLUG	417
EPP-3572	49AX242	PLUG	415
EPP-3573	49AX230	PLUG	7
EPP-3573	49AX230	PLUG	7
EPP-3573	49AX230	PLUG	11
EPP-3573	49AX230	PLUG	13
EPP-3573	49AX230	PLUG	41
EPP-3574	49AX233	PLUG	7
EPP-3574	49AX233	PLUG	11
EPP-3574	49AX233	PLUG	63
EPP-3574	49AX233	PLUG	65
EPP-3574	49AX233	PLUG	49
EPP-3575	49AX234Z	PLUG	7
EPP-3575	49AX234Z	PLUG	42
EPP-3575	49AX234Z	PLUG	9
EPP-3575	49AX234Z	PLUG	267
EPP-3575	49AX234Z	PLUG	277
EPP-3576	49AX235	PLUG	7
EPP-3576	49AX235	PLUG	42
EPP-3576	49AX235	PLUG	61
EPP-3576	49AX235	PLUG	247
EPP-3576	49AX235	PLUG	233
FPP-3577	49AX244	PLUG	7
FPP-3577	49AX244	PLUG	65

PAI Reference	OEM Reference	Description	Page
FPP-3577	49AX244	PLUG	61
FPP-3577	49AX244	PLUG	209
FPP-3577	49AX244	PLUG	239
LCV-3754	20QE3373	VALVE	421
EBG-3807-TIM	3027681	BEARING	237
EBG-3808-TIM	3001281	BEARING	237
EGA-3877	446GC1225	O-RING	58
EGA-3877	446GC1225	O-RING	163
EGS-3890-020	590GB1189A	GASKET	390
EGS-3900-027	56AX456	O-RING	117
EGS-3905-021	446GC1215	O-RING	318
FFF-4094	301SD19B	FILTER	429
FAD-4099	6635-638F50GS	ADAPTER	57
FAD-4099	6635-638F50GS	ADAPTER	161
MSV-4119	6635-V404P66	VALVE	50
MSV-4119	6635-V404P66	VALVE	57
MSV-4119	6635-V404P66	VALVE	161
FKT-4156	485GB3219D	KIT	430
MHV-4223	25MF126	VALVE	50
FWF-4520	25MF435A	FILTER	432
FWF-4521	25MF436	FILTER	432
FFF-4536	483GB465	FILTER	429
FOF-4540	236GB311A	FILTER	431
FFF-4550	483GB218B	FILTER	429
FFF-4551	483GB431	FILTER	429
FAF-4558	57MD42M	FILTER	431
FAF-4561	57MD31A	FILTER	431
FAF-4562	57MD21A	FILTER	431
FAF-4563	57MD26	FILTER	431
FAF-4564	57MD33	FILTER	431
FAF-4565	57MD29301	FILTER	431
FAF-4566	57MD27	FILTER	431
FAF-4567	57MD29305	FILTER	431
FAF-4568	57MD32	FILTER	431
FAF-4569	57MD25P2	FILTER	431
FOF-4570	485GB3191C	FILTER	430
FOF-4571	57GC2134	FILTER	430
FFF-4590	483GB219A	FILTER	429
FOF-5328	57GC2231	FILTER	430
FFF-5329	483GB477M	FILTER	429
FAF-5453	57MD320M	FILTER	431
FAF-5476	57MD318	FILTER	431
FFF-5485	483GB372M	FILTER	429
FFF-5486	483GB476M	FILTER	429
FFF-5531	483GB470AM	FILTER	429
FFF-5532	483GB471M	FILTER	429
FOF-5534	57GC2187	FILTER	430
FKT-5537	57GC2206	FILTER	430
FOF-5538	485GB3236	FILTER	430
EBG-6163	9383-6205LL	BEARING	55
EBG-6163	9383-6205LL	BEARING	233
EBG-6163	9383-6205LL	BEARING	235
GBG-6601	46AX64	BEARING	233
EBG-8041	46AX58	BEARING	49
EBG-8041	46AX58	BEARING	49
EBG-8041	46AX58	BEARING	159
EBG-8041	46AX58	BEARING	159
EBG-8042	46AX474	BEARING	49
EBG-8042	46AX474	BEARING	55
EBG-8042	46AX474	BEARING	53
EBG-8042	46AX474	BEARING	51
EBT-8050	88GB354P12	SET	435
EBT-8052	88GB354P30	BELT	435
EBT-8053	88GB439P652	BELT	435
EMT-8489	**32GB39P2**	**BRACKET**	**429**
EMT-8490	32GB163	BRACKET	429
EMT-8500	32GB160P2	BRACKET	429
EMT-8515	32GB258P2	BRACKET	429
EMT-8528	485GB4365M	ASSEMBLY	430
EFC-8551	222GB214	CAP	8
EFC-8551	222GB214	CAP	137
EFC-8551	107981	CAP	420
EFC-8552	222GB27A	CAP	209
EFC-8552	101322	CAP	420
EFN-8571	**2MH367M**	**FAN**	**423**
EFN-8577	2MH360M	FAN	423
EFN-8577	2MH360M	FAN	73
EFN-8615	2MH414P23	FAN	423
EFN-8615	2MH414P23	FAN	73
EFN-8616	2MH414P56	FAN	423
EFN-8616	2MH414P56	FAN	73
EFN-8617	2MH414P64	FAN	423
EFN-8617	2MH414P64	FAN	73
EFN-8618	2MH414P70	FAN	423
EFN-8618	2MH414P70	FAN	73
EBT-8620	88GB354P50	SET	435
ESP-8621	24MH163	SPACER	421
ESP-8625	N/A	ADAPTER	421
EFN-8636	2MH48P41	FAN	423
EFN-8636	2MH48P41	FAN	73
EFN-8637	2MH48P40	FAN	423
EFN-8637	2MH48P40	FAN	73
EFN-8638	2MH429	FAN	423
EFN-8638	2MH429	FAN	73
EBT-8683	87GB41A	TENSIONER	433
EFN-8685	2MH445	FAN	423
EFN-8685	2MH445	FAN	73
EBG-8688	306DD	BEARING	47
EBG-8688	306DD	BEARING	157
EBG-8688HP	5566505	BEARING	157
EBG-8689	46AX118	BEARING	390
ECH-8692	11MF2634P10	HOSE	61
EBT-8694	87GB46A	TENSIONER	433
EFN-8706	2MH29304	FAN	423
EFN-8706	2MH29304	FAN	73
EFN-8707	2MH460	FAN	423
EFN-8707	2MH460	FAN	73
EFN-8709	2MH444	FAN	423
EFN-8709	2MH444	FAN	73
EFN-8754	2005452C1	FAN	423
EFN-8754	2005452C1	FAN	73
EFN-8755	2010884C1	FAN	423
EFN-8755	2010884C1	FAN	73
EFN-8756	2000729C2	FAN	423
EFN-8756	2000729C2	FAN	73
EFN-8757	3507485C1	FAN	423
EFN-8757	3507485C1	FAN	73
EFN-8758	3507486C1	FAN	423
EFN-8758	3507486C1	FAN	73
EFN-8759	1610891C2	FAN	423

PAI Copyright 2017

PAI Reference	OEM Reference	Description	Page
EFN-8759	1610891C2	FAN	73
EFN-8767	2MH443	FAN	423
EFN-8767	2MH443	FAN	73
EFN-8768	2MH453	FAN	423
EFN-8768	2MH453	FAN	73
EBT-8771-787	88GB472P787	BELT	435
EBT-8774-630	88GB457P630	BELT	435
EBT-8775-585	88GB459P585	BELT	435
EBT-8775-670	88GB459P670	BELT	435
EBT-8775-735	88GB459P735	BELT	435
EBT-8775-738	88GB459P738	BELT	435
EBT-8775-746	88GB459P746	BELT	435
EBT-8775-795	88GB459P795	BELT	435
EBT-8775-831	88GB459P831	BELT	435
EBT-8775-847	88GB459P847	BELT	435
EBT-8776	88GB449P605	BELT	435
EBT-8776-555	88GB458P555	BELT	435
EBT-8776-565	88GB458P565	BELT	435
EBT-8776-579	88GB458P579	BELT	435
EBT-8776-678	88GB458P678	BELT	435
EBT-8776-687	88GB458P687	BELT	435
EBT-8777	88GB447P615	BELT	435
EBT-8778	88GB447P666	BELT	435
EBT-8779	88GB447P732	BELT	435
EBT-8781	88GB445P720	BELT	435
EBT-8806	88GB449P655	BELT	435
EBT-8807	2428-425761	BELT	435
EBT-8808	2428-425762	BELT	435
EBT-8816	88GB445P730	BELT	435
EBT-8817	88GB447P728	BELT	435
EBT-8823	88GB439P506	BELT	435
EBT-8824	88GB439P376	BELT	435
EBT-8825	88GB439P552	BELT	435
EBT-8844	88GB439P391	BELT	435
EBT-8845	88GB439P411	BELT	435
EBT-8846	88GB439P431	BELT	435
EBT-8847	88GB439P457	BELT	435
EBT-8848	88GB439P462	BELT	435
EBT-8849	88GB439P532	BELT	435
EBT-8851	88GB439P602	BELT	435
EBT-8852	88GB439P622	BELT	435
EBT-8853	88GB439P642	BELT	435
EBT-8867	**88GB439P491**	**BELT**	**435**
EBT-8879	88GB437P2	SET	435
EBT-8880	88GB354P52	SET	435
EBT-8881	88GB437	SET	435
EBT-8882	88GB196	BELT	435
EBT-8883	88GB439P436	BELT	435
EBT-8884	88GB439P672	BELT	435
EBT-8885	88GB439P662	BELT	435
EBT-8886	88GB439P732	BELT	435
EBT-8887	88GB439P722	BELT	435
EBT-8888	88GB439P516	BELT	435
EBT-8889	88GB439P421	BELT	435
EMT-8970	32GB354P2	BRACKET	432
EMT-8971	32GB415	BRACKET	432
ETC-9229	4955462	TURBOCHARGER	249
EKT-9244	173736	KIT	170
ETC-9252	7536-171270	TURBOCHARGER	304
ETC-9252	3802290	TURBOCHARGER	304
ETC-9252	7536-171270	TURBOCHARGER	303
ETC-9253	3802289	TURBOCHARGER	304
ETC-9253	7536-166592	TURBOCHARGER	304
ETC-9253	7536-166592	TURBOCHARGER	303
ETC-9254	7536-316468	TURBOCHARGER	368
ETC-9254	7536-316468	TURBOCHARGER	386
ETC-9255	7536-167049	TURBOCHARGER	76
ETC-9256	7536-167050	TURBOCHARGER	76
ETC-9257	7536-167713	TURBOCHARGER	76
ETC-9258	7536-167715	TURBOCHARGER	76
ETC-9259	7536-170359	TURBOCHARGER	170
EKT-9260	7536-196006	KIT	117
EKT-9261	7536-187197	KIT	117
ETC-9267	3801697	TURBOCHARGER	390
ETC-9275	172033	TURBOCHARGER	170
ETC-9278	172035	TURBOCHARGER	170
ETC-9278X	**472035**	**TURBOCHARGER**	**170**
ETC-9285	3803109	TURBOCHARGER	250
ETC-9286	7536-168823	TURBOCHARGER	250
ETC-9286	7536-168823	TURBOCHARGER	249
ETC-9287	7536-168824	TURBOCHARGER	250
ETC-9287	7536-168824	TURBOCHARGER	249
ETC-9288	7536-166825	TURBOCHARGER	250
ETC-9288	7536-168825	TURBOCHARGER	249
ETC-9289	7536-197916	TURBOCHARGER	76
ETC-9289	7536-197916	TURBOCHARGER	399
ETC-9291	3522865	TURBOCHARGER	76
ETC-9291	7536-196441	TURBOCHARGER	76
ETC-9292	3522871	TURBOCHARGER	76
ETC-9292	7536-196463	TURBOCHARGER	76
ETC-9293	3522867	TURBOCHARGER	76
ETC-9293	7536-196464	TURBOCHARGER	76
ETC-9294	3523415	TURBOCHARGER	76
ETC-9294	7536-196800	TURBOCHARGER	76
ETC-9295	7536-193903	TURBOCHARGER	76
ETC-9295	7536-193903	TURBOCHARGER	399
ETC-9296	7536-196389	TURBOCHARGER	76
ETC-9296	7536-196389	TURBOCHARGER	399
ETC-9297	7536-196390	TURBOCHARGER	76
ETC-9297	7536-196390	TURBOCHARGER	399

A

Accessory Drive
855 Series 66
L10, M11 & ISM Series 243
N14 Series 166
Aftercooler
855 Series
Big Cam I, II, III - FFC 68
Small Cam - FFC 68
Air Compressor
13.2 CFM 416
QE Series 414
Twin Cylinder ST676 / ST773 418

B

Belt Tensioners 433–435
Bracket
Fuel Filter 428
Water Filter 432

C

Cam Follower Housing
855 Series 44
K Series 379
L10, M11 & ISM Series 227
N14 Series 154
Camshaft
4B Series 275
6B Series 298
6C & ISC Series 361
378 Series 392
504/555 Series 392
855 Series 33
ISB & QSB Series 330
ISX Series 183
L10, M11 & ISM Series 213
N14 Series 142
Complete Engine Assembly
N14 Series 178
Crankshaft
4B Series 270
6B Series 288
6C & ISC Series 348
378 Series 392
504 Series 392
555 Series 392
743 Series 393
855 Series 12
ISB & QSB Series
3.9 L 320
4.5 L Industrial Engine 321
5.9 L and 6.7 L 322
ISX Series 182
K Series 378
L10, M11 & ISM Series 216
N14 Series 139
Cylinder Block
4B Series 266
6B Series 284
6C & ISC Series 344
855 Series
Big Cam - FFC, Including 88NT 6
Small Cam - Non-FFC and FFC 6
ISB & QSB Series 314
L10, M11 & ISM Series 208
N14 Series 136
Cylinder Head Assemblies
4B Series 276
6B Series 296
6C & ISC Series 358
855 Series 38–41
ISB & QSB Series 316
ISX Series 190
K Series 384–386
L10, M11 & ISM Series 228
N14 Series 152
Cylinder Kits
6C Series 356
743 Series 393
By CPL
855 Series 18–32
ISM Series 226
L10 Series 222–224
M11 Series 225
N14 Series 148–151
QSM Series 226

E

EGR Cooler
ISX Series 196
Engine Brake Components
855 Series 37
Exhaust Manifold
855 Series
Current Style 74
Ford L and LT 9000 72
L10, M11 & ISM Series 244
N14 Series 169

F

Fan Blades 422
Fan Clutch 424
Components 421
Repair Kits 426
Fan Clutches 424
Fans 422
Fan Switch 421
Fan Drive
L10, M11 & ISM Series 236

Filters
Air 431
Fuel 428
Oil 430

 PAI Copyright 2017

Element 431
Water 432
Fittings
Compression Assembly Fuel 418
Pipe
Internal Drive Pipe Plugs 419
Straight Thread O-Ring Boss Plugs 419
Flywheel Assemblies
855 Series 46
ISX Series 184
L10, M11, ISM Series 230
N14 Series 156
Front Cover
855 Series 10
ISX Series 181
L10, M11 & ISM Series
External Dampening 212
Internal Dampening 211
N14 Series 140
Fuel Injectors
L10, M11, ISM Series 245
N14 Series 162
Fuel Shutoff Solenoid
4B Series 279
6B Series 300
6C & ISC Series 364
Fuel System
6C & ISC Series 365
855 Series 56
Components
ISB & QSB Series 332
Fuel Pump
ISX Series 193
L10, M11, ISM Series 245
N14 Series 160
Fuel Transfer Pumps
4B Series 278
6B Series 301

G

Gaskets
Miscellaneous
4B Series 281
6B Series 313
6C Series 376
855 Series 133
ISX Series 206
K Series 389
L10, M11 and ISM Series 264
N14 Series 178
Gasket Sets
Lower Gasket
4B Series 281
6B Series 312
6C & ISC Series 376
6C Series 376
743 Series 393
855 Series 133
1710 and V28 Series 397
ISB & QSB Series 336
ISX Series 205
K Series 388
L10, M11 and ISM Series 264
N14 Series 179
Overhaul
855 Series 133
Upper Gasket
4B Series 281
6B Series 312
6C & ISC Series 376
6C Series 376
743 Series 393
855 Series 132
1710 and V28 Series 397
ISB & QSB Series 336
ISX Series 204
K Series 388
L10, M11, ISM Series 264
N14 Series 179
Single Cylinder Head
N14 Series 179
Gear Housing/Cover
4B Series 268
6B Series 286
6C & ISC Series 346

I

Idler Gear
L10, M11 & ISM Series
Internal Dampening 214
Inframe Kits
Breakdown
ISM Series 262
ISX Series 202
L10 Series 260
M11 Series 262
N14 Series 176
By CPL
855 Series 118
ISM Series 259
L10 Series 254–257
M11 Series 258
N14 Series 172–175
w/o Pistons
ISX Series 204
Intake Manifold
855 Series
Big Cam I, II, III - FFC 68
Small Cam - FFC 68
N14 Series 168
Internal Drive Pipe Plugs 419

L

Lower Gasket Sets
4B Series 281
6B Series 312

6C Series 376
743 Series 393
855 Series 133
1710 and V28 Series 397
ISX Series 205
K Series 388
L10, M11 and ISM Series 264
N14 Series 179

M

Miscellaneous Components
ISX Series 206
L10, M11, ISM Series 264
N14 Series 178

O

Oil Caps
Oil Caps and Dipstick 420
Oil Cooler
4B Series 280
6B Series 302
6C & ISC Series 367
855 Series
86NT and 88NT 62
88NT 64
Small Cam and Big Cam 60
ISB & QSB Series 334
ISX Series 194
K Series 387
L10 Series 239
M11 Series 240
N14 Series 164
VT555 Series 392
Oil Cooler Cooling
L10, M11 & ISM Series 242
Oil Pan
855 Series 9
ISX Series 180
K Series 380
L10, M11 & ISM Series 210
N14 Series 138
Oil Pump
4B Series 280
6B Series 302
6C & ISC Series 366
855 Series
Big Cam II,III and IV - FFC 58
Small Cam and Big Cam I 59
ISB & QSB Series 333
ISX Series 193
L10,M11 & ISM Series 238
N14 Series 163
Overhaul Engine Kits
N14 Series 176
Overhaul Gasket Sets
855 Series 133

P

Pipe Fittings
Internal Drive Pipe Plugs 419
Pistons
4B Series 272
6B Series 290–294
6C Series
One Piece 350
Two Piece 354
743 Series 393
855 Series 14
1710 and V28 Series 397
ISB & QSB Series 324–329
K Series 382
One Piece
ISX Series 185
L10, M11 & ISM Series 218
N14 Series 144
Two Piece
ISX Series 188
L10, M11, ISM Series 220
N14 Series 146

R

Rebuild Kit
4B Series 282
6B Series 308
6C & ISC Series 372–374
ISB & QSB Series
4 Cylinder 338
6 Cylinder 339
Ring Sets
4B Series 272
6B Series 290–294
6C & ISC Series 350
743 Series 393
855 Series 14
ISB & QSB Series 324–329
ISX Series 185–188
K Series 382
L10, M11 & ISM Series 218–220
N14 Series 144–147
Rocker Box Components
5 Bolt 34
7 Bolt 35
Covers
855 Series 36
Gasket Sets
855 Series 36
Rod Bearings
4B Series 272
6B Series 290–294
6C & ISC Series 350
743 Series 393
855 Series 14
ISB & QSB Series 324–329
ISX 185
K Series 382
L10, M11 & ISM Series 218–220

 PAI Copyright 2017

N14 Series 144–147

S

Sensors
Air Pressure 403
Air Temperature 403
Boost 403
Cam / Crank Position 404
Connectors 402
Coolant Level 405
Crankshaft 405
Dual Pressure / Temperature 410
EGR Pressure 406
Map Sensor Kits 407
Oil Pressure 408
Oil Temperature 409
Speedometer 413
Temperature 411**T**
Thermostat
4B Series 278
6B Series 299
6C & ISC Series 363
ISB & QSB Series 331
ISX Series 192
L10 Series 246
Turbocharger
6B Series 303
6C & ISC Series 368
Applications by CPL
4B and 6B Series 304–306
6C & ISC Series 369
855 Series 76–116
1710 and V28 Series 399
L10 & M11 Series 250–253
N14 Series 170
ISB & QSB Series 335
ISX Series 201
L10, M11 & ISM Series 248
Repair Kits
855 Series 117
N14 Series 171

U

Upper Gasket Sets
4B Series 281
6C Series 376
743 Series 393
855 Series
Single Cylinder Head 132
1710 and V28 Series 397
ISX Series 204
K Series 388
L10, M11 and ISM Series 264
N14 Series 179
Single Cylinder Head
N14 Series 179

V

Valve Cover Gasket
6C & ISC Series 362
Valves
Air Solenoid 421
Shutoff 57

W

Water Pumps
4B Series 278
6B Series 299
6C & ISC Series 363
743 Series 393
855 Series
Small Cam - Non-FFC 51
w/ Idler
88NT 54
Big Cam I, II, III 52
Early Big Cam IV 52
Small Cam - FFC 48
ISB & QSB Series 331
ISX Series 192
L10E, M11 & ISM Series
3 Hole Flange Mount 234
L10 Series
4 Hole Flange Mount 232
w/ Idler
N14 Series 158
Water Rail Components
855 Series 42