



STAY CURRENT

ISO 9001 CERTIFIED

FEBRUARY 2016

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TRADESHOWS & EVENTS

HDA Truck Pride Annual Conference
April 13-17, 2016 - San Antonio, TX

VIPAR Heavy Duty Annual Business Conference
October 16-21, 2016 - Orlando, FL

HDAW 2017
January 23-26, 2017 - Las Vegas, NV



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PRICE REDUCED

Click Part# for more details

PAI REFERENCE	OEM REFERENCE	DESCRIPTION
EVA-2654	MAK 691GC225M	Relief Valve
HNU-4014	MAK 6990-G127708	Nut
LPP-5646	MAK 745-104263	Valve Kit
FMT-5707	MAK 48QS401A	Regulator Mount
FST-5743	MAK 85QM4192M2	Fuel Step
FST-5744	MAK 85QM4192M2	Fuel Step
JSY-6861	MAK 8235-17N32651X	Yoke
BCY-6876	DAN 6-4-6371	Yoke
ETC-8247X	MAK 631GC5176M11	Turbocharger
ETC-8257	MAK 631GC5174AM	Turbocharger
ETC-8267	MAK 631GC5126P2	Turbocharger
ETC-8275	MAK 631GC5127M5	Turbocharger
ETC-8277	MAK 631GC5127M21	Turbocharger
ETC-8289X	MAK 631GC5118P6	Turbocharger
EHD-8588	MAK 404GB470	Damper
ETC-9229	CUM 4955462	Turbocharger
ETC-9296	MAK 7536-196389	Turbocharger
804202	MAK 41MD56AM3	Hood Grille
EF59570	FUL 4302041	Gear
740330	FTL A17-15251-000	Grille
EF89530	FUL 4304510	Gear
ER85550	ROK A1-1205-X-2728	Seal
640141	DDC 23531273	Fitting
ER85560	ROK A1-1205-Y-2729	Seal
301058	N/A	Cylinder Kit
101189	N/A	Cylinder Kit
171723	CUM 3801263	Bearing Kit
191857	CUM 3965966	Roller Tappet
EF66030A	FUL K-2468	Pinion Kit
EF68690	FUL K-3234	Bearing Kit
750032	HDK 34013-072	Bushing Kit

PAI REFERENCE	OEM REFERENCE	DESCRIPTION
803742	GUN HR935F	Rear Disc Hub
431336	N/A	Bolt/Gasket Kit
301044	N/A	Cylinder Kit
481209	NAV 1825406C92	Turbocharger
381182	CAT 103-2084	Turbocharger
381189	CAT 146-4328	Turbocharger
181191	CUM 3803257	Turbocharger Kit
660012	N/A	Cylinder Head Kit
803883	MAK 97QL5119M	Bracket Assembly
381202	CAT 203-3376	Turbocharger
060163X	CUM 4962732	Cylinder Head Assy.
181198	CUM 4040844	Turbocharger
181199	CUM 4090042	Turbocharger Kit
940027	ROK 3105-K-1155	Retainer
803884	MAK 85QM4192M68	Fuel Step
EM71410	MAK 205SP71	Bearing Kit
S60102E-033	N/A	Engine Kit
391930	CAT 107-0268	Valve Insert
180107	CUM 4988748	Fuel Pump
642024	DDC 23512307	Isolator
660045	DDC 23509709	Flywheel Assy.
ECH-8668	MAK 160AX515P11	Hose
801152	MAK 22195464	Housing
331229	CAT 189-1946	Gasket Kit
101096	CUM 3800319	Cylinder Kit
131885	CUM 4955644	Gasket Kit
151540	N/A	Acc. Drive Kit
ER22630	ROK A-3892-C-4735	Kit
311032	CAT 7E0539	Piston
311033	N/A	Piston Kit
900465	FUL K-2041	Bearing/Seal Kit



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TECH TIPS

Fasteners and Installation

A very important factor affecting the performance and longevity of an engine is the fastener selection and application. Major engine failures are often a result of not paying sufficient attention to this factor. Applying torque on a fastener might seem like an insignificant task, but failure analysis has shown that careful installation is the key to building a more secure engine. Torque wrenches are by far the most common method of installing fasteners. These devices need to be calibrated often and maintained in a way that they remain accurate. It is common for mechanics to ignore precautions while handling the torque wrenches. One of the most common cases is when mechanics use the wrench to “back off” a torqued fastener. Since these devices are expected to only be used to tighten the fastener, they are calibrated for this purpose. Using these devices in any other manner will very likely compromise the accuracy of the wrench. Loosening fasteners needs to be done using a different device to avoid this.

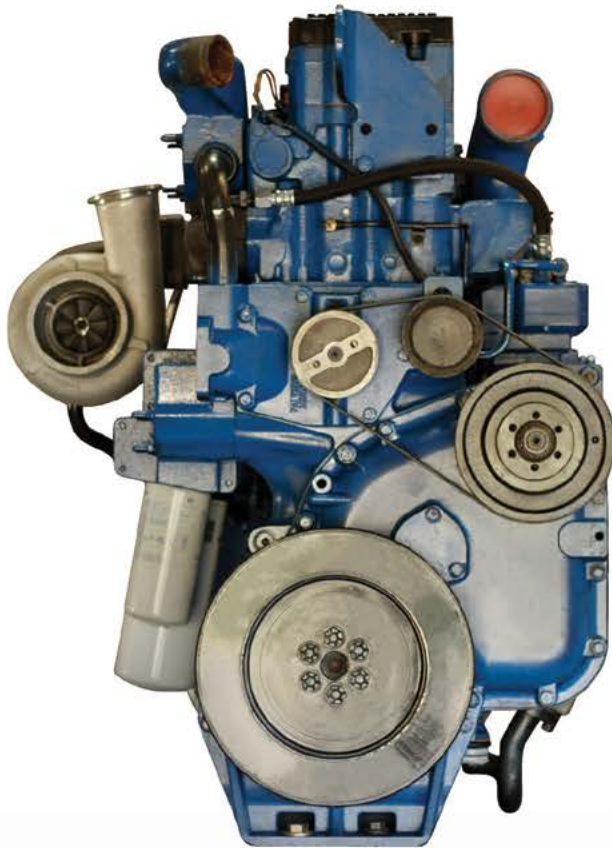
The other important factor, as mentioned above, is fastener selection. When rebuilding engines, it is very important to understand that torque-to-yield fasteners must not be reused. During factory assembly, these fasteners are typically torqued up to and beyond their yield point to generate the required preload. When a fastener has yielded, it will undergo a permanent deformation in structure and never perform the same again. Reusing such components could cause anything from inadequate sealing or blown head gaskets to engine failure due to poor fastening. On non-torque-to-yield fasteners, it is important to examine all surfaces for galling or corrosion. Only if the surfaces are free of unusual damage and the dimensions meet all specifications and standards, is it acceptable to reuse such fasteners.

PAI Industries, Inc. - World Tested. Performance Proven.

CUMMINS N14

REBUILT ENGINE • CPL 2025 • 525 HORSEPOWER

BUILT BY PAI INDUSTRIES, INC., REF# CPL2025-001



NEW PARTS ADDED

Pistons	Water Pump
Liners	Thermostat
Rings	Oil Cooler
Main Bearings	Piston Cooling Nozzles
Rod Bearings	Fuel Pump
Cam Bearings	Valve Guides
Camshaft	Valves
Turbo	Valve Locks
Sensors	Valve Seats
Accessory Drive	Belts
Belt Tensioner	
Oil Pump	

REBUILT PARTS

Injectors	Crankshaft
Connecting Rods	Cylinder Head
Rings	Oil Cooler

PAI REFERENCE#:
CPL2025-001

ENGINE DYNO TESTED

- Four(4) Hour Initial Run with Break-In Oil to Make Sure Rings Seat Properly.
- Drain & Add New Oil
- 24hr Break-In Process
- Engine Tested To Reach 525 Horsepower





**LOWER FRICTION.
RUNS COOLER.
BETTER MPG.**





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DRIVE TRAIN

ENGINE



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
DAN 6-4-6371-1	960077	End Yoke
Application: Dana 1710 Series / Multiple		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
FUL 4301478	900651	Countershaft Gear(5th)
Application: Fuller 5406 / 5306 Midrange / 6406 Series		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
FUL 4301691	900652	Countershaft Gear(4th)
Application: Fuller 5205 & 5005 Midrange / A/B Series		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
FUL 4304930	900704	Maindrive Gear(3rd)
Application: Fuller 6406 Series		



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OEM REFERENCE	PAI REFERENCE	DESCRIPTION
FUL 4304931	900705	Mainshaft Gear(4th)
Application: Fuller 6406 Series		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
MAK 61KH463	808139	Bull Gear(3.79, 4.80 Ratio)(47 Teeth)
Application: CRD 150 Front Differential / CRD 151 Rear Differential		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
MAK 21016169	808148	Helical Gear(3.79, 4.80 Ratio)(15 Teeth)
Application: CRD 150 Front Differential / CRD 151 Rear Differential		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
ROK KIT5397	940034	Auxiliary Main Drive Kit Includes Gear (1)940036 Ring (1)EF27470
Application: Rockwell 9 & 10 Speed Trans.		

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391965 Shown

OEM REFERENCE	PAI REFERENCE	DESCRIPTION	APPLICATION
CAT 7W7490	391945	Intake Valve	Caterpillar 3300 (NG)
CAT 7W7491	391965	Exhaust Valve	Caterpillar 3300 (NG)



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CAT 9N6275	361603	Cylinder Repair Sleeve
Application: Caterpillar 3200		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CAT 102-5844	381819	Water Pump Assembly
Application: Caterpillar 3176 Series		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CAT 160-1799	370008	Crankshaft Assembly Includes Crankshaft (1)370005 Gear (1)371631 Dowel Pins (1)345028 (1)345029
Application: Caterpillar C15 (Non-Accent)		



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131971 Shown

OEM REFERENCE	PAI REFERENCE	DESCRIPTION	APPLICATION
CUM 2871452	131971	After Treatment Gasket	Cummins ISB / QSB
CUM 2871453	131972	After Treatment Gasket	Cummins ISX / QSX



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 2881920	141440	EGR Cooler Installation Kit
Application: Cummins ISX / QSX		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 3401439	191878	Camshaft Gear
Application: Cummins ISM		



209977X Shown

OEM REFERENCE	PAI REFERENCE	DESCRIPTION	APPLICATION
CUM 3411758	209977X	Fuel Injector Assembly	Cummins M11 & ISM
CUM 3411761	209988X	Fuel Injector Assembly	Cummins N14

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141326 Shown

OEM REFERENCE	PAI REFERENCE	DESCRIPTION	APPLICATION
CUM 3882346	141326	Transfer Tube	Cummins ISM / M11
CUM 4082897	141327	Transfer Tube	Cummins ISM



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 3965008	171759	Crankshaft Assembly Includes Crankshaft (1)171758 Gear (1)171714 Dowel Pin (1)171717
Application: Cummins ISC		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 3928160	180222	Fuel Shutoff Solenoid(12 VDC)
Application: Cummins ISC / ISL / QSC		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 3991168	180219	Fuel Shutoff Solenoid(24 VDC)
Application: Cummins ISB / QSB		

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OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 3932529	180226	Fuel Shutoff Solenoid(12 Volt)
Application: Cummins ISB		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
CUM 4101432	191938	Injector Side Camshaft
Application: Cummins ISX		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
R9040968899	681190	Turbocharger
Application: Mercedes MBE 4000		



OEM REFERENCE	PAI REFERENCE	DESCRIPTION
SCH 171702	EM92760	Turbocharger
Application: Detroit Diesel 60 Series		

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DRIVE TRAIN

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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".