

# KOMATSU®

## WA480-5

BUCKET CAPACITY  
3.8–6.1 m<sup>3</sup>  
5.0–8.0 yd<sup>3</sup>



**WA**  
**480**



Photo may include optional equipment.

WHEEL LOADER



# WA480-5 Wheel Loader

# WALK-AROUND

## ***High Productivity & Low Fuel Consumption***

- Powerful engine
- Ultra-low fuel consumption
- Dual-mode engine power select system
- Transmission mode select system
- Dual speed hydraulic system
- Superior dumping clearance and reach
- Long wheelbase and 40 degree articulation

See page 4.

## ***Excellent Operator Environment***

- Automatic transmission with selectable modes
- Low-noise designed cab (option)
- Electrically controlled transmission lever
- Fingertip control levers
- Pillar-less large ROPS/FOPS cab (option)
- Easy entry/exit, rear-hinged doors
- Telescopic/tilt steering column

See pages 8 and 9.

# GALEO

Based upon the expertise, technology and success which Komatsu has accumulated over 80 years, the new brand was born to provide customers all over the world a fresh image of the innovative technology and great value of Komatsu equipment. ***The new brand name is GALEO.*** High productivity, environment-friendly, safety and benefiting from cutting-edge technology, ***GALEO*** will contribute to our environment in the 21st century.

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

## ***Harmony with Environment***

- Meets EPA Tier II and EC second emission regulations
- Low spectator noise
- Low fuel consumption



**NET HORSEPOWER**  
202 kW 271 HP @ 2000 rpm

**OPERATING WEIGHT**  
24010–24295 kg  
52,932–53,561 lb

**BUCKET CAPACITY**  
3.8–6.1 m<sup>3</sup>  
5.0–8.0 yd<sup>3</sup>

## Increased Reliability

- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Maintenance-free, fully hydraulic, wet disc service and parking brakes
- All hydraulic hoses use flat face O-ring seals
- Cathion electrodeposition process is used to apply primer paint
- Powder coating process is used to apply on main structure
- Sealed DT connectors for electrical connections

See page 6.



Photo may include optional equipment.

## Easy Maintenance

- “EMMS” (Equipment Management Monitoring System)
- Reversible radiator fan
- Swing-out aftercooler and oil coolers
- Prolonged engine oil change interval
- Ground check for windshield washer tank and coolant tank
- Easy access, gull-wing type engine side doors

See page 7.



# PRODUCTIVITY FEATURES

## High Productivity and Low Fuel Consumption

### Powerful Engine

The electronically controlled fuel injection timing in the SAA6D125E-3 engine provides optimum combustion of fuel at both low and high speed/power applications. This system also provides fast throttle response to match the machine's powerful rim pull and fast hydraulic response.

### 202 kW, 271 HP

The common rail type fuel injection system provides maximum power with minimum emissions. This engine meets EPA Tier II emission regulations and EC second emission regulations.

### Low Fuel Consumption

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

**Reduction of Fuel Consumption:** 15% (compared with Dash 3 technology).

### Dual-Mode Select System

This wheel loader offers two selectable operating modes—Normal and Power. The operator can adjust the machine's performance by flipping a switch.

- **Normal Mode:** This mode provides maximum fuel efficiency for most of general loading.
- **Power Mode:** This mode provides maximum power output for hard digging operation or hill climb.



### Transmission Mode Select System

This operator controlled system allows the operator to select manual shifting or three levels of automatic shifting (low, medium, and high).

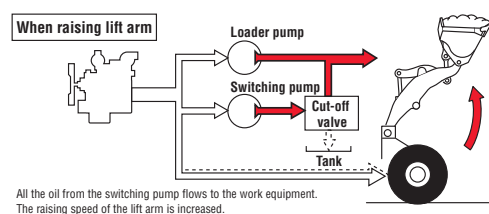
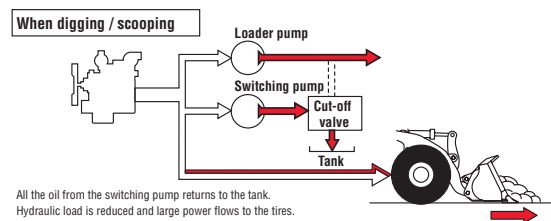


- **Manual:** Transmission is fixed to gear speed selected with gear shift lever.
- **Auto. L:** This mode provides smooth gear change and low fuel consumption since gear shifting is performed at relatively low engine speeds, suitable for general excavating and loading.
- **Auto. M:** Gear is shifted at medium engine speeds between those of L and H modes.
- **Auto. H:** This mode provides large rim pull and short cycle time since gear shifting is performed at relatively high engine speeds, suitable for load and carry operation on uphill.

### New Dual-Speed Hydraulic System

Komatsu's dual-speed hydraulic system increases operational efficiency by matching the hydraulic demands to work conditions.

Oil from the switch pump is completely returned to the tank when digging and breaking out, therefore, hydraulic flow to the loader is reduced and pressure is increased. This reduces horsepower demand from the engine and makes the operation more efficient. Kick-down switch signal also controls the oil flow. This new technology is greater productivity at the lowest operating cost.





### Maximum Dumping Clearance and Reach



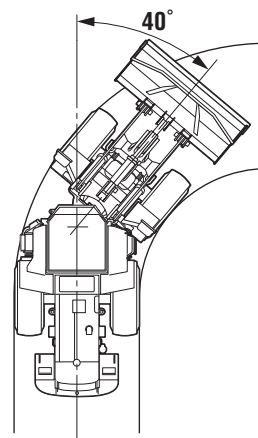
The long lift arms provide high dumping clearances and maximum dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

**Dumping Clearance: 3205 mm 10'6"**  
**Dumping Reach: 1410 mm 4'8"**  
 (4.6 m<sup>3</sup> 6.0 yd<sup>3</sup> bucket with B.O.C.)

### Long Wheelbase/Articulation Angle of 40°

The longest wheelbase in class and the widest tread provide improved machine stability in both longitudinal and lateral directions. Since the articulation angle is 40°, the operator can work efficiently even in the tightest job sites.

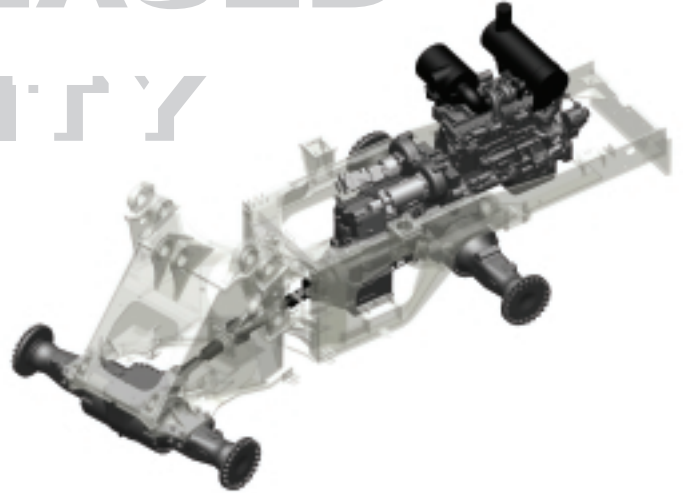
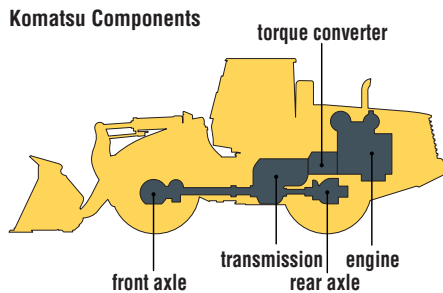
Tread	<b>2300 mm</b> 7'7"
Wheelbase	<b>3450 mm</b> 11'4"
Minimum turning radius (center of outside tire)	<b>5900 mm</b> 19'4"



# INCREASED RELIABILITY

## Komatsu Components

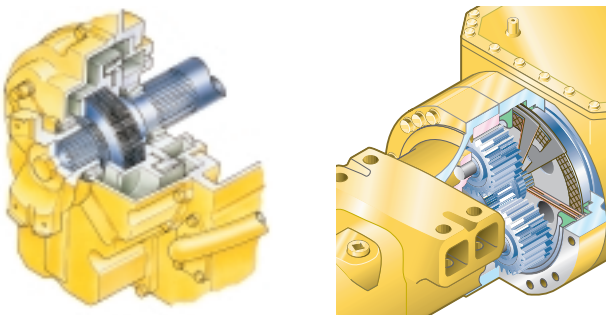
Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, and even each bolt on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.



**Wet multi-disc brakes and fully hydraulic braking system** 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 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. Provides hydraulic backup should one of the circuits fail.

Fully hydraulic brakes mean no air system to bleed, or the condensation of water in the system that can lead to contamination, corrosion, and freezing.

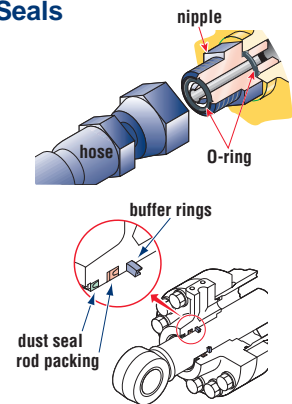


## High-rigidity Frames

The front and rear frames have high rigidity to bear twisting and bending loads applied repeatedly to the loader body. Both upper and lower center pivot bearings are tapered roller bearings having high durability. The structure is similar to those of large-sized loaders and the reinforced loader linkage also ensures high rigidity.

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

Flat face-to-face O-ring seals are used to securely seal all 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 the 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 metal sheet parts. This process results in a beautiful rust-free machine, 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

## EMMS (Equipment Management Monitoring System)

Monitor is mounted in front of the operator and is tilted for easy view, allowing the operator 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 the loader has any troubles, the monitor displays action details on the character display at the center bottom of the monitor.
- **Monitor function.** Controller monitors engine oil level, pressure, coolant temperature, air cleaner clogging, etc. If controller finds abnormalities, all of these are displayed on LCD.
- **Replacement time notice function.** Monitor informs replacement time of oil and filters on LCD when it reaches replacement intervals.
- **Trouble data memory function.** Monitor stores abnormalities for effective troubleshooting.

## Reversible Cooling Fan and Swing-out Cooler Elements



If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the cab by turning on a switch on the control panel. The coolers can also swing out for easy cleaning.



## 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.



## Lengthened Maintenance Interval

**Lengthened engine oil replacement interval:**  
250 H → 500 H

**Lengthened drive shaft greasing interval:**  
1,000 H → 4,000 H



# OPERATOR ENVIRONMENT

## Easy Operation

### Automatic Transmission with ECMV

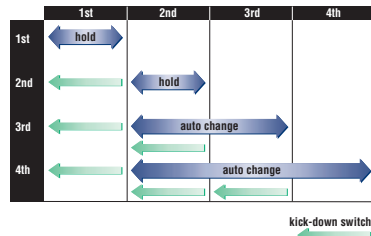
Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV (Electronically Controlled Modulation Valve) system engages the clutch smoothly to prevent lags and shocks when shifting. This system provides efficient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

- **Kick-down**

**switch:** Consider this valuable feature for added 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 or 4th 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 with a touch of the fingers 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.

### Variable Transmission Cut-off

The operator can adjust the transmission cut-off connected to the left brake pedal with the switch near the operator's seat to set the brake/cut-off point for easier operation and higher operating performance in variable operating conditions.

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

### Telescopic/Tilt Steering Column

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



### Fingertip Work Equipment Control Lever

New PPC control levers are used for the work equipment. The operator can easily operate the work equipment with fingertip control, reducing operator fatigue and increasing controllability. The PPC control lever column can be tilted forward or rearward and the wrist rest can be adjusted up



or down to provide the operator with a variety of comfortable operating positions.



## Comfortable Operation

### Low-noise Design

Operator noise: 72 dB(A)

Dynamic noise (outside): 110 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, dustproof with pressurizing, and comfortable operating environment. Also, spectator noise is lowest in this class.



### Pillar-less Large Cab (Optional)

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.

The cab area is the largest in its class providing maximum space for the operator.

### Rear-hinged Full Open Cab Door

The cab door hinges are installed to the rear side of the cab providing a large opening angle for the operator to enter and exit. The steps are designed like a staircase, so that the operator can get on and off the cab easily.



### Emergency Brake

If the brake oil pressure drops, the warning lamp flashes and the warning buzzer sounds intermittently. If the brake pressure drops lower, the parking brake is applied providing a double safety system.

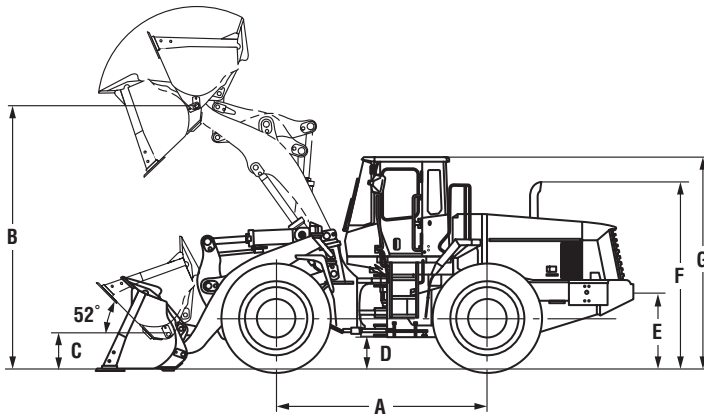






### DIMENSIONS

Measured with 26.5-25-20PR (L3) tires



	Tread	2300 mm	7'7"
	Width over tires	3010 mm	9'11"
<b>A</b>	Wheelbase	3450 mm	11'4"
<b>B</b>	Hinge pin height, max. height	4505 mm	14'9"
<b>C</b>	Hinge pin height, carry position	585 mm	1'11"
<b>D</b>	Ground clearance	525 mm	1'9"
<b>E</b>	Hitch height	1240 mm	4'1"
<b>F</b>	Overall height, top of the stack	3080 mm	10'1"
<b>G</b>	Overall height, ROPS cab	3500 mm	11'6"

	General Purpose Buckets					Loose Material Bucket	Light Material Bucket
	Stockpile		Excavating				
	Bolt-on Cutting Edges	Teeth	Bolt-on Cutting Edges	Teeth and Segments	Teeth		
Bucket capacity: heaped	4.6 m <sup>3</sup>	4.3 m <sup>3</sup>	4.1 m <sup>3</sup>	4.1 m <sup>3</sup>	3.8 m <sup>3</sup>	4.9 m <sup>3</sup>	6.1 m <sup>3</sup>
struck	6.0 yd <sup>3</sup>	5.6 yd <sup>3</sup>	5.4 yd <sup>3</sup>	5.4 yd <sup>3</sup>	5.0 yd <sup>3</sup>	6.4 yd <sup>3</sup>	8.0 yd <sup>3</sup>
	4.0 m <sup>3</sup>	3.8 m <sup>3</sup>	3.5 m <sup>3</sup>	3.5 m <sup>3</sup>	3.2 m <sup>3</sup>	4.2 m <sup>3</sup>	5.2 m <sup>3</sup>
	5.2 yd <sup>3</sup>	5.0 yd <sup>3</sup>	4.6 yd <sup>3</sup>	4.6 yd <sup>3</sup>	4.2 yd <sup>3</sup>	5.5 yd <sup>3</sup>	6.8 yd <sup>3</sup>
Bucket width	3170 mm 10'5"	3190 mm 10'6"	3170 mm 10'5"	3190 mm 10'6"	3190 mm 10'6"	3170 mm 10'5"	3170 mm 10'5"
Bucket weight	2260 kg 4,982 lb	2165 kg 4,773 lb	2220 kg 4,894 lb	2255 kg 4,971 lb	2125 kg 4,685 lb	2340 kg 5,159 lb	2410 kg 5,313 lb
Dumping clearance, max. height and 45° dump angle*	3205 mm 10'6"	3080 mm 10'1"	3295 mm 10'10"	3170 mm 10'5"	3170 mm 10'5"	3125 mm 10'3"	3080 mm 10'1"
Reach at max. height and 45° dump angle*	1410 mm 4'8"	1510 mm 5'0"	1320 mm 4'4"	1420 mm 4'8"	1420 mm 4'8"	1490 mm 4'11"	1535 mm 5'0"
Reach at 2130 mm (7') clearance and 45° dump angle	2135 mm 7'0"	2180 mm 7'2"	2080 mm 6'10"	2130 mm 7'0"	2130 mm 7'0"	2180 mm 7'2"	2205 mm 7'3"
Reach with arm horizontal and bucket level	3020 mm 9'11"	3175 mm 10'5"	2895 mm 9'6"	3050 mm 10'0"	3050 mm 10'0"	3135 mm 10'3"	3195 mm 10'6"
Operating height (fully raised)	6175 mm 20'3"	6175 mm 20'3"	6025 mm 19'9"	6025 mm 19'9"	6025 mm 19'9"	6175 mm 20'3"	6450 mm 21'2"
Overall length	9155 mm 30'0"	9310 mm 30'7"	9030 mm 29'8"	9185 mm 30'2"	9185 mm 30'2"	9270 mm 30'5"	9330 mm 30'7"
Loader clearance circle (bucket at carry, outside corner of bucket)	14060 mm 46'2"	14190 mm 46'7"	14010 mm 46'0"	14120 mm 46'4"	14120 mm 46'4"	14140 mm 46'5"	14170 mm 46'6"
Digging depth: 0°	90 mm 3.5"	110 mm 4.3"	90 mm 3.5"	110 mm 4.3"	110 mm 4.3"	90 mm 3.5"	90 mm 3.5"
10°	355 mm 1'2"	400 mm 1'4"	335 mm 1'1"	380 mm 1'3"	380 mm 1'3"	375 mm 1'3"	385 mm 1'3"
Static tipping load: straight	19300 kg 42,549 lb	19395 kg 42,758 lb	19340 kg 42,637 lb	19305 kg 42,560 lb	19435 kg 42,846 lb	19220 kg 42,372 lb	19150 kg 42,218 lb
40° full turn	16800 kg 37,037 lb	16890 kg 37,236 lb	16840 kg 37,125 lb	16805 kg 37,048 lb	16935 kg 37,335 lb	16720 kg 36,861 lb	16650 kg 36,707 lb
Breakout force	212 kN 47,658 lb	226 kN 50,805 lb	231 kN 51,929 lb	237 kN 53,278 lb	249 kN 55,975 lb	196 kN 44,061 lb	189 kN 42,487 lb
Operating weight	24145 kg 53,230 lb	24050 kg 53,021 lb	24145 kg 53,230 lb	24140 kg 53,219 lb	24010 kg 52,932 lb	24225 kg 53,406 lb	24295 kg 53,561 lb

\* At the end of tooth or B.O.C.

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 weight changes on the following page to operating weight and static tipping load.



## WEIGHT CHANGES

Tires	Operating Weight		Tipping Load Straight		Tipping Load Full Turn		Width Over Tires		Ground Clearance		Change in Vertical Dimensions	
	kg	lb	kg	lb	kg	lb	mm	ft in	mm	ft in	mm	ft in
26.5-25-20PR(L-3)	0	0	0	0	0	0	3010	9'11"	525	1'9"	0	0
26.5-25-20PR(L-4)	+360	+794	+250	+551	+220	+485	3010	9'11"	525	1'9"	0	0
Remove ROPS cab	-660	-1,455	-550	-1,213	-530	-1,168						
Install additional counterweight	+400	+880	+950	+2,094	+790	+1,742						



## STANDARD EQUIPMENT

- 2-spool valve for boom and bucket controls
- Alternator, 35 A
- Auto shift transmission with mode select system
- Back-up alarm
- Back-up lamp
- Batteries, **150 Ah/2 x 12 V**
- Boom kick-out
- Bucket positioner
- Counterweight
- Directional signal
- EMMS (Equipment Management Monitoring System)
- Engine, Komatsu SAA6D125E-3 diesel
- Engine shut-off system, electric
- Hard water area arrangement (corrosion resister)
- Hydraulic-driven fan with reverse rotation
- Lift cylinders and bucket cylinder
- Loader linkage with standard lift arm
- Main monitor panel with speedometer
- PPC fingertip control, two levers
- Radiator mask, lattice type
- Seat, suspension type with reclining
- Service brakes, wet disc type
- Starting motor, **7.5 kW/24 V**
- Steering wheel, tiltable
- Swing-out aftercooler and oil cooler
- Tires (26.5-25-20PR, L3 tubeless) and rims
- Transmission, 4 forward and 4 reverse



## OPTIONAL EQUIPMENT

- 3-spool valve
- Additional counterweight
- Additional fuel filter
- Air conditioner
- Air conditioner, side louver
- Alternator, 50 A
- Alternator, 90 A
- AM/FM radio
- AM/FM stereo radio cassette
- Auto air conditioner
- Automatic greasing
- Battery disconnect switch
- Brake cooling system
- Bucket teeth (bolt-on type)
- Bucket teeth (tip type)
- Counterweight for log
- Cutting edge (bolt-on type)
- Deluxe suspension seat
- ECSS (Electronically Controlled Suspension System)
- Emergency steering (SAE)
- Engine pre-cleaner with extension
- EPC fingertip control levers with automatic leveler and positioner
- Floormat
- Front fender
- Heater and defroster
- High lift arm
- Joystick steering
- Limited slip differential (F&R)
- Load meter, new type
- Lock-up clutch torque converter
- Log grapple
- Ordinary spare parts
- Power train guard
- Rear defroster (electric)
- Rear fender
- Rearview mirror
- Rear window washer and wiper
- Remote grease (lift arm pivot pin)
- ROPS/FOPS cab
- ROPS/FOPS canopy
- Seat belt
- Single lever, loader control
- Starting motor, **11 kW**
- Sun visor
- Tool kit
- Vandalism protection kit
- Water separator

HESS524200

©2001 Komatsu Printed in USA

SN7(1.5M)EH DataKom

7/01 (EV-1)

# KOMATSU®