



224HP | 4.4 - 5.2 yd3 BUCKET CAPACITY





A COMPLETE SOLUTION

- ► Emissions-certified 224 HP Cummins diesel engine
- ► 4.4 to 5.2 cu. yard bucket available
- Accepts a wide assortment of attachments to handle many jobs
- ► Ride Control option provides stable load handling
- Single hydraulic control option for easy operation
- Automatic powershift transmission with four forward and reverse speeds
- Outboard-mounted, dual circuit wet disc brakes for reliability and long service life
- ➤ Torque-proportioning differentials for longer tire life and less wheel spin

- Transmission has helical gears which reduce noise level and vibration
- ➤ Automatic Reversible Fan Cooling Fan with manual override, standard.
- Adjustable declutch allows the operator to adjust the declutch to various operating conditions
- ► MODM (Machine Operation Diagnostic Module) provides essential operations and diagnostic information in an easy-to-read LCD display
- ► ELS (Efficient Loading System), Standard
- Wide front fenders with mud flaps, standard

EASY TO OPERATE. EASY TO MAINTAIN. EASY TO DO BUSINESS WITH.

POWER TO SPARE.

The 85ZV-2 features a redesigned ROPS cab with operator-friendly features. The operator may now customize settings and make adjustments to the loader controls to work more efficiently in the current operating conditions or environment. New features like the Adjustable Declutch, Dual Boom Kickout Control. Idle Management System, Dual Mode Engine Switch, and ELS (Efficient Loading System) allow the operator to make adjustments from the comfort of the cab increasing productivity and efficiency. Options such as the Limited Slip Differentials allow the operator additional controls to adapt the 85ZV-2 loader to the working conditions.



COMFORTABLE, EFFICIENT, SAFE.

The 85ZV-2 features standard air conditioning and heater. The Air Ride seat is standard. The operator compartment has increased leg room. Options such as the F-R Directional Switch, Ride control, and Single Lever Hydraulic Control allow the operator additional ease of operation and comfort.

VERSATILE, RELIABLE, STRONG.

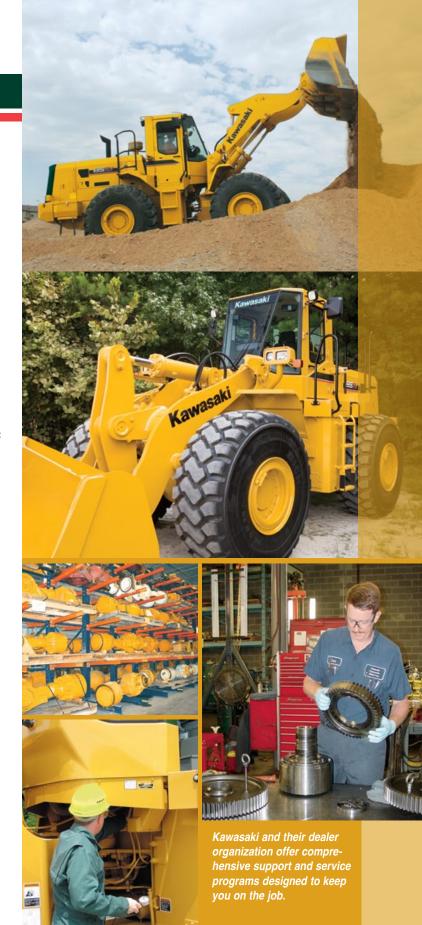
Like all Kawasaki loaders, the 85ZV-2 has a 45⁺ year heritage of strength and reliability.

The 85ZV-2 is available with several buckets, bucket teeth, and bolt-on cutting edge combinations. A third spool valve is available to handle a number of attachments and extend the wheel loader's versatility.

Features such as the outboard-mounted, sealed wet disc brakes are designed for long life and easy access and overhaul. Spin-on filters, grouped grease fittings, sealed universal joints, all provide easy field maintenance. The new MODM (Machine Operation Diagnostic Module) provides essential operational and diagnostic information in an easy-to-read LCD display. The optional K-LINK system allows location, system alarm sensors, and all major machine performance data to be electronically transmitted to cell phones, fax and e-mail for real-time equipment management.

FAILURE IS NOT AN OPTION.

Kawasaki is dedicated to keeping your wheel loader up and running, even in the most challenging situations. Starting with the KLEW (Kawasaki Loaders Early Warning) Oil Analysis System, designed to eliminate unnecessary maintenance and downtime, to our 24-hour parts shipment service, and our extensive rebuild program, Kawasaki has the expertise and experience to respond quickly to your needs.



POWER AND PERFORMANCE PROVIDE UNMATCHED PRODUCTIVITY



COMPUTER CONTROLLED ENGINE

The Engine Control Module (ECM) provides a wide range of operating data and feed-back to assist in analyzing diagnostics and troubleshooting. Cummins offers diagnostic tools to allow technicians to quickly recover engine information for fast, accurate analysis.

EPA Tier III emission standards are met by using the Cummins In-Cylinder Advanced Combustion Solution, a proven technology that keeps the overall design simple and less costly to maintain.

- Extended Oil Change intervals
- Increased Peak Torque provides improved performance, better rimpull.
- Reduced RPM reduces fuel consumption without loss of operating efficiency.
- Idle Management System allows for lower engine speed when idling for extended periods to conserve fuel. It also increases engine RPM to reduce engine warm-up time in cold temperatures.

WORLD-CLASS ENGINES

- 224 HP Cummins QSC8.3 diesel
- Complies with tough Tier III emissions standards
- Engineered for longer service life
- · Reliable and fuel efficient
- Extensive distribution system
- 24 volt battery system for reserve power
- Turbocharger with aftercooler

esel

FUEL EFFICIENT MODE



The operator can select either "Power" or "Fuel Efficient" engine mode. Power mode provides

added power for extreme applications. Fuel Efficient mode offers better fuel economy for standard applications.



- · Dry, reliable
- · Cast iron, dirt tolerant, gear pumps
- · Easy access to two-spool control valve
- · Large oil reservoir keeps oil cooler

TRANSMISSION

- Automatic transmission selects optimum speed from second to fourth gear
- · Single lever control
- Switch activates adjustable transmission declutch on the left brake pedal
- Transmission declutch can be set by the operator to match operating conditions
- Downshift button speeds cycle times and reduces operator fatigue
- Helical gears reduce noise and vibration

AXLES/BRAKES

- Torque Proportioned Differentials improve traction in slippery conditions
- 26.5-25-20PR (L-3) tires standard
- 23.5-25 and 26.5-25 tire sizes available in bias ply, radial and L-3 to L-5 configurations.
- 5-piece rims standard 2
- Outboard-mounted, dual-circuit wet disc brakes
- · Easy maintenance
- High capacity
- · Long life

LIFT ARMS/BUCKETS

- Z-linkage
- High breakout force
- · Optional high lift arms available
- 4.4 to 5.2 cu. yd. buckets
- Easy loading
- · Excellent load retention
- Full assortment of edges and teeth
- Complete array of attachments available
- Bolt-on heel plates extend bucket life

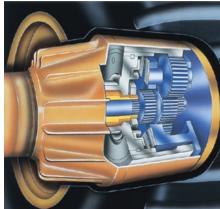
ECONOMIC AND EFFICIENT SYSTEMS

- Hydraulic System, designed for energy efficiency with the steering flow to supplement the main circuit once steering demand is met. This allows for full utilization of the pump capacity for efficient operation in all conditions.
- Adjustable Boom Kickout can be set by the operator to attain proper dump height and return-to-dig height
- Automatic 4-speed transmission, single grip shift lever
- Bucket leveler and boom kick-out standard

STRUCTURED TO LAST

- Redesigned buckets provide easy loading and excellent load retention
- · Full assortment of edges and teeth
- · Complete array of attachments available
- Massive center pins and bearings
- Heavy box frame rear chassis













ENJOY THE RIDE

- The cab provides excellent visibility in all directions
- The front windshield is flat glass mounted in rubber gaskets that make windshield replacement fast and easy.
- Viscous mounting of the cab reduces vibration and noise
- Fully certified ROPS/FOPS cab meets all regulations
- · Increased Leg Room
- · Air Conditioning, standard
- Air Ride Seat, standard
- Tilting and Telescopic Steering column
- Easy access to cab on both sides of machine
- Sliding side windows
- AM/FM CD Radio with AUX Input, standard
- · Increased personal storage
- Front and Rear window wipers and washers

TOTAL COMMAND. TOTAL CONTROL.

- MODM (Machine Operation Diagnostic Module) offers information to make the operation, maintenance and troubleshooting more efficient. With this information, operators, maintenance and technical personnel can quickly determine key operating data.
- Downshift Button, located on the boom control lever provides quick, convenient downshifting from 2nd gear to 1st gear.
- Adjustable Declutch allows the operator to select the location of the left brake pedal where the declutch engages. This allows the operator to easily adjust for various operating conditions.
- 12V outlet for operator to use 2-way radios and other plug-in devices
- ELS Efficient Loading System, increases rimpull power when digging while demanding less fuel. Increases productivity and fuel efficiency. A switch on the instrument control panel allows operator to activate from cab.







ACCESSIBILITY, SERVICEABILITY, DURABILITY

- Sealed universal joints only require greasing at 12,000 hour intervals extending the life expectancy of the drive shaft
- · Engine side covers open wide for optimum access
- · Easy access to filters, drains and fittings
- MODM (Machine Operation Diagnostic Module) offers information to make the operation, maintenance and troubleshooting more efficient. With this information, operators, maintenance and technical personnel can quickly determine key operating data.
- · Increased Transmission Capacity provides greater service life
- Outboard Wet Disc Brakes, sealed, provide high capacity braking and protection from contamination. The dual brake system separates the front and rear axles for added safety.
- Sealed Deutsch DT electrical connectors are used throughout the system to reduce corrosion and improve durability
- · Automatic Reversible Fan with Manual Override, Standard







OPTIONS

OPTIONAL EQUIPMENT

- JRB Quick Coupler and Attachments 1
- Limited Slip Differentials provide additional traction for applications requiring extreme traction control.
- K-Lever, stick steering 3
- F-R Directional Switch allows the operator to select direction directly from the side console.
- Ride Control offers a smooth ride to improve load retention and increase travel speeds.
- HID (High Intensity Discharge) lights are extremely bright lights with exceptionally long service life.
- · Backup Camera
- Autolube 5

- K-Link, a management tool, provides on demand reports on machine location, hours, system sensors, engine performance, operating status, geo-fence break alerts and several customizable reports by phone, pager, or e-mail
- Single Lever Hydraulic Control increases operator efficiency

SPECIAL APPLICATION PACKAGES

- Chemical
- · Logging/Woodchip
- Waste/Refuse/Recycling

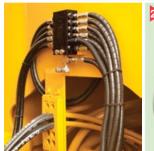
















With Ride Control



BUCKET DATA

				High Lift Boom			
) of			General Purpose Bucket With Bolt-on Cutting Edge	General Purpose Bucket With Teeth	Material Handling Bucket With Bolt-on Cutting Edge	General Purpose Bucket With Bolt-on Cutting Edge	
O	05	1		<u> </u>			
Capacity	Heaped	yd ³ (m ³)	4.8 (3.7)	4.4 (3.4)	5.2 (4.0)	4.1 (3.1)	
Оараспу	Struck	yd³ (m³)	4.3 (3.3)	3.7 (2.9)	4.5 (3.5)	3.4 (2.6)	
Maximum dump clearance	ing	ft-in (mm)	10'5 ⁵ /8" (3,190)	10 ¹ 1/4" (3,055)	9'11 ¹⁷ / ₃₂ " (3,035)	11'11" (3,630)	
Dumping reach of bucket edge of	(to front or tooth)	ft-in (mm)	3'4 ³ / ₈ " (1,025)	3'8 ¹ / ₂ " (1,130)	3'87/8" (1,190)	3'5" (1,040)	
Bucket hinge pir	n height	ft-in (mm)	14'1 ⁵ / ₈ " (4,310)	14'1 ⁵ /8" (4,310)	14'1 ⁵ /8" (4,310)	15'6 ¹³ / ₁₆ " (4,745)	
Digging depth		ft-in (mm)	2 ³ / ₄ " (70)	3 ¹¹ / ₃₂ " (85)	2 ³ / ₄ " (70)	2 ³ / ₄ " (70)	
Breakout force		lb (kg)	40,680 (18,450)	43,386 (19,680)	36,867 (16,723)	41,450 (18,800)	
Bucket tilt-	at ground level		42.5°	42.5°	42.5°	41°	
back angle	at carry position		50°	50°	50°	48°	
	Length	ft-in (mm)	26'8 ³ / ₄ " (8,145)	27'3 ¹¹ / ₁₆ " (8,320)	27' ¹¹ / ₁₆ " (8,245)	27'9 ³ / ₁₆ " (8,460)	
Overall	Height	ft-in (mm)	11'7 ³ / ₁₆ " (3,535)	11'7 ³ / ₁₆ " (3,535)	11'7 ³ / ₁₆ " (3,535)	11'7 ³ / ₁₆ " (3,535)	
	Width (outside tire)	ft-in (mm)	9'7 ³ / ₈ " (2,930)	9'7 ³ / ₈ " (2,930)	9'7 ³ / ₈ " (2,930)	9'7 ³ / ₈ " (2,930)	
	Width (outside bucket)	ft-in (mm)	10'2 ¹ / ₁₆ " (3,100)	10'3 ¹ / ₄ " (3,130)	10'2 ¹ / ₁₆ " (3,100)	10'2 ¹ / ₁₆ " (3,100)	
Wheel base		ft-in (mm)	10'9 ⁷ / ₈ " (3,300)	10'9 ⁷ /8" (3,300)	10'9 ⁷ /8" (3,300)	10'9 ⁷ / ₈ " (3,300)	
Minimum	at outside bucket	ft-in (mm)	21'9 ³ / ₈ " (6,635)	21'11 ³ / ₄ " (6,700)	21'10 ⁹ / ₃₂ " (6,660)	21'8¹/₅" (6,605)	
Minimum turning radius	at center of outside tire	ft-in (mm)	18'6 ¹ / ₂ " (5,650)	18'6 ¹ / ₂ " (5,650)	18'6 ¹ /2" (5,650)	18'6 ¹ / ₂ " (5,650)	
Minimum ground clearance	d	ft-in (mm)	1'8 ¹ / ₂ " (520)	1'8 ¹ / ₂ " (520)	1'8¹/2" (520)	1'8 ¹ / ₂ " (520)	
Full articulation angle deg		degree	40°	40°	40°	40°	
Operating weigh (with ROPS Cat		lb (kg)	46,275 (20,990)	45,966 (20,850)	46,539 (21,110)	46,539 (21,110)	
Static Tipping	Straight	lb (kg)	35,252 (15,990)	35,626 (16,160)	35,009 (15,880)	29,828 (13,530)	
Load (with ROPS cab)	Full turn lb (kg)		30,203 (13,700)	30,534 (13,850)	29,983 (13,600)	25,551 (11,590)	

^{*} The weight and load figure includes optional counterweight, enclosed ROPS Cab, air conditioner, 26.5-25-20PR (L-3) tires, and full fuel tank and operator.

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.



OPERATING SPECIFICATIONS

WEIGHTS AND DIMENSIONS (SUPPLEMENTAL DATA)									
		Operating Weight	Tippin Straight	g Load Full Turn		Overall Width (Outside Tire)	Tread	Vertical Dimensions	Overall Length
Remove ROPS Cab (for transport only)	lb (kg)	-1,100 (-500)	-950 (-430)	-820 (-370)	in (mm)	(0.00000 1000)			
Remove Optional Counterweight	lb (kg)	-770 (-350)	-1,895 (-860)	-1,610 (-730)	in (mm)				
Tires: 23.5R25* (L-3)	lb (kg)	-0 (-0)	-0 (-0)	-0 (-0)	in (mm)	-2 ⁵ / ₈ " (-66)		-1 ³ / ₄ " (-45)	+1 ⁹ / ₁₆ " (+40)
26.5R25* (L-3)	lb (kg)	+1,040 (+470)	+750 (+340)	+640 (+290)	in (mm)				
26.5-25-20PR (L-5)	lb (kg)	+1,440 (+655)	+1,030 (+470)	+890 (+405)	in (mm)				
26.5-25-20PR (L-3) with 75% CaCl2 for logging	lb (kg)	+3,220 (+1,460)	+4,805 (+2,180)	+4,125 (+1,870)	in (mm)				
Air conditioner — Deletion	lb (kg)	-220 (-100)	-175 (-80)	-155 (-70)	in (mm)				
Belly Guard (rear frame)	lb (kg)	+220 (+100)	+420 (+190)	+355 (+160)	in (mm)				

Base Tire 26.5-25-20PR (L-3)

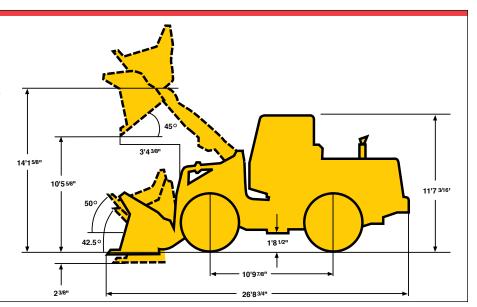
Width (outside tire)9'73/8" (2,930mm)

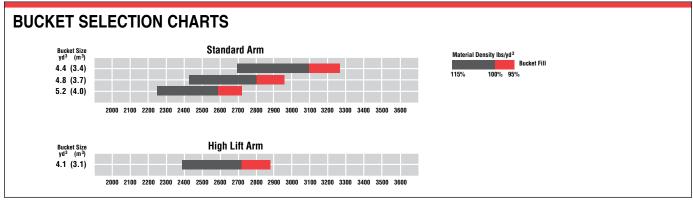
Width (outside bucket). . .10'21/16" (3,100mm)

Equipped with GSC bucket with

bolt on cutting edge

26.5-25-20PR (L-3) Tire and ROPS Cab







OPERATING SPECIFICATIONS

ENGINE			
Gross Power (SAE J1995)	240 HP/2200 RPM		
Net Power (SAE J1349)	224 HP/2200 RPM		
Net Peak Torque	764 ft/lb (106 kgm)/1500 RPM		
Make/Model/Fuel Type	Cummins/QSC8.3/Diesel		
Туре	4-cycle, watercooled, in-line direct injection type with turbo charger and air-cooled intercooler		
Number of cylinders	6		
Bore and stroke	4.49" x 5.31" (114mm x 135mm)		
Total displacement	506 in ³ (8,260 cm ³)		
Alternator	AC24V - 1700W (70 amp)		
Battery	12V – 150AH (1,000 CCA), 2 units		

TORQ	TORQUE CONVERTER AND TRANSMISSION				
Torque con	verter	3 elements, single stage			
Torque stal	l ratio	3.42:1			
Main clutch	es	Wet hydraulic, multi-disc type			
Cooling me	thod	Forced circulation type			
Transmission	on	Full powershift, 4 forward, 4 reverse with automatic mode (2nd – 4th) with downshift switch for 2nd – 1st downshifting			
Speeds	Forward	1st: 4.8 MPH (7.8 km/hr) 2nd: 8.1 MPH (13.1 km/hr) 3rd: 13.7 MPH (22.0 km/hr) 4th: 22.2 MPH (35.8 km/hr)			
Speeds	Reverse	1st: 5.0 MPH (8.1 km/hr) 2nd: 8.4 MPH (13.5 km/hr) 3rd: 14.0 MPH (22.6 km/hr) 4th: 22.7 MPH (36.5 km/hr)			

SYSTEMS CAPACITY				
LOCATION	CAPACITY:	Gallons	Liters	
Engine (coolant)		15.9	(60.0)	
Fuel tank (diesel fuel)		79.3	(300.0)	
Engine oil (oil pan)		7.9	(30.0)	
Front axle (gear oil)		19.6	(74.0)	
Rear axle (gear oil)		21.1	(80.0)	
Torque converter and transmission (engine oil)		14.0	(53.0)	
Hydraulic system including tank (hydraulic oil)		55.5	(210)	

HYDRAULIC AND STEERING SYSTEM				
Steering type		Articulated frame steering		
Steering mech	nanism	Hydraulic power steering unit, pilot operated type		
Lift (boom) cy	inder	Two (2) double-acting piston type: 6.3" x 33.86" (160mm x 860mm)		
Tilt (bucket) cy	/linder	One (1) double-acting piston type: 7.48" x 21.42" (190mm x 544mm)		
Steering cylind	der	Two (2) double-acting piston type: 3.54" x 17.32" (90mm x 440mm)		
Steering oil pu	ımp	Gear type: 56.3 GPM/1000psi @ 2200 RPM (213 LPM/70kg/cm² @ 2200 RPM)		
Main oil pump		Gear type: 20.1 GPM/1000psi @ 2200 RPM (76 LPM/70kg/cm² @ 2200 RPM)		
Pilot oil pump		Gear type: 15.9 GPM/1000psi @ 2200 RPM (60 LPM/70kg/cm² @ 2200 RPM)		
Relief valve set pressure	Loading Steering	3000 psi (210 kg/cm²) 3000 psi (210 kg/cm²)		
HYDRAULIC	CYCLE TIME*			
Lifting time (at	full load)	6.3 sec.		
Lowering time	(empty)	4.2 sec.		
Bucket dumpi	ng time	1.3 sec.		
TOTAL		11.1 sec.		

^{*} Measured in accordance with SAE J732C

AXLE SYSTEM				
Drive system		4-wheel drive		
Front a	and rear axle	Full floating banjo type		
Tires	Standard	26.5 x 25-20PR (L-3)		
	Optional	23.5 x 25-16PR (L-3) 26.5 x 25-20PR (L-4) (L-5)		
Reduction and differential gear		Spiral bevel/gear, 1 stage reduction, torque proportioning type		
Final reduction gear		Outboard mounted, internal planetary gear		
Oscillation angle		±11° (total 22°)		

BRAKE SYSTEM		
Service brakes	4 wheel, adjustment free, wet multiple disc brake. Controlled by full hydraulic system Dual circuit.	
Parking/Emergency brake	Spring-applied, oil-released type located in the front driveline. Meets MSHA requirements.	



EQUIPMENT DATA

STANDARD EQUIPMENT

Air Conditioner
(R134 Refrigerant)
Alarms (Audible):
Brake Oil Pressure
Engine Oil Pressure
Hydraulic Oil Level
Parking Brake with
T/M Engaged
Alarms (Visual):
Air Filter
Battery Discharge
Brake Pressure

Central Warning Lamp Engine Coolant Temperature Engine Oil Pressure

Engine Warning Hydraulic Oil Level Parking Brake Torque Converter

Oil Temperature Transmission Control Warning

Alternator (70 amp)

AM/FM CD Radio with

AUX Input

Batteries: 12V–150AH 1,000 CCA (2 units)

Boom Kickout (2-Position, Adjustable, In Cab)

Brake Line Protection (Front)

Brake (Parking) Spring applied;

Oil pressure released, Drum Type

Brakes (Service)

Enclosed Wet Disc, Dual System

Full Hydraulic System

Bucket Control Lever Dual, Pilot Assisted

Bucket Leveler

Coat Hook

Cold Start Aid

Converter, 12V/15Amp dash outlet

Cooling Fan, Automatic Reversible w/manual override

Cup Holder

Downshift Button

Drawbar

ELS (Efficient Loading System)

Engine Pre-Cleaner (Turbine Type)

Fenders (Full Width Front w/Mudflaps, Rear)

Gauges:

Converter Oil Temperature Engine Coolant Temp

Fuel Level Hour Meter

Hydraulic Oil Level, Sight

Tachometer

Heater/Pressurizer
Hoodsides (Hinged)

Horn (Electric)

Indicators:

Engine Pre-Heater High Beam Parking Brake

Transmission Declutch
Transmission Shift Monitor

Working Light

Linkage (Z-type, Sealed)

Lights:

2 Headlights (Hi/Lo/Halogen)

4 Forward Working Lights

4 Rear Working Lights

2 Stop/Tail/Backup (LED) MODM (Machine Operation

Muffler

Neutral Safety Start Operator's Manual Box

Diagnostic Module)

Radiator:

Wide Spaced Aluminum Fin Type Radiator Grille, Hinged

Rear Under-Frame Cover

Reverse Alarm

ROPS Cab: Enclosed cab with sound suppression, front and rear wipers and washers, two rear view and side mirrors, tinted glass,

and sliding side windows
Safety Articulation
Locking Bar

Seat, Air Ride

Seat Belt, Retractable, 3" wide

Shift Control Unit for Automatic Shift

Steering Wheel, Telescoping and Tilt

Torque Proportioning Differentials

Transmission Declutch Select/Adjustment Switch

Vandalism Protection Wrist Rest, Adjustable

OPTIONAL EQUIPMENT

Autolube
Back-up Camera
Belly Guard, Hinged
Transmission

Bolt-On Cutting Edge Segments

Bucket Teeth
Counterweight, Bucket

Cushion Dump Valve Emergency Steering Fenders, Extra-Wide, Front & Rear (hinged) F-R Direction Switch

HID Lighting (High Intensity Discharge)

High Lift Arm

Hydraulic System, 3-Spool Valve K-Lever Steering

K-Link

Limited Slip Differentials

Multi-Function Grip

Quick Coupler and Attachments

Ride Control
ROPS Canopy
Single Lever
Hydraulic Control

Turn Signal With Four-Way Flasher

KAWASAKI KEEPS IT SIMPLE.



Since 1962, Kawasaki has been listening to and learning from customers and dealers in the field. As a result, Kawasaki wheel loaders continue to evolve, with a constant focus on one thing — producing the most durable, most efficient, most dependable machines possible.

EASY TO OPERATE.

In a world of increasing demands, tighter deadlines, shrinking budgets and complicated contracts, better efficiency and greater productivity are a must. Innovative high-tech features on all Kawasaki wheel loaders allow the operator to adapt to the environment and the application right from the cab.

EASY TO MAINTAIN.

Diagnostic and operational modules monitor fluids and filters, and constantly provide information on everything from engine and transmission codes to location, hours, alarm sensors and machine performance data.

EASY TO DO BUSINESS WITH.

No run-arounds. No layers and layers of management. No distractions from competing product lines. Wheel loaders are our only business. Got a question? We'll get you an answer. Need a part? It's on its way. Quickly. Kawasaki offers flexible warranty programs, a state-of-the-art parts distribution system, an in-house rebuild center, and an experienced, knowledgeable support staff, focused on serving you.

The independent dealers that represent and support Kawasaki loaders are experts in their markets and are dedicated to providing you with the best service available.

Together, we are committed to making your investment in a Kawasaki loader a sound business decision that will pay dividends for years to come.

KAWASAKI. ONE FOCUS. COMPLETE SOLUTIONS.





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