



■ Kawasaki

THE VERSATILE 50 Zz-2

A COMPLETE SOLUTION

- Emissions-compliant 109 HP Cummins diesel
- 2.1 cu. yard bucket standard
- Accepts a wide assortment of attachments to handle many jobs
- High visibility ROPS cab optimizes productivity
- Ride Control option provides stable load handling
- Single hydraulic control for easy operation
- Powershift transmission with three forward and reverse speeds
- Four-wheeled sealed wet disc brakes for reliability and long service life
- Torque-proportioning differentials for improved traction and longer brake life
- Easy access to drains, filters and fittings



The GOMe can be equipped to tackle a wide array of tasks such as material handling in concrete, asphalt plants and millyards.

THE POWER TO PERFORM!

The December loader is a versatile, high productivity wheel loader for a wide range of applications from agriculture to road construction. Featuring a Cummins B5.9C diesel engine producing 109 flywheel horse-power, a 2.1 cu. yard bucket, a certified ROPS cab and a host of other features that provide high operating efficiency, ease of maintenance and safety, the December is becoming the wheel loader of choice.

OPERATOR PRODUCTIVITY AND SAFETY

The TDE features a ROPS cab with an operator's compartment that offers unmatched comfort and is designed to maximize efficiency and productivity. The cab is accessible by ladders on both sides, has front and rear wipers and includes many other features which contribute to improved safety, visibility and comfort.



Kawasaki and their dealer organization offer comprehensive support and service programs designed to keep you on the job.

PUTTING THE GOZETO WORK

Like all Kawasaki loaders, the TOME has a 35-year heritage of strength and reliability. The TOME is designed with the heaviest Z-linkage lift arms in its class for high breakout force. Single lever hydraulic control and single twist-grip transmission control offer ease of operation.

The Tolker comes equipped with a 2.1 cubic yard bucket with a bolt-on cutting edge. A third spool valve, control lever, linkage and line are available to handle a number of attachments and extend the Tolker's versatility. Other buckets, Quick Couplers and attachments are also available.

The sealed wet disc brakes are designed for long life and easy access and overhaul. Standard spin-on filters, remote mounted grease fittings and oil drain simplify maintenance. The standard 15.5 x 25-12PR(10) L-2 tires and optional 17.5 x 25 tires use heavy duty rims.



UNMATCHED SUPPORT

Kawasaki maintains a large inventory of new components to ensure outstanding parts availability and minimal downtime. In addition, a predictive oil analysis program

helps eliminate unnecessary maintenance and helps find problems before they occur. Kawasaki also stocks an array of cost-effective rebuilt components.

BUILT TO STAY ON THE JOB

Kawasaki loaders are designed with the durability to provide years of service. Backed by a dealer network of heavy equipment experts and a dedicated support staff in the Kawasaki parts and service organization, your investment in a Kawasaki loader is an excellent choice that will pay dividends for years to come.

POWER AND PERFORMANCE UNMATCHED PRODUCTIVITY

The Kawasaki TOM= means business. It incorporates the best in design and technology, giving your operators the tool they need to get the job done.

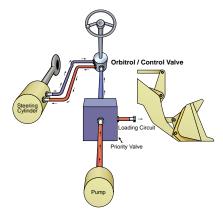
Because Kawasaki specializes in the design and manufacture of articulated wheel loaders, you get a machine with a 35-year heritage of successful innovations. The power and productivity that the EDE brings to the job is a result of that experience.





WORLD-CLASS ENGINES

- 109 HP emissions-compliant Cummins B5.9C diesel
- Compliant with tough new emissions standards for 2001
- Totally reengineered for longer service life
- Reliable and fuel efficient
- Extensive distribution system
- 24 volt battery system for reserve power



HIGH EFFICIENCY HYDRAULIC SYSTEM

- Dry, reliable
- Cast iron gear pump
- Energy efficient, steering circuit supplements main
- · Large oil reservoir keeps oil cooler



TRANSMISSION

- Three-speed transmission with powershift
- Single lever control
- Transmission declutch selector switch activates left brake pedal declutch





AXLES

- Torque-proportioning differentials offer increased traction in sand and mud while extending tire life
- 15.5 x 25-12PR (L-3) tires standard
- 17.5 x 25 x 12 (L-2 & L-3) tires available
- 4-wheel drive
- Oscillation range ± 12° (total 24°)



BRAKES

- Four-wheel, dual-circuit wet disc brakes
- High capacity
- Long life
- · Easy inspection and service



LIFT ARMS/BUCKETS

- · Heaviest in the class
- Z-linkage
- High breakout force
- 2.1 cu. yard bucket standard
- Easy loading
- Excellent load retention
- Full assortment of edges and teeth
- Complete array of attachments available
- Heel plates extend bucket life
- Bucket leveler standard
- Automatic boom height positioner

STRONG, RUGGED CHANNEL FRAME

- Massive center pins and bearings
- · High strength loader tower
- · Heavy channel frame

THE COMFORT ZONE CAB SEAT • Seven-way adjustable seat with headrest and adjustable armrests · Excellent visibility Certified ROPS · Isolation-mounted to standard Heavy-duty suspensionLumbar support reduce vibration · Doors latch back • Side windows slide down CONTROLS • Wrap-around tinted windshields for excellent visibility • Single lever hydraulic control Front and rear wipers and washers AM/FM cassette radio, standard One rearview and two side mirrors standard Single, twist-grip transmission lever Gauges including speedometer All systems monitored with lights • Reduced sound levels • Air conditioner available and alarms Pressurized air control **OPTIONAL FEATURES** · Heater, standard · Air ride seat

EASY ACCESS SIMPLIFIES SERVICING

- · Hinged grille makes radiator cleaning easy
- Engine side covers open wide for optimum access
- Filters positioned within easy reach
- Easy access to drains, filters and fittings
- Grease fittings are grouped for easy lubrication
- · Readily available Fleetguard and Donaldson filters
- · Starters and alternators available through Cummins national distribution network
- · Ladders on both sides of the machine
- · Pressurized air control reduces dust in cab and control boxes



OPTIONS

QUICK COUPLER ATTACHMENT

The JRB Quick Coupler, can be used in conjunction with a variety of attachments, including:

- · General and multi-purpose buckets
- Side dump bucket
- Construction utility forks
- Utility pallet forks
- Extendable boom
- · Paddle top clamp forks
- Grapple bucket
- · Loader rake and loader rake with hydraulic clamps





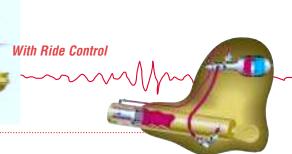


Without Ride Control MMMMmre

Illustration representative of similar models.

RIDE CONTROL

- Stable load handling
- Reduces operator fatique
- Cuts vibration and equipment wear
- Improves safety and productivity
- · Less spillage
- Faster travel speed



60 Zz-≥ BUCKET DATA

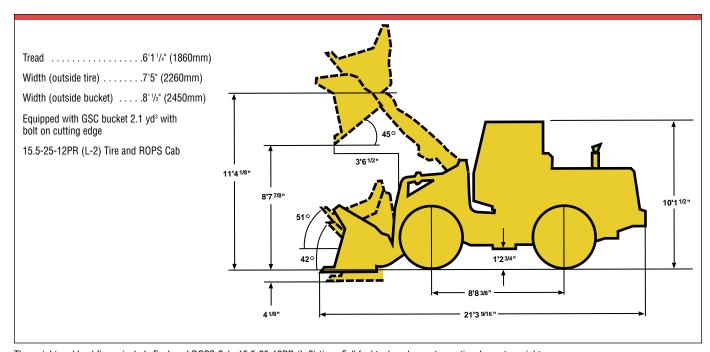
			General	Purpose	Material Handling
	-		With Bolt-on Cutting Edge	With Teeth	With Bolt-on Cutting Edge
•				1-0-0-0-0-0-0	
Capacity	Heaped	yd³ (m³)	2.1 (1.6)	2.0 (1.5)	2.4 (1.8)
	Struck	yd³ (m³)	1.8 (1.4)	1.7 (1.3)	2.0 (1.5)
Maximum dumpi clearance	ing	ft-in (mm)	8'7 ⁷ /8" (2640)	8'7 ⁷ /8" (2555)	8'4 ¹ /2" (2585)
Dumping reach (of bucket edge o	to front r tooth)	ft-in (mm)	3'6 ¹ /2" (1085)	3'8 ⁵ /8" (1135)	3'8 ¹ /4" (1125)
Bucket hinge pin	height	ft-in (mm)	11'4 ¹ /8" (3460)	11'4'/8" (3460)	11'4'/e" (3460)
Digging depth		ft-in (mm)	4 ¹ /8" (105)	4 ⁵ /8" (120)	4¹/s" (105)
Breakout force		lb (kg)	17,600 (8000)	19,000 (8600)	16,300 (7400)
Bucket tilt- back angle	at ground level at carry position		42° 51°	42° 51°	42° 51°
Overall	Length	ft-in (mm)	21'5 ⁹ /16" (6540)	21'6" (6555)	21'4 ⁷ /s" (6525)
	Height	ft-in (mm)	10'1½" (3085)	10'11'/2" (3085)	10 ¹ 1 ¹ / ₂ " (3085)
	Width (outside tire)	ft-in (mm)	7'5" (2260)	7'5" (2260)	7'5" (2260)
	Width (outside bucket)	ft-in (mm)	8' ¹ /2" (2450)	8' 1/2" (2450)	8' ½" (2450)
Wheel base		ft-in (mm)	8'8 ³ /s" (2650)	8'8 ³ /8" (2650)	8'8 ³ /8" (2650)
Minimum turning radius	at outside bucket	ft-in (mm)	17'6" (5335)	17'7 ¹ /4" (5365)	17'6 ⁷ /8" (5355)
	at center of outside tire	ft-in (mm)	15'2 ³ / ₄ " (4640)	14'11 ⁷ /8" (4570)	14'11 ⁷ /8" (4570)
Minimum ground ft-in clearance (mm)		1'2 ³ /4" (375)	1'2 ³ / ₄ " (375)	1'2 ³ /4" (375)	
Full articulation angle degree		40°	40°	40°	
Operating weight (with ROPS Cab) (kg)			19,045 (8638)	18,725 (8488)	18,855 (8548)
Static tipping load	Straight	lb (kg)	16,016 (7265)	16,330 (7405)	16,170 (7335)
(with ROPS Cab)	Full turn	lb (kg)	13,774 (6248)	14,010 (6358)	13,860 (5838)

Measured in accordance with SAE J732C & J742

Materials and specifications are subject to change without notice and without obligation on the part of the manufacturer. The specifications supplied, while believed to be completely reliable, are not to be taken as warranty for which we assume legal responsibility.

60 2 OPERATING SPECIFICATIONS

WEIGHTS AND DIMENSIONS (SUPPLEMENTAL DATA)								
		Operating Weight	Tippii Straight	ng Load Full Turn	_	Overall Width (Outside Tire)	Vertical Dimensions	Overall Length
ROPS Canopy (Instead of ROPS Cab)	lb (kg)	-530 (-240)	-490 (-220)	-420 (-190)	in (mm)		-2" (-50)	
Remove ROPS Canopy and Cab (for transport only)	lb (kg)	-995 (-450)	-895 (-405)	-785 (-355)	in (mm)		-14" (-355)	
Counterweight (Deduct) (Instead of rear tire ballast)	lb (kg)	-615 (-278)	-1180 (-535)	-1010 (-458)	in (mm)			+2" (+50)
Tires:								
17.5-25-12PR (L-2), (L-3)	lb (kg)	+200 (+90)	+130 (+60)	+110 (+50)	in (mm)	+1'1/8" (+30)	+1' 1/8" (+30)	-1'1/8" (-30)
15.5-25-12PR (L-2), (L-3) with 75% CaCl	lb (kg)	+925 (+420)	+1190 (+540)	+1045 (+475)	in (mm)			
17.5-25-12PR (L-2), (L-3) with 75% CaCl	lb (kg)	+1410 (+640)	+1810 (+820)	+1600 (+730)	in (mm)	+1' ¹ /8" (+30)	+1' ¹ /8" (+30)	-1' 1/8" (-30)
Air conditioner	lb (kg)	+150 (+70)	+130 (+60)	+110 (+50)	in			
Belly Guard (rear frame)	lb (kg)	+90 (+40)	+75 (+35)	+65 (+30)	in			



 $The weight and load figure include \ Enclosed \ ROPS \ Cab. \ 15.5-25-12PR \ (L-2) \ tires. \ Full fuel tank and operator, optional counterweight.$

602 → OPERATING SPECIFICATIONS

ENGINE	
Make/Model/Fuel Type	Cummins/B5.9-C/Diesel
Туре	4-cycle, watercooled, direct injection
Net flywheel horsepower	109HP/2400 RPM
Torque	325 ft. lbs./1600 RPM
Number of cylinders	6
Bore and stroke	4.02" x 4.72" (102mm x 120mm)
Total displacement	359 in ³ (5883 cm ³)
Alternator	DC24V-1200w (50amp)
Starting motor	24V-4.5kw (6HP)
Battery	12V-65AH, 2 units
Governor	All-speed, mechanical type

TORQUE CONVERTER AND TRANSMISSION					
Torque converter	3 elements, single stage				
Torque stall ratio	3.02:1				
Main clutches	Wet hydraulic, multi-disc type				
Cooling method	Forced circulation type				
Transmission	Full power shift, 3 forward, 3 reverse				
Forward & reverse (maximum speed)	1st: 4.8 MPH (7.8 km/hr) 2nd: 9.5 MPH (15.3 km/hr) 3rd: 20.1 MPH (32.4 km/hr)				

SERVICE REFILL CAPACITY					
LOCATION	CAPACITY:	Gallons	Liters		
Engine (coolant)		8.50	(32)		
Fuel tank (diesel fuel)		46.25	(175)		
Engine oil (oil pan)		3.75	(14)		
Front axle (gear oil)		5.25	(20)		
Rear axle (gear oil)		5.25	(20)		
Torque converter and transmission (engine oil)		5.25	(20)		
Hydraulic system including tank (hydraulic oil)		26.50	(100)		
Brake oil tank (engine oil)		0.50	(2)		

HYDRAU	JLIC AN	D STEERING SYSTEM			
Steering type		Articulated frame steering			
Steering mech	nanism	Hydraulic power steering (Orbitrol)			
Lift (boom) cy	linder	Two (2) double-acting piston type: 43/s" x 251/4" (110mm x 641mm)			
Tilt (bucket) c	ylinder	One (1) double-acting piston type: 4% x 18% (120mm x 464mm)			
Steering cyline	der	Two (2) double-acting piston type: 2 % x 16" (60mm x 405mm)			
Main oil pump)	Gear type: 31 GPM/1000psi @2400 RPM (117 LPM/70kg/cm² @2400 RPM)			
Relief valve	Loading	3000 psi (210 kg/cm²)			
set pressure	Steering	2490 psi (175 kg/cm²)			
HYDRAULIC (YCLE TIME*				
Lifting time (a	t full load)	6.0 sec.			
Lowering time	(empty)	3.0 sec.			
Bucket dumpi	ng time	1.2 sec.			
TOTAL		10.2 sec.			

^{*} Measured in accordance with SAE J732C

AXL	AXLE SYSTEM				
Drive system		4-wheel drive			
Front a	and rear axle	Semi-floating banjo type			
Tires	Standard	15.5 x 25-12PR (L-2)			
	Optional	15.5 x 25-12PR (L-3) 17.5 x 25-12PR (L-2) 17.5 x 25-12PR (L-3)			
Reduction and differential gear		Spiral bevel/gear, 1 stage reduction, torque proportioning type			
Final reduction gear		Internal planetary gear (5.44:1) inboard mounted			
Oscillation angle		±12°/ 1'3³/s" (390mm)			

BRAKE SYSTEM				
Service brakes	4-wheel fully hydraulic wet disc brakes with independent systems for front and rear wheels with inching system (inboard mounted)			
Parking/Emergency brake	Mechanical, located on front drive shaft.			

60 2 - ≥ EQUIPMENT DATA

STANDARD EQUIPMENT

Air Cleaner

(Double Element Donaldson)

Alarms (Audible):

Brake Oil Level

Brake Oil Pressure

Engine Oil Pressure

Parking Brake with

T/M Engaged

Alarms (Visual):

Air Filter

Battery Discharge

Brake Oil Level

Brake Oil Pressure

Engine Oil Pressure

Engine Coolant Temperature

Converter Oil Temperature

Parking Brake

Alternator (24V, 40 amp)

AM/FM Cassette Radio

Batteries: 12V–65AH (2 units)

Brake (Parking)

Mechanical Drum type

Brakes (Service)

Oil Actuation

Enclosed Wet Disc

Dual System

Bucket Control Lever (Single)

Bucket Leveler

Boom Kickout

Cold Start Aid

Drawbar

Electrical System (24 volt)

Engine Water Expansion Tank

Fan (Blower)

Fenders (Front and Rear)

Gauges:

Fuel Level

Hour Meter

Hydraulic Oil Level

Speedometer

Heater/Pressurizer

(40,000 BTU)

Hoodsides (Hinged)

Horn (Electric)

Indicators:

High Beam

Transmission Declutch

Working Light

Linkage (Z-type, Sealed)

Lights:

4 Front

2 Rear

2 Stop/Tail

2 Backup

2 ROPS

Muffler

Neutral Safety Start Operator's Manual Box Radiator: Heavy Duty Plate Fin Type

Radiator Grille, Hinged

Reverse Alarm

ROPS Cab: Enclosed cab with sound suppression, front lights, front and rear wipers

and washers, one rear and two side mirrors, tinted

glass, and sliding side

windows

Safety Articulation Locking Bar

Seat (Deluxe, adjustable suspension with headrest and

adjustable armrests)
Seat Belt, 3" wide

Torque Proportioning

Differentials

Transmission Declutch

Selector Switch

Vandalism Protection

OPTIONAL EQUIPMENT

Air conditioner (with heater & defroster) (R134a refrigerant)

Belly Guard

Bolt-on Counterweight
Bucket Control Lever: Dual

Cushion Dump Valve

Hi-Lift Arms

Hydraulic System

three (3) spool valve, control lever, linkage & lines

No spin differential

Precleaner

Quick Coupler and Attachments Ride Control ROPS Canopy

Seat, Air Ride Tires: 15.5-25-12PR (L-3),

17.5-25-12PR (L-2), 17.5-25-12PR (L-3) Tire Rims—3-Piece
Turn Signal With
Four-way Flasher
Vandalism Cover For
Operation Panel

KAWASAKI LOADERS

More Than A Machine, A Complete Solution

Kawasaki Construction Machinery Corp. of America, a division of Kawasaki Heavy Industries, is a leading supplier of a full range of high quality wheel loaders. In fact, Kawasaki is the oldest on-going manufacturer of articulated, rubbertired wheel loaders in the world. With over 35 years of proven performance history, Kawasaki wheel loaders have continuously evolved to bring you the best in equipment and support services, backed by a carefully selected dealer network.

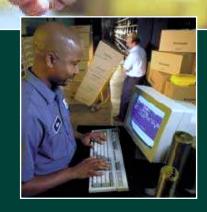
Kawasaki articulated wheel loaders incorporate innovative design features coupled with extensive knowledge and experience gained from real-world applications. Kawasaki pioneered Z-Link design to provide unmatched utility, high breakout force and efficiency in its machines. Powered by proven emissions-compliant Cummins diesel engines, durability and serviceability are designed into every Kawasaki loader.

Kawasaki loaders are assembled at the company's modern facilities in Newnan, GA. Service and support operations are headquartered in Kennesaw, GA.

A state-of-the-art parts distribution system links dealers with the main parts warehouse, allowing them to order parts directly. Qualified craftsmen rebuild components for all Kawasaki models at our fully-equipped rebuild center, making component exchange easier and faster. An independent oil analysis program allows monitoring of critical systems to reduce unscheduled downtime.







■ Kawasaki

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