

KOMATSU®

WA900-3E0

FLYWHEEL HORSEPOWER
638 kW 856 HP @ 2050 rpm

BUCKET CAPACITY
11.5-13.0 m³ 15.0-17.0 yd³

WA
900



GALE

Photo may include optional equipment.

WHEEL LOADER

WALK-AROUND

High Productivity & Low Fuel Consumption

- High performance SAA12V140E-3 engine
- Low fuel consumption
- Dual-mode active working power select system
- Large dumping clearance

See pages 4 and 5.

Excellent Operator Environment

- Automatic transmission with ECMV
- Tilttable steering column
- "AJSS" (Advanced Joystick Steering System) (Optional)
- Roomy, quiet cab with power windows
- Low vibration & noise
- Pillar-less large cab with ROPS/FOPS canopy
- Comfortable operator's seat

See pages 8 and 9.



Building on the technology and expertise Komatsu has accumulated since its establishment in 1921, GALEO presents customers worldwide with a strong, distinctive image of technological innovation and exceptional value. The GALEO brand will be employed for Komatsu's full lineup of advanced construction and mining equipment. Designed with high productivity, operator comfort and environmental considerations in mind, the machines in this line reflect Komatsu's commitment to contributing to the creation of a better world.

***Genuine Answer for Land
and Environment Optimization***

Harmony with Environment

- EPA Tier 2 emission certified
- Low fuel consumption

Reliability

- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Engine pre-lube system (Optional)
- Maintenance-free, fully hydraulic, wet disc brakes

See page 6.

- Hydraulic hoses use flat face O-ring seals
- Cathion electrodeposition process is used to apply primer paint
- Powder coating process is used to apply main structure paint
- Sealed DT connectors for electrical connections

FLYWHEEL HORSEPOWER
638 kW 856 HP @ 2050 rpm

BUCKET CAPACITY
11.5–13.0 m³ 15.0–17.0 yd³



Photo may include optional equipment.

Easy Maintenance

- Simple checks
- "VHMS" (Vehicle Health Monitoring System) (Optional)
- Rear access stairs
- Auto greasing system (Optional)

See page 7.

HIGH PRODUCTIVITY AND LOW FUEL CONSUMPTION

High Performance SAA12V140E-3 Engine

Electronic Heavy Duty Common Rail fuel injection system provides optimum combustion of fuel.

This system also provides fast throttle response to match the machine's powerful tractive effort and fast hydraulic response.

Net: 638 kW 856 HP

Low Emission Engine

This engine is EPA Tier 2 emission certified without sacrificing power or machine productivity.

Low Fuel Consumption

Low fuel consumption is achieved because of the low-noise, high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

Durable Bucket

Komatsu buckets are manufactured using high-tensile strength steel with replaceable welded wear plates for extended bucket life. Additional strength has been added to the bucket bottom corners, side edges and spill guard ends for increased durability.

Bucket capacities

13.0m³ 17cu.yd

Dual-Mode Active Working System

The machine can be equipped with two mode active working system. This system provides the most efficient hydraulic flow for your operation.

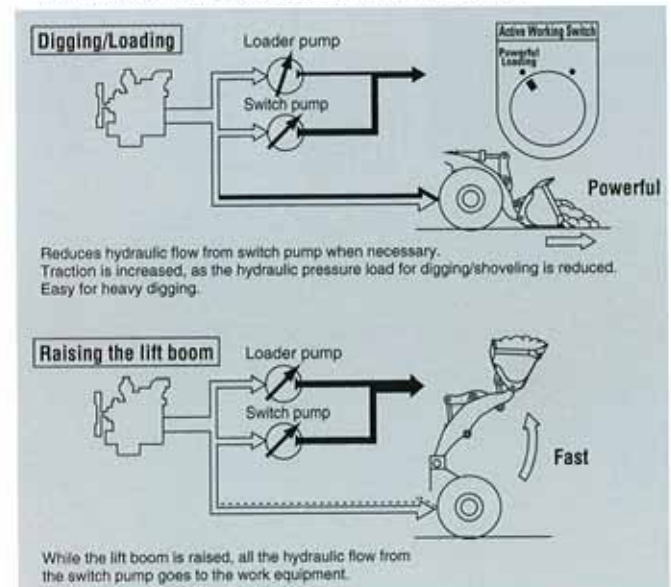
The active working switch has two modes: powerful loading or normal loading.



Dual modes switch

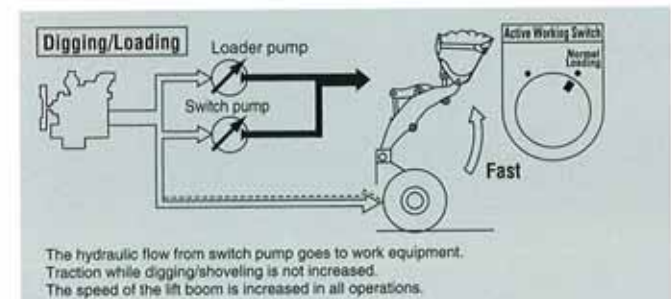
• Powerful loading mode:

Hydraulic flow towards the work equipment can be increased and reduced as and when required.



• Normal loading mode:

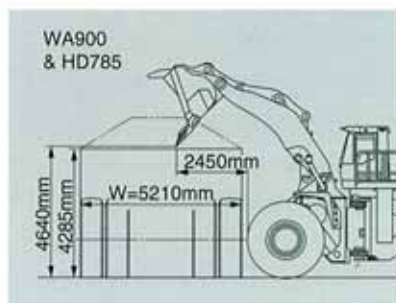
All hydraulic flow is transferred directly to the work equipment.





Large Dumping Clearance

The WA900-3 was designed with ample dumping clearance for dump truck matching.



High Breakout Force

Komatsu wheel loaders have high-tensile steel Z-bar loader linkages for maximum rigidity and maximum breakout force. Sealed loader linkage pins extend greasing intervals.

Breakout force: 67900 kg 149,690 lb
 13.0 m³ 17.0 yd³ Excavating bucket (spade nose) with tiptooth

Excellent Stability

The WA900-3 has the widest tread in its class **3,350mm (11')** and a long **5,450mm (17'11")** wheelbase, for maximum machine stability.

Static tipping load

(with 45/65-45-58 PR (L-5) tires / bucket 13.0 m³ 17.0 yd³)

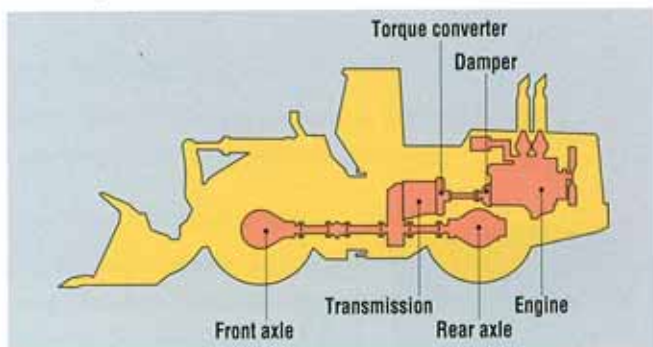
Straight: 65670 kg 144,780 lb

40° full turn: 57430 kg 126,610 lb

INCREASED RELIABILITY

Komatsu Components

Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.

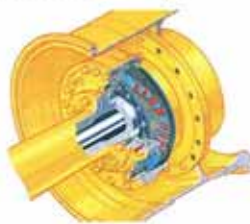


Engine pre-lube System (optional)

Durability of the engine is achieved by raising the engine oil pressure before starting the engine. When the operator turns the key, the pre-lubrication pump sends oil from the engine oil pan to the engine oil filter and raises the pressure of that oil to the set pressure. Then, the starting motor rotates to start the engine.

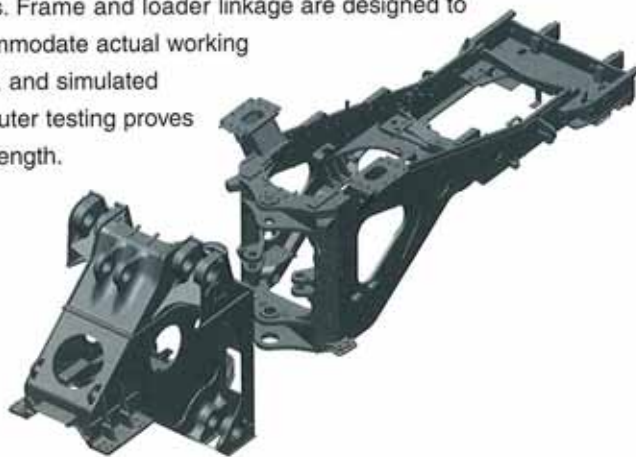
Maintenance-Free Braking System

Service brakes employ two hydraulically-actuated independent circuits which are adjustment-free, fully-sealed, wet disc units, preventing intrusion of dirt and dust. Since the brake system does not use air, it provides many features such as absence of condensation, dependable braking even in cold conditions, no need for drainage, and rust free piping. What's more, charging time after engine starting is drastically shortened and pedal depressing effort is reduced.



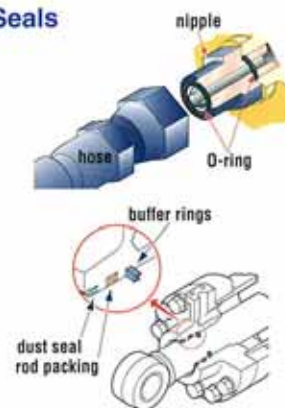
High-rigidity Frames and Loader Linkage

The front and rear frames and the loader linkage have more torsional rigidity to secure resistance against increased stress. Frame and loader linkage are designed to accommodate actual working loads, and simulated computer testing proves its strength.



Flat Face-to-Face O-Ring Seals

Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize reliability.



Cathion Electrodeposition Primer Paint/ Powder Coating Final Paint

Cathion electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior sheet metal parts. This process results in a durable paint finish, even in the most severe environments. Some external parts are made of plastic providing long life and high impact resistance.

Sealed DT Connectors

Main harnesses and controller connectors are equipped with sealed DT connectors providing high reliability, water resistance and dust resistance.



EASY MAINTENANCE



Photo may include optional equipment.

Simple Checks, Easy Maintenance

The main monitor and the maintenance monitor (EDIMOS II) are neatly arranged on the instrument panel for a quick, clear reading of machine functions at all times. The main monitor also has a diagnostic function.

Main monitor



Maintenance monitor



Large Side Door

Right side door is easy to open and provides accessibility for maintenance.



Fuel Tank Cap with Mud Cover and Large Tool Box

Fuel tank cap



Tool box



Rear Access Stairs

For the purpose of boarding and exiting machine, rear access stairs with handrail is provided. The step width, clearance, and the step angle have been designed for climbing both up and down. A step light provides light for night boarding.

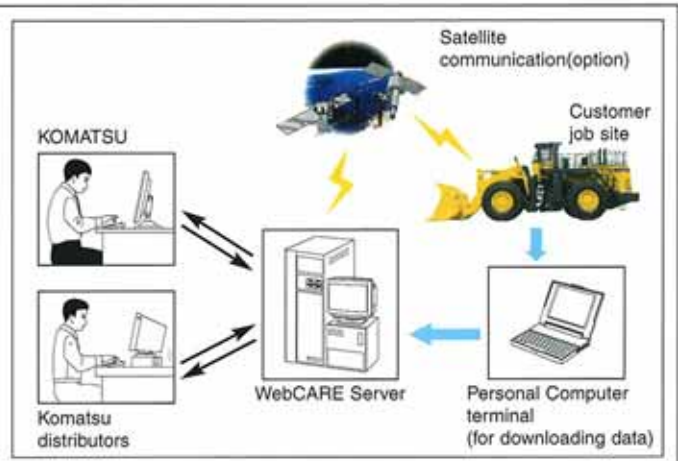


Auto-Greasing System (optional)

The periodic lubrication points, except for drive shaft, are greased automatically according to a preset amount and interval. Quick-change grease canisters make replacement easy and clean.

VHMS (Vehicle Health Monitoring System) (optional)

VHMS is a management system for large equipment for use in mining, which enables detailed monitoring of fleet via satellite communications. Komatsu and distributors can analyze "vehicle health" and other operating conditions and provide the information to job site using the internet from a remote location on a near-real time basis.



OPERATOR ENVIRONMENT

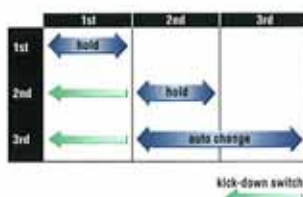
Easy Operation

Automatic Transmission with Electronically Controlled Modulation Valve (ECMV)

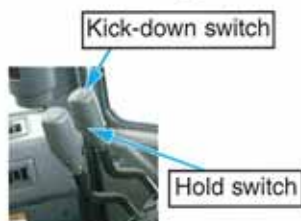
Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV system engages the clutch smoothly to prevent lags and shocks when shifting. This system provides efficient machine operation and a comfortable ride.

- **Kick-down switch:**

This valuable feature for increases productivity. With the touch of a finger, the kick-down switch automatically downshifts from second to first when beginning the digging cycle. It automatically upshifts from first to second when the direction control lever is placed in reverse. This results in increased rim pull for better bucket penetration and reduced cycle times for higher productivity.



- **Hold switch:** Auto shift is selected and if the operator turns on this switch when the lever is at the 3rd gear speed position, the transmission is fixed to that gear speed.



Electronically Controlled Transmission Lever

Easy shifting and directional changes with Komatsu two-lever electronic shifting. Change direction or shift gears without removing the shifting hand from the steering wheel. Solid state electronics and conveniently located direction and gear shift controls make this possible. Automatic shifts in ranges two through four keep production high and manual shifting at a minimum.



Steering Wheel Type



Tiltable Steering Column & One-Glance Monitors

The steering column can be easily tilt-adjusted to the most comfortable position with one lever.



Variable Transmission Cut-off System

The operator can set the transmission cut-off pressure desired for the left brake pedal using the switch located on the right-side control panel. The operator can improve the working performance by setting the cut-off pressure properly depending on working condition.

- High cut-off pressure for digging operations.
- Low cut-off pressure for truck-loading operations.



1:T/M cut-off ON/OFF switch
2:T/M cut-off set switch

Comfortable Operation

Remote Boom Positioner

The highest and lowest position of the bucket can be set from the cab to match any truck body. Once the positioner is set, the bucket is smoothly stopped at desired position with no shock.



3: Remote boom positioner switch

AJSS (Advanced Joystick Steering System) (Optional)

AJSS is a feedback steering system which has been incorporated to allow steering and forward and reverse selection to be controlled by wrist and finger control. With the feedback function, the machine steering angle is exactly the same angle as the lever tilt angle.



Roomy, Quiet Cab With Power Windows

The cab is large, with a comfortably spacious interior and power windows. Also, a wide viewing angle is guaranteed because the cab is pillar-less. By adopting a high-capacity air conditioner, Komatsu ensures operator comfort, no matter the exterior conditions. Other features designed with operators in mind include a lunchbox storage space.



Lunchbox storage space

Low Vibration & Noise

The cab rests on Komatsu viscous damping mounts (rubber and silicon oil) to reduce vibration and noise. All hydraulic equipment is mounted on high-resistance rubber to further reduce vibration and noise.



Pillar-less Large Cab with ROPS / FOPS Canopy

A wide pillar-less flat glass provides excellent front visibility. The wiper arm covers a large area to provide great visibility even on rainy days.



Rear heated glass provides clear view even in freezing or condensation conditions.



Comfortable Operator's Seat

The operator's seat has a reclining/air suspension design with headrest to support the operator comfortably during long operation. Also, it is easy to adjust seat height with air suspension.





ENGINE

Model	Komatsu SAA12V140E-3
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 6.50"
Piston displacement	30.48 ltr 1860 in ³
Governor	all-speed, electronic
Flywheel horsepower	
SAE J1995	Gross 672 kW 900 HP
ISO 9249/SAE J1349	Net 638 kW 856 HP
Rated rpm	2050 rpm
Fan drive method for radiator cooling	Mechanical
Fuel system	Direct injection
Lubrication system:	
Method	Gear pump, force-lubrication
Filter	Full-flow and bypass combined
Air cleaner	Dry type with automatic dust ejector and pre-cleaner, cyclopac with vacuacer



TRANSMISSION

Torque converter:
Type3-element, single-stage, single-phase
Transmission:
TypeFull-powershift, planetary type
Travel speed: km/h mph
Measured with 45/65-45-58 tires

	1st	2nd	3rd
Forward	7.0 4.3	12.3 7.6	28.0 17.4
Reverse	7.1 4.4	12.4 7.7	28.3 17.6



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 actuated, wet disc brakes actuate on four wheels
Parking brake	Dry disc brake
Emergency brake	Parking brake is commonly used



STEERING SYSTEM

Type	Articulated type, full-hydraulic power steering
Steering angle	40° each direction
Minimum turning radius at the center of outside tire	9200 mm 30'2"



HYDRAULIC SYSTEM

Steering system:	
Hydraulic pump	Piston pump
Capacity	.315 ltr/min 83.2 U.S. gal/min at rated rpm
Relief valve setting	.34.3 MPa 350 kgf/cm ² 4,977 psi
Hydraulic cylinders:	
Type	Double-acting, piston type
Number of cylinders	2
Bore x stroke	160 mm x 503 mm 6.3" x 19.8"
Loader control:	
Hydraulic pump	Piston pump
Capacity	.415 ltr/min 109.6 U.S. gal/min at rated rpm
Relief valve setting	.34.3 MPa 350 kgf/cm ² 4,977 psi
Hydraulic cylinders:	
Type	Double-acting, piston type
Number of cylinders—bore x stroke:	
Boom cylinder	2- 260 mm x 1368 mm 10.2" x 53.9"
Bucket cylinder	1- 300 mm x 906 mm 11.8" x 35.7"
Control valve	Spool type
Control positions:	
Boom	Raise, hold, lower, and float
Bucket	Tilt-back, hold, and dump
Hydraulic cycle time (rated load in bucket)	
Raise	11.2 sec
Dump	2.0 sec
Lower (Empty)	4.8 sec

**ROPS / FOPS & CAB**

Structure complies with ISO 3471 ROPS (Roll-Over Protective Structure) standards, as well as ISO 3449 FOPS (Falling Object Protective Structure) standards. The cab is mounted on rubber pads and is well insulated.

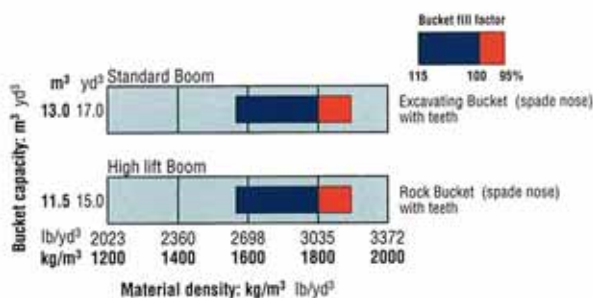


SERVICE REFILL CAPACITIES

Cooling system	337 ltr	89.0 U.S. gal
Fuel tank	1555 ltr	410.8 U.S. gal
Engine	130 ltr	34.3 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



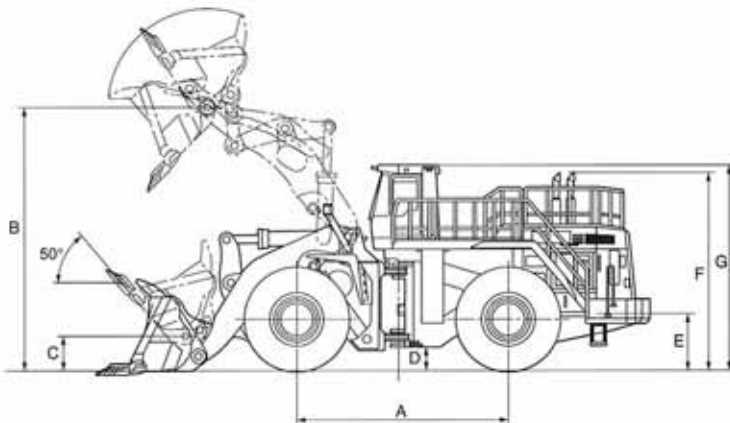
BUCKET SELECTION GUIDE





DIMENSIONS

Measured with 45/65-45-58PR(L-5) tires



	Standard Boom	High lift Boom
Tread	3350 mm 11'	
Width over tires	4585 mm 15'1"	
A Wheelbase	5450 mm 17'11"	
B Hinge pin height, max. height	6960 mm 22'10"	7445 mm 24'5"
C Hinge pin height, carry position	800 mm 2'7"	
D Ground clearance	550 mm 1'10"	
E Hitch height	1390 mm 4'7"	
F Overall height, top of the stack	5130 mm 16'10"	
G Overall height, ROPS cab	5275 mm 17'4"	

	Standard boom	High lift boom
	Excavating Bucket	Excavating Bucket
	Spade nose Tipteeth	Spade nose teeth
Bucket capacity: heaped	13.0 m³ 17.0 yd³	11.5 m³ 15.0 yd³
struck	11.0 m³ 14.4 yd³	9.7 m³ 12.7 yd³
Bucket width	4810 mm 15'9"	4810 mm 15'9"
Bucket weight	12330 kg 27,180 lb	11370 kg 25,070 lb
Dumping clearance, max. height and 45° dump angle	4640 mm 15'3"	5255 mm 17'3"
Reach at max. height and 45° dump angle	2450 mm 8'	2235 mm 7'4"
Reach at 2130 mm (7') clearance and 45° dump angle	3650 mm 12'	4020 mm 13'2"
Reach with arm horizontal and bucket level	4640 mm 15'3"	4760 mm 15'7"
Operating height (fully raised)	9680 mm 31'9"	9875 mm 32'5"
Overall length	14490 mm 47'6"	14685 mm 48'2"
Loader clearance circle (bucket at carry, outside corner of bucket)	22000 mm 72'2"	22200 mm 72'10"
Digging depth: 0°	165 mm 6.5'	160 mm 6.3'
10°	645 mm 2'1"	610 mm 2'0"
Static tipping load: straight	65670 kg 144,780 lb	62540 kg 137,880 lb
40° full turn	57430 kg 126,610 lb	55030 kg 121,320 lb
Breakout force	666 kN 67900 kgf 149,690 lb	703 kN 71700 kgf 158,070 lb
Operating weight	107200 kg 236,340 lb	107350 kg 236,670 lb

All dimensions, weights, and performance values based on SAE J732c and J742b standards.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS canopy, air conditioner, bucket and operator. Machine stability and operating weight are affected by counterweight, or ballast, tire size, and other attachments. Use either counterweight or ballast, not both. Apply the following weight changes to operating weight and static tipping load.



WEIGHT CHANGES

	Operating weight		Tipping load			
			Straight		Full turn	
Remove ROPS canopy	-1385 kg	-3,055 lb	-1220 kg	-2,690 lb	-1180 kg	-2,600 lb
Remove steel cab	-430 kg	-950 lb	-335 kg	-740 lb	-330 kg	-730 lb



STANDARD EQUIPMENT

- 2-spool valve for boom and bucket controls
- Alternator, 90 A/24 V
- Air conditioner
- Automatic transmission F3 / R3
- Back-up alarm
- Back-up lamp
- Batteries, 160 Ah/12 V x 4
- Boom kick-out
- Bucket positioner
- Counterweight
- Directional signal
- Emergency brake
- Engine, Komatsu SAA12V140E-3 diesel
- Floormat
- Front working lights (2)
- Hard water area arrangement (corrosion resister)
- Head lights (2)
- Lift cylinders and bucket cylinder
- Radiator mask, lattice type
- Rear access stairs
- Rear defroster (electric)
- Rearview mirrors
- Rear window washer and wiper
- Rear working lights (2)
- Room mirror
- ROPS/FOPS canopy
- Seat belt
- Seat, suspension type with reclining
- Service brakes, wet disc type
- Side working lights (2)
- Standard boom
- Starting motor, 7.5 kW/24 V x 2
- Steel cab included front wiper, windshield washer and power window
- Steering wheel, tiltable
- Sun visor
- Tires (45/65-45-58PR L5 tubeless) and rims
- Water separator



OPTIONAL EQUIPMENT

- AJSS (advanced Joystick Steering System)
- AM/FM radio
- AM/FM stereo radio cassette
- Ashtray and cigarette lighter
- Automatic greasing
- Bucket corner teeth
- Bucket teeth (weld-on/tip type)
- Counterweight for high lift boom
- Emergency steering (SAE)
- Engine pre-lube system
- Fast fill fuel system
- Fenders
- Fire extinguisher
- Heater and defroster
- High lift boom
- Mesh chain
- Ordinary spare parts
- Power train guard
- Rear under view mirror
- Sweeper wing
- Tires (45/65-R45 L5 tubeless)
- Tool kit
- Under view mirror
- Vandalism protection
- VHMS (Vehicle Health Monitoring System)
- Yellow rotating lamp

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