BUCKET CAPACITY
3.1–3.7 m³
4.1–4.8 yd³

KOMATSU®

WA430-5

WA 430

WHEEL LOADER

Photo may include optional equipment.

WA430-5 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
- Electrically controlled transmission lever
- Fingertip control levers
- Pillar-less large ROPS/FOPS cab
- Easy entry/exit, rear-hinged doors
- Telescopic/tilt steering column

See pages 8 and 9.

Harmony with Environment

- EPA Tier 2 and EU Stage 2 emissions certified
- Low fuel consumption

WA430-5
WHEEL LOADER

NET HORSEPOWER
162 kW 217 HP @ 2000 rpm

OPERATING WEIGHT
18340– 18555 kg
40,430– 40,900 lb

BUCKET CAPACITY
3.1 – 3.7 m³
4.1 – 4.8 yd³

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

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.

Easy Maintenance

- "EMMS" (Equipment Management Monitoring System)
- Reversible radiator fan (optional)
- Swing-out aftercooler and oil coolers

See page 7.

- Prolonged engine oil change interval
- Ground check for windshield washer tank and coolant tank
- Easy access, gull-wing type engine side doors

Productivity Features

High Productivity and Low Fuel Consumption

Powerful Engine

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

162 kW 217 HP

This engine is EPA Tier 2 and EU Stage 2 emissions certified.

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

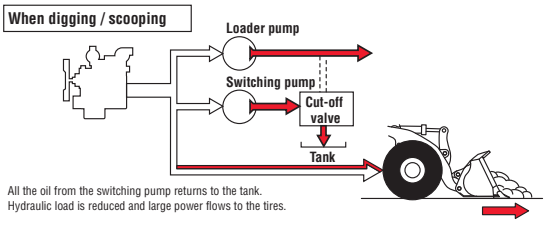
This operator controlled system allows the operator to select manual shifting or three levels of automatic shifting (low, medium, and high).

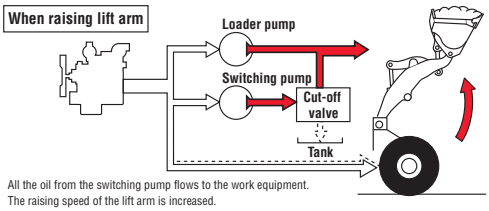
- **Manual:** Transmission is fixed to gear speed selected with gear shift lever.
- **Auto. L:** This mode provides smooth gear change and low fuel consumption since gear shifting is performed at relatively low engine speeds, suitable for general excavating and loading.
- **Auto. M:** Gear is shifted 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

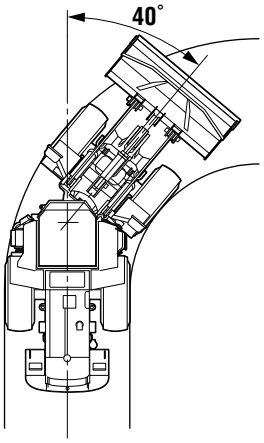
The long lift arms provide high dumping clearances and maximum dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

Dumping Clearance: 3125 mm 10'3"
Dumping Reach: 1110 mm 3'8"
(**3.7 m³** 4.8 yd³ bucket with B.O.C.)

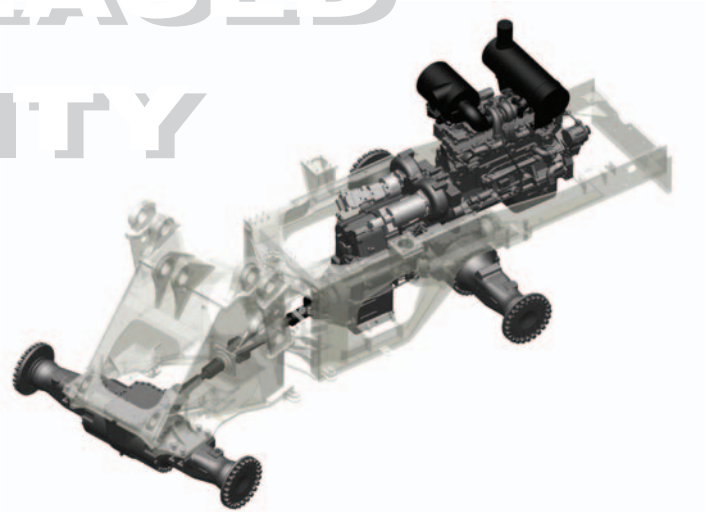
Long Wheelbase/Articulation Angle of 40˚

The widest tread in class and the long wheelbase 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	**2200 mm** 7'3"
Wheelbase	**3350 mm** 11'0"
Minimum turning radius (center of outside tire)	**5700 mm** 18'8"

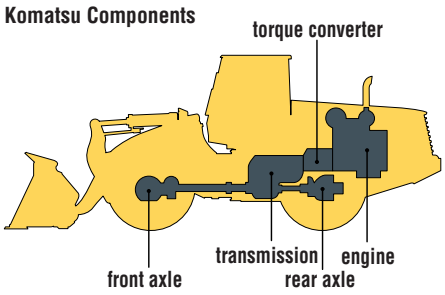


INCREASED RELIABILITY



Komatsu Components

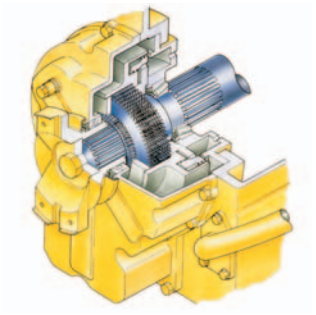
Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, and even each bolt on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.

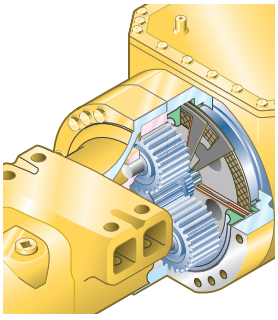


Wet multi-disc brakes and fully hydraulic braking system mean lower maintenance costs and higher reliability. Wet disc brakes are fully sealed. Contaminants are kept out, reducing wear and resulting maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The new parking brake 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.



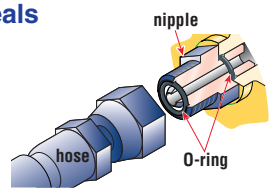


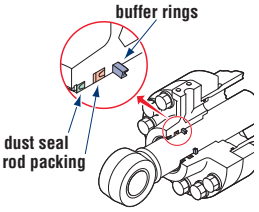
High-rigidity Frames

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 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 (optional) 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

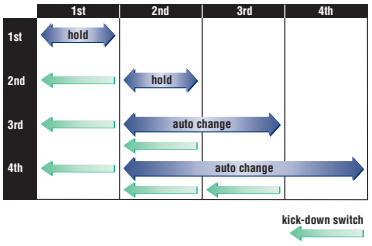
OPERATOR ENVIRONMENT

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.

Comfortable Operation

Low-noise Design

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.

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 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.

SPECIFICATIONS

ENGINE

Model . . . . . .Komatsu SAA6D125E-3
Type . . . . . .Water-cooled, 4-cycle
Aspiration . . . . . .Turbocharged
Number of cylinders 6
Bore x stroke . . . . . .**125 mm x 150 mm** 4.92" x 5.91"
Piston displacement . . . . . .**11.04 ltr** 674 in³
Performance:
Flywheel horsepower . . . . . .**162 kW** 217 HP (SAE J1349)
162 kW 220 PS (DIN 6270)
Rated rpm . . . . . .2000 rpm
Fuel system . . . . . .Direct injection
Governor . . . . . .Mechanical, all-speed control
Lubrication system:
Lubrication method . . . . . .Gear pump, force-lubrication
Filter . . . . . Full-flow type
Air cleaner . . . . . .Dry type with double elements and dust evacuator, plus dust indicator

EPA Tier 2 and EU Stage 2 emissions certified.

TRANSMISSION

Torque converter:
Type . . . . . .3-element, single-stage, single-phase
Transmission:
Type . . . . . .Full-powershift, countershaft type
Travel speed: **km/h** mph
Measured with 23.5-25 tires

	1st	2nd	3rd	4th
Forward	**6.6** 4.1	**11.5** 7.1	**20.4** 12.7	**33.2** 20.6
Reverse	**7.1** 4.4	**12.3** 7.6	**21.6** 13.4	**34.9** 21.7

Measured with 26.5-25 tires

	1st	2nd	3rd	4th
Forward	**7.0** 4.3	**12.5** 7.8	**21.9** 13.6	**34.8** 21.6
Reverse	**7.7** 4.8	**13.3** 8.3	**23.2** 14.4	**36.6** 22.7

AXLES AND FINAL DRIVES

Drive system . . . . . .Four-wheel drive
Front . . . . . .Fixed, semi-floating
Rear . . . . . .Center-pin support, semi-floating, 20˚ total oscillation
Reduction gear . . . . . .Spiral bevel gear
Differential gear . . . . . .Conventional type
Final reduction gear . . . . . .Planetary gear, single reduction

BRAKES

Service brakes . . . . . .Hydraulically actuated, wet disc brakes actuate on four wheels
Parking brake . . . . . .Wet disc brake
Emergency brake . . . . . .Parking brake is commonly used

STEERING SYSTEM

Type . . . . . .Articulated type, full-hydraulic power steering
Steering angle . . . . . .40˚ each direction
Minimum turning radius at
the center of outside tire . . . . . .**5700 mm** 18'8"

HYDRAULIC SYSTEM

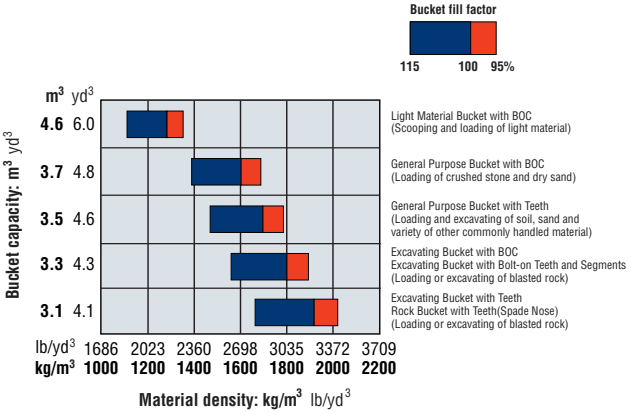
Steering system:
Hydraulic pump . . . . . .Gear pump
Capacity . . . . . .**103 ltr/min** 27.2 U.S. gal/min at rated rpm
Relief valve setting . . . . . .**170 kgf/cm²** 2,420 psi
Hydraulic cylinders:
Type . . . . . .Double-acting, piston type
Number of cylinders 2
Bore x stroke . . . . . .**100 mm x 441 mm** 3.9" x 17.4"

Loader control:
Hydraulic pump . . . . . .Gear pump
Capacity . . . . . .**212 + 116 ltr/min** 56.0 + 30.6 U.S. gal/min at rated rpm
Relief valve setting . . . . . .**210 kgf/cm²** 3,000 psi
Hydraulic cylinders:
Type . . . . . .Double-acting, piston type
Number of cylinders—bore x stroke:
Boom cylinder . . . . . .2—**160 mm x 846 mm** 6.3" x 33.3"
Bucket cylinder . . . . . .1—**200 mm x 498 mm** 7.9" x 21.1"
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 . . . . . .1.4 sec
Lower (Empty) . . . . . .3.4 sec

SERVICE REFILL CAPACITIES

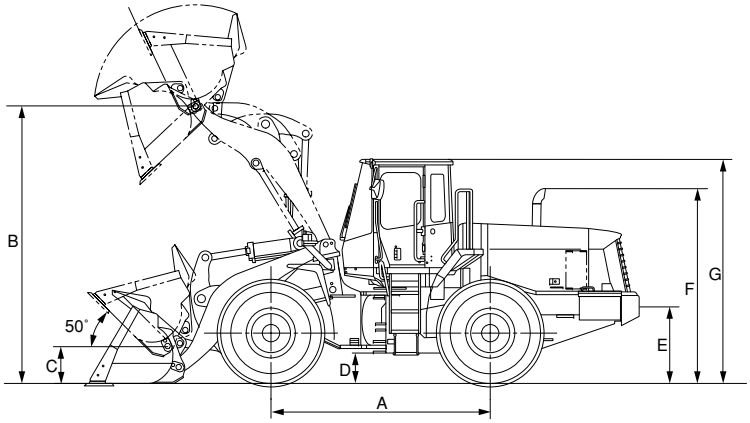
Cooling system . . . . . .**50 ltr** 13.2 U.S. gal
Fuel tank . . . . . .**343 ltr** 90.6 U.S. gal
Engine . . . . . .**45 ltr** 11.9 U.S. gal
Hydraulic system . . . . . .**186 ltr** 49.1 U.S. gal
Axle (each front and rear) . . . . . .**38 ltr** 10.0 U.S. gal
Torque converter and transmission . . . . . .**62 ltr** 16.4 U.S. gal

BUCKET SELECTION GUIDE



DIMENSIONS

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



	Tread	**2200 mm**	7'3"
	Width over tires	**2820 mm**	9'3"
A	Wheelbase	**3350 mm**	11'0"
B	Hinge pin height, max. height	**4250 mm**	13'11"
C	Hinge pin height, carry position	**520 mm**	1'8"
D	Ground clearance	**460 mm**	1'6"
E	Hitch height	**1150 mm**	3'9"
F	Overall height, top of the stack	**2965 mm**	9'9"
G	Overall height, ROPS cab	**3380 mm**	11'1"

	General Purpose Buckets		Excavating Buckets		
	Bolt-on Cutting Edges	**Teeth**	**Bolt-on Cutting Edges**	**Teeth and Segments**	**Teeth**
Bucket capacity: heaped	**3.7 m³** 4.8 yd³	**3.5 m³** 4.6 yd³	**3.3 m³** 4.3 yd³	**3.3 m³** 4.3 yd³	**3.1 m³** 4.1 yd³
struck	**3.2 m³** 4.2 yd³	**3.0 m³** 3.9 yd³	**2.8 m³** 3.7 yd³	**2.8 m³** 3.7 yd³	**2.6 m³** 3.4 yd³
Bucket width	**3050 mm** 10'0"	**3065 mm** 10'1"	**3050 mm** 10'0"	**3065 mm** 10'1"	**3065 mm** 10'1"
Bucket weight	**1745 kg** 3,847 lb	**1670 kg** 3,682 lb	**1835 kg** 4,045 lb	**1885 kg** 4,156 lb	**1760 kg** 3,880 lb
Dumping clearance, max. height and 45° dump angle*	**3125 mm** 10'3"	**3000 mm** 9'10"	**3175 mm** 10'5"	**3055 mm** 10'0"	**3055 mm** 10'0"
Reach at max. height and 45° dump angle*	**1110 mm** 3'8"	**1210 mm** 4'0"	**1055 mm** 3'6"	**1155 mm** 3'9"	**1155 mm** 3'9"
Reach at 2130 mm (7') clearance and 45° dump angle	**2615 mm** 8'7"	**2660 mm** 8'9"	**2585 mm** 8'6"	**2630 mm** 8'8"	**2630 mm** 8'8"
Reach with arm horizontal and bucket level	**3425 mm** 11'3"	**3585 mm** 11'9"	**3350 mm** 11'0"	**3505 mm** 11'6"	**3505 mm** 11'6"
Operating height (fully raised)	**5825 mm** 19'1"	**5825 mm** 19'1"	**5745 mm** 18'10"	**5745 mm** 18'10"	**5745 mm** 18'10"
Overall length	**8375 mm** 27'6"	**8530 mm** 28'0"	**8295 mm** 27'3"	**8455 mm** 27'9"	**8455 mm** 27'9"
Loader clearance circle (bucket at carry, outside corner of bucket)	**13440 mm** 44'1"	**13530 mm** 44'5"	**13370 mm** 43'10"	**13485 mm** 44'3"	**13485 mm** 44'3"
Digging depth: 0°	**120 mm** 4.7"	**135 mm** 5.3"	**120 mm** 4.7"	**135 mm** 5.3"	**135 mm** 5.3"
10°	**345 mm** 1'2"	**390 mm** 1'3"	**335 mm** 1'1"	**375 mm** 1'3"	**375 mm** 1'3"
Static tipping load: straight	**13955 kg** 30,765 lb	**14030 kg** 30,930 lb	**13865 kg** 30,565 lb	**13815 kg** 30,455 lb	**13940 kg** 30,730 lb
40° full turn	**12135 kg** 26,750 lb	**12210 kg** 26,920 lb	**12045 kg** 26,555 lb	**11995 kg** 26,445 lb	**12120 kg** 26,720 lb
Breakout force	**180 kN 18400 kgf** 40,565 lb	**195 kN 19900 kgf** 43,870 lb	**193 kN 19700 kgf** 43,430 lb	**195 kN 19900 kgf** 43,870 lb	**209 kN 21300 kgf** 46,960 lb
Operating weight	**18415 kg** 40,600 lb	**18340 kg** 40,430 lb	**18505 kg** 40,795 lb	**18555 kg** 40,905 lb	**18430 kg** 40,630 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, air conditioner 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.

WEIGHT CHANGES

Tires or attachments	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
23.5-25-16PR(L-3)	**0**	0	**0**	0	**0**	0	**2820**	9'3"	**460**	1'6"	**0**	0
26.5-25-16PR(L-3)	**+420**	+925	**+330**	+730	**+290**	+640	**2940**	9'8"	**525**	1'9"	**+65**	+3"
Remove ROPS cab with A/C	**-730**	–1,610	**–690**	–1,520	**–600**	–1,325	**0**	0	**0**	0	**0**	0
Install ROPS canopy	**+430**	+950	**+395**	+870	**+345**	+760	**0**	0	**0**	0	**-30**	-1"
Install additional counterweight	**+325**	+715	**+880**	+1,940	**+735**	+1,620						

STANDARD EQUIPMENT

- 2-spool valve for boom and bucket controls
- Air conditioner
- Alternator, 50 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
- Engine, Komatsu SAA6D125E-3 diesel
- Engine shut-off system, electric
- Floormat
- Front fender
- Lift cylinders and bucket cylinder
- Loader linkage with standard lift arm
- Main monitor panel with EMMS (Equipment Management Monitoring System)
- PPC fingertip control, two levers
- Radiator mask, lattice type
- Rearview mirror
- Rear window washer and wiper
- ROPS/FOPS cab
- Seat belt
- Seat, suspension type with reclining
- Service brakes, wet disc type
- Starting motor, **7.5 kW**/24 V
- Steering wheel, tiltable
- Sun visor
- Swing-out aftercooler and oil cooler
- Tires (23.5-25-16PR, L3 tubeless) and rims
- Transmission, 4 forward and 4 reverse
- Water separator

OPTIONAL EQUIPMENT

- 3-spool valve
- Additional counterweight
- Additional fuel filter
- AM/FM radio
- 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
- High lift arm
- Hydraulic-driven fan with reverse rotation
- KOMTRAX
- Limited slip differential (F&R)
- Log grapple
- Ordinary spare parts
- Power train guard
- Remote grease (lift arm pivot pin)
- ROPS/FOPS canopy
- Tool kit
- Vandalism protection kit
- Vinyl suspension seat

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