

KOMATSU®

WA480-5

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

OPERATING WEIGHT
24290–24575 kg
53,550–54,179 lb

BUCKET CAPACITY
3.8–6.1 m³ **5.0–8.0 yd³**

WA
480

WHEEL LOADER



GALEO

WA480-5 Wheel Loader

WALK-AROUND

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

18% larger cab
with new layout design.

Powerful yet efficient Komatsu
SAA6D125E-3 **emissionized engine**.

Adjustable
transmission cut-off system.

Reversible hydraulic radiator fan
and swing-out coolers.

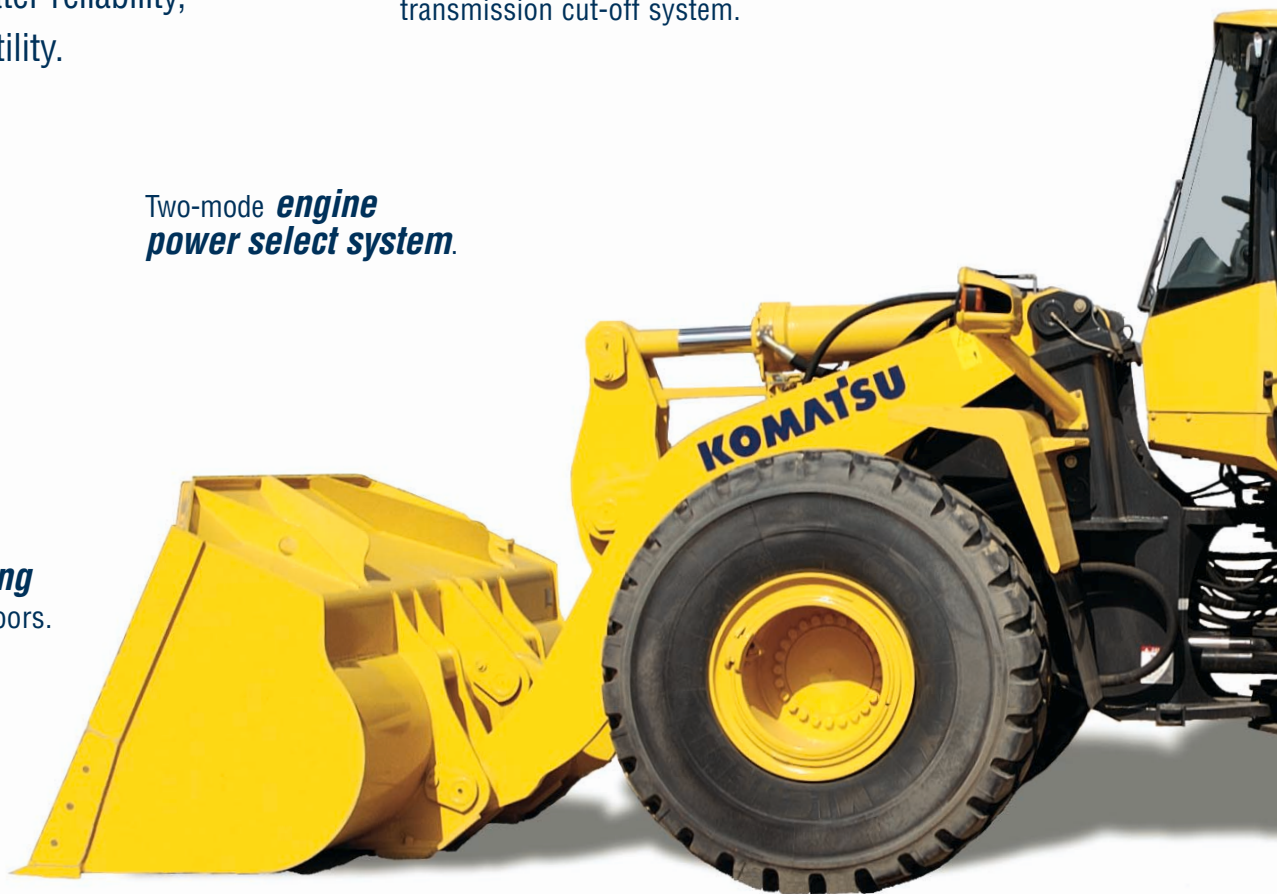
Two-mode **engine power select system**.

Full side opening
gull-wing engine doors.

Optional **lockup torque converter**.

Automatic transmission
with four selectable shifting modes.

Staircase-type steps
with large rear-hinged doors.



WA480-5

WHEEL LOADER

NET HORSEPOWER
202 kW 271 HP @ 2000 rpm

OPERATING WEIGHT
24290 – 24575 kg
53,550 – 54,179 lb

BUCKET CAPACITY
3.8 – 6.1 m³
5.0 – 8.0 yd³

Air conditioning, air-ride seat
and **ride control** are standard features for
increased operator comfort.

Expanded main monitor
and troubleshooting display.

Reduced operator noise
to 71 dB(A).

Fingertip control levers.



Telescopic/tilt
steering column.

Optional **joystick steering**.

Dual-speed
hydraulic system.

Optional **load meter**
integrated on main
monitor.



Ground level servicing
and fluid checks.

Extended service intervals.

GALEO

Komatsu's highly productive, innovative
technology, environmentally friendly
machines built for the 21st century.

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.

271 HP, 202 kW

The common rail type fuel injection system provides maximum power with minimum emissions. This engine is EPA Tier 2 emission ready.

Low Fuel Consumption

The fuel consumption has been reduced 5% due to the high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

Two Mode Engine Power Select System

This wheel loader offers two selectable engine operating modes — Normal and Power. The operator can adjust the machine's engine performance to match the condition requirements. This system is controlled with a dial on the right side control panel.

- **Normal Mode:** provides maximum fuel efficiency for most general loading conditions.
- **Power Mode:** provides maximum power output for hard digging conditions or hill climb operations.



Automatic Transmission with Four Mode Select System

This operator controlled system allows the selection of manual shifting or three levels of automatic shifting modes (low, medium, and high). The operator can match the machine's operating requirements with optimum performance efficiency. This system is controlled with a dial on the right side of the control panel.

- **Manual:** The transmission is fixed to the gear speed and selected with the gear shift lever.

- **Auto Low:** Low mode provides smooth gear shifting at low engine speeds suitable for general excavating and loading while offering reduced fuel consumption.
- **Auto Medium:** Medium mode provides gear shifting at mid-range engine speeds required for more aggressive conditions.



- **Auto High:** High mode provides maximum rim pull and fast cycle times by shifting the transmission at high engine speeds. This mode is suitable for hill-climb and load and carry operations.

Variable Transmission Cut-off

The operator can select the transmission cut-off pressure desired for the left brake pedal using the switch located on the right-side control panel.

- Higher cut-off pressure allows the transmission to remain engaged at higher engine rpm/hydraulic pressure for increased performance in ramp loading and stockpiling operations.
- Lower cut-off pressure disengages the transmission at lower rpm/hydraulic pressure for more fuel efficient operation on level surfaces.

Lockup Torque Converter

The Komatsu designed lock-up torque converter provides increased production efficiency, reduced cycle times and optimum fuel savings in load and carry or hill-climb operations.

This optional feature allows the operator to activate the system on or off with a switch located on the right-side control panel. When the system is activated, the torque converter will automatically lock-up when the travel speed reaches 10.9 km/h **6.8 mph** in third gear or 20.9 km/h **13.0 mph** in fourth gear.

Joystick Steering

Komatsu's optional joystick steering provides fast, precise operator control for V-type cycle loading. The Komatsu joystick steering system has both a steering wheel and joystick combination to comfortably fit all operator preferences and operating conditions.

The Komatsu joystick steering control lever has conveniently located gear upshift/downshift switches, a F/N/R directional change switch, a high/low articulation speed mode switch and a horn switch.

Transmission Hold Switch

This feature compliments the automatic transmission by allowing the operator to hold the transmission in a desired gear by simply pressing a button on the side of the boom lever.

Transmission Kick-Down Switch

This feature provides increased rimpull, bucket pile penetration and reduced cycle times. The operator can press a button on the top of the boom lever to downshift the transmission from second to first gear when digging into the pile. The transmission automatically shifts into second gear when changing into reverse gear.

The kickdown switch has two new functions:

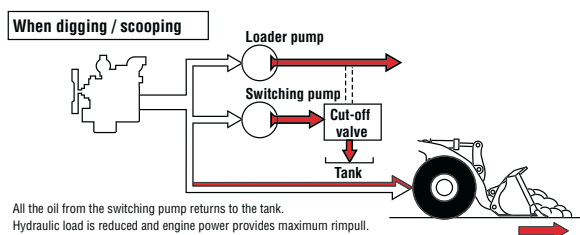
1. Downshift function one gear at a time from 4th gear to 1st when in automatic shift mode.
2. Increased rimpull in uphill ramp loading applications.

Dual-Speed Hydraulic System

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

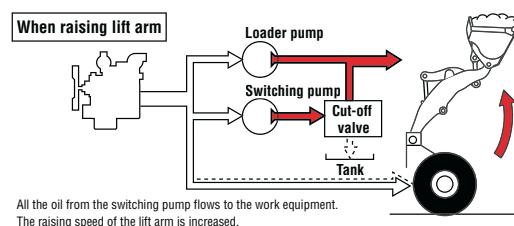
Digging Operations

Engine power used to operate the switch pump is transferred to the transmission to provide increased rimpull when digging.



Lifting Operations

The switch pump assists the loader pump to provide increased lifting speed and power when lifting and loading.



ECSS Ride Control

Ride control is a standard feature for Komatsu and is ideal in load and carry operations. The ECSS provides a smooth ride in rough ground surfaces which optimizes productivity by improving material retention in the bucket and increasing operator comfort and control.

Load Meter

The new optional Komatsu load meter is now integrated into the main monitor display panel for improved readability and efficiency.

The subtotal and cancel switches are located on the bucket control lever for easy operator function. Komatsu also offers a paper printer option to use with the load meter to record the weight of the material loaded.

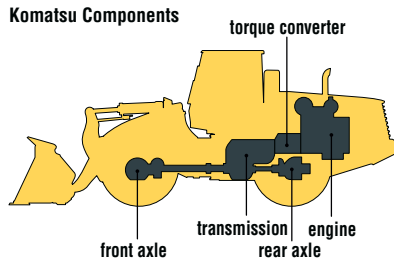


INCREASED RELIABILITY AND SERVICEABILITY

Komatsu Components

Komatsu manufactures the engine, torque converter, transmission, hydraulic units, and electrical parts on this wheel loader.

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



Reversible Hydraulic Radiator Fan and Swing-Out Coolers

The new Komatsu cooling system is isolated from the engine to provide more efficient cooling and easier cleaning. The hydraulic fan is reversible to allow the operator to quickly

clean out the cooling system by turning on a switch located on the right side control panel. The reversible fan, swing-out air-to-air and oil coolers along with the swing-up rear grill and bottom flush-out gates allow the operator to easily clean the radiator system in adverse operating conditions.

Full Side-Opening Gull-Wing Engine Doors

Ground level engine service and daily service checks are made easy with the gas spring assisted full side opening gull-wing doors.

Extended Service Intervals

The new clean running Komatsu SAA6D125E-3 emissionized engine provides fuel efficient power and extended engine oil and filter service intervals; increased from 250 hours to 500 hours.

Improved drive-shaft seals also allow extended greasing intervals from 1000 hours to 4000 hours.

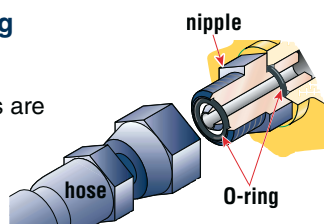


Sealed DT Connectors

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

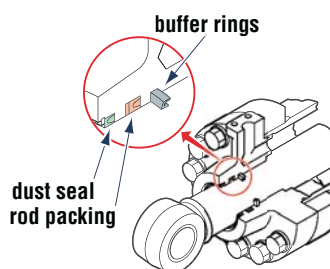
Flat Face-to-Face O-Ring Seals

Flat face-to-face O-ring seals are used to securely seal all hydraulic hose connections and prevent oil leakage.



Cylinder Buffer Rings

Buffer rings are installed to the head-side of the all-hydraulic cylinders to lower the load on the rod seals, prolong cylinder life by 30% and maximize overall reliability.



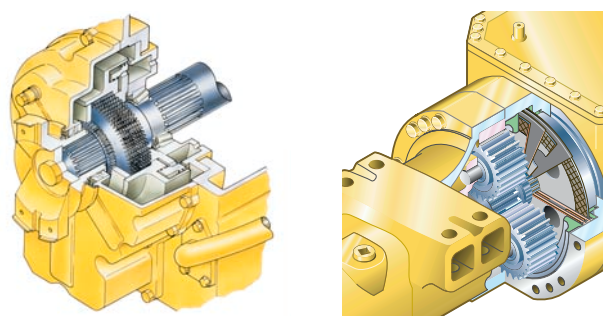
Main Monitor - EMMS (Equipment Management Monitoring System)

Komatsu's new main monitor keeps the operator informed of all machine functions at a glance. The monitor is located behind the steering wheel and displays 38 different machine functions including fluid/filter change intervals and troubleshooting memory display functions. The main gauges are analog type for easy viewing and other functions utilize lighted symbols or LCD readouts.

Cathion Electrodeposition Primer Paint/ Powder Coating Final Paint

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

Wet multi-disc brakes and fully hydraulic braking system results in lower maintenance costs and higher reliability. The wet disc service and parking brakes are fully sealed and adjustment-free to reduce contamination, wear and maintenance. Added reliability is designed into the braking system by the use of two independent hydraulic circuits providing hydraulic backup should one of the circuits fail. If the brake oil pressure drops, a warning lamp flashes and an alarm sounds intermittently. If the brake pressure continues to drop, the parking brake is automatically applied providing a double safety system.



High-Rigidity Frames

The front and rear frames along with the loader linkage have high rigidity to withstand repeated twisting and bending loads to the loader body and linkage. Both the upper and lower center pivot bearings use tapered roller bearings for increased durability.



OPERATOR COMFORT

New Cab Layout

Komatsu's new cab layout provides the operator with a roomy, quiet and efficient work environment. The cab has 123 cubic feet of space and large flat glass for optimum visibility. The low noise level inside the cab leads the industry at 71 dB(A) and loader controls are ergonomically designed to reduce operator fatigue and increase productivity.

Fingertip Control Levers

Komatsu now offers fingertip operated hydraulic control levers mounted on an adjustable control panel and wrist rest. This new feature matches well with the pilot pressure controlled hydraulics to reduce operator fatigue, improve fine work equipment control and increase overall productivity. The hydraulic boom and bucket control levers also feature the kickdown switch, transmission hold switch and load meter functions.

Two Door Walk-Through Cab

Entry and exit into the new Komatsu cab starts with sloped staircase type steps and large diameter handrails for added safety and comfort. The large cab doors are rear-hinged to open 130 degrees offering easy entry/exit and will not hamper visibility when operating the machine with the doors latched open.



Telescopic/Tilt Steering Column

The operator can both tilt and telescope the steering wheel to allow maximum comfort and control. The two-spoke steering wheel allows maximum visibility of the monitor panel and the forward work environment.



Comfortable High-Back Air-Ride Bucket Seat

Long work days and rough work environments will seem short and comfortable on the new air ride fabric seat. This standard feature seat offers eleven-way adjustments, arm-rest, headrest and lumbar support for any size operator. The retractable seat belt and rear document holder help to keep the cab clean and organized.

Electrically Controlled Transmission Levers

The Komatsu two-lever electronic shift control levers provide easy gear selection and directional changes. The transmission levers can be operated without removing the operator's hand from the steering wheel, allowing improved comfort and control. This system coupled with the automatic transmission, kickdown switch, transmission hold switch and joystick

steering, offers a variety of transmission shifting options available to match the operator preference and the working conditions.

Centralized Switch Panel

The centralized switch panel is conveniently located on the right hand side of the operator's work station allowing easy access to the machine's functions such as the key switch, transmission mode, power mode and other switch controls.

Comforts of Home

The large cab allows room for a large lunch box holder, a variety of cup and bottle holders and a hot/cold box storage area. Standard air conditioning and the optional AM/FM stereo cassette system create a comfortable and controlled work environment.



SPECIFICATIONS



ENGINE

ModelKomatsu SAA6D125E-3
EPA Tier 2 emission ready

TypeWater-cooled, 4-cycle

AspirationTurbocharged and aftercooled

Number of cylinders6

Bore x stroke125 mm x 150 mm **4.9" x 5.9"**

Piston displacement11.04 ltr **674 in³**

Horsepower rating @ 2000 rpm (SAE J1349)

Gross power211 kW **283 HP**

Flywheel/net power202 kW **271 HP**

Fuel systemDirect injection

GovernorElectronic, all-speed control

Lubrication system:

Lubrication methodGear pump, force-lubrication

FilterFull-flow type

Air cleanerDry type with double radial-sealed elements and dust evacuator, plus dust indicator



TRANSMISSION

Torque converter:

Type3-element, single-stage, single-phase

Transmission:

TypeFull-powershift, countershaft type

Travel speed (measured with 26.5-25 tires):

	1st		2nd		3rd		4th	
	km/h	mph	km/h	mph	km/h	mph	km/h	mph
Forward	6.3	3.9	12.1	7.5	21.6	13.4	34.3	21.3
Reverse	6.6	4.1	12.8	8.0	22.8	14.2	35.8	22.2



AXLES AND FINAL DRIVES

Drive systemFour-wheel drive

FrontFixed, semi-floating

RearCenter-pin support, semi-floating,
30° total oscillation

Reduction gearSpiral bevel gear

Differential gearConventional type

Final reduction gearPlanetary gear, single reduction



BRAKES

Service brakesHydraulically actuated, in-board mounted
wet disc brakes actuate on four wheels

Parking brakeWet disc brake



STEERING SYSTEM

TypeArticulated type, full-hydraulic power steering

Steering angle40° each direction

Minimum turning radius at
the center of outside tire5900 mm **19'4"**



HYDRAULIC SYSTEM

Steering system:

Hydraulic pumpGear pump

Capacity146 ltr/min **38.6 U.S. gal/min** at rated rpm

Relief valve setting210 kgf/cm² **3,000 psi**

Hydraulic cylinders:

TypeDouble-acting, piston type

Number of cylinders2

Bore x stroke100 mm x 441 mm **3.9" x 17.3"**

Loader control:

Hydraulic pumpGear pump

Capacity303 + 120 ltr/min **80.0 + 31.7 U.S. gal/min**
at rated rpm

Relief valve setting210 kgf/cm² **3,000 psi**

Hydraulic cylinders:

TypeDouble-acting, piston type

Number of cylinders—bore x stroke:

Boom cylinder2—180 mm x 881 mm **7.1" x 34.7"**

Bucket cylinder1—225 mm x 572 mm **8.9" x 22.5"**

Control valve2-spool type

Control positions:

BoomRaise, hold, lower, and float

BucketTilt-back, hold, and dump

Hydraulic cycle time (rated load in bucket)

Raise6.5 sec

Dump1.6 sec

Lower (empty)3.8 sec

Total11.9 sec



SERVICE REFILL CAPACITIES

Cooling system50 ltr **13.2 U.S. gal**

Fuel tank417 ltr **110.2 U.S. gal**

Engine38 ltr **10.0 U.S. gal**

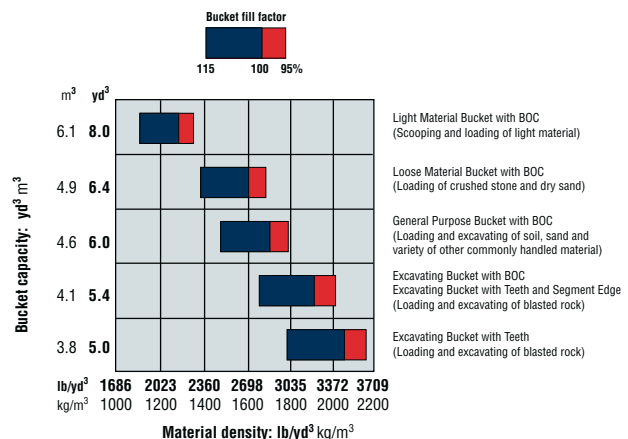
Hydraulic system186 ltr **49.1 U.S. gal**

Axle (each front and rear)55 ltr **14.5 U.S. gal**

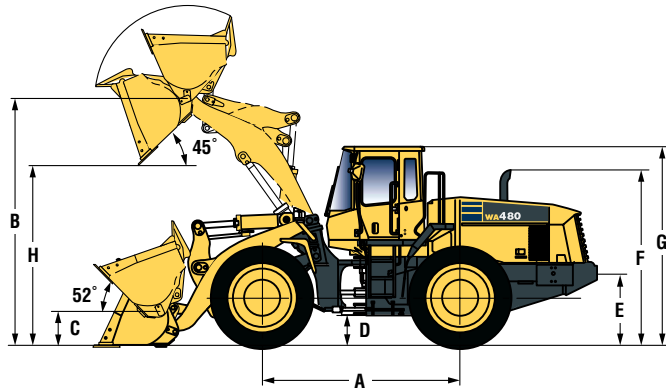
Torque converter and transmission60 ltr **15.9 U.S. gal**



BUCKET SELECTION GUIDE



DIMENSIONS



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

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

Bucket	General Purpose Bolt-on Cutting Edge		Excavating with Teeth and Segment Edge		Excavating with Teeth		Loose Material Bolt-on Cutting Edge		Light Material Bolt-on Cutting Edge	
Bucket Capacity Heaped	4.6 m ³	6.0 yd³	4.1 m ³	5.4 yd³	3.8 m ³	5.0 yd³	4.9 m ³	6.4 yd³	6.1 m ³	8.0 yd³
Struck	4.0 m ³	5.2 yd³	3.5 m ³	4.6 yd³	3.2 m ³	4.2 yd³	4.2 m ³	5.5 yd³	5.2 m ³	6.8 yd³
Bucket Width	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	2255 kg	4,971 lb	2125 kg	4,685 lb	2340 kg	5,159 lb	2410 kg	5,313 lb
Static Tipping Load Straight	20250 kg	44,644 lb	20155 kg	44,434 lb	20285 kg	44,721 lb	20620 kg	45,459 lb	20000 kg	44,092 lb
40° full turn	17590 kg	38,779 lb	17500 kg	38,581 lb	17630 kg	38,868 lb	17945 kg	39,562 lb	17345 kg	38,239 lb
Dumping Clearance, Maximum Height and 45° Dump Angle (H)	3205 mm	10'6"	3170 mm	10'5"	3170 mm	10'5"	3125 mm	10'3"	3080 mm	10'1"
Reach at 7' 2130 mm 45° Dump Angle	2135 mm	7'0"	2080 mm	6'10"	2135 mm	7'0"	2180 mm	7'2"	2205 mm	7'3"
Reach at Maximum Height and 45° Dump Angle	1420 mm	4'8"	1420 mm	4'8"	1420 mm	4'8"	1490 mm	4'11"	1535 mm	5'0"
Reach with Arm Horizontal and Bucket Level	3020 mm	9'11"	2895 mm	9'6"	3050 mm	10'0"	3125 mm	10'3"	3205 mm	10'6"
Operating Height Fully Raised	6175 mm	20'3"	6025 mm	19'9"	6025 mm	19'9"	6175 mm	20'3"	6450 mm	21'2"
Overall Length Bucket on Ground	9155 mm	30'0"	9185 mm	30'2"	9185 mm	30'2"	9270 mm	30'5"	9330 mm	30'7"
Loader Clearance Circle*	14060 mm	46'2"	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"	110 mm	4.3"	90 mm	3.5"	90 mm	3.5"
10°	355 mm	1'2"	380 mm	1'3"	380 mm	1'3"	380 mm	1'3"	380 mm	1'3"
Breakout Force	212 kN	47,658 lb	237 kN	53,278 lb	249 kN	55,975 lb	196 kN	44,061 lb	189 kN	42,487 lb
Operating Weight	24545 kg	54,113 lb	24420 kg	53,837 lb	24290 kg	53,550 lb	24505 kg	54,024 lb	24575 kg	54,179 lb

*Bucket at carry, outside corner of bucket. 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, additional counterweight, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.

Weight Changes

	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
Tires: 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 ROPS Canopy	+430	+950	+360	+795	+345	+760						
Remove additional Counterweight	-400	-880	-950	-2094	-790	-1742						



STANDARD EQUIPMENT

- 2-spool valve for boom and bucket controls
- Alternator, 50 A, 24V
- Auto shift transmission with mode select system
- Back-up alarm
- Batteries, 150 Ah/2 x 12 V
- Boom kick-out
- Bucket positioner
- Cab (ROPS/FOPS) with adjustable wrist rests, adjustable work equipment levers, cigarette lighter/ash tray, dome light, electrically heated rear window, air conditioner and hot/cold box, heater/defroster/pres-surizer, floor mat, front (intermittent) and rear wiper/washer, rearview mirrors (2 outside, 2 inside), right hand and left hand door access with steps, sun visor
- Centralized grease banks
- Counterweight
- ECSS (Electronically Controlled Suspension System)
- EMMS (Equipment Management Monitoring System)
 - Gauges (Speedometer/tachometer, engine water temperature, fuel level, hydraulic temperature, torque converter temperature)
 - LCD displays (service meter/ troubleshooting, shift indicator)
 - Lights (central warning, brake oil pressure, engine oil pressure, engine oil level, air cleaner restriction, parking brake, axle oil temperature, reverse cooling fan, oil change required, battery electrolyte level, radiator water level, engine preheat, battery charge, steering oil pressure, auxiliary steering, power mode, joystick steering option, directional indicator, auto shift, torque converter lock-up option, shift hold, gear position, torque converter temperature, engine water temperature, turn signals, high beam, rpm/mph display, hydraulic temperature, fuel level)
- Engine, Komatsu SAA6D125E-3 diesel
- Engine shut-off system, electric
- Engine water conditioner
- Fenders, full front, partial rear
- Hydraulic-driven fan, reversible
- Lift cylinders and bucket cylinder
- Lights
 - Stop and tail
 - Turn signal, 2 front, 2 rear with hazard switch
 - Working lights, halogen (2 front, high-low beam with indicator, fender mount, 2 rear, 2 front, outside mount)
- Loader linkage with standard lift arm
- PPC fingertip control, two levers
- Radiator mask, lattice type
- Seat, fabric, air suspension, reclining, armrests
- Seat belt, 76 mm 3" width, retractable
- Service brakes, wet disc type
- Starting motor, 7.5 kW/24 V
- Steering wheel, tiltable, telescopic
- Swing-out aftercooler and oil cooler
- Tires (26.5-25-20PR, L3 tubeless) and rims
- Tool Box (in battery boxes)
- Transmission, 4 forward and 4 reverse
- Vandalism protection kit
- Voltage converter, 5 A, 12 V



OPTIONAL EQUIPMENT

- 3-spool valve, with lever and piping
- Additional counterweight
- AM/FM stereo radio cassette
- Auxiliary steering
- Bucket, excavating, with teeth
3.8 m³ **5.0 yd³**
- Bucket, excavating, with teeth and segment edge 4.1 m³ **5.4 yd³**
- Bucket, general purpose, with BOCE
4.6 m³ **6.0 yd³**
- Bucket, loose material, with BOCE
4.9 m³ **6.4 yd³**
- Bucket, light material, with BOCE
6.1 m³ **8.0 yd³**
- Bucket teeth (bolt-on type)
- Cutting edge (bolt-on type)
- Decals, French
- Engine pre-cleaner with extension
- Joystick steering
- Limited slip differential (F&R)
- Load meter
- Load meter printer
- Lock-up clutch torque converter
- Rear full fenders
- ROPS/FOPS open canopy
- Single lever, multi-function loader and transmission control
- Suspension seat, vinyl
- Tires, bias
 - 26.5-25, 20PR, L4
 - 26.5-25, 20PR, L5
 - Brand preference (Goodyear)
- Tires, radial
 - 26.5-R25 VMT L3 Bridgestone
 - 26.5-R25 XHA 1-Star L3 Michelin
 - 26.5-R25 XLDD1A 1-Star L4 Michelin
 - 26.5-R25 XLDD2A 1-Star L5 Michelin
 - 26.5-R25 XMINED2 L5 Michelin

AESS592-01

©2002 Komatsu Printed in USA DK(10M)07/02 C (5M)05/04 C

7/02(EV-1)

KOMATSU®

Komatsu America International Company
440 N. Fairway Dr., Vernon Hills, IL 60061

