KAWASAKI

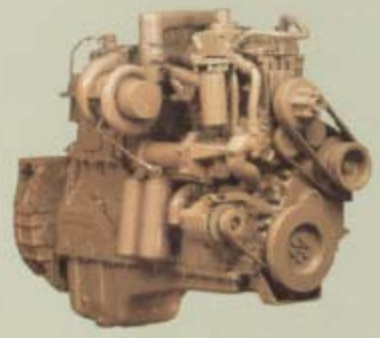
95ZII

95ZII

SUMMARY OF FEATURES

- The popular, fuel-efficient Cummins NTA855 turbocharged diesel supplies a big 310 HP.
- Reliable Delco Remy electrical components make support simple.
- Common SAE hydraulic hose fittings allow hoses to be replaced easily.
- Z-linkage provides high breakout force for easy digging.
- Low cost caliper disc brakes are fade-resistant, self-adjusting, self-cleaning and easy to change.
- Large optional 29.5 × 25 bias or radial tires offer excellent flotation and high load capability.
- Dual bucket cylinders are mounted wide on the torque tube to spread stress and give superior visibility.
- Superior quality in structural areas such as liftarms, frames and center pins provide excellent durability.
- Precision-made hydraulic components allow clean, dry operation longer.
- Operator features include: fingertip controls, semi-automatic transmission, isolated and sound-suppressed cab, suspension seat, tilt wheel, bucket leveler and boom kickout.
- Service features include: sealed linkage pins, cluster-mounted grease fittings, tire inflator, special tools, hinged hoodsides, spin on engine oil and fuel filters, aspirated Donaldson air cleaner, brake pad wear sensor.
- Safety features include: separate brake systems front and rear, emergency brake, warning buzzers and lights to monitor all systems, neutral start and optional emergency steering.

CUMMINS ENGINE



The highly reliable Cummins NTA855 Big Cam III turbocharged diesel supplies 310 flywheel horsepower. Fuel efficiency is excellent and the turbocharger allows the engine to maintain full power up to 10,000 ft. altitude and high ambient temperatures. The dual element Donaldson air cleaner is equipped with an exhaust aspirator to extend element life. The fuel and oil filters are spin-on type. The ether starting system aids cold-weather starts. Delco Remy electrical components simplify support.

OPERATOR COMFORT FEATURES

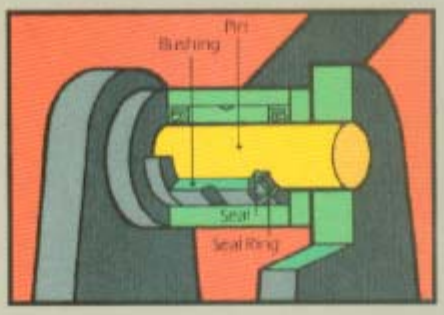
The quiet, roomy ROPS cab offers a comfortable work place to maximize productivity by reducing operator fatigue. The suspension seat is adjustable six ways and the tilt wheel allows the operator to fit the machine to his liking. The compartment is isolation-mounted to reduce vibration and noise. Visibility is excellent in all directions. The cab is equipped with front and rear wipers, front washer, lights, tinted glass, sliding side windows and circulation fan.

SOFT-SHIFT TRANSMISSION

The big planetary powershift transmission has a soft-shift feature to reduce shift shock and increase operator comfort. For quicker cycles and less operator fatigue, shifts from first to second and third to fourth are automatic. Universal joints on all drivelines are a standard SAE size.

SEALED DUAL Z-LINKAGE

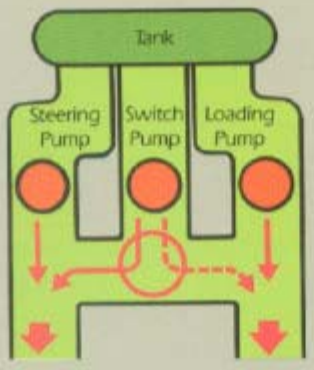
The Kawasaki 95ZII utilizes a dual Z-linkage that incorporates sealed pins to retain lubricant and restrict dirt entry. The two-cylinder design spreads loads evenly over the cast torque tube for added durability.



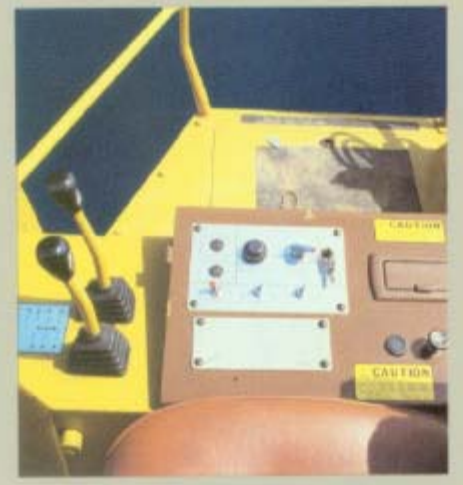
Also, the excellent bucket rollback angle permits carrying the maximum load without spillage.

SMOOTH, EASY STEERING AND FINGERTIP CONTROLS

The demand hydraulic system utilizes three highly-reliable cast iron gear pumps. The demand pump supplements the steering pump at low engine RPM and the main pump at higher RPM. This gives easy steering at all engine speeds and maximum digging speeds.



The dual, servo-assisted control levers offer superior modulation and fingertip control. The boom kickout and bucket leveler help to speed cycle time.



PRESSURIZED HYDRAULICS

The hydraulic tank is pressurized to keep the oil cleaner longer. The large hydraulic capacity and low system pressure reduces heat. With lower heat and cleaner oil the 95ZII hydraulic system stays dry longer. Several of the SAE hoses are used in multiple locations to simplify support.

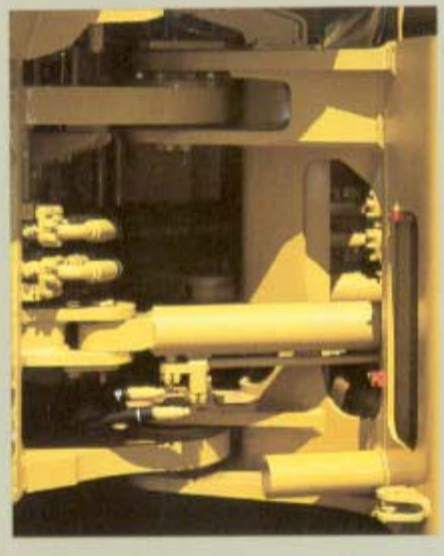
SIMPLE, EFFECTIVE CALIPER DISC BRAKES

The four wheel caliper disc brakes are the lowest operating-cost brake for most applications. These simple brakes are fade-resistant, self-cleaning, and self-

adjusting. The brake pads have electronic sensors to monitor wear. Easy to service in the field, the new pads can be installed quickly. The front and rear axles have separate systems for added safety. The emergency brake automatically applies in case of pressure loss.

SERVICEABILITY FEATURES

Large hinged hoodsides provide easy access to the engine compartment. Grease fittings are cluster-mounted to assure efficient maintenance. A tire inflator is standard.



KAWASAKI'S PDQ SYSTEM

Kawasaki understands the need for timely delivery of parts to any of its users. To provide an unsurpassed level of service in this area, Kawasaki maintains an extremely high level of parts availability and fast response from our parts distribution network and dealers.

KAWASAKI HISTORY

The dependable Kawasaki loader is manufactured by Kawasaki Heavy Industries. Kawasaki is a large industrial manufacturer of ships, aircraft, locomotives, robots, plants, hydraulic components, and motorcycles, as well as a variety of construction equipment. The first Kawasaki articulated loader was manufactured in 1962, making Kawasaki a true pioneer in the loader market. The Kawasaki loaders are sold in over 100 countries. Kawasaki is one of the largest loader manufacturers in the world.

OPERATING SPECIFICATIONS

95ZII

ENGINE

Make/Model/Fuel type	CUMMINS/NTA-855-C335/Diesel
Type	4 cycle, watercooled, turbo-charged, & aftercooled, direct injection
Number of cylinders	6
Bore and stroke	5.5" × 6" (140 mm × 152 mm)
Total displacement	885 in.³ (14,010 cm³)
Horsepower rating at flywheel	310HP/2,100 rpm
Alternator (Delco)	AC 24V-1,800W (75 AMP)
Starting motor	24V-7.5kW (10.1 HP)
Battery	12V-200Ah, 2 units
Governor	All speed, mechanical type

TORQUE CONVERTER AND TRANSMISSION SPECIFICATIONS

Torque converter	Four elements, single stage, 2-phase
Torque stall ratio	5.21:1
Main clutch	Wet hydraulic, multi-disc type
Cooling method	Forced circulation type
Transmission	Power shift, 4 speed forward, automatic shift 1-2 and and 3-4, 2 speed reverse, automatic shift
Max speeds forward Max speeds reverse	1st, 2nd: 7.5MPH (9.3km/hr) 3rd, 4th: 21.4MPH (34.5km/hr) 1st, 2nd: 12.0MPH (15.0km/hr)
Max tractive effort	50,700lbs (23,000kg)

SERVICE REFILL CAPACITY

LOCATION	CLASSIFICATION	CAPACITY-Gal (Lit)
Engine	Cooling water	22.5 (85)
Fuel tank	Diesel fuel	113.6 (430)
Engine (oil pan)	Engine oil	11.4 (43)
Front axle	Gear oil	19.0 (72)
Rear axle	Gear oil	19.0 (72)
Gear box	Gear oil	1/3 (1.5)
Torque converter and transmission	Engine oil	15.9 (60)
Hydraulic system (including tank)	Hydraulic oil	95.1 (360)
Brake oil tank	Brake fluid	1.1 (4)

BRAKE SYSTEM

Service brakes	4 wheel hydraulic, air actuated disc brake of completely independent systems for front and rear wheels. Two brake pedals: Right pedal brakes only. Left pedal brakes while neutralizing transmission.
Parking brake	Spring applied air released type, located on front drive shaft.
Emergency brake	Same as parking, applied on failure in air or hydraulic oil line.

HYDRAULIC AND STEERING SYSTEM

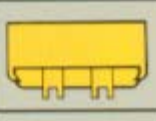
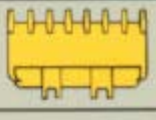
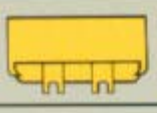
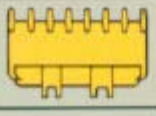
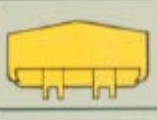
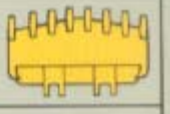
Type	Articulated frame steering
Hydraulic mechanism	Hydraulic power steering unit, mechanical follow-up
Lift (boom) cylinder	Two (2) double-acting piston type: 7.48"ϕ × 38.54" (190mmϕ × 979mm)
Tilt (bucket) cylinder	Two (2) double-acting piston type: 6.3"ϕ × 24.49" (160mmϕ × 622mm)
Steering cylinder	Two (2) double-acting: 3.9" ϕ × 18.1" (100mmϕ × 460mm)
Steering oil pump	Gear type: 30.4GPM/2,275psi @ 1,800rpm (115LPM/160kg/cm² @ 1,800rpm)
Main oil pump	Gear type: 44.1GPM/2,490psi @ 1,800rpm (167LPM/175kg/cm² @ 1,800rpm
Demand (switch) pump	Gear type: 52.8GPM/2,490psi @ 1,800rpm (200LPM/175kg/cm² @ 1,800rpm)
Control valve	Multiple control valve (set pressure – 2,490 psi/175kg/cm²)
Steering relief set pressure	2,275psi (160kg/cm²)
HYDRAULIC CYCLE TIME: *	
Lifting time (at full load)	6.7 sec.
Lowering time (empty)	4.1 sec.
Bucket dumping time	1.3 sec.
TOTAL	12.1 sec.
*Measured in accordance with SAE J732 C.	

AXLE SYSTEM

Drive system	4-wheel drive
Front and rear axle	Full floating banjo type
Tires	Standard: 26.5-25-24PR (L3) Optional: 26.5-25-24PR (L4, L5) 29.5-25-22PR (L3, L4)
Reduction and differential gear	Torque proporting type for improved traction. Spiral bevel gear, 1 stage reduction
Final reduction gear	Internal planetary gear, (4.313:1)
Oscillation angle	± 11° (total: 22°)

OPERATING SPECIFICATIONS / BUCKET DATA

95ZII

			General Purpose		Rock Purpose			
			Straight Edge With Bolt on Cutting Edge GSN962	Straight Edge With Teeth GST962	Straight Edge Without Teeth RSN962	Straight Edge With Teeth RST962	Spade Nose Edge Without Teeth RVN962	Spade Nose With Teeth RVT962
								
Capacity	Heaped	yd³ (m³)	6.25 (4.75)	6.0 (4.5)	5.5 (4.2)	5.5 (4.2)	5.5 (4.2)	5.5 (4.2)
	Struck	yd³ (m³)	5.5 (4.25)	5.2 (4.0)	4.7 (3.6)	4.7 (3.6)	4.7 (3.6)	4.7 (3.6)
Recommended Material Density		lb/yd³ (kg)/m³	3,000 (1,780)	3,000 (1,780)	3,200 (1,900)	3,200 (1,900)	3,200 (1,900)	3,200 (1,900)
Maximum Dumping Clearance		ft-in (mm)	10'5/8" (3,065)	9'7 7/8" (2,930)	10'3 1/2" (3,140)	9'7" (2,920)	9'9 3/8" (2,980)	9'1 1/2" (2,780)
Dumping Reach (to front of bucket edge or teeth)		ft-in (mm)	4'10 1/4" (1,480)	5'1/4" (1,530)	4'7 3/8" (1,405)	5'1 5/8" (1,540)	5'1 1/2" (1,565)	5'6 3/8" (1,685)
Digging Depth		ft-in (mm)	4 3/4" (120)	6" (155)	3 1/2" (90)	6" (155)	3 1/2" (90)	6" (155)
Breakout Force		lb (kg)	50,550 (22,930)	54,300 (24,630)	55,000 (24,940)	55,000 (24,940)	46,900 (21,300)	46,900 (21,300)
Bucket tilt-back angle	(at ground level)	degree	47°	47°	47°	47°	47°	47°
	(at carry position)	degree	47°	47°	47°	47°	47°	47°
Overall	Length	ft-in (mm)	28'3" (8,610)	28'10 5/8" (8,805)	27'10 1/2" (8,495)	28'10 1/2" (8,800)	28'7 3/8" (8,720)	29'5 5/8" (8,980)
	Height	ft-in (mm)	12'7 1/2" (3,850)	12'7 1/2" (3,850)	12'7 1/2" (3,850)	12'7 1/2" (3,850)	12'7 1/2" (3,850)	12'7 1/2" (3,850)
	Width (Outside Tire)	ft-in (mm)	10'2 1/2" (3,110)	10'2 1/2" (3,110)	10'2 1/2" (3,110)	10'2 1/2" (3,110)	10'2 1/2" (3,110)	10'2 1/2" (3,110)
	Width (Outside Bucket)	ft-in (mm)	11'3 7/8" (3,450)	11'3 7/8" (3,450)	11'3 7/8" (3,450)	11'3 7/8" (3,450)	11'3 7/8" (3,450)	11'3 7/8" (3,450)
Wheel Base		ft-in (mm)	11'6 5/8" (3,520)	11'6 5/8" (3,520)	11'6 5/8" (3,520)	11'6 5/8" (3,520)	11'6 5/8" (3,520)	11'6 5/8" (3,520)
Min. Turning Radius	at outside bucket	ft-in (mm)	25'4 1/8" (7,725)	25'4 1/8" (7,725)	25'3 1/2" (7,710)	25'3 1/2" (7,710)	25'3 3/8" (7,705)	25'3 3/8" (7,705)
	at center of outside tire	ft-in (mm)	21'9 7/8" (6,650)	21'9 7/8" (6,650)	21'9 7/8" (6,650)	21'9 7/8" (6,650)	21'9 7/8" (6,650)	21'9 7/8" (6,650)
Min. Ground Clearance		ft. in (mm)	1'5 3/4" (450)	1'5 3/4" (450)	1'5 3/4" (450)	1'5 3/4" (450)	1'5 3/4" (450)	1'5 3/4" (450)
Full Articulation Angle		degree	36°	36°	36°	36°	36°	36°
Operating Weight (with ROPS Cab)		lb (kg)	61,840 (28,050)	61,810 (28,030)	62,250 (28,230)	62,690 (28,430)	62,470 (28,330)	62,910 (28,530)
Static Tipping Load (with ROPS Cab)	Straight	lb (kg)	40,120 (18,200)	40,510 (18,370)	40,060 (18,170)	39,620 (17,970)	39,840 (18,070)	39,190 (17,770)
	Full Turn	lb (kg)	36,270 (16,450)	36,630 (16,610)	36,400 (16,510)	35,740 (16,210)	36,180 (16,410)	35,520 (16,110)

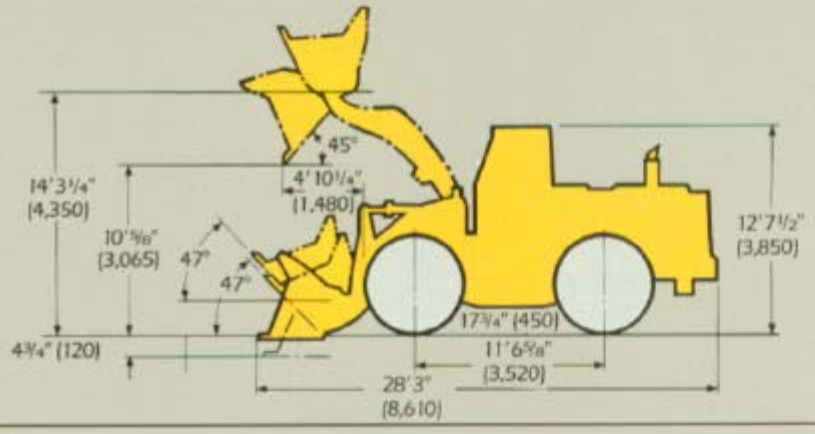
The Weight and Load figure include Enclosed ROPS Cab, 26.5-25-24PR (L-3) Tires, full fuel tank and operator.
Measured in accordance with SAE J732C and J742C.

WEIGHTS AND DIMENSIONS (SUPPLEMENTAL DATA)

		Operating Weight	Tipping Load			Overall Width (Outside Tire)	Tread	Change in Vertical Dimension	Overall Length
			Straight	Full Turn					
ROPS Canopy (Instead of ROPS Cab)	lb (kg)	-770 (-350)	-620 (-280)	-620 (-280)					
Remove ROPS Canopy and Cab	lb (kg)	-2,980 (-1,350)	-2,650 (-1,200)	-2,540 (-1,150)	in (cm)			-3 1/2" (-90)	
Counter Weight	lb (kg)	+660 (+300)	+1,455 (+660)	+1,260 (+570)	in (mm)				2" (+50)
Tires: 26.5-25-24PR(L-4)*	lb (kg)	+800 (+400)	+640 (+290)	+570 (+260)	in (mm)			1 1/4" (+30)	
26.5-25-24PR(L-5)*	lb (kg)	+2,180 (+990)	+1,565 (+710)	+1,410 (+640)	in (mm)			1 1/4" (+30)	
29.5-25-22PR(L-3)*	lb (kg)	+925 (+420)	+660 (+300)	+595 (+270)	in (mm)	+7 1/2" (+190)	+4 3/4" (+120)	+1 5/8" (+40)	
Air Conditioner	lb (kg)	+220 (+100)	+240 (+110)	+220 (+100)					
Belly Guard (Rear Frame)	lb (kg)	+265 (+120)	+375 (+170)	+330 (+150)					

*$CaCl_2$ in 26.5-25-24 PR weighs 3,170 lbs. $CaCl_2$ in 29.5-25-24 PR weighs 4,185 lbs.

Tread ..... 7' 11" (2,420mm)
Width (Outside Tire)
..... 10' 2 1/2" (3,110mm)
Width (Outside Bucket)
..... 11' 3 7/8" (3,450mm)
Equipped with GSN bucket with bolt on cutting edge, 26.5-25-24 PR (L-3) TIRE and ROPS Cab.



STANDARD EQUIPMENT

- Adjustable steering column
- Air cleaner (Donaldson type with storata precleaner)
- Air compressor
- Alternator-24V-75 amp
- Backup alarm
- Batteries (2) 12V-200Ah
- Brakes (dual system-air over hydraulic, disc)
- Bucket positioner
- Cold start ether system
- Emergency brake
- Engine side panel
- Fenders – (two [2] front, two [2] rear)
- Filtration system (replacable elements)
- Frame lock
- Fuel gauge guard
- Gauges:
  - air pressure, engine water temperature, torque converter oil temperature, hour meter, fuel level indicator, hydraulic oil level indicator
- Horn (electric)
- Hydraulic servo-assisted control valve
- Hydraulic power steering (with demand valve)
- Indicator lights: working light, high beam
- Ladder (access at both sides)
- Lights: (two [2] headlights, two [2] stop & tail lights, two [2] rear lights
- Muffler
- Neutral starter
- Parking brake
- ROPS canopy
- Seatbelt
- Seat (adjustable suspension type)
- Special tool kit
- Switches: cold start, lights – front & rear, pilot light check, starter
- Tires - four (4) 26.5-25-24PR (L-3)
- Tire inflation kit
- Torque proportional differential
- Vandalism protection
- Warning buzzers: air pressure, engine oil pressure, brake fluid, parking brake with transmission engaged
- Warning lights: engine water temperature, torque converter oil temperature, engine oil pressure, air pressure, brake fluid, air filter clogging, parking brake, battery discharge

OPTIONAL EQUIPMENT

- Air conditioner, floor-mounted
- Air dryer
- Belly guard
- Bolt-on counterweight
- Bolt-on cutting edge
- Bolt-on wear plate
- Buckets (see bucket data)
- Emergency steering
- Cooler: 18,300 BTU/Hr
- Heater: 24,200 BTU/Hr rated
- Hydraulic system, three-spool valve, control lever, linkage and lines
- Soft cab: enclosed, with sound suppression, front and rear windshield wipers, front working lights, defroster fan
- Rear working lights
- Tires (sets of four): 26.5-25-24PR (L-4) (L-5), 29.5-25-22PR (L-3)

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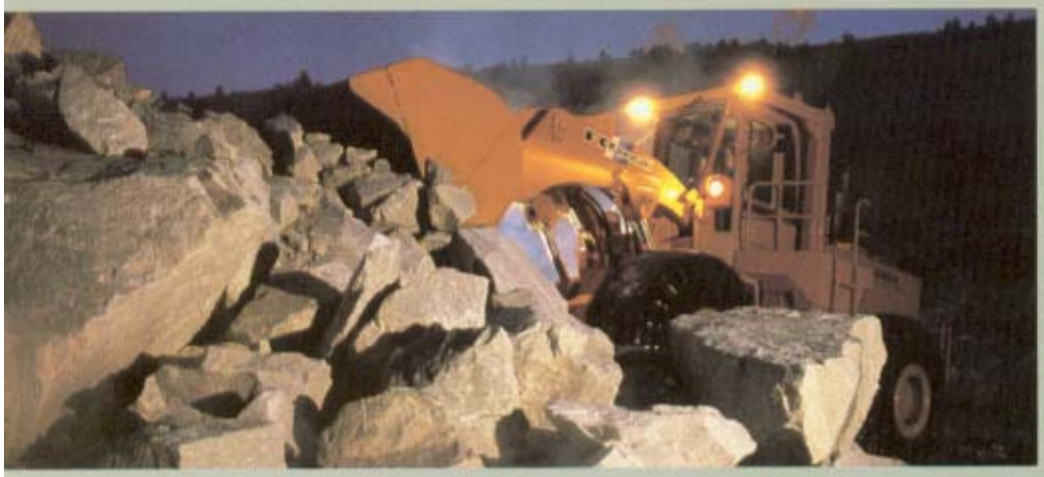

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