WEIGHT CHANGES

	Change in Operating Weight		Change in Tipping Load: Straight		Change in Tipping Load: Full Turn		Width Over Tire		Ground Clearance		Change in Vertical Dimensions		Change in Reach	
17.5-25-16PR (L3)	**55 kg**	121 lb	**45 kg**	99 lb	**35 kg**	77 lb	**2375 mm**	7'10"	**395 mm**	1'4"	**0 mm**	0"	**0 mm**	0"
20.5-25-12PR (L2)	**280 kg**	617 lb	**215 kg**	474 lb	**190 kg**	419 lb	**2470 mm**	8'1"	**465 mm**	1'6"	**70 mm**	2.8"	**–70 mm**	–2.8"
20.5-25-12PR (L3)	**430 kg**	948 lb	**325 kg**	717 lb	**280 kg**	617 lb	**2470 mm**	8'1"	**465 mm**	1'6"	**70 mm**	2.8"	**–70 mm**	–2.8"
Install ROPS canopy (instead of cab)	**–150 kg**	–331 lb	**–150 kg**	–331 lb	**–130 kg**	–287 lb								
Additional counterweight	**300 kg**	661 lb	**580 kg**	1,279 lb	**510 kg**	1,124 lb								

STANDARD EQUIPMENT

- 2-spool valve for boom and bucket controls
- Air conditioner
- Alternator, 60 A
- Auto shift transmission with mode select system
- Back-up alarm
- Back-up lamp
- Batteries, **110 Ah**/2 x 12 V
- Bucket positioner
- Counterweight
- Directional signal
- Engine, Komatsu SAA6D107E-1 diesel
- Engine shut-off system, electric
- Floor mat
- Fuel prefilter with water separator
- Hydraulic-driven fan with reverse rotation
- Lift cylinders and bucket cylinder
- Loader linkage with standard lift boom
- Main monitor panel with EMMS (Equipment Management Monitoring System)
- PPC fingertip control, mono lever
- Radiator mask, lattice type
- Rear defroster (electric)
- Rear view mirror
- Rear window washer and wiper
- ROPS/FOPS cab
- Seat, rigid type with reclining
- Seat belt
- Service brakes, wet disc type
- Starting motor, **4.5 kW**/24 V
- Steering wheel, tiltable
- Sun visor
- Tires (17.5-25-16PR, L2 tubeless) and rims
- Transmission, 4 forward and 4 reverse

OPTIONAL EQUIPMENT

- 3-spool valve
- Additional counterweight
- AM/FM radio
- AM/FM stereo radio cassette
- Boom kick-out
- Bucket teeth (bolt-on type)
- Bucket teeth (tip type)
- Cutting edge (bolt-on type)
- Deluxe suspension seat
- ECSS (Electronically Controlled Suspension System)
- Emergency steering (SAE)
- Engine pre-cleaner with extension
- Fire extinguisher
- Front fenders
- High lift boom
- Limited slip differential (F&R)
- Rear full fender
- Tool kit
- Vandalism protection kit

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KOMATSU®

CEN00259-01

KOMATSU®

WA250-6

HORSEPOWER
Gross: 104 kW 140 HP @ 2000 rpm
Net: 103 kW 138 HP @ 2000 rpm

BUCKET CAPACITY
1.8–2.7 m³ 2.4-3.5 yd³

ecot3

WA 250

WHEEL LOADER

Photo may include optional equipment.

WALK-AROUND

HORSEPOWER
Gross: 104 kW 140 HP @ 2000 rpm
Net: 103 kW 138 HP @ 2000 rpm

BUCKET CAPACITY
1.8–2.7 m³ 2.4-3.5 yd³

High Productivity & Low Fuel Consumption

- High performance SAA6D107E-1 engine
- Low fuel consumption
- Electronically-controlled HST with variable shift control system
- Variable traction control system
- S-mode

See pages 4 and 5.

Excellent Operator Environment

- HST traction control switch
- Electrically controlled directional lever
- Tiltable steering column
- Low-noise designed cab
- Pillar-less large ROPS/FOPS cab-integrated
- Easy entry/exit, rear-hinged doors

See pages 8 and 9.

Increased Reliability

- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Maintenance-free, fully hydraulic, wet disc service and parking brakes
- Hydraulic hoses use flat face O-ring seals

See page 6.

- 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

Photo may include optional equipment.

Harmony with Environment

- EPA Tier 3 and EU Stage 3A emission regulations certified
- Low exterior noise
- Low fuel consumption

Easy Maintenance

- "EMMS" (Equipment Management Monitoring System)

See page 7.

- Easy access, gull-wing type engine side doors
- Automatic Reversible Fan (option)

HIGH PRODUCTIVITY AND LOW FUEL CONSUMPTION

High Performance SAA6D107E-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: 103 kW 138 HP

Low Emission Engine

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

Low Fuel Consumption

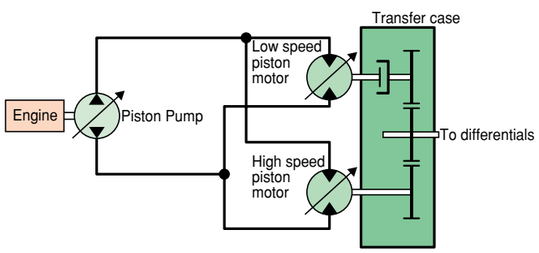
The high-torque engine and Hydrostatic Transmission (HST) with maximum efficiency in the low-speed range provide low fuel consumption.

Eco Indicator

The eco indicator will help an operator to promote energy saving.

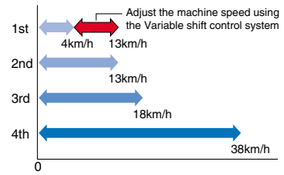
Electronically-Controlled HST Using a 1-Pump, 2-Motor System

- The 1-pump, 2-motor system allows for high-efficiency and high tractive effort. Engine power is transmitted hydraulically to a transfer case, then manually out to the differentials and out to 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 kick-down 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 a drag on the system.
- An inching pedal gives the operator excellent simultaneous control of his 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 his accelerator to increase flow to his equipment hydraulics. Depressing the inching pedal further will activate the service brakes.

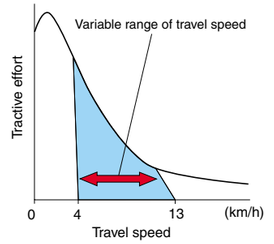


Electronically-Controlled HST with Variable Shift Control System

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.

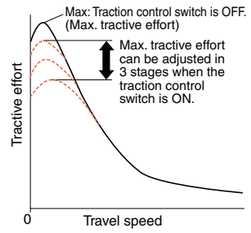


The variable shift switch allows the operator to adjust his machine speed in applications such as confined v-loading. When in 1, the operator can adjust travel speed using the variable shift switch to match machine speed and hydraulics to the distance travelled.



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 the function of torque proportioning differentials, this system exerts the following effects.

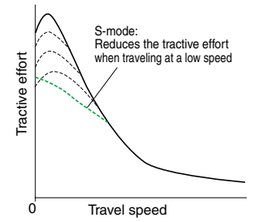


- Facilitates operation on soft ground where the tires of the machine are apt to slip.
- Eliminates excessive bucket penetration and reduces tire slippage during stockpile loading to improve the work efficiency.
- Reduces tire slippage to extend the life of tires.

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.

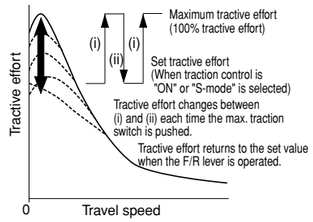
S-mode

Setting the switch to S-mode allows the machine to get the optimum driving force for operations on slippery road surfaces, like snow-removal on snow surface, resulting in reduced tire slippage and facilitation of the operation.
Unexpected tire slippage on slippery road surface is suppressed by controlling the engine speed and HST motor when traveling at a low speed.
(S-mode is effective only in forward traveling.)



Max. Traction Switch

Max. traction switch is located on the work equipment control lever. When traction control switch is at 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 piling up work where large tractive effort is required temporarily.



Accelerator Pedal Sensitive HST Control

Finely-tuned HST control according to the accelerator pedal angle reduces shocks and allows smoother traveling and better energy-saving operation.

Maximum Dumping Clearance and Reach

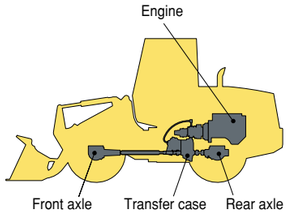
The long lift arms provide high dumping clearances and maximum dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

Dumping Clearance: 2780 mm 9'1"
Dumping Reach: 1055 mm 3'6"
(**2.3 m³** 3.0 yd³ bucket with B.O.C.)

INCREASED RELIABILITY

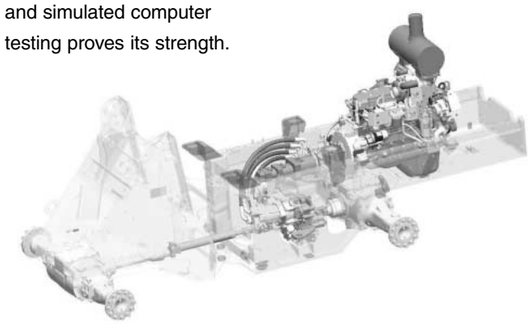
Komatsu Components

Komatsu manufactures the 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.



High-rigidity Frames and Loader Linkage

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



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 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 should one of the circuits fail.
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.

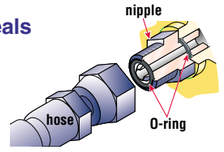
Overrun Prevention System

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.

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 paint is applied as a primer paint and powder coating is applied as 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 connectors are equipped with sealed DT connectors providing high reliability, water resistance and dust resistance.

EASY MAINTENANCE

Photo may include optional equipment.

EMMS (Equipment Management Monitoring System)

Monitor is mounted in front of the operator 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 an abnormality occurs, the monitor displays action details on the character display at the center bottom of the monitor.
- **Monitor function:** 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:** Monitor informs replacement time of oil and filters on the LCD when replacement intervals are reached.
- **Trouble data memory function:** Monitor stores abnormalities 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.

Ease of Radiator Cleaning

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.

Automatic Reversible Fan (option)

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

B: Manual Reverse Mode
A: Normal rotation Mode
C: Auto Reverse Mode

OPERATOR ENVIRONMENT

Easy Operation

Electronically Controlled Directional Lever

The operator can change direction with a touch of his fingers without removing his hand from the steering wheel. Solid state electronics makes this possible.

Tiltable Steering Column

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

Easy-to-operate Loader Control Mono-lever

A new mono-lever using PPC (Proportional Pressure Control) allows the operator to easily operate the work equipment, to reduce operator fatigue and to increase 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.

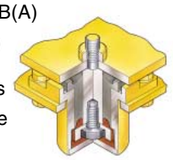
1:Speed range selector switch 2:Variable shift switch
3:Traction control switch 4:Max. traction switch
5:Fan reverse switch

Photo may include optional equipment.

Comfortable Operation

Low-noise Design

Noise at operator's ear noise level : 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.

Pillar-less Large Cab

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 large cab area provides maximum space for the operator. The front mounted air conditioner was introduced to increase seat reclining and backward slide adjustment.

Rear-hinged Full Open Cab Doors

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

SPECIFICATIONS

ENGINE

Model . . . . . .Komatsu SAA6D107E-1
Type . . . . . .Water-cooled, 4-cycle
Aspiration . . . . . .Turbocharged, aftercooled
Number of cylinders 6
Bore x stroke . . . . . .**107 mm x 124 mm** 4.21" x 4.88"
Piston displacement . . . . . .**6.69 ltr** 408 in^3
Governor . . . . . .All-speed, electronic
Horsepower
SAE J1995 . . . . . .Gross **104 kW** 140 HP
ISO 9249/SAE J1349* . . . . . .Net **103 kW** 138 HP
Rated rpm . . . . . .2000 rpm
Fan drive method for radiator cooling . . . . . .Hydraulic
Fuel system . . . . . .Direct injection
Lubrication system:
Method . . . . . .Gear pump, force-lubrication
Filter . . . . . .Full-flow type
Air cleaner . . . . . .Dry type with double elements and dust evacuator, plus dust indicator

*Net horsepower at the maximum speed of radiator cooling fan is 100 kW 134 HP.

TRANSMISSION

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 and Reverse	**3.6 - 11.7** 2.2 - 7.3	**11.7** 7.3	**16.2** 10.1	**34.2** 21.2

Measured with 20.5-25 tires

	1st	2nd	3rd	4th
Both Forward and Reverse	**4.0 - 13.0** 2.5 - 8.1	**13.0** 8.1	**18.0** 11.2	**38.0** 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 . . . . . .Hydraulically actuated, wet disc 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 . . . . . .Full-hydraulic power steering
Steering angle . . . . . .38˚ each direction (40˚ end stop)
Minimum turning radius at the center of outside tire . . . . . .**5175 mm** 17'0"

HYDRAULIC SYSTEM

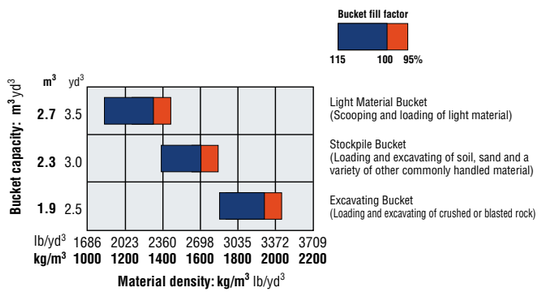
Steering system:
Hydraulic pump . . . . . .Gear type pump
Capacity . . . . . .**110 ltr/min** 29.1 U.S. gal/min at rated rpm
Relief valve setting . . . . . .**18.6 MPa** 190 kgf/cm^2 2,700 psi
Hydraulic cylinders:
Type . . . . . .Double-acting, piston type
Number of cylinders 2
Bore x stroke . . . . . .**70 mm x 453 mm** 2.8" x 17.8"

Loader control:
Hydraulic pump . . . . . .Gear type pump
Capacity . . . . . .**78 ltr/min** 20.6 U.S. gal/min
Relief valve setting . . . . . .**20.6 MPa** 210 kgf/cm^2 3,000 psi
Hydraulic cylinders:
Type . . . . . .Double-acting, piston type
Number of cylinders—bore x stroke:
Boom cylinder . . . . . .2- **130 mm x 717 mm** 5.1" x 28.2"
Bucket cylinder . . . . . .1- **150 mm x 491 mm** 5.9" x 19.3"
Control valve . . . . . .2-spool type
Control positions:
Boom . . . . . .Raise, hold, lower, and float
Bucket . . . . . .Tilt-back, hold, and dump
Hydraulic cycle time (rated load in bucket)
Raise . . . . . .6.3 sec
Dump . . . . . .1.7 sec
Lower (Empty) . . . . . .3.6 sec

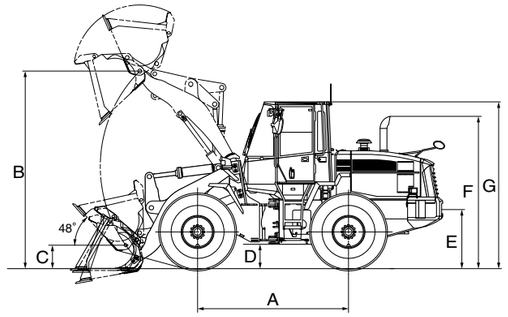
SERVICE REFILL CAPACITIES

Cooling system	**22 ltr**	5.8 U.S. gal
Fuel tank	**186 ltr**	49.1 U.S. gal
Engine	**23 ltr**	6.1 U.S. gal
Hydraulic system	**67 ltr**	17.7 U.S. gal
Axle (each front and rear)	**18 ltr**	4.8 U.S. gal
Torque converter and transmission	**5 ltr**	1.3 U.S. gal

BUCKET SELECTION GUIDE



DIMENSIONS



		17.5-25 tires		20.5-25 tires	
	Tread	**1930 mm**	6'4"	**1930 mm**	6'4"
	Width over tires	**2375 mm**	7'10"	**2470 mm**	8'1"
A	Wheelbase	**2900 mm**	9'6"	**2900 mm**	9'6"
B	Hinge pin height, max. height	**3725 mm**	12'3"	**3795 mm**	12'5"
C	Hinge pin height, carry position	**375 mm**	1'3"	**450 mm**	1'6"
D	Ground clearance	**395 mm**	1'4"	**465 mm**	1'6"
E	Hitch height	**880 mm**	2'11"	**950 mm**	3'1"
F	Overall height, top of the stack	**2855 mm**	9'4"	**2925 mm**	9'7"
G	Overall height, ROPS cab	**3130 mm**	10'3"	**3200 mm**	10'6"

Measured with 17.5-25-16PR (L2) tires, ROPS/FOPS cab

	Stockpile Bucket		Excavating Bucket		Light Material Bucket
	Bolt-On Cutting Edges	**Teeth**	**Bolt-On Cutting Edges**	**Teeth**	**Bolt-On Cutting Edges**
Bucket capacity: heaped	**2.3 m³** 3.0 yd³	**2.1 m³** 2.7 yd³	**1.9 m³** 2.5 yd³	**1.8 m³** 2.4 yd³	**2.7 m³** 3.5 yd³
struck	**2.0 m³** 2.6 yd³	**1.8 m³** 2.4 yd³	**1.6 m³** 2.1 yd³	**1.5 m³** 2.0 yd³	**2.3 m³** 3.0 yd³
Bucket width	**2685 mm** 8'10"	**2705 mm** 8'10"	**2685 mm** 8'10"	**2705 mm** 8'10"	**2685 mm** 8'10"
Bucket weight	**960 kg** 2,116 lb	**865 kg** 1,907 lb	**905 kg** 1,995 lb	**810 kg** 1,786 lb	**1050 kg** 2,315 lb
Dumping clearance, max. height and 45˚ dump angle*	**2780 mm** 9'1"	**2665 mm** 8'9"	**2855 mm** 9'4"	**2740 mm** 9'0"	**2685 mm** 8'10"
Reach at max. height and 45˚ dump angle*	**1055 mm** 3'6"	**1155 mm** 3'9"	**980 mm** 3'3"	**1080 mm** 3'7"	**1150 mm** 3'9"
Reach at **2130 mm** (7') clearance and 45˚ dump angle*	**1535 mm** 5'0"	**1560 mm** 5'1"	**1495 mm** 4'11"	**1530 mm** 5'0"	**1580 mm** 5'2"
Reach with arm horizontal and bucket level*	**2305 mm** 7'7"	**2450 mm** 8'0"	**2200 mm** 7'3"	**2345 mm** 7'8"	**2430 mm** 8'0"
Operating height (fully raised)	**4995 mm** 16'5"	**4995 mm** 16'5"	**4875 mm** 16'0"	**4875 mm** 16'0"	**5130 mm** 16'10"
Overall length	**7055 mm** 23'2"	**7200 mm** 23'7"	**6950 mm** 22'10"	**7095 mm** 23'3"	**7185 mm** 23'7"
Loader clearance circle (bucket at carry, outside corner of bucket)	**12060 mm** 39'7"	**12140 mm** 39'10"	**12030 mm** 39'6"	**12085 mm** 39'8"	**12220 mm** 40'1"
Digging depth: 0˚	**145 mm** 5.7"	**160 mm** 6.3"	**145 mm** 5.7"	**160 mm** 6.3"	**145 mm** 5.7"
10˚	**335 mm** 1'1"	**375 mm** 1'3"	**315 mm** 1'0"	**355 mm** 1'2"	**355 mm** 1'2"
Static tipping load: straight	**11110 kg** 24,495 lb	**11205 kg** 24,705 lb	**11230 kg** 24,760 lb	**11325 kg** 24,970 lb	**10960 kg** 24,160 lb
38˚ full turn	**9780 kg** 21,560 lb	**9860 kg** 21,740 lb	**9885 kg** 21,790 lb	**9965 kg** 21,970 lb	**9645 kg** 21,265 lb
Breakout force	**121 kN** 12340 kgf 27,210 lb	**106 kN** 10830 kgf 23,875 lb	**136 kN** 13850 kgf 30,535 lb	**117 kN** 12010 kgf 26,475 lb	**108 kN** 11000 kgf 24,250 lb
Operating weight	**10965 kg** 24,170 lb	**10870 kg** 23,965 lb	**10910 kg** 24,050 lb	**10815 kg** 23,845 lb	**11055 kg** 24,370 lb

* At the end of 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 following weight changes to operating weight and static tipping load.