

KOMATSU®

WA380-5

NET HORSEPOWER
140 kW **187 HP** @ 2000 rpm

OPERATING WEIGHT
17635 – 18220 kg
38,879 – 40,170 lb

BUCKET CAPACITY
2.9–4.0 m³ 3.8–5.2 yd³

WA
380

WHEEL LOADER



Photos may include optional equipment.

GALEO

Courtesy of Machine.Market

WA380-5 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.

Reduced operator noise to 71 dB(A).

18% larger cab with new layout design.

Expanded main monitor and troubleshooting display.

Telescopic/tilt steering column.

Optional **joystick steering**.

Fingertip control levers.

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



Dual-speed hydraulic system.

Extended service intervals.

Automatic transmission with four selectable shifting modes.

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

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

Powerful yet efficient Komatsu
SAA6D114E-2 **emissionized engine.**



Reversible, variable speed,
hydraulic radiator fan
and swing-out coolers.

Full side opening
gull-wing engine doors.

Staircase-type steps
with large rear-hinged doors.

Optional **lockup torque**
converter.

Ground level servicing
and fluid checks.

Adjustable
transmission cut-off system.

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 187 hp SAA6D114E-2 engine provides optimum combustion of fuel at both low and high speed/power applications with fast throttle response to match the machine's powerful rim pull and fast hydraulic response.

Low Fuel Consumption

The fuel consumption has been reduced 15% 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:

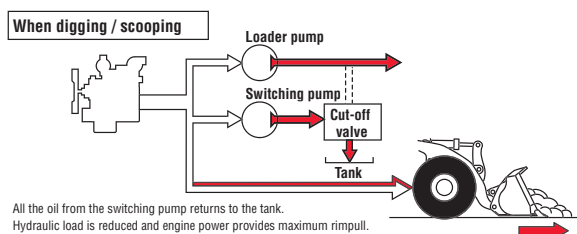
1. Downshift function one gear at a time from 4th gear to 1st when in automatic shift mode.
2. Increased rimpull in uphill ramp loading applications.

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.

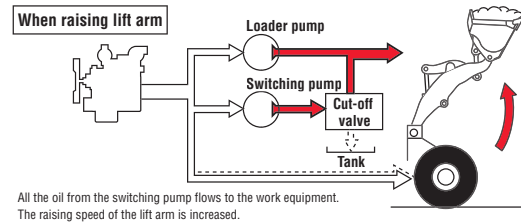
Digging Operations

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.

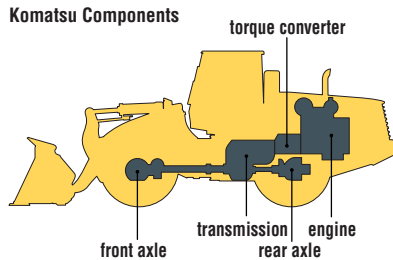


INCREASED RELIABILITY AND SERVICEABILITY

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 variable speed 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. The variable speed hydraulic fan is temperature activated to provide cooling on demand and reduce fuel consumption.

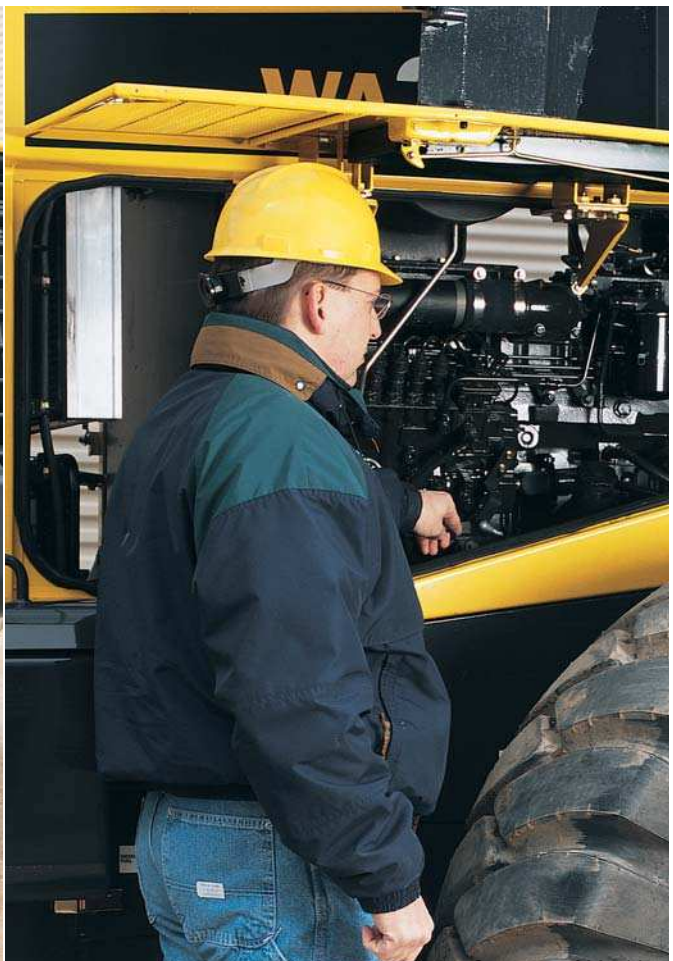
Full Side-Opening Gull-Wing Engine Doors

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 SAA6D114E-2 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.

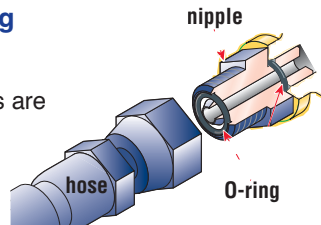


Sealed DT Connectors

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

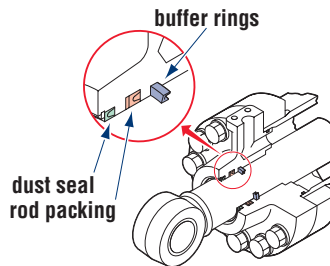
Flat Face-to-Face O-Ring Seals

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)

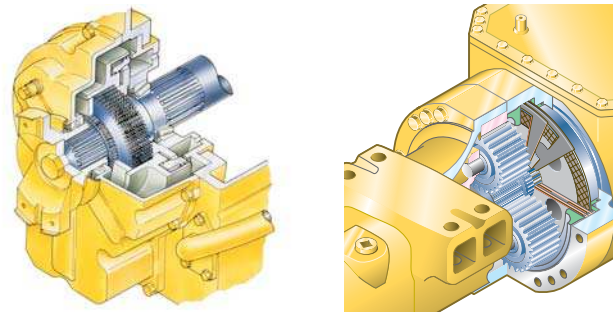
Komatsu's new main monitor keeps the operator informed of all machine functions at a glance. The monitor is located behind the steering wheel and displays 38 different machine functions including fluid/filter change intervals and troubleshooting memory display functions. The main gauges are analog type 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 SAA6D114E-2
 EPA Tier 2 emission ready

TypeWater-cooled, 4-cycle

AspirationTurbocharged and aftercooled

Number of cylinders6

Bore x stroke114 mm x 135 mm **4.49" x 5.31"**

Piston displacement8.27 ltr **505 in³**

Horsepower rating @ 2000 rpm (SAE J1349)
 Gross power151 kW **203 HP**
 Flywheel/net power140 kW **187 HP**

Fuel systemDirect injection

GovernorMechanical, 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: km/h **mph**

Measured with 23.5-25 tires

	1st		2nd		3rd		4th	
	km/h	mph	km/h	mph	km/h	mph	km/h	mph
Forward	6.8	4.2	12.3	7.6	21.4	13.3	34.0	21.1
Reverse	7.3	4.5	12.8	8.0	22.6	14.0	35.0	21.7



AXLES AND FINAL DRIVES

Drive systemFour-wheel drive

FrontFixed, semi-floating

RearCenter-pin support, semi-floating, 26° total oscillation

Reduction gearSpiral bevel gear

Differential gearConventional type

Final reduction gearPlanetary gear, single reduction



BRAKES

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

Parking brakeWet multi-disc brake



STEERING SYSTEM

TypeArticulated type, full-hydraulic power steering

Steering angle40° each direction

Minimum turning radius at the center of outside tire5620 mm **18'5"**



HYDRAULIC SYSTEM

Steering system:
 Hydraulic pumpGear pump
 Capacity94 ltr/min **24.8 U.S. gal/min** at rated rpm
 Relief valve setting160 kgf/cm² **2,275 psi**

Hydraulic cylinders:
 TypeDouble-acting, piston type
 Number of cylinders2
 Bore x stroke90 mm x 442 mm **3.5" x 17.4"**

Loader control:
 Hydraulic pumpGear pump
 Capacity212 + 94 ltr/min **56.0 + 24.8 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—160 mm x 713 mm **6.3" x 28.1"**
 Bucket cylinder1—180 mm x 535 mm **7.1" x 21.1"**

Control valve2-spool type

Control positions:
 BoomRaise, hold, lower, and float
 BucketTilt-back, hold, and dump

Hydraulic cycle time (rated load in bucket)
 Raise5.7 sec
 Dump1.4 sec
 Lower (Empty)2.7 sec
 Total9.8 sec



SERVICE REFILL CAPACITIES

Cooling system36 ltr **9.5 U.S. gal**

Fuel tank300 ltr **79.3 U.S. gal**

Engine32 ltr **8.5 U.S. gal**

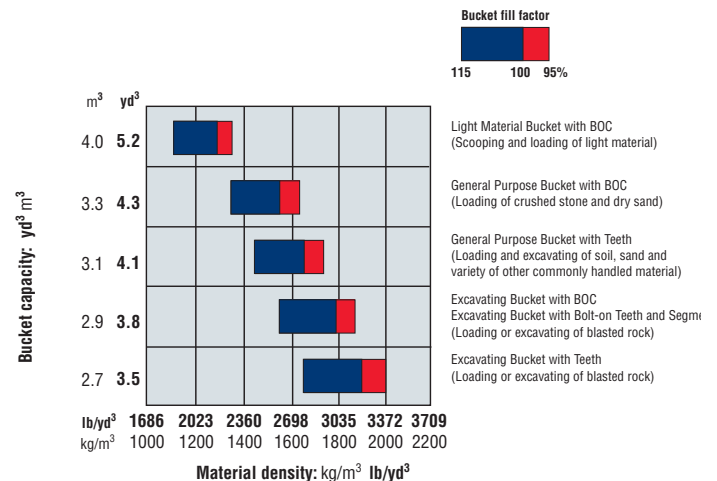
Hydraulic system129 ltr **34.1 U.S. gal**

Axle (each front and rear)38 ltr **10.0 U.S. gal**

Torque converter and transmission54 ltr **14.3 U.S. gal**

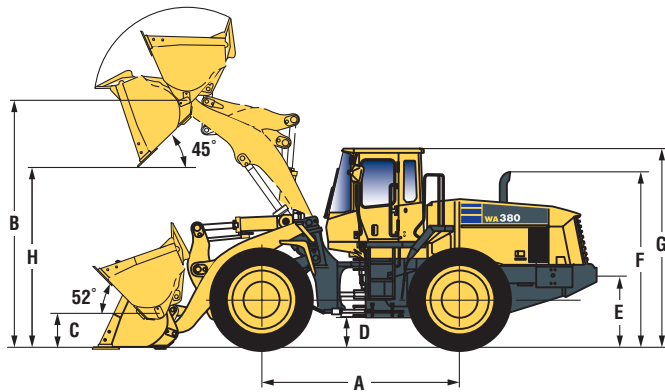


BUCKET SELECTION GUIDE





DIMENSIONS



	Tread	2160 mm	7'1"
	Width over tires	2780 mm	9'1"
A	Wheelbase	3300 mm	10'10"
B	Hinge pin height at Max. height:	Standard Boom	4095 mm 13'5"
		High Lift Boom	4625 mm 15'2"
C	Hinge pin height at carry position:	Standard Boom	520 mm 1'8"
		High Lift Boom	685 mm 2'3"
D	Ground clearance	460 mm	1'6"
E	Hitch height	1150 mm	3'9"
F	Overall height, top of stack	2950 mm	9'8"
G	Overall height ROPS cab	3380 mm	11'1"

Measured with 23.5-25-16PR (L3) tires

Bucket		General Purpose Bolt-on Cutting Edge		Excavating Bolt-on Cutting Edge		Light Material Bolt-on Cutting Edge		High Lift Boom, G.P. Bolt-on Cutting Edge	
Bucket Capacity	Heaped	3.3 m ³	4.3 yd³	2.9 m ³	3.8 yd³	4.0 m ³	5.2 yd³	2.9 m ³	3.8 yd³
	Struck	2.9 m ³	3.8 yd³	2.4 m ³	3.1 yd³	3.4 m ³	4.4 yd³	2.4 m ³	3.1 yd³
Bucket Width		2905 mm	9'6"	2905 mm	9'6"	2905 mm	9'6"	2905 mm	9'6"
Bucket Weight		1645 kg	3,627 lb	1720 kg	3,792 lb	1835 kg	4,045 lb	1555 kg	3,437 lb
Static Tipping Load	Straight	14480 kg	31,923 lb	14405 kg	31,758 lb	14290 kg	31,504 lb	11460 kg	25,265 lb
	40° full turn	12565 kg	27,701 lb	12490 kg	27,536 lb	12375 kg	27,282 lb	9970 kg	21,980 lb
Dumping Clearance, maximum height and 45° dump angle		2950 mm	9'9"	3025 mm	9'11"	2855 mm	9'5"	3575 mm	11'9"
Reach at 2130 mm 7' 45° dump angle		1730 mm	5'8"	1690 mm	5'6"	1770 mm	5'10"	2200 mm	7'3"
Reach at maximum height and 45° dump angle		1150 mm	3'9"	1065 mm	3'6"	1235 mm	4'1"	1185 mm	3'11"
Reach with arm horizontal and bucket level		2590 mm	8'6"	2475 mm	8'1"	2715 mm	8'11"	2940 mm	9'8"
Operating Height Fully raised		5585 mm	18'4"	5470 mm	18'0"	5655 mm	18'10"	5985 mm	19'8"
Overall Length Bucket on Ground		8140 mm	26'8"	8025 mm	26'4"	8265 mm	27'1"	8760 mm	28'9"
Loader clearance circle*		13160 mm	43'2"	13090 mm	42'11"	13220 mm	43'4"	13590 mm	44'7"
Digging Depth	0°	60 mm	2.4"	60 mm	2.4"	60 mm	2.4"	115 mm	5"
	10°	295 mm	11.6"	270 mm	10.6"	315 mm	1'0"	320 mm	1'1"
Breakout Force		148 kN	33,245 lb	163 kN	36,642 lb	135 kN	30,348 lb	168 kN	36,310 lb
Operating Weight		17635 kg	38,879 lb	17715 kg	39,055 lb	17825 kg	39,297 lb	18220 kg	40,170 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	
	kg	lb	kg	lb	kg	lb
Remove ROPS cab	-660	-1,455	-650	-1,433	-625	-1,378
Remove additional counterweight	-325	-717	-860	-1,896	-715	-1,577
Install ROPS canopy	430	950	425	937	410	904



STANDARD EQUIPMENT

- Air cleaner, 2-stage dry with auto dust evacuator, plus dust indicator (radial sealed)
- 2-spool valve for boom and bucket controls
- Alternator, 50 A, 24V
- Auto shift transmission with mode select system
- Axles, semi-floating with conventional differentials
- Back-up alarm
- Batteries, 150 Ah/2 x 12 V, 1000 CCA
- 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/heater/defroster/pressurizer, floor mat, front (intermittent) and rear wiper/washer, rearview mirrors (2 outside, 2 inside), right hand and left hand door access with steps, sunvisor
- 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 lockup option, shift hold, gear position, torque converter temperature, engine water temperature, turn signals, high beam, rpm/mph display, hydraulic temperature, fuel level)
- Engine, Komatsu SAA6D114E-2 diesel
- Engine shut-off system, electric
- Engine water conditioner
- Fenders, full front, partial rear
- Horn, electric
- Hydraulic-driven fan, reversible, variable speed
- Lift cylinders and bucket cylinder
- Lifting eye
- 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
- Parking brake, wet multi-disc
- 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 aid, air intake manifold preheater
- Starting motor, 7.5 kW/24 V
- Steering wheel, tiltable, telescopic
- Swing-out aftercooler and oil cooler
- Tires (23.5-25-16PR, L3 tubeless) and rims
- Tool box (in battery boxes)
- Transmission, 4 forward and 4 reverse
- Vandalism protection kit
- Voltage converter, 5A, 12V



OPTIONAL EQUIPMENT

- 3-spool valve, with lever and piping
- Additional counterweight
- AM/FM stereo radio cassette
- Auxiliary steering
- Bucket, excavating, with BOCE 2.9 m³ **3.8 yd³**
- Bucket, general purpose, with BOCE 2.9 m³ **3.8 yd³** (highlift)
- Bucket, general purpose, with BOCE 3.3 m³ **4.3 yd³**
- Bucket, light material, with BOCE 4.0 m³ **5.25 yd³**
- Bucket teeth (bolt-on type)
- Cutting edge (bolt-on type) (BOCE)
- Decals, French
- Engine pre-cleaner with extension
- Joystick steering
- Highlift arrangement
- JRB bucket, general purpose, for use with quick coupler, with BOCE 3.4m³ **4.41yd³**
- JRB bucket, multi-purpose, for use with quick coupler, with BOCE 2.8m³ **3.68yd³**
- JRB construction forks, for use with quick coupler, 1524 mm **60"** tines
- JRB utility pallet forks, for use with quick coupler, 1524 mm **60"** tines
- JRB utility pallet forks, for use with quick coupler, 1829 mm **72"** tines
- JRB hydraulic quick coupler
- JRB extendable boom, 3-section for use with hydraulic coupler
- Limited slip differential (F&R)
- Load meter
- Load meter printer
- Logging arrangement
- Logging counterweight
- Lock-up torque converter
- Rear full fenders
- ROPS/FOPS open canopy
- Single lever, multi-function loader and transmission control
- Suspension seat, vinyl
- Tires, bias
 - 23.5-25, 12PR, L2
 - 23.5-25, 12PR, L3
 - 23.5-25, 16PR, L2
 - 23.5-25, 20PR, L3
 Brand preference Goodyear
- Tires, radial
 - 23.5-R25 VMT L3 Bridgestone
 - 23.5-R25 XHA 1-Star L3 Michelin
 - 23.5-R25 XRDIAT 1-Star L4 Michelin

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