# KOMATSU®

**WA200PZ-6** 

**NET HORSEPOWER** 

94 kW **126 HP** @ 2000 rpm

**OPERATING WEIGHT** 

11465 - 11530 kg

25,275 - 25,420 lb

**BUCKET CAPACITY** 

1.9 - 2.1 m<sup>3</sup> 2.5 - 2.75 yd<sup>3</sup>

WA 200 PZ



# WITH PARALLEL Z-BAR LINKAGE

# WALK-AROUND

# **High Productivity** & Low Fuel Consumption with **Hydrostatic Transmission**

control system





KOMTRAX sends machine location, Service Meter Reading (SMR) and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.

## **Environmentally Friendly**

- EPA Tier 3 and EU Stage 3A emissions certified
- Low exterior noise

**Excellent Operator Environment** 

Electronically controlled directional lever

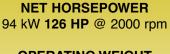
Easy entry/exit, rear-hinged doors

Pillar-less large ROPS/FOPS Level 2 cab-integrated

HST traction control switch

 Tiltable steering column Low-noise designed cab

Low fuel consumption



# OPERATING WEIGHT

11465 - 11530 kg **25,275 - 25,420 lb** 

### **BUCKET CAPACITY**

1.9 - 2.1 m<sup>3</sup> 2.5 - 2.75 yd<sup>3</sup>

# 11 25 BUC

# WA 200 PZ

New Komatsu Parallel PZ Linkage

Large dump angle at maximum boom height

Excellent visibility of front attachments

Parallel movement in both fork

and bucket applications

Large tilt force at all heights

2 mode bucket leveler

### Reliability

- Adjustment-free, fully hydraulic, wet disc service and parking brakes
- Hydraulic hoses use flat face O-ring seals
- Sturdy main frame
- 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

Photos may include optional equipment.

## Easy Maintenance

- Equipment Management Monitoring System (EMMS)
- Easy access, gull-wing type engine side doors
- Automatic reversible fan
- KOMTRAX®

# HIGH PRODUCTIVITY AND LOW FUEL CONSUMPTION



### **High Performance SAA4D107E-1 Engine**

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

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

Net: 94 kW 126 HP

### **Low Emission Engine**

This engine is EPA Tier 3 and EU Stage 3A emissions certified, without sacrificing power or machine productivity.

### **Low Fuel Consumption**

The high-torque engine and Hydrostatic Transmission (HST) with maximum efficiency in the low-speed range provide low fuel consumption.

### **Eco Indicator**

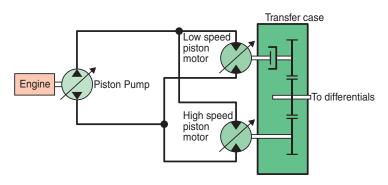
The eco indicator will help an operator achieve energy savings.



# **Hydrostatic Transmission (HST)**

# Electronically-Controlled HST Using a 1-Pump, 2-Motor System

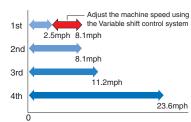
- The 1-pump, 2-motor system allows high-efficiency and high tractive effort. Engine power is transmitted hydraulically to a transfer case, then mechanically out to the differentials and the four driving wheels.
- HST provides quick travel response and aggressive drive into the pile. The variable displacement system automatically adjusts to the tractive effort demand to provide maximum power and efficiency.
- Full auto-shifting eliminates any gear shifting and kickdown operation to allow the operator to concentrate on digging and loading.
- When high drive torque is needed for digging, climbing, or initiating movement, the pump feeds both motors. This combination makes the loader very aggressive and quick.
- Under deceleration, the HST system acts as a dynamic brake on the mechanical drive system. The dynamic brake can hold the loader in position on most workable slopes. This can be an advantage in stockpiling and ramp loading.
- As the machine moves and gains ground speed, the torque demand decreases and the low speed motor is effectively removed from the drive system by a clutch. At this point, the flow is going to the high-speed motor and the low-speed motor is not causing drag on the system.
- An inching pedal gives the operator excellent simultaneous control of travel and equipment hydraulic speeds. By depressing the inching pedal, drive pump flow to the motors will decrease, reducing ground speed and allowing the operator to use the accelerator to increase flow to the equipment hydraulics. Depressing the inching pedal further will activate the service brakes.



# Electronically-Controlled HST with Variable Shift Control System

The operator can choose between first, second, third or fourth maximum speeds by dialing the speed range selector switch. For V-cycles, the operator can set the speed control switch to

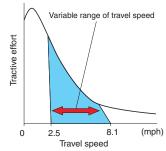
1 or 2, which provides aggressive digging, quick response, and fast hydraulics. For load and carry, select 3 or 4 which still provides aggressive digging but with much faster travel speed.



The variable shift switch

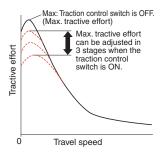
allows the operator to adjust machine speed in applications such as confined V-loading. When in 1, the operator can adjust travel speed using the variable shift switch to match machine speed and hydraulics to the distance traveled. This feature is also useful when powering a broom or snowblower.





### **Variable Traction Control System**

The tractive effort of the machine, when traveling at a low speed, can be reduced by using the traction control switch. Combined with torque proportioning differentials, or optional limited slip differentials this system provides the following benefits:



- Facilitates operation on soft ground where the tires of the machine are apt to slip.
- Eliminates excessive bucket penetration and reduces tire slippage during stockpile loading to improve the work efficiency.



MAX

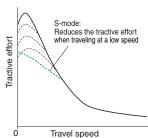
• Reduces tire slippage to extend the life of tires.

Furthermore, the maximum tractive effort can be adjusted in three stages (one stage for conventional machines) when the traction control switch is ON. This allows the operator to select the optimum tractive effort for diversified road conditions.

### S-mode

Setting the switch to S-mode provides excellent driving force for operations on slippery road surfaces, like snow-removal on snow-covered surfaces, resulting in low tire slippage and

facilitation of the operation. Unexpected tire slippage on slippery road surfaces is suppressed by controlling the engine speed and HST motor when traveling at a low speed. (S-mode is effective only in forward travel.)



### **Max. Traction Switch**

The max. traction switch is located on the work equipment control lever. When the traction control switch is at the ON position or S-mode is selected, pushing this switch cancels the setting of the traction control temporarily and increases the tractive effort to its 100% value. Then pushing the max. traction switch again or operating the F/R lever returns the tractive effort to the set value automatically. This switch is useful for operations such as stockpile work where large tractive effort is required temporarily.

### **Accelerator Pedal Sensitive HST Control**

Finely-tuned HST control according to the accelerator pedal angle allows smoother traveling and better energysaving operation.



### **Dumping Clearance and Reach**

The long lift arms provide high dumping clearance and long dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

Dumping Clearance: 2760 mm 9'0" Dumping Reach: 1130 mm 3'8"

(Dimensions at max. height and 45° dump angle;

2.1 m<sup>3</sup> 2.75 yd<sup>3</sup> bucket with B.O.C.E.)

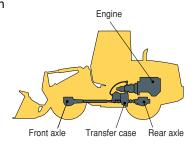
# RELIABILITY

### **Komatsu Components**

Komatsu manufactures the axles, engine, transfer case, and

hydraulic components on this wheel loader.

Komatsu loaders are manufactured with an integrated production system under a strict quality control system.



# Wet Multi-disc Brakes and Fully Hydraulic Braking System

This means low maintenance costs and high reliability. Wet disc brakes are fully sealed. Contaminants are kept out, providing low wear and maintenance. Brakes require no adjustments for wear. The new parking brake is also an adjustment-free, wet multi-disc for high reliability and long life. Added reliability is designed into the braking system by the use of two independent hydraulic circuits, providing hydraulic backup. Fully hydraulic brakes mean no air system to bleed and no condensation of water in the system that can lead to contamination, corrosion, and freezing.





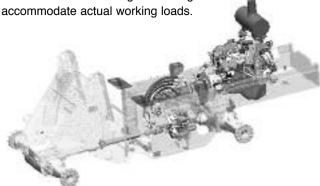
### **Overrun Reduction System**

When the machine descends a slope of six degrees or less, maximum travel speed is automatically restricted to approximately 38 km/h 23 mph, for protection against damage of power train components and brakes, by sensing the travel speed and controlling the discharge amount of the HST pump and motor. When the machine descends a steep slope and the travel speed reaches 36 km/h 22 mph, the caution lamp lights up to inform the operator to reduce the travel speed.

Note: When the machine descends a steep slope, the use of the service brake is necessary to limit travel speed.

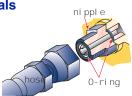
### **High-rigidity Frames and Loader Linkage**

The front and rear frames and the loader linkage have torsional rigidity to provide resistance to stresses. The frames and loader linkage are designed to



### Flat Face-to-Face O-Ring Seals

Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections.



# Cathion Electrodeposition Primer Paint/ Powder Coating Final Paint

Cathion electrodeposition process is used to apply primer paint and powder coating process is used to apply the topcoat to the exterior metal sheet parts. Some external parts are made of plastic providing long life and high impact resistance.

### **Sealed DT Connectors**

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

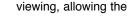


# **EASY MAINTENANCE**



# **Equipment Management Monitoring System** (EMMS)

The monitor is mounted in front of the operator for easy



to easily check gauges and warning lights.

A specially designed two-spoke steering wheel allows the operator to easily see the instrument panel.

### **Maintenance Control and Troubleshooting Functions**

- Action code display function: If an abnormality occurs, the monitor displays action details on the character display at the center bottom of the monitor.
- Monitor function: The controller monitors engine oil pressure, coolant temperature, air cleaner clogging, etc.
   If the controller finds abnormalities, the error is displayed on the LCD.
- Replacement time notice function: The monitor informs replacement time of oil and filters on the LCD when replacement intervals are reached.
- Trouble data memory function: The monitor stores abnormality data for effective troubleshooting.

### **Gull-wing Type Engine Side Doors Open Wide**

The operator can open and close each gull-wing type engine side door easily, with the assistance of a gas spring, to perform daily service checks from the ground.



### **Easy Radiator Cleaning**

If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the cab by pressing a switch on the control panel.

### **Automatic Reversible Fan**

The engine fan is driven hydraulically and can be operated in reverse automatically. When the switch is in the automatic position, the fan revolves in reverse intermittently for 2 minutes every 2 hours. (Default setting)



- B: Manual Reverse Mode
- A: Normal Rotation Mode
- C: Auto Reverse Mode

# **OPERATOR ENVIRONMENT**

# Easy and Comfortable Operation

### **Excellent Visibility With Forks**

The new PZ loader linkage design enables the operator to see the fork tine tips to aid in loading pallets and other materials onto the forks.

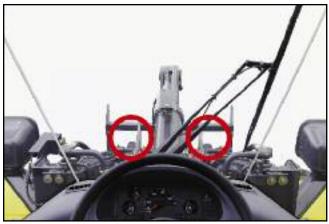


Photo may include optional equipment.

# Multi-function Loader Control Lever with Forward & Reverse Switch

A new multi-function control lever integrated with forward and

reverse switch allows the operator to easily operate the work equipment, providing low operator fatigue and good controllability. The adjustable wrist rest provides the operator with a variety of comfortable operating positions.



### **Right-side Control Panel**

The operator can select the speed range, maximum travel speed in 1st, tractive effort, and reversible fan setting.



- 1: Speed range selector switch
- 2: Variable shift switch
- 3: Traction control switch
- 4: Max. traction switch
- 5: Fan reverse switch
- 6: Quick coupler lock switch
- 7: Two mode bucket leveler switch
- 8: Directional selector activation switch

### **Low-noise Design**

Noise level at operator's ear: 70 dB(A) Dynamic noise level (outside): 104 dB(A)

The large cab is mounted with Komatsu's unique ROPS/FOPS viscous mounts. The low-noise engine, hydraulically driven fan, and hydraulic pumps are mounted with rubber cushions, and the cab sealing is improved to provide a quiet, low-vibration, pressurized, and comfortable operating environment.

### **Rear-hinged Full Open Cab Doors**

The large cab doors are rear-hinged to open fully, offering easy entry/exit. Exit from the cab is easily accomplished by having steps in view of the operator. Sloped hand rails help guide the foot onto the first step.



### **Tiltable Steering Column**

The operator can tilt the steering column to provide a comfortable working position.



# **SPECIFICATIONS**



### **ENGINE**

Model	
Number of cylinders	
Bore x stroke	
Piston displacement	4.46 ltr <b>272 in</b> <sup>3</sup>
Governor	
Horsepower	
SAE J1995	
ISO 9249/SAE J1349	Net 94 kW 126 HP
Hydraulic fan at maximum speed	Net 91 kW 122 HP
Rated rpm	2000 rpm
Fan drive method for radiator cooling	ngHydraulic
Fuel system	Direct injection
Lubrication system:	
Method	Gear pump, force-lubrication
Filter	Full-flow type
Air cleaner	Ory type with double elements and dust evacuator, plus dust indicator

EPA Tier 3 and EU Stage 3A emissions certified.



### **TRANSMISSION**

Type ..........Hydrostatic, 1 pump, 2 motors with speed range select

Travel speed: km/h **mph**Measured with 17.5-25 tires

	1st	2nd	3rd	4th
Both Forward	4.0 - 13.0	13.0	20.0	34.5
and Reverse	2.5 - 8.1	8.1	12.4	21.4

Measured with 20.5-25 tires

	1st	2nd	3rd	4th
Both Forward	4.4 - 14.3	14.3	22.0	38.0
and Reverse	2.7 - 8.9	8.9	13.7	23.6



### **AXLES AND FINAL DRIVES**

Drive system	Four-wheel drive
Front	Fixed, semi-floating
Rear	Center-pin support, semi-floating,
	24° total oscillation
Reduction gear	Spiral bevel gear
Differential gear	Torque proportioning
Final reduction gear	Planetary gear, single reduction

### **BRAKES**

Service brakes	
wet o	lisc brakes actuate on four wheels
Parking brake Wet, multi-	disc brake on transfer output shaft
Emergency brake	.Parking brake is commonly used

### **STEERING SYSTEM**

Type	
Steering angle	38° each direction (40° end stop)
Minimum turning radius at	
the center of outside tire	5100 mm <b>16'9"</b>

### **HYDRAULIC SYSTEM**

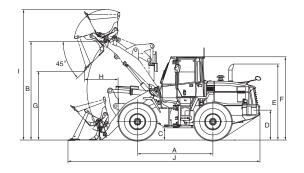
Steering system: Hydraulic pump
Number of cylinders
Loader control: Hydraulic pump
Type
Boom cylinder 2- 125 mm x 673.5 mm 4.9" x 26.5" Bucket cylinder
Boom
Raise       5.7 sec         Dump       1.6 sec         Lower (Empty)       3.2 sec



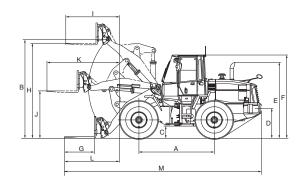
### **SERVICE REFILL CAPACITIES**

Cooling system	4.5 U.S. gal
Fuel tank177 ltr	46.8 U.S. gal
Engine 15.5 ltr	4.1 U.S. gal
Hydraulic system	15.3 U.S. gal
Axle (each front and rear)	4.8 U.S. gal
Transfer case	1.3 U.S. gal

### **DIMENSIONS**



	Units: mm <b>ft in</b>	17.5-25 tires		20.5-25 tires	
	Tread	1930	6'4"	1930	6'4"
	Width over tires	2375	7'10"	2470	8'1"
Α	Wheelbase	2840	9'4"	2840	9'4"
В	Hinge pin height, at max. height	3815	12'6"	3885	12'9"
	Hinge pin height, at carry position	355	1'2"	425	1'5"



	Units: mm <b>ft in</b>	17.5-25 tires		20.5-25 tires	
С	Ground clearance	425	1'5"	495	1'8"
D	Hitch height	870	2'10"	940	3'1"
Ε	Overall height, top of the stack	2725	8'11"	2795	9'2"
F	Overall height, ROPS cab	3110	10'2"	3180	10'5"

### **Bucket**

Measured with 20.5-25-12PR (L2) tires, ROPS/FOPS cab

		General Purpose Bucket w/ BOCE		
	Bucket capacity: heaped	1.9 m <sup>3</sup> 2.1 m <sup>3</sup> <b>2.75 yd</b>		
	struck	1.6 m³ <b>2.1 yd³</b>	1.8 m <sup>3</sup> <b>2.3 yd<sup>3</sup></b>	
	Bucket width	2550 mm <b>8'4"</b>	2550 mm <b>8'4"</b>	
	Bucket weight937 kg	1005 kg <b>2,065 lb</b>	2,215 lb	
G	Dumping clearance, max. height and 45° dump angle*	2815 mm <b>9'3"</b>	2760 mm <b>9'0"</b>	
Н	Reach at max. height and 45° dump angle* 3'6"	1075 mm <b>3'8"</b>	1130 mm	
	Reach at 2130 mm 7' clearance and 45° dump angle*	1630 mm <b>5'4"</b>	1650 mm <b>5'5"</b>	
	Reach with arm horizontal and bucket level* 8'3"	2515 mm <b>8'6"</b>	2590 mm	
I	Operating height (fully raised)	5145 mm <b>16'10"</b>	5230 mm <b>17'2"</b>	
J	Overall length: Bucket on ground	7405 mm <b>24'4"</b>	7480 mm <b>24'6"</b>	
	Bucket at carry	7305 mm <b>24'0"</b>	7290 mm <b>23'11"</b>	
	Loader clearance circle*(bucket at carry, outside corner of bucket)	11965 mm <b>39'3"</b>	12010 mm <b>39'5"</b>	
	Digging depth: 0°	126 mm <b>5.0"</b>	110 mm <b>4.3"</b>	
	10°	347 mm <b>13.7"</b>	338 mm <b>13.3"</b>	
	Static tipping load: straight	8145 kg <b>17,955 lb</b>	8020 kg <b>17,680 lb</b>	
	40° full turn	7085 kg <b>15,620 lb</b>	6975 kg <b>15,375 lb</b>	
	Breakout force	89.8 kN 9167 kgf <b>20,210 lb</b>	84.4 kN 8614 kgf <b>18,990 lb</b>	
	Operating weight	11465 kg <b>25,275 lb</b>	11530 kg <b>25,420 lb</b>	

<sup>\*</sup>At the end of B.O.C.E.

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 cab, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.

Apply the following weight changes to operating weight and static tipping load.

### **Fork**

Measured with 20.5-25-12PR (L2) tires, ROPS/FOPS cab

G	Fork tine length		1220 mm	48"
	Fork weight		683 kg	1506 lb
Н	Ground to top of tine at maximum lift		3740 mm	12'3"
- 1	Reach at maximum height		2030 mm	6'8"
J	Ground to top of tine – boom and tine level		1750 mm	5'9"
K	Reach – boom and tine level		2935 mm	9'7"
L	Reach – tine level on ground		2330 mm	7'8"
М	Overall length – tine level on ground		7810 mm	25'7"
	Operating height, fully raised		4980 mm	16'4"
	Operating load		2542 kg	5,605 lb
	Static tipping load – boom and			
	fork level, 610 mm <b>24"</b> Straigh	nt	5845 kg	12,885 lb
	load center Full tui	rn (40°)	5085 kg	11,210 lb
	Operating weight		11470 kg	25,285 lb

Operating load per SAE J1197 (Feb. 1991), 50% of static tipping load.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab and operator. Machine stability and operating weight affected by tire size and attachments.



### **WEIGHT AND DIMENSION CHANGES**

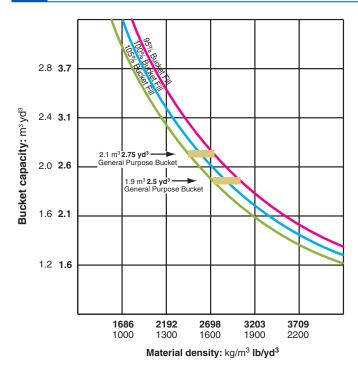
### **Bucket**

	Change in		Change in Tipping Load				Change in		Change in	
	Operating	y Weight	Straight		Full Turn		Vertical Dimensions		Reach	
17.5-25-16PR (L2)	-325 kg	-716 lb	–215 kg	-474 lb	–185 kg	-408 lb	-70 mm	-2.8"	75 mm	3.0"
17.5-25-16PR (L3)	–290 kg	-639 lb	–190 kg	-419 lb	–167 kg	-368 lb	–70 mm	-2.8"	75 mm	3.0"
20.5-25-12PR (L3)	165 kg	364 lb	105 kg	231 lb	95 kg	209 lb	0 mm	0"	0 mm	0"
Install ROPS canopy (instead of cab)	–167 kg	-368 lb	-152 kg	-335 lb	-134 kg	-295 lb				

### **Fork**

	Change in		Change in Tipping Load				Change in		Change in	
	Operating	g Weight	Straight Ful		Full	Turn	Vertical Dimensions		Reach	
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20.5-25-12PR(L3)	165 kg	364 lb	105 kg	231 lb	95 kg	209 lb	0 mm	0"	0 mm	0"
Install ROPS canopy (instead of cab)	-167 kg	-368 lb	-152 kg	-335 lb	–134 kg	-295 lb				

# BUCKET SELECTION GUIDE



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.

### **Approximate Material Densities**

Material (loose)	kg/m <sup>3</sup>	lb/yd³
Caliche	1250	2,100
Cinders	590	1,000
Clay and gravel, dry	1420	2,400
Clay and gravel, wet	1540	2,600
Clay, dry	1480	2,500
Clay, natural bed	1660	2,800
Clay, wet	1660	2,800
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 <b>1/2" to 2"</b>	1690	2,850
Gravel, pit run (graveled sand)	1930	3,250
Gravel, wet 13 to 50 mm 1/2" to 2"	2020	3,400
Gypsum, crushed	1600	2,700
Limestone, broken or crushed	1540	2,600
Magnetite, iron ore	2790	4,700
Phosphate rock	1280	2,160
Pyrite, iron ore	2580	4,350
Sand and gravel, dry	1720	2,900
Sand and gravel, wet	2020	3,400
Sand, dry	1420	2,400
Sand, wet	1840	3,100
Sandstone, broken	1510	2,550
Shale	1250	2,100
Slag, broken	1750	2,950
Stone, crushed	1600	2,700
Topsoil	950	1,600

### STANDARD EQUIPMENT

- 3-spool valve for boom and bucket controls
- Air conditioner
- Alternator, 60 A
- Back-up alarm
- Back-up lamp
- Batteries, 110 Ah/2 x 12 V
- Boom kick-out
- Bucket positioner
- Counterweight, standard and additional (300 kg 661 lb)
- Deluxe air suspension seat
- Directional signal
- Engine, Komatsu SAA4D107E-1 diesel

- Floor mat
- Front fenders
- Fuel pre-filter with water separator
- Hydraulic-driven fan with auto-reverse rotation
- KOMTRAX®
- Lift cylinders and bucket cylinder
- Loader linkage with PZ lift arm
- Main monitor panel with Equipment Management Monitoring System (EMMS)
- Mono-lever loader control with transmission F/R switch + 1 lever
- Quick coupler

- Radiator mask, lattice type
- Rear defroster (electric)
- Rear view mirrors, inside (2), outside (3)
- Rear window washer and wiper
- Rims for 20.5-25 tires
- ROPS/FOPS Level 2 cab
- Seat belt, 76 mm 3" retractable
- Service brakes, wet disc type
- Starting motor, 4.5 kW/24 V
- Steering wheel, tiltable
- Sun visor
- Transmission speed ranges,
   4 forward and 4 reverse



**Quick coupler** 

### **OPTIONAL EQUIPMENT**

- AM/FM stereo radio
- Electronically Controlled Suspension System (ECSS)
- Engine pre-cleaner with extension
- JRB bucket, general purpose, for use with coupler, with BOCE 1.9 m<sup>3</sup> 2.5 yd<sup>3</sup>
- JRB bucket, general purpose, for use with coupler, with BOCE 2.1 m<sup>3</sup> 2.75 yd<sup>3</sup>
- JRB construction forks for use with coupler, 1219 mm 48"
- JRB extendable boom, 3-section, for use with coupler
- JRB hydraulic quick coupler

- Limited slip differential (F&R)
- Rear full fenders
- ROPS canopy
- Secondary steering (SAE)
- Wide core radiator

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