

115 ZIII



115ZIII

SUMMARY OF FEATURES

- The reliable, fuel efficient Cummins KT-19-C turbocharged engine supplies a big 410 HP.
- Z-type linkage for high breakout force and easy digging in tough materials.
- Dual bucket cylinders for excellent visibility to the bucket plus distribution of loads evenly across the torque tube.
- High tipping loads for excellent stability.
- Large 35/65 x 33 tire provides excellent flotation and high load capacity.
- Safety features include seat belt, separate brake systems front and rear, emergency brake, major component monitor system, reverse alarm, neutral start and optional emergency steering.
- Operator features include adjustable steering column, single twist grip transmission lever, wrist rest, fingertip hydraulic controls, isolated/sound suppressed cab, optional air conditioner/heater, suspension seat, bucket leveler and boom kickout.
- Service features include sealed linkage pins, remote mounted grease fittings, SAE hydraulic hoses, spin on engine and fuel filter, multiple use of common hoses, hinged hood/sides and special tool kit.
- Wet disc brakes offer protection from external contamination, longer life and excellent braking capacity.
- KLEW – Kawasaki Loaders Early Warning Oil Analysis program measures wear metals and contaminants in the oil to monitor wear rates of major components. This sophisticated test allows overhauls to be scheduled to reduce downtime and costs.

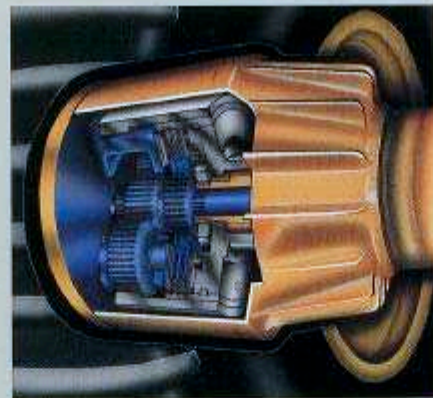


CUMMINS ENGINE

The state-of-the-art Cummins KT-19-C turbocharged diesel provides a big 410 flywheel horsepower. With outstanding torque characteristics; this engine also offers excellent fuel economy. The turbo-charger permits efficient operation at high altitude or high ambient conditions. Reliable Delco Remy electrical components make service easy. Ether cold start is standard. Resilient engine mounts reduce vibration and noise. Two stage Donaldson air cleaner protects the engine.

WET DISC BRAKES

The 115ZIII wet disc brakes offer excellent capacity, protection and long life. Mounted in each wheel are the multiple, sintered alloy clutches that offer excellent heat capacity and rotate to provide greater cooling. The clutches are



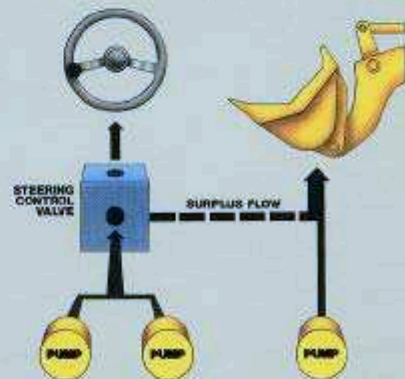
mounted on the low-torque, input side of the planetary. This permits the use of fewer parts and easier accessibility to reduce overhaul time.

PLANETARY TRANSMISSION WITH S.C.U.

The big four-speed transmission offers excellent performance and reliability. Speed selection is made easy by the Shift Control Unit (S.C.U.) which allows four options: Hold in First, Hold in Second, Automatic 1-2, Automatic 1-2-3-4. The single twist grip shift lever allows the operator to select the speed range best suited to the job. The S.C.U. insures proper shifting to protect the transmission and extend service life.

ENERGY EFFICIENT HYDRAULICS

The ZIII series loaders all incorporate energy efficient hydraulics. The unused steering fluid is utilized by the loading circuit. This gives excellent performance with low horsepower drain. The 115ZIII tank is pressurized to keep hydraulic oil cleaner, longer. The large system capacity reduces oil temperature and heat on hoses, seals and other components. This adds life, keeping the 115ZIII dry longer. To insure these high standards of quality, Kawasaki extensively tests each loader.



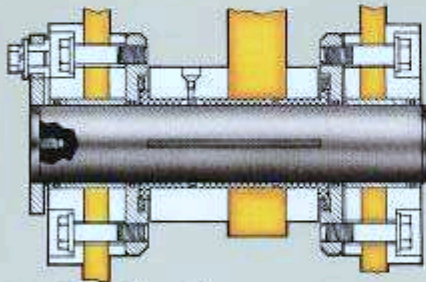
AUTO BRAKE

The S.C.U. also has an Auto Brake feature for protection against transmission overspeeding. If overspeeding conditions exist the Auto Brake senses the condition and partially applies the service brakes and shifts the transmission to neutral until a proper speed for the gear range is achieved.



SEALED PINS

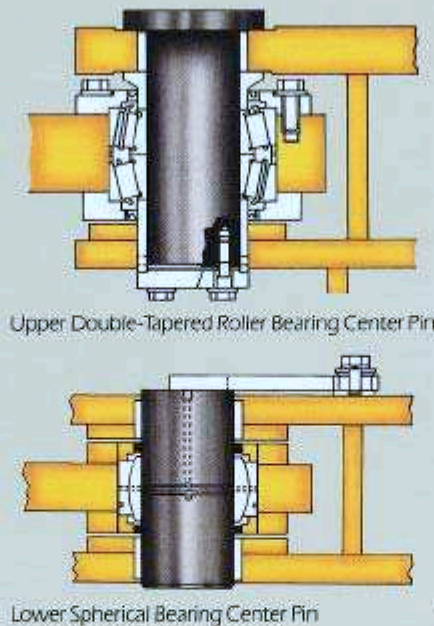
The lower bucket hinge pins use a patented design triple seal on each end of the pin to insure that dirt cannot enter. This pin uses grease as a lubricant rather than oil to provide greater durability and longer life. All other linkage pins use conventional lip type seals to retain grease and extend service life. Service interval for all pins is 100 hours.



Lower Bucket Hinge Pin

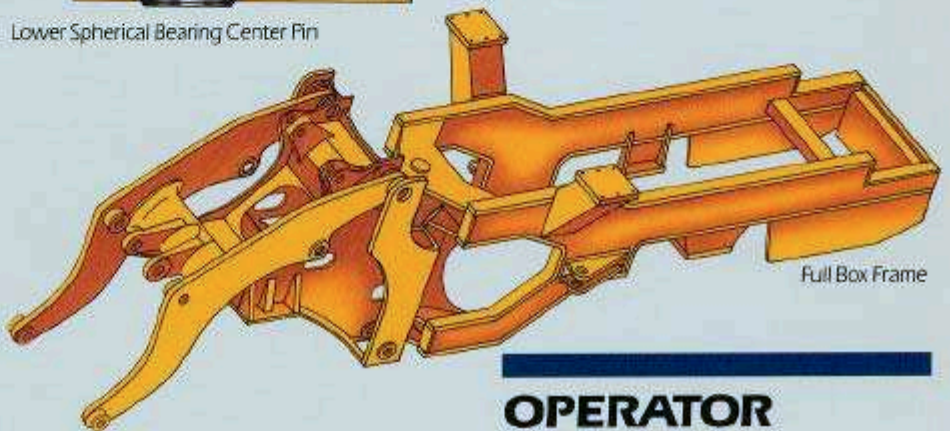
DUAL Z-LINKAGE

The Z-linkage provides high breakout force for digging tough material. The 50° bucket rollback permits carrying the full load without spillage. The dual tilt cylinders spread the load more evenly across the torque tube and provide a clear line of sight to the bucket.



Upper Double-Tapered Roller Bearing Center Pin

Lower Spherical Bearing Center Pin



Full Box Frame

TOUGH STRUCTURES

The 115ZIII is built to handle the tough jobs. The solid lift arms are made from high strength alloy steel for excellent durability. The large center pins are supported by massive structures and use tapered roller bearings and spherical bearings to handle the load in this critical area. The rear frame is a heavy full-box section frame to provide long, trouble-free service.

OPERATOR COMFORT

The roomy ROPS cab is rubber mounted, reducing both vibration and sound levels to 85 dBA. The cab is well equipped with tinted glass, sliding windows, front and rear wipers and washers, defroster fan, available floor mounted heater/air conditioner, and exterior and interior rear view mirrors. Operator comfort is further enhanced by a 3-way adjustable suspension seat, pilot operated fingertip hydraulic controls, wrist rest and adjustable steering column. Bucket cylinder design results in excellent bucket visibility, and the bucket leveler and boom kick-out reduce fatigue and quicken cycle time.

SERVICEABILITY FEATURES

To insure proper efficient servicing, the Kawasaki 115ZIII offers many features. All grease fittings are located for easy access. Convenient panels and hinged hood sides along with spin-on engine, oil and fuel filters make routine service checks simple. All flange fittings use SAE threads for easy, convenient replacement. Most of the hoses are used in several locations, allowing a minimal stock of hoses to support the entire machine. A special tool kit is standard.



KAWASAKI ZIII SUPPORT



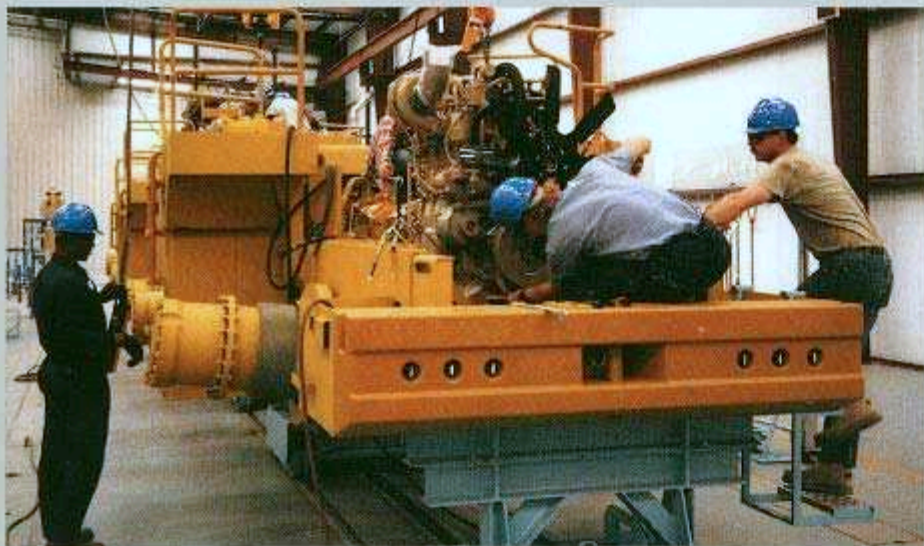
KAWASAKI'S PDQ

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 LOADERS MANUFACTURING CORP., USA

The Kawasaki commitment has been further demonstrated with the establishment of Kawasaki Loaders Manufacturing Corp. USA (KLMC). This new factory, located southwest of Atlanta, is dedicated to providing the same high quality product Kawasaki has become known for. The outstanding support we offer through dedicated independent dealers completes this commitment to you.



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. Kawasaki loaders are sold in over 100 countries and Kawasaki is one of the largest loader manufacturers in the world today.

OPERATING SPECIFICATIONS

115ZIII

ENGINE

Make/Model/ Fuel Type	Cummins/KT19-C/Diesel
Type	4 cycle, watercooled, turbocharged, direct injection
Net flywheel horsepower	410 HP/2000 rpm
Max Torque	1300 lb.ft/1300 rpm (180 kgm/1300 rpm)
Number of cylinders	6
Bore and stroke	φ 6.25" × 6.25" (φ 159mm × 159mm)
Total displacement	1150 in ³ (18,853 cm ³)
Alternator	AC24V-1800W, 75AMP
Starting motor	24V-8.9kw (12HP)
Battery	12V-200Ah, 2 Units
Governor	all speed, mechanical type

TORQUE CONVERTER AND TRANSMISSION SPECIFICATIONS

Torque converter	three elements, single stage, 1-phase	
Torque stall ratio	3.0:1	
Main clutch	wet hydraulic, multi-disk type	
Cooling method	forced circulation type	
Transmission	full power shift, 4 forward, 3 reverse	
Speeds	Forward	1st: 0~4.1 MPH (0~6.6 km/h)
		2nd: 0~7.6 MPH (0~12.2 km/h)
		3rd: 0~12.7 MPH (0~20.4 km/h)
		4th: 0~19.3 MPH (0~31.1 km/h)
	Reverse	1st: 0~4.4 MPH (0~7.1 km/h)
		2nd: 0~8.1 MPH (0~13.1 km/h)
3rd: 0~13.5 MPH (0~21.8 km/h)		

SERVICE REFILL CAPACITY

LOCATION	CAPACITY Gal (Lit)
Engine (Coolant)	cooling water 24 (90)
Fuel Tank	diesel fuel 164 (620)
Engine (oil pan)	engine oil 16 (59)
Front axle	gear oil 48 (180)
Rear axle	gear oil 48 (180)
Torque converter and transmission	engine oil 21 (80)
Hydraulic system (including tank)	hydraulic oil 120 (450)
Brake oil tank	engine oil 1.1 (4)

HYDRAULIC AND STEERING SYSTEM

Type	articulated frame steering	
Steering mechanism	hydraulic power steering unit, pilot operated type	
Lift (boom) cylinder	two (2) double-acting piston type: φ 8 ¹ / ₂ " × 3'8 ¹ / ₂ " (φ 225mm × 1132mm)	
Tilt (bucket) cylinder	two (2) double-acting piston type: φ 7 ¹ / ₂ " × 2'6 ¹ / ₂ " (φ 190mm × 767mm)	
Steering cylinder	two (2) double-acting piston type: φ 4 ¹ / ₂ " × 2'4 ¹ / ₂ " (φ 110mm × 720mm)	
Main Pump	gear type: 54.2 GPM/1000 psi @ 2000 rpm (205 LPM/70kg/cm ² @ 2000 rpm)	
Steering pump	gear type: 108.3 GPM/1000 psi @ 2000 rpm (410 LPM/70kg/cm ² @ 2000 rpm)	
Pilot pump	25.1 GPM/420 psi @ 2000 rpm (95 LPM/30kg/cm ² @ 2000 rpm)	
Relief set pressure	Loading	3000 psi (210 kg/cm ²)
	Steering	3000 psi (210 kg/cm ²)
HYDRAULIC CYCLE TIME:*		
Lifting time (at full load)	8.7 sec.	
Lowering time (empty)	4.4 sec.	
Bucket dumping time	2.1 sec.	
TOTAL	15.2 sec.	
*Measured in accordance with SAE J732C.		

AXLE SYSTEM

Drive system	4-wheel drive	
Front and rear axle	full floating banjo type	
Tires	Standard:	35/65-33-24PR (L-4)
	Optional:	35/65-33-24PR (L-5) 29.5-29-28PR (L-3) 29.5-29-28PR (L-4) 29.5-29-28PR (L-5)
Reduction and differential gear	spiral bevel gear, 1 stage reduction	
Final reduction gear	Outboard mounted, internal planetary gear	
Oscillation angle	± 13° (total 26°)	

BRAKE SYSTEM

Service brakes	4 wheel adjustment-free, wet multiple-disk brakes, controlled by full hydraulic system
Parking brake	Spring applied oil pressure released type, located in front drive shaft
Emergency brake	same as parking, applying on failure in brake control line

OPERATING SPECIFICATIONS / BUCKET DATA

115ZIII STANDARD BOOM



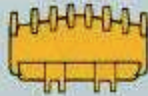

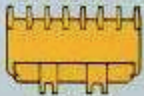
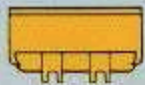
		Rock-V-Edge		Rock-Straight	General Purpose
		With Teeth	Without Teeth	With Teeth	With Bolt on Cutting Edge
Capacity	Heaped	yd ³ (m ³)	7.5 (5.7)	7.5 (5.7)	8.25 (6.3)
	Struck	yd ³ (m ³)	6.5 (5.0)	6.5 (5.0)	7.0 (5.3)
Maximum Dumping Clearance		ft-in (mm)	10' 10 1/8" (3320)	11' 9 1/4" (3600)	11' 10" (3605)
Dumping Reach (to front of bucket edge or teeth)		ft-in (mm)	6' 7" (2005)	5' 11" (1800)	6' 5/8" (1750)
Bucket Hinge Pin Height		ft-in (mm)	16' 6 1/8" (5040)	16' 6 1/8" (5040)	16' 6 1/8" (5040)
Digging Depth		ft-in (mm)	6" (150)	3 1/8" (90)	6" (150)
Breakout Force		lb (kg)	80,690 (36,600)	80,690 (36,600)	87,080 (39,500)
Bucket Tilt-Back Angle		(at ground level)	43°	43°	43°
		(at carry position)	50°	50°	50°
Overall	Length	ft-in (mm)	35' 10 1/8" (10,940)	34' 9" (10,590)	35' 1 1/8" (10,710)
	Height	ft-in (mm)	13' 5 1/8" (4110)	13' 5 1/8" (4110)	13' 5 1/8" (4110)
	Width (Outside Tire)	ft-in (mm)	11' 8 1/8" (3570)	11' 8 1/8" (3570)	11' 8 1/8" (3570)
	Width (Outside Bucket)	ft-in (mm)	12' 5 1/8" (3790)	12' 4" (3770)	12' 5 1/8" (3790)
Wheel Base		ft-in (mm)	13' 3 1/8" (4050)	13' 3 1/8" (4050)	13' 3 1/8" (4050)
Min. Turning Radius	At Outside Bucket	ft-in (mm)	27' 2" (8,280)	26' 9 1/4" (8,160)	27' 2" (8,280)
	At Center of Outside Tire	ft-in (mm)	22' 7 1/4" (6890)	22' 7 1/4" (6890)	22' 7 1/4" (6890)
Minimum Ground Clearance		ft-in (mm)	1' 9 1/8" (550)	1' 9 1/8" (550)	1' 9 1/8" (550)
Full Articulation Angle		degree	40°	40°	40°
Operating Weight (with ROPS cab)		lb (kg)	93,390 (42,360)	92,440 (41,930)	93,010 (42,190)
Static Tipping Load (with ROPS Cab)	Straight	lb (kg)	60,450 (27,420)	61,730 (28,000)	60,960 (27,650)
	Full Turn	lb (kg)	51,850 (23,520)	53,130 (24,100)	52,360 (23,750)

The Weight and Load figure include Enclosed ROPS Cab, 35/65-33-24PR (L-4) Tires, full fuel tank and operator. Measured in accordance with SAE J732 and SAE J742.

OPERATING SPECIFICATIONS / BUCKET DATA

115ZIII HIGH LIFT BOOM



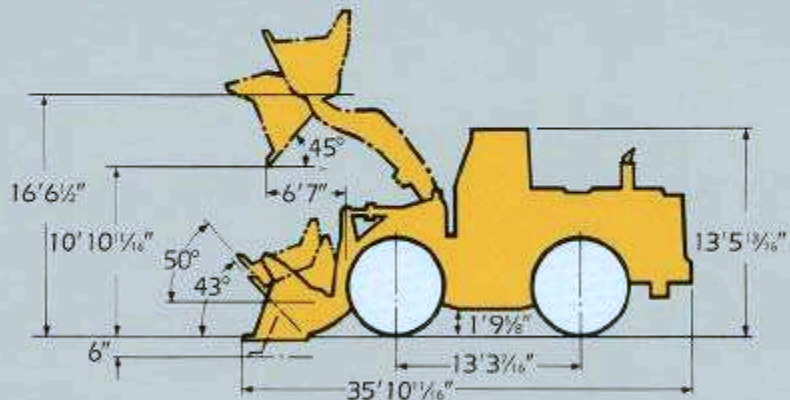
		Rock-V-Edge		Rock-Straight	General Purpose	
		With Teeth	Without Teeth	With Teeth	With Bolt on Cutting Edge	
						
Capacity	Heaped	yd ³ (m ³)	6.5 (5.0)	6.5 (5.0)	6.5 (5.0)	7.5 (5.6)
	Struck	yd ³ (m ³)	5.6 (4.3)	5.6 (4.3)	5.5 (4.3)	6.5 (5.0)
Maximum Dumping Clearance		ft-in (mm)	12'7" (3835)	13'6" (4115)	13'1 1/2" (4000)	13'7 1/2" (4150)
Dumping Reach (to front of bucket edge or tooth)		ft-in (mm)	6'7 1/2" (2030)	5'11 1/2" (1825)	6'1 1/2" (1865)	5'8 1/2" (1750)
Bucket Hinge Pin Height		ft-in (mm)	18' 1/8" (5490)	18' 1/8" (5490)	18' 1/8" (5490)	18' 1/8" (5490)
Digging Depth		ft-in (mm)	6" (150)	3 1/2" (90)	6" (150)	5 1/2" (130)
Breakout Force		lb (kg)	85,960 (38,990)	85,960 (38,990)	92,600 (42,000)	81,860 (37,130)
Bucket tilt-back angle		(at ground level)	43°	43°	43°	43°
		(at carry position)	50°	50°	50°	50°
Overall	Length	ft-in (mm)	37'1 1/2" (11,320)	35'11 1/2" (10,970)	36'4 1/8" (11,090)	35'9 1/8" (10,900)
	Height	ft-in (mm)	13'5 1/2" (4110)	13'5 1/2" (4110)	13'5 1/2" (4110)	13'5 1/2" (4110)
	Width (Outside Tire)	ft-in (mm)	11'8 1/2" (3570)	11'8 1/2" (3570)	11'8 1/2" (3570)	11'8 1/2" (3570)
	Width (Outside Bucket)	ft-in (mm)	12'5 1/2" (3790)	12'4" (3770)	12'5 1/2" (3790)	12'4" (3770)
Wheel Base		ft-in (mm)	13'3 1/2" (4050)	13'3 1/2" (4050)	13'3 1/2" (4050)	13'3 1/2" (4050)
Min. Turning Radius	At Outside Bucket	ft-in (mm)	27'9 1/4" (8460)	27'3 3/4" (8330)	27'9 1/4" (8460)	27'6 1/4" (8400)
	At Center of Outside Tire	ft-in (mm)	22'7 1/4" (6890)	22'7 1/4" (6890)	22'7 1/4" (6890)	22'7 1/4" (6890)
Minimum Ground Clearance		ft-in (mm)	1'9 1/2" (550)	1'9 1/2" (550)	1'9 1/2" (550)	1'9 1/2" (550)
Full Articulation Angle		degree	40°	40°	40°	40°
Operating Weight (with ROPS cab)		lb (kg)	95550 (43340)	94600 (42910)	95000 (43070)	94140 (42700)
Static Tipping Load (with ROPS Cab)	Straight	lb (kg)	54980 (24940)	56220 (25500)	55510 (25180)	56570 (25660)
	Full Turn	lb (kg)	46820 (21240)	48060 (21800)	47360 (21480)	48410 (21960)

The Weight and Load figure include Enclosed ROPS Cab, 35/65-33-24PR [L-4] Tires, full fuel tank, counterweight and operator. Measured in accordance with SAE J732 and SAE J742

WEIGHTS AND DIMENSIONS (SUPPLEMENTAL DATA)

		Operating Weight	Tipping Load			Overall Width (Outside Tire)	Vertical Dimension	Overall Length
			Straight	Full Turn				
ROPS Canopy (Instead of ROPS Cab)	lb (kg)	-800 (-360)	-620 (-280)	-620 (-280)				
Remove ROPS Canopy and Cab	lb (kg)	-2,770 (-1,260)	-2,430 (-1,100)	-2,310 (-1,050)	in (mm)		-1'5 1/8" (-450)	
Counter Weight	lb (kg)	+1,340 (+610)	+3,240 (+1,470)	+2,690 (+1,220)	in (mm)			+2 1/8" (+75)
Tires: 35/65-33-24PR (L-5)	lb (kg)	+1,500 (+680)	+1,060 (+480)	+930 (+420)	in (mm)		+1 (+25)	-1 (-25)
29.5-29-28PR(L-3)	lb (kg)	-4,070 (-1,850)	-2,890 (-1,310)	-2,530 (-1,150)	in (mm)	-4 1/4" (-120)	-3 1/8" (-80)	+3 1/8" (+80)
29.5-29-28PR(L-4)	lb (kg)	-2,200 (-1,000)	-1,540 (-700)	-1,370 (-620)	in (mm)	-4 1/4" (-120)	-1 1/2" (-40)	+1 1/2" (+40)
29.5-29-28PR(L-5)	lb (kg)	-1,210 (-550)	-830 (-380)	-750 (-340)	in (mm)	-4 1/4" (-120)	-1/2" (-20)	+1/2" (+20)
35/65-33-24PR(L-4) 75% CaCl ₂	lb (kg)	+5,950 (+2,700)	+8,420 (+3,820)	+7,430 (+3,370)				
35/65-33-24PR(L-5) 75% CaCl ₂	lb (kg)	+7,450 (+3,380)	+10,540 (+4,780)	+9,300 (+4,220)	in (mm)		+1 (+25)	-1 (-25)
29.5-29-28PR(L-3) 75% CaCl ₂	lb (kg)	+550 (+250)	+770 (+350)	+680 (+310)	in (mm)	-4 1/4" (-120)	-3 1/8" (-80)	+3 1/8" (+80)
29.5-29-28PR(L-4) 75% CaCl ₂	lb (kg)	+2,430 (+1,100)	+3,420 (+1,550)	+3,020 (+1,370)	in (mm)	-4 1/4" (-120)	-1 1/2" (-40)	+1 1/2" (+40)
29.5-29-28PR(L-5) 75% CaCl ₂	lb (kg)	+3,420 (+1,550)	+4,830 (+2,190)	+4,250 (+1,930)	in (mm)	-4 1/4" (-120)	-1/2" (-20)	+1/2" (+20)
Air Conditioner	lb (kg)	+220 (+100)	+310 (+140)	+260 (+120)				
Belly Guard (Rear Frame)	lb (kg)	+310 (+140)	+420 (+190)	+375 (+170)				

Tread 8'8 1/8" (2,650mm)
 Width (Outside Tire) 11'8 1/8"
 (3,570mm)
 Width (Outside Bucket) 12'4 1/8"
 (3,770mm)
 Equipped with Rock-V-Edge bucket
 with Teeth, 35/65-33-24 PR (L-4) TIRE
 and ROPS Cab.



STANDARD EQUIPMENT

<p>Adjustable steering column</p> <p>Air cleaner (Donaldson: double element 2 stage type)</p> <p>Alarms – Audible:</p> <ul style="list-style-type: none"> brake oil level brake oil pressure parking brake w/transmission engaged (neutral check) engine oil pressure engine water temperature transmission oil temperature emergency brake <p>Alarms – Visual:</p> <ul style="list-style-type: none"> air filter auto brake battery discharge brake oil level brake oil pressure 	<p>emergency brake</p> <p>engine water level</p> <p>engine oil level</p> <p>engine oil pressure</p> <p>engine water temperature</p> <p>transmission oil temperature</p> <p>transmission control system</p> <p>parking brake</p> <p>Alternator – 24V, 75 amp</p> <p>Batteries: two (2) – 12V-200Ah</p> <p>Boom lift kick-out</p> <p>Bucket positioner</p> <p>Cold start ether system</p> <p>Draw bar</p> <p>Emergency brake</p> <p>Engine side panel</p> <p>Fan guard</p> <p>Fenders – (front and rear)</p>	<p>Filtration system (replaceable elements)</p> <p>Frame lock</p> <p>Gauges:</p> <ul style="list-style-type: none"> converter oil temperature engine water temperature fuel level hour meter <p>Horn (electric)</p> <p>Indicator lights: working light, high beam, transmission cut off, neutral, 1st, 2nd, low, high</p> <p>Ladder (access at both sides).</p> <p>Lights: (two (2) headlights, two (2) stop & tail lights, two (2) rear working lights, reverse light</p> <p>Neutral safety start</p>	<p>Parking brake (spring applied oil released type)</p> <p>Pilot assisted hydraulic control</p> <p>Reverse alarm</p> <p>ROPS cab, enclosed with sound suppression, front and rear windshield wiper and washer, front working lights, defroster fan and rear view mirrors</p> <p>Seat belt</p> <p>Seat (adjustable suspension type)</p> <p>Special tool kit</p> <p>Switches: cold start, headlight, rear working light, starter, parking, transmission cut off, wiper</p> <p>Tires – four (4) 35/65-33-24PR (L-4)</p> <p>Vandalism protection</p>
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OPTIONAL EQUIPMENT

<p>Air conditioner, with heater and defroster</p> <p>Belly guard</p> <p>Bolt-on counterweight (instead of rear tire ballast)</p> <p>Bolt-on wear plate</p>	<p>Bucket (see data chart)</p> <p>Emergency steering (special option)</p> <p>Heater: 16,000 BTU/hr rated-hot water</p> <p>High lift arm kit</p> <p>Hydraulic system – three spool</p>	<p>valve, control lever, linkage and lines (special option)</p> <p>No spin differential (special option)</p> <p>ROPS canopy</p> <p>Teeth, weld-on,</p> <p>Tires, (set of four):</p> <ul style="list-style-type: none"> 29.5-29-28PR (L-3) 29.5-29-28PR (L-4) 	<p>29.5-29-28PR (L-5)</p> <p>29.5-29-XRD (L-4)</p> <p>29.5-29-XRD2 (L-5)</p> <p>29.5-29-XMINE (L-5)</p> <p>35/65-33-24PR (L-5)</p> <p>35/65R3 XRD1 (L-4)</p> <p>35/65R3 XRD2 (L-5)</p>
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Specifications are subject to change without notice.



KAWASAKI CONSTRUCTION MACHINERY
CORP. OF AMERICA

2140 Barrett Park Drive • Suite 101
P.O. Box 1657
Kennesaw, Georgia 30144
Tel: 770-499-7000
Fax: 770-421-6842
www.kawasakiloaders.com