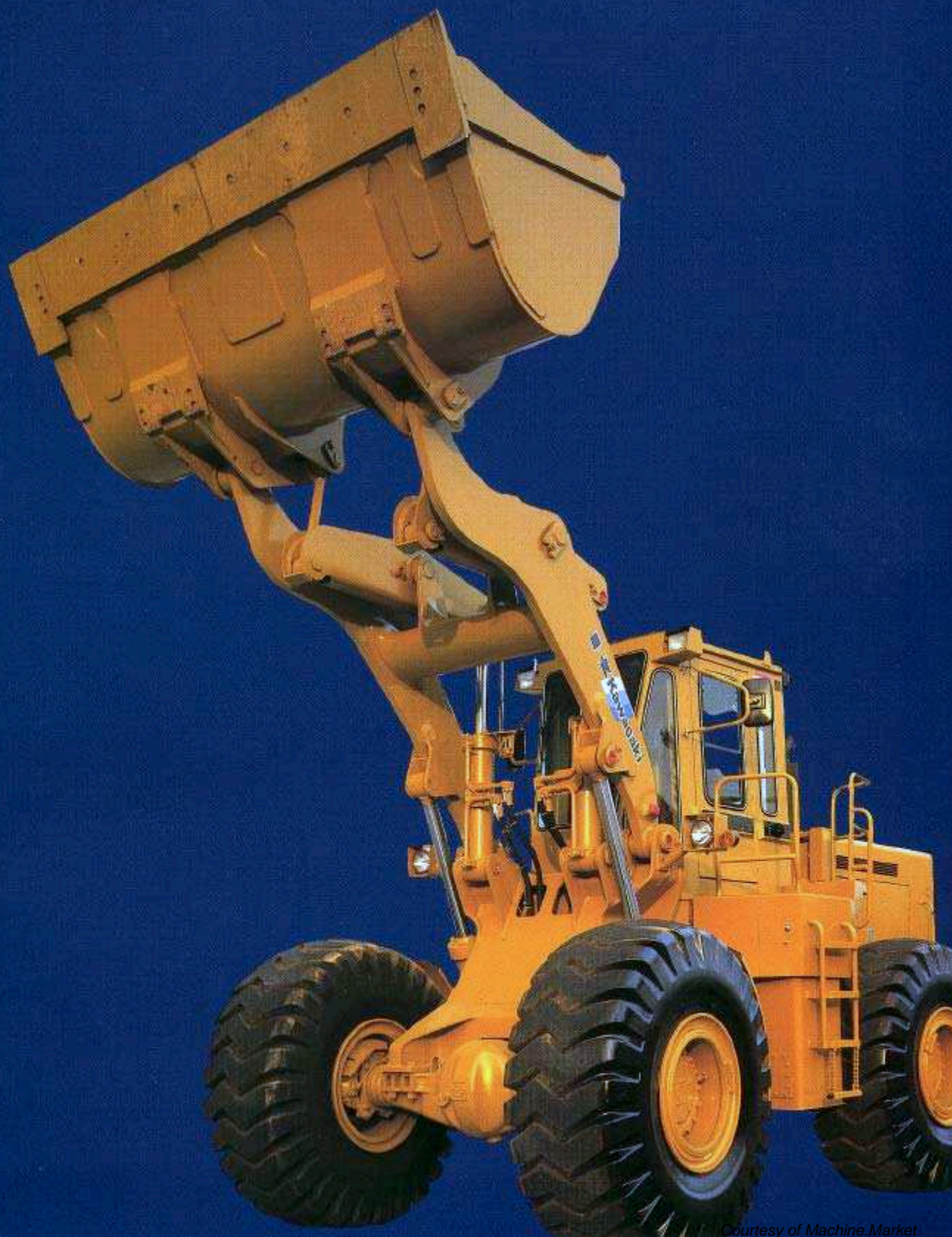


85zII



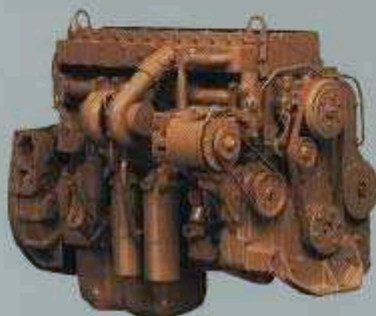
85ZII

SUMMARY OF FEATURES

- The reliable, fuel efficient Cummins LT10 turbocharged engine supplies a big 226 HP.
- Z-type linkage for high breakout force and easy digging in tough materials.
- Dual bucket cylinder for excellent visibility to the bucket plus distributes loads evenly across the torque tube.
- Caliper disc brakes are self-cleaning, fade resistant and easy to change, for the lowest cost per hour.
- High tipping loads for excellent stability.
- Large 26.5 x 25 tire provides excellent flotation and high load capacity.
- Large capacity pressurized hydraulic tank keeps oil cooler and cleaner, longer.
- Safety features include separate brake systems front and rear, emergency brake, major component monitor system, reverse alarm, neutral start, and optional emergency steering.
- Operator features include tilt steering wheel, servo-assisted hydraulic controls, isolated/sound suppressed cab, suspension seat, bucket leveler and boom kickout.
- Service features include sealed linkage pins, remote mounted grease fittings, tire inflation kit, SAE hydraulic hoses, multiple use of common hoses, and hinged hood sides.

CUMMINS ENGINE

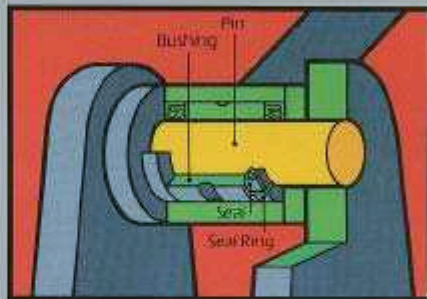
The state-of-the-art Cummins LT10 turbocharged diesel provides a big 226 flywheel horsepower. With outstanding torque characteristics this engine also offers excellent fuel economy. The turbocharger permits efficient operation at high altitude or high ambient conditions. Reliable Delco Remy electrical components make service easy. Ether cold start is standard. Resilient engine mounts reduce vibration and noise. Two stage Donaldson air cleaner protects the engine.



OPERATOR COMFORT FEATURES

The roomy ROPS cab is rubber mounted to reduce vibration and sound levels. The cab is well appointed with tinted glass, sliding windows, front and rear wipers, and washers, defroster fan, side mirrors and interior rear view mirrors. Operator comfort is further enhanced with the three-way adjustable, suspension seat and tilt steering wheel. Visibility to the bucket is excellent because of the dual bucket cylinder design.

SEALED, DUAL Z-LINKAGE



The Z-type bucket linkage provides high breakout force and digging power for the toughest jobs. Also, the bucket rollback angle permits carrying the maximum load without spillage. The linkage pins are sealed to retain lubricant better. The two cylinder design spreads loads evenly along the torque tube to increase reliability.

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 from third to fourth are automatic.



HIGH BIAS TORQUE PROPORTIONING DIFFERENTIALS

With High Bias TPD, the 85ZII has a higher ratio of torque that can be transferred to the tire with traction. This improves production and reduces tire wear and stress to the axle and gears in tight turning situations.



SMOOTH & QUICK HYDRAULICS

Servo-assisted, fingertip controls coupled with the standard bucket leveler and boom kick-out, speeds cycle times and provides smooth, quick control, while reducing operator fatigue. All of this adds up to greater productivity.



PRESSURIZED HYDRAULICS

The hydraulic tank is pressurized to keep the hydraulic oil cleaner, longer. The large hydraulic tank capacity along with the hydraulic oil cooler reduces oil temperature. Since heat causes faster aging of hoses and seals, cooler oil keeps the Kawasaki 85ZII dry, longer.

SERVICEABILITY FEATURES

To insure proper efficient servicing, the Kawasaki 85ZII offers many features. All grease fittings are located for easy access. Convenient panels make routine service checks simple. All flange

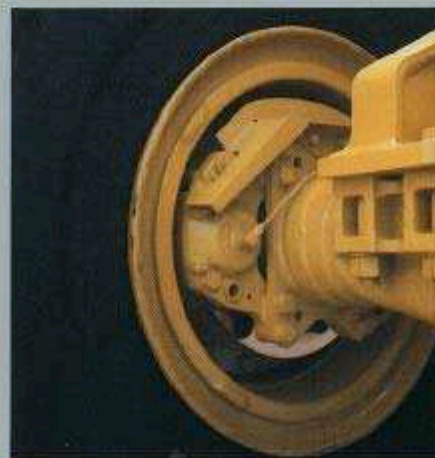


fittings use SAE thread for easy, convenient replacement. Most of the hoses are used in several locations allowing a minimal stock of hoses to support the entire machine. A tire inflator and tool kit are standard.



SIMPLE EFFECTIVE CALIPER DISC BRAKES

The four-wheel, dual-caliper, long life, disc brakes are self-cleaning, fade resistant and easy to service. Pad wear is easily monitored through inspection covers, and pad removal is done quickly and easily. The front and rear brakes are completely separate to provide added safety. The emergency brake automatically applies in case of loss of air or oil pressure.





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.



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 product and support we offer through dedicated independent dealers completes this commitment to you.

OPERATING SPECIFICATIONS

85zII

ENGINE

Make/Model/Fuel type	CUMMINS/IT-10-C250/DIESEL
Type	4 cycle, watercooled, turbocharged, direct injection
Number of cylinders	6
Bore and stroke	4.92" × 5.35" (125 mm × 136 mm)
Total displacement	611 in. ³ (10,013 cm ³)
Horsepower ratings at flywheel	226/2100 rpms
Alternator (Delco)	AC 24V- 75 AMP (1800W)
Starting motor	24V-7.4kW (9.9 HP)
Battery	12V-150Ah, 2 units
Governor	All speed, mechanical type
Air Cleaner	Dry type, 2 stage, w/indicator

TORQUE CONVERTER AND TRANSMISSION SPECIFICATIONS

Torque converter	four elements, single stage
Torque stall ratio	5.5:1
Main clutch	wet hydraulic, multi-disc type
Cooling method	forced circulation type
Transmission	full power shift 4 speeds forward, automatic shift 1-2 and 3-4 2 speeds reverse, automatic shift
Max. Speeds	Forward 22.5 MPH (36.0 KM/H) Reverse 9.7 MPH (15.5 KM/H)
Max. tractive effort	35,300 lbs (16,000 kg)

SERVICE REFILL CAPACITY

LOCATION		gal (Lit)
Engine	Cooling water	17 3/8 (66)
Fuel tank	Diesel fuel	77 (290)
Engine (oil pan)	Engine oil	9 3/4 (37)
Front axle	Gear oil	14 1/2 (55)
Rear Axle	Gear oil	14 1/2 (55)
Gear box	Gear oil	1 1/8 (1.5)
Torque converter and transmission	Engine oil	15 3/4 (60)
Hydraulic system (including tank)	Hydraulic oil	67 (254)
Brake oil tank	Brake fluid	7 1/8 (3.1)

HYDRAULIC AND STEERING SYSTEM

Type	articulated frame power steering
Steering mechanism	hydraulic power steering unit, mechanical follow-up
Lift (boom) cylinder	two (2) double-acting piston type: 6 5/16" φ × 33 7/8" (160mm φ × 848mm)
Tilt (bucket) cylinder	two (2) double-acting piston type: 5 1/2" φ × 22 3/8" (140mm φ × 568mm)
Steering cylinder	two (2) double-acting: 3 1/2" φ × 17 1/16" (90mm φ × 455mm)
Steering pump	gear type: 36.7GPM/2915psi @ 1800rpm (139LPM/205kg/cm ² @ 1800rpm)
Main pump	gear type: 55.7GPM/2630psi @ 1800rpm (211LPM/185kg/cm ² @ 1800rpm)
Relief set pressure	Loading: 2630 psi Steering: 2915 psi
HYDRAULIC CYCLE TIME: *	
Lifting time (at full load)	6.3 sec.
Lowering time (empty)	4.0 sec.
Bucket dumping time	1.2 sec.
TOTAL	11.5 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: 23.5-25-16PR (L-3) Optional: 23.5-25-16PR (L-2, L-4, L-5) 26.5-25-20PR (L-2, L-3, L-4, L-5)
Reduction and differential gear	Torque proportioning type, 1 stage reduction
Final reduction gear	Internal planetary gear, outboard mounted
Oscillation angle	± 15° (total 30°)

BRAKE SYSTEM

Service brakes	4 wheel hydraulic, air actuated disc brake. 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 automatically on failure in air or brake fluid line.

OPERATING SPECIFICATIONS / BUCKET DATA

85zII

			General Purpose		Material Handling
			Straight Edge With Bolt-on Cutting Edge GSC861	Straight Edge With Teeth GST861	Straight Edge With Bolt-on Cutting Edge LSC861
					
Capacity	Heaped	yd ³ (m ³)	4.25 (3.25)	4.0 (3.1)	4.75 (3.6)
	Struck	yd ³ (m ³)	3.75 (2.8)	3.5 (2.7)	4.25 (3.25)
Recommended Material Density		lb/yd ³ (kg/m ³)	3,000 (1,780)	3,000 (1,780)	2,600 (1,550)
Maximum Dumping Clearance		ft-in (mm)	9'7 3/4" (2,940)	9'3 3/8" (2,835)	9'6 1/8" (2,900)
Dumping Reach (to front of bucket edge or teeth)		ft-in (mm)	3'3 3/8" (1,010)	3'7 3/4" (1,110)	3'5 1/4" (1,050)
Digging Depth		ft-in (mm)	1 3/8" (35)	2 1/8" (55)	1 3/8" (35)
Breakout Force		lb (kg)	37,080 (16,820)	39,460 (17,900)	35,410 (16,060)
Bucket tilt-back angle	(at ground level)	degree	43°	43°	43°
	(at carry position)	degree	46°	46°	46°
Overall	Length	ft-in (mm)	25'1 1/2" (7,635)	24'9 1/2" (7,560)	25'2 3/4" (7,690)
	Height	ft-in (mm)	11'10 3/4" (3,625)	11'10 3/4" (3,625)	11'10 3/4" (3,625)
	Width (Outside Tire)	ft-in (mm)	9'8 1/8" (2,950)	9'8 1/8" (2,950)	9'8 1/8" (2,950)
	Width (Outside Bucket)	ft-in (mm)	9'8 1/4" (2,953)	9'8 1/4" (2,953)	9'8 1/4" (2,953)
Wheel Base		ft-in (mm)	10'6" (3,200)	10'6" (3,200)	10'6" (3,200)
Min. Turning Radius	at outside bucket	ft-in (mm)	23'5 1/2" (7,150)	23'11 3/8" (7,300)	23'6 5/8" (7,180)
	at center of outside tire	ft-in (mm)	20'5 1/4" (6,230)	20'5 1/4" (6,230)	20'5 1/4" (6,230)
Min. Ground Clearance		in (mm)	1'9 1/4" (540)	1'9 1/4" (540)	1'9 1/4" (540)
Full Articulation Angle		degree	35°	35°	35°
Operating Weight (with Enclosed ROPS Cab)		lb (kg)	43,870 (19,900)	43,030 (19,520)	42,600 (19,322)
Static Tipping Load (with Enclosed ROPS Cab)	Straight	lb (kg)	29,970 (13,595)	31,420 (14,250)	31,285 (14,190)
	Full Turn	lb (kg)	27,190 (12,335)	28,590 (12,970)	28,485 (12,920)

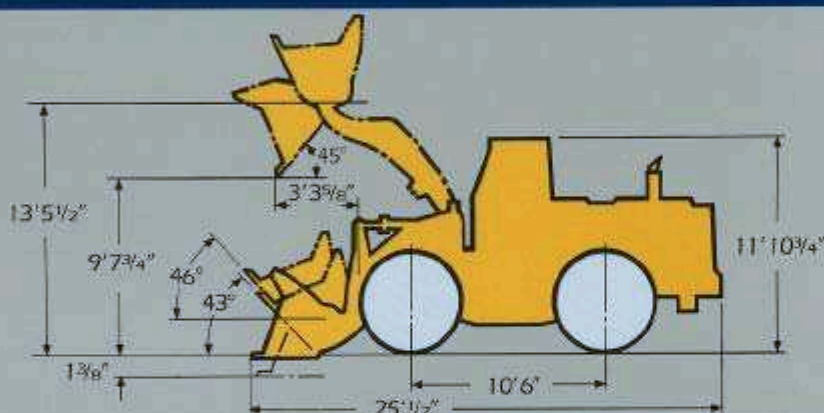
The Weight and Load figure include Enclosed ROPS Cab, 26.5-25-Z0PR (L-3) Tires, full fuel tank and operator.
Measured in accordance with SAE 1732 and 1742

Courtesy of MachineMarket

WEIGHTS AND DIMENSIONS (SUPPLEMENTAL DATA)

		Operating Weight	Tipping Load		Overall Width (Outside Tires)	Tread	Vertical Dimension	Overall Length
			Straight	Full Turn				
ROPS Canopy (Instead of ROPS Cab)	lb (kg)	-770 (-350)	-630 (-285)	-620 (-280)				
Remove ROPS Cab	lb (kg)	-1480 (-680)	-1150 (-520)	-1140 (-515)				-1 3/8" (-35)
Tires: 23.5-25-16PR (L-2, L-3)	lb (kg)	-1280 (-580)	-950 (-430)	-860 (-390)	-6 3/8" (-162)	-2 1/2" (-62)		
23.5-25-16PR (L-3) with 700 lb counter weight	lb (kg)	-580 (-260)	+620 (+280)	+530 (+240)	-6 3/8" (-162)	-2 1/2" (-62)		+3 (+75)
23.5-25-16PR (L-3) with 75% CaCl ₂	lb (kg)	+220 (+100)	+2440 (+1110)	+2140 (+970)	-6 3/8" (-162)	-2 1/2" (-62)		
26.5-25-20PR (L-2, L-3) with 75% CaCl ₂ for logging	lb (kg)	+5425 (+2460)	+4560 (+2070)	+4160 (+1890)				
Air Conditioner	lb (kg)	+220 (+100)	+170 (+80)	+170 (+80)				
Belly Guard (Rear Frame)	lb (kg)	+55 (+25)	+66 (+30)	+66 (+30)				

Tread 7'3 7/8" (2,230mm)
Width (Outside Tire) 9'8 1/8" (2,950mm)
Width (Outside Bucket) 9'8 1/4" (2,953mm)
Equipped with GSC861 bucket
with bolt-on cutting edge
26.5-25-16PR (L-3) TIRE,
and ROPS CAB



STANDARD EQUIPMENT

Adjustable steering column Air cleaner (Donaldson; with pre-cleaner) Air compressor Alarms – Audible: air pressure engine oil pressure brake fluid parking brake w/transmission engaged (neutral check) Alarms – Visual: air filter air pressure battery discharge brake fluid converter oil temperature engine oil pressure engine water temperature	Alternator-24V, 75 amp Batteries two (2)-12V, 150 Ah Bolt-on counter weight Boom lift kick-out Bucket positioner Cold start ether system Draw bar Emergency brake Engine side panel Engine coolant expansion tank Fan guard Fenders - front and rear Filtration system (replaceable elements) Frame lock Fuel gauge guard Fuel tank with water separator	Gauges: air pressure converter oil temperature engine water temperature fuel level indicator hour meter hydraulic fluid level indicator Horn (electric) Hydraulic servo-assisted control valve Indicator lights: working light, high beam, parking brake Ladder (access at both sides) Lights: (two [2] headlights, two [2] stop-and tail lights, One [1] rear light)	Neutral start switch Parking brake (spring applied air-released type) Reverse alarm ROPS, canopy Seat belt Seat (adjustable suspension type) Special tool kit Switches: cold start, lights – front & rear, pilot light check, starter Tires – four (4) 23.5-25-16PR (L2) Tires inflation kit Torque proportioning differential Transmission declutch Vandalism Protection
--	---	--	---

OPTIONAL EQUIPMENT

Air conditioner, with heater and defroster	Buckets (see bucket data)	ROPS cab, enclosed with sound suppression, front and rear windshield wiper and washer, front working lights, defroster fan and rear view mirrors	Tires (sets of four): 23.5-25-16PR (L-3) 26.5-25-20PR (L-2) 26.5-25-20PR (L-3)
Air dryer	Emergency steering (special option)	Teeth, weld-on, bolt-on type	Turn signal with four-way flasher
Belly guard	Heater		
Bolt-on counterweight (instead of rear tire ballast)	Hydraulic system – three-spool valve, control lever, linkage and lines		
Bolt-on cutting edge			
Bolt-on wear plate			

Specifications are subject to change without notice.

85zII



 **Kawasaki**
KAWASAKI CONSTRUCTION MACHINERY
CORP. OF AMERICA

2140 Barrett Park Drive
Suite 101
Kennesaw, GA 30144
Tel: (770) 499-7000
Fax: (770) 421-6842

11/88 125M

Courtesy of MachineMarket