

KOMATSU®

WA800-3

With Advanced Joystick Steering System
(AJSS)

NET HORSEPOWER
603 kW **808 HP** @ 2000 rpm

OPERATING WEIGHT
98180 kg - 101420
216,450 - 223,590 lb

BUCKET CAPACITY
11.0 - 12.3 m³ **14.4 - 16.1 yd³**

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Photos may include optional equipment.

WALK-AROUND

Komatsu-integrated design offers the best value, reliability, and versatility. Hydraulics, powertrain, frame, and all other major components are engineered and built by Komatsu. You get a machine whose components are designed to work together for higher production, greater reliability, and more versatility.

New easier access to engine for servicing

Large swing-out hood doors lock with cab key. Radiator grill is also hinged with radiator clean-out doors on both sides

Underhood mounted muffler provides operator with great rearward vision

Automatic transmission and kick-down switch are production enhancing, standard features

Spade nose bucket capacity of 11.0 m³ **14.4 yd³**

The Komatsu SAA12V140ZE-2 engine provides an output of 603 kW, **808 HP** @ 2000 rpm for superior performance and productivity and is Tier 1 EPA, EU and Japan emissions certified



Hensley 550 Bladesaver II System™

offers full protection for the bucket lip and excellent digging performance while leaving a smooth floor

New Advanced Joystick Steering System (AJSS)

offers single lever control of steering, transmission range, direction and horn

Designed for better value through improved reliability and enhanced versatility. That's why the WA800-3 means value, and anything less is just another Wheel Loader

Large cab for increased operator productivity

Operator's cab provides improved visibility with a pillarless flat glass windshield and power windows. A Grammer air suspension seat with retractable seat belt keeps the operator comfortable

Service monitor with diagnostics including an air cleaner sensor keeps the operator informed. True three level monitoring provides the operator with prestart level checks, cautions and warnings

Rear-mounted fuel tank allows for ground level fueling. Fuel tank prepared to accept Wiggings fast fuel fittings

Rear lights mounted high out of harms way

Sight gauge for hydraulic tank allows ground level check without opening the compartment

Check battery easily

Low mount battery boxes for easy checking and servicing

Ground level grease bank lubrication reduces maintenance

Fully-hydraulic brake system means less maintenance and more reliability



Photos may include optional equipment.

NET HORSEPOWER
603 kW 808 HP @ 2000 rpm

OPERATING WEIGHT
98180 - 101420 kg
216,450 - 223,590 lb

BUCKET CAPACITY
11.0 - 12.3 m³
14.4 - 16.1 yd³

OPERATOR'S COMPARTMENT

Ask the people who run one—they will tell you the operator's cab sets the Komatsu Wheel Loader apart from the others. That's a productivity feature you can't ignore. No matter how a machine specs out, or how much is promised for productivity, unless the operator can work a full shift without becoming fatigued, you will never get the full measure of promised productivity.

The cab improvements on the WA800-3 go beyond providing a large cab with a comfortable seat. Improvements include many production-enhancing standard features. The WA800-3 has the largest cab ever offered on a Komatsu wheel loader by 15%.

New three-piece flat glass windshield provides the operator an unobstructed view of the working area and attachment. Power windows offer ventilation at the touch of a finger.

Two-door walk-through cab. Good for ventilation as well as easy entry and exit from either side of the cab.

Silicone-filled rubber mounts dampen noise and vibration, reduces fatigue caused by noise. Helps keep the operator productive longer.

Low-effort brake pedals actuate fully hydraulic brakes. Parking brake provides effective braking with the touch of a finger.

Steer with ease. Komatsu's Advanced Joystick Steering (AJSS) offers precise low-effort steering performance in demanding V-cycle applications. AJSS has proven popular with operators throughout the world on Komatsu's flagship wheel loader, the WA1200-3.

Kick-down switch is conveniently located on the boom lever. A simple motion of the thumb actuates this valuable productivity feature.



Easy shifting and directional changes. The multi-function steering lever also contains the transmission direction and range controls. Solid state electronics and conveniently located direction and gear shift controls make this possible. Standard automatic transmission allows automatic shifts in ranges two through three, keeping production high and manual shifting at a minimum.

At-a-glance instrument monitor. Travel data is mounted in front of the operator and is tilted for easy view, allowing the operator to easily check gauges and warning lights.



Cab Comforts

Value options for productivity and those little added touches that make work a little easier.

Keep cool, keep productive with a **five-mode air conditioner**. Thirteen strategically located vents direct cool air to the operator, maintaining productivity on even the hottest days.

There's nothing more refreshing than a cold drink on a hot day. The WA800-3 offers a large lunch box holder. The hot/cold box will keep a beverage cool on a hot day. That's something to look forward to at lunch or break-time.

Make the time go faster with an auto-tuning **AM/FM cassette radio** with a digital clock.

Five-mode air conditioner



Cool box



AM/FM cassette radio



KOMATSU DESIGNED POWER TRAIN

Engine


The **Komatsu SAA12V140ZE-2** delivers the power and efficiency to get the job done quickly and cost effectively while meeting emission requirements.

The **SAA12V140ZE-2** is an electronically controlled, water-cooled, four-stroke cycle, twelve-cylinder V-Type, turbocharged and air-to-air aftercooled direct injection engine that produces high performance and excellent fuel economy.

Komatsu electronically controlled fuel system features continuously variable timing and higher injection pressure to control emissions and white smoke, improve cold-start performance, and allow higher torque rise.

Large swing-out doors allow easy access to the engine and radiator for routine maintenance and cleaning.

Spin-on filters and easily accessible lubrication points mean reduced maintenance time and less chance of missing these important maintenance items. Extended 500 hour oil and filter change intervals reduce service time while minimizing waste oil disposal costs.



Komatsu integrated design means components are matched to provide the most efficient use of power whether you're working the face of a material bank or traveling with a loaded bucket.

With a piston displacement of 30.5 ltr 1861 in³, the Komatsu SAA12V140ZE-2 has a net flywheel horsepower of 603 kW 808 HP @ 2000 rpm.

Advanced Joystick Steering System (AJSS)

Three-Speed Transmission

Provides maximum forward speed in third gear of up to 28.0 km/h **17.4 mph** and in reverse of 28.3 km/h **17.6 mph**. The transmission is a full power shift, planetary transmission.

Other features include:

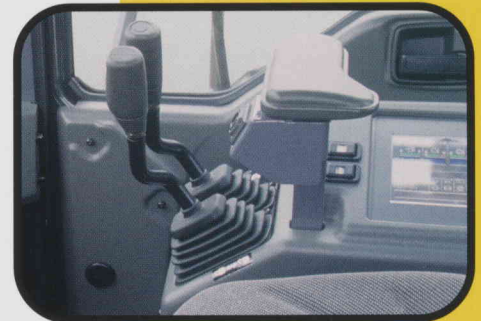
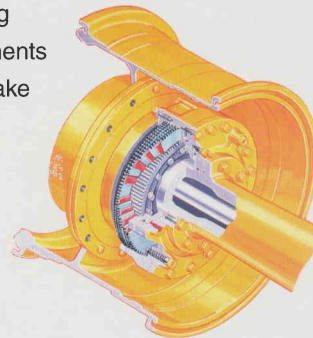
- Solid state electronic shifting control that reduces wear, increases reliability, and provides easy directional shifts.
- Three forward and three reverse gears to better match the cycle conditions. You get higher efficiency and better fuel economy.
- Fingertip-shifting from forward to reverse or from one gear to another.
- Standard automatic offers autoshift in ranges two through three to keep productivity high.

Consider this valuable feature for added productivity. Kick-down switch automatically downshifts with the touch of a finger from second to first when beginning the digging cycle. Automatically upshifts from first to second when reverse direction is selected. The result is increased rim pull for better bucket penetration and reduced cycle times for higher productivity.

Komatsu designed axles and final drives for rugged reliability and low maintenance. Axle shafts are full-floating, the front axle is fixed. The rear axle is a center-pin support design that provides a total oscillation of up to 22 degrees.

The differential reduction gear is a heavy-duty spiral bevel gear for strength and reliable performance. Rugged, outboard planetary final drives carry the total gear reduction of the drive train to the wheel which is mounted to the axle hub.

Wet, multi-disc brakes and fully hydraulic braking system mean lower maintenance costs and higher reliability. Wet disc brakes are fully sealed. Contaminants are kept out, reducing wear and resulting maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The parking brake is also an adjustment-free, dry disc mounted to the front driveline for high reliability and long life. Added reliability is designed into the braking system by the use of two independent hydraulic circuits, providing hydraulic back-up should one of the circuits fail. Full hydraulic brakes mean no air system to bleed, or the condensation of water in the system that can lead to contamination and corrosion.



Komatsu's exclusive AJSS reduces operator fatigue and increases total productivity while achieving exceptional control in tight loading conditions. The seat-mounted controller allows a full range of adjustments for the most comfortable fit. The joystick provides a convenient, comfortable, efficient steering system for every operating condition. With AJSS the operator enjoys exceptional legroom and easy access in and out of the dual entry cab.

EASY MAINTENANCE

Servicing With a Smile

It would be better if most of us approached routine maintenance and service as something that made us smile. That's why Komatsu designed the WA800-3 Wheel Loader to make servicing as easy as possible. We know by doing this, routine maintenance and servicing are less likely to be skipped, which can mean a reduction in costly downtime later on. Here are some of the many service features found on the WA800-3.

- Large service doors provide easy access to the engine compartment.
- Ground Level Greasing—all grease points are easily reached from ground level, and grease banks are provided in strategic areas to reduce maintenance time.
- New radial seal dry-type air cleaner with safety element offers improved sealing and fast change-outs.
- Sight gauges allow for easy hydraulic level checks without risking system contamination.
- Full hydraulic brakes eliminate air system maintenance.
- Batteries are located in the counterweight for ground level access.
- Sealed Loader Linkage Pins—designed to keep grease contained longer, prevent the entrance of dust, thereby lengthening greasing intervals.
- Swing-out rear grill facilitates radiator cleaning.
- Repositioned hydraulic breather mounting allows easy access for quick service while protecting breathers from contamination.



The WA800-3 can be configured to load 85-100 ton haulers with room to spare.

WA800-3 WHEEL LOADER

SPECIFICATIONS



ENGINE

Model Komatsu SAA12V140ZE-2
 Type Water-cooled, 4-cycle
 Aspiration Turbocharged, air-to-air aftercooled
 Number of cylinders 12
 Bore x stroke 140 mm x 165 mm **5.51" X 6.5"**
 Piston displacement 30.5 ltr **1,861 in³**
 Governor Electrical, all-speed control
 Horsepower rating @ 2000 rpm
 Gross horsepower 636 kW **853 HP**
 Net flywheel horsepower 603 kW **808 HP**

Fuel system High pressure direct injection
 Lubrication system:
 Method Gear pump, force lubrication
 Filter Full-flow
 Air cleaner Radial seal dry-type with safety element, automatic dust evacuator, and dust indicator on monitor



TRANSMISSION

Torque converter Three-element, single-stage, single-phase
 Transmission Full power shift, automatic planetary gear

Travel Speed*	Forward		Reverse	
	km/h	mph	km/h	mph
1st	7.0	4.3	7.1	4.4
2nd	12.3	7.6	12.4	7.7
3rd	28.0	17.4	28.3	17.6

*Measured with 45/65-45, 46PR (L5) tires



AXLES AND FINAL DRIVES

Drive system Four-wheel drive
 Front Fixed, full-floating
 Rear Center-pin support, full-floating 22° total oscillation
 Reduction gear Spiral bevel gear
 Differential gear Straight bevel gear
 Final reduction gear Planetary gear, single reduction, oil bath



BRAKES

Service Brakes Hydraulically articulated, wet-disc brakes actuate on four wheels

Parking Brake Dry-disc, hydraulically-released, spring-applied on front axle input shaft



BUCKET CONTROLS

Control positions:

 Boom Raise, hold, lower, and float
 Bucket Rollback, hold, and dump



HYDRAULIC SYSTEM

Capacity (discharge flow) @ engine rated rpm:

 Loader pump 405 ltr/min **107 U.S. gal/min**
 Steering pump 307 ltr/min **81 U.S. gal/min**
 Switch pump 405 ltr/min **107 U.S. gal/min**

Relief valve setting:

 Loader 320 kg/cm² **4,550 psi**
 Steering 320 kg/cm² **4,550 psi**

Control valves:

 A two-spool type control valve and steering valve with demand valve

Hydraulic cylinders	Number of cylinders	Bore		Stroke	
		mm	in	mm	in
Boom	2	260	10.2"	1368	53.9"
Bucket	1	300	11.8"	906	35.7"
Steering	2	160	6.3"	503	19.8"



SERVICE REFILL CAPACITIES

Cooling system 301 ltr **79.5 U.S. gal**
 Fuel tank 1425 ltr **376.5 U.S. gal**
 Engine 132 ltr **34.9 U.S. gal**
 Hydraulic system 725 ltr **191.5 U.S. gal**
 Axle (each front and rear) 360 ltr **95.1 U.S. gal**
 Torque converter and transmission 140 ltr **37.0 U.S. gal**
 Brake System 31 ltr **8.2 U.S. gal**



STEERING SYSTEM

Type Articulated, full-hydraulic power steering independent of engine rpm

Steering angle 40° each direction

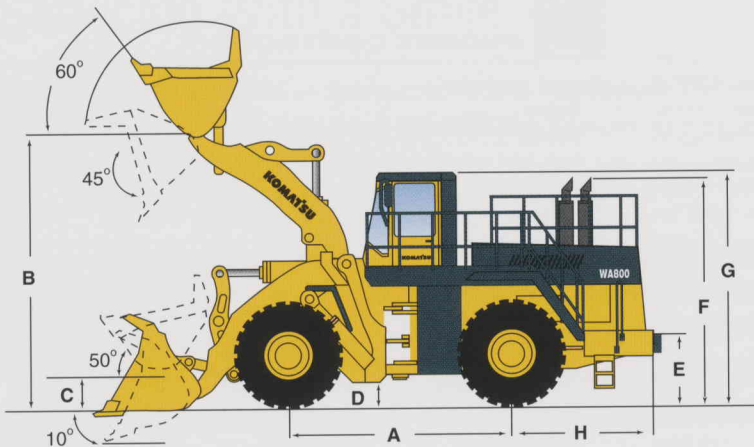
Turning radius outside corner of bucket

with teeth 10940 mm **35'11"**

WA800-3 WHEEL LOADER



DIMENSIONS



Tread		3350 mm	11'0"
Width over tires		4585 mm	15'1"
A Wheelbase		5450 mm	17'11"
B Hinge pin height at Max. height:	Standard Boom	6785 mm	22'3"
	High Lift Boom	7265 mm	23'10"
C Hinge pin height at carry position:	Standard Boom	850 mm	2'9"
	High Lift Boom	850 mm	2'9"
D Ground clearance		550 mm	1'10"
E Hitch height		1390 mm	4'7"
F Overall height, top of stack		5080 mm	16'8"
G Overall height ROPS cab		5275 mm	17'4"
H Axle centerline to counterweight		3200 mm	10'6"

All specs are with teeth and 45/65-45, 46PR (L5) tires, steel cab, ROPS canopy, lubricant, full fuel, additional counterweight, and operator.

		Spade Nose Rock With Teeth		Spade Nose Rock With Teeth**		Spade Nose Rock With Teeth (HL)	
Bucket capacity	SAE rated	11.0 m ³	14.4 yd³	12.3 m ³	16.1 yd³	10.0 m ³	13.1 yd³
	Struck	9.3 m ³	12.2 yd³	10.4 m ³	13.6 yd³	8.5 m ³	11.1 yd³
Bucket width		4810 mm	15'9"	4810 mm	15'9"	4810 mm	15'9"
	With tire protector	5045 mm	16'7"	5045 mm	16'7"	5045 mm	16'7"
Bucket weight		11430 kg	25,200 lb	12151 kg	26,790 lb	N/A	N/A
Static tipping loads	Straight	61250 kg	135,030 lb	60530 kg	133,450 lb	59010 kg	130,100 lb
	Full turn (40°)	53900 kg	118,830 lb	53180 kg	117,240 lb	51930 kg	114,490 lb
Dump clearance, maximum height and 45° dump angle		4630 mm	15'2"	4525 mm	14'10"	5200 mm	17'1"
Reach at 2130 mm 7' and 45° dump angle		3455 mm	11'4"	3550 mm	11'8"	N/A	N/A
Reach at maximum height and 45° dump angle		2385 mm	7'10"	2495 mm	8'2"	2310 mm	7'7"
Operating height	Fully raised	9300 mm	30'6"	9430 mm	30'11"	9625 mm	31'7"
Overall length	Bucket on ground	13730 mm	45'0"	13880 mm	45'6"	14480 mm	47'6"
Turning radius*		10900 mm	35'9"	10965 mm	36'0"	11100 mm	36'5"
Digging depth	0°	165 mm	6.5"	165 mm	6.5"	200 mm	7.9"
	10°	605 mm	1'11"	630 mm	2'1"	620 mm	2'0"
Breakout force (bucket cylinder)		69000 kg	152,120 lb	64170 kg	141,470 lb	71790 kg	158,270 lb
Operating weight		99900 kg	220,240 lb	100620 kg	221,830 lb	101420 kg	223,590 lb

*Turning radius measured with bucket at carry position, outside corner of bucket with teeth.

**Used only for light weight material (1600 kg/m³ 2700 lb/yd³).

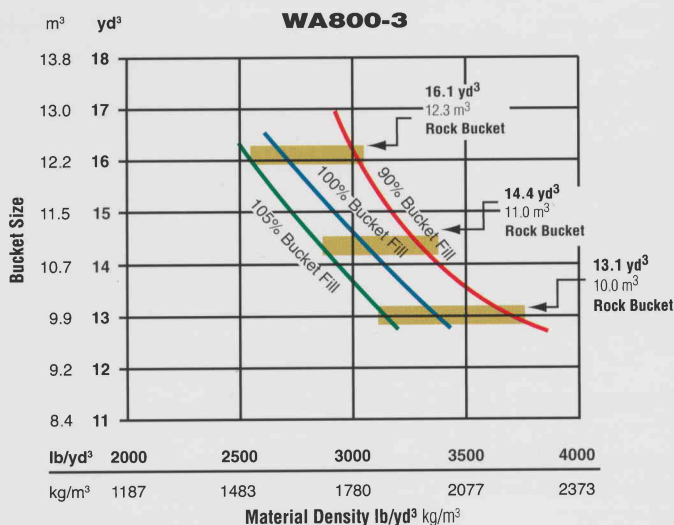
Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers. SAE standard J732 JUN 92 and J742 FEB 85.

Static tipping load and operating weight shown include 45/65-45, 46PR (L5) tires, steel cab, ROPS canopy, lubricant, full fuel tank, additional counterweight, and operator.

Machine's stability and operating weight are affected by counterweight, tire size, and other weight changes to operating weights and static tipping load.

Weight Changes

Tires/Bucket	Change in Operating Weight			Change in Static Tipping Load					
				Straight			Full Turn (40°)		
	S/N With Teeth	S/N With Teeth**	S/N With Teeth (HL)	S/N With Teeth	S/N With Teeth**	S/N With Teeth (HL)	S/N With Teeth	S/N With Teeth**	S/N With Teeth (HL)
45/65-45, 46PR (L5)	99900 kg 220,240 lb	100620 kg 221,830 lb	101420 kg 223,590 lb	61250 kg 135,030 lb	60530 kg 133,450 lb	59010 kg 130,100 lb	53900 kg 118,830 lb	53180 kg 117,240 lb	51930 kg 114,490 lb
45/65-45, 50PR (L4)	98180 kg 216,450 lb	98900 kg 218,040 lb	N/A	58670 kg 129,350 lb	57950 kg 127,760 lb	N/A	51660 kg 113,890 lb	50940 kg 112,310 lb	N/A
45/65-45, 50PR (L45)	100100 kg 220,680 lb	100820 kg 222,270 lb	N/A	61550 kg 135,700 lb	60830 kg 134,110 lb	N/A	54160 kg 119,410 lb	53440 kg 117,820 lb	N/A



This guide, representing bucket sizes not necessarily manufactured by Komatsu, will help you select the proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. Bucket fill factors represent the approximate amount of material as a percent of rated bucket capacity. Fill factors are primarily affected by material, ground conditions, breakout force, bucket profile, and the cutting edge of the bucket used.

Material (loose weight)	kg/m³	lb/yd³
Clay and gravel, dry	1420	2,400
Clay and gravel, wet	1540	2,600
Coal, anthracite, broken	1100	1,850
Coal, bituminous, broken	830	1,400
Earth, dry, packed	1510	2,550
Earth, loam	1250	2,100
Earth, wet, excavated	1600	2,700
Granite, broken or large crushed	1660	2,800
Gravel, dry	1510	2,550
Gravel, dry 13 to 50 mm 1/2" to 2"	1690	2,850
Gravel, pit run (graveled sand)	1930	3,250
Gravel, wet 13 to 50 mm 1/2" to 2"	2020	3,400
Limestone, broken or crushed	1540	2,600
Phosphate rock	1280	2,160
Sand and gravel, dry	1720	2,900
Sand and gravel, wet	2020	3,400
Sand, dry	1420	2,400
Sand, wet	1840	3,100
Stone, crushed	1600	2,700
Topsoil	950	1,600

Machine Right Sizing

Model	Configuration	Bucket Weight + Rated Load = Total Machine Load
WA800-3	Standard	11430 kg + 19800 kg = 31230 kg 25,200 lb + 43,650 lb = 68,850 lb
WA800-3	High Lift	10750 kg + 18000 kg = 28750 kg 23,700 lb + 39,683 lb = 63,400 lb



STANDARD EQUIPMENT

ENGINE AND RELATED ITEMS:

- Air cleaner, 2-stage dry radial seal type with auto dust evacuator
- Air intake extension
- Electric cut-off
- Engine, KOMATSU SAA12V140ZE-2 turbocharged and air-to-air aftercooled, direct injection, Tier 1 emission certified, diesel
Gross HP: 636 kW **853 HP** @ 2000 rpm
Net HP: 603 kW **808 HP** @ 2000 rpm
- Exhaust pipe with sound suppression, glasswool
- Fan, blower
- Radiator, staggered core type
- Transmission guard

ELECTRICAL SYSTEM:

- Alternator, 100 ampere, 24V
- Back-up alarm
- Back-up light
- Batteries, 200 Ah, 4 x 12V
- Battery auto-disconnect switch
- Horn, electric
- Instrument monitor panel with speedometer
- Starting motor, 1 x 11 kW, 24V direct electric
- Lights:
 - stop and tail
 - turn signal (2 front, 2 rear) with hazard switch
 - working (4 front fender mount, 2 front, cab mount, 2 side, 2 rear grill mount, 1 rear step with timer)

POWER TRAIN AND CONTROLS:

- Axles full floating with conventional differentials

- Brakes, parking, dry disc
- Brakes, service, wet, multiple-disc, axle by axle
- Transmission, planetary F3-R3
- Transmission control, electric with kick-down switch
- Automatic transmission shift control

OPERATOR ENVIRONMENT:

- AM/FM stereo radio cassette
- Auxillary steering, ground driven with indicator
- ROPS canopy
- Cab, steel (RH and LH entrance)
 - Air conditioner, heater, defroster, and pressurizer
 - Cigarette lighter/ashtray
 - Dome light
 - Floormat
 - Wiper/washer front and rear, front intermittent
 - Lunch box holder
 - Power windows
 - Rearview mirrors, inside cab mount/outside mount (LH and RH)
 - Seat, air suspension, reclining, with armrests (fabric)
 - Seat belt, 76 mm **3"** retractable
 - Steering, Advanced Joystick Steering System (AJSS) single lever controlled steering system
 - Sun visor

MAIN MONITOR—ELECTRONIC DISPLAY:

- Central warning lamp for check items
- Central warning lamp for caution items
- Head lamp high beam pilot
- Speedometer, MPH

- Service meter
- Transmission shift indicator
- Turn signal pilot

MAINTENANCE MONITOR—ELECTRONIC DISPLAY:

- Air cleaner check
- Battery charge
- Brake oil pressure
- Engine oil level
- Engine oil pressure
- Engine water level
- Engine water temperature
- Fuel gauge
- Parking brake warning light
- Torque converter temperature

HYDRAULICS AND CONTROLS:

- High pressure in-line hydraulic filters
- 2-valves for boom and bucket controls with Pressure Proportional Control (PPC)
- Lift cylinders and bucket cylinder

VANDALISM PROTECTION:

- Battery box lock
- Caplock and cover for fuel tank
- Radiator, filler lock, and cover

OTHER STANDARD EQUIPMENT:

- Boom kick-out, automatic
- Bucket leveler, automatic
- Counterweight, standard and additional
- Front fenders (LH and RH)
- Fuel filter arrangement for poor fuel
- PM service kit
- Rear steps (LH) with partial fenders
- Tow hitch

NOTE: Tires and rims are not included as standard equipment.
Rims must be ordered as a required attachment.



OPTIONAL EQUIPMENT

TIRES ONLY (TUBELESS) SET OF FOUR:

- 45/65-45, 50PR (L4) Bias tires
- 45/65-45, 50PR (L5) Bias tires
- 45/65-45, 58PR (L5) Bias tires
- 45/65,-R45, XLDD2 Radial tires

RIMS ONLY, LESS TIRES:

- Rims only for 45/65-45 tires

BUCKETS:

- Spade nose rock, 11.0 m³, **14.4 yd³** with Hensley 550 Bladesaver II system™
- Spade nose rock, 10.0 m³ **13.1 yd³** with Hensley 550 Bladesaver II system™ (for high lift)
- Spade nose rock, 12.3 m³ **16.1 yd³** with Hensley 550 Bladesaver II system™ (light material 1600 kg/m³ **2,700 lb³**)

AUXILIARY EQUIPMENT:

- Wiggins fast fuel system

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DK02(2.5M)C (2.5M)C 05/05

02/05 (EV-1)

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