

# WA320-8 Wheel loader Tier 4 Final engine



Photos in this brochure may include optional equipment

Net horsepower 165 HP @ 2,100 rpm (123 kW @ 2,100 rpm) Operating weight 34,128-34,987 lbs. (15,480-15,870 kg) Bucket capacity 3.0-4.2 yd<sup>3</sup> (2.3-3.2 m<sup>3</sup>)









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# **Bucket capacity**

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## High production with low fuel consumption

Proven, fourth-generation hydrostatic transmission:

 Quick acceleration Dynamic braking

# Komatsu SmartLoader Logic

- Variable speed traction control

### helps reduce fuel consumption without decreasing production.

- Low range creeping mode
- HST coasting mode



A powerful Komatsu SAA6D107E-3 engine provides a net output of 165 HP (123 kW) with up to 3% improved fuel consumption. This engine is EPA Tier 4 Final emissions certified.

Variable geometry turbocharger (VGT) is hydraulically actuated to provide optimum air flow under all speed and load conditions. This Tier 4 Final version has improved performance.

Komatsu Diesel Particulate Filter (KDPF) and selective catalytic reduction (SCR) systems reduce particulate matter and nitrogen oxides while providing automatic regeneration that does not interfere with daily operation.

#### Ample cooling capacity

· Auto-reversing fan is standard

Wider core coolers

#### Fluid neutral or better

Combined fuel and diesel exhaust fluid (DEF) consumption is equal to or less than the WA320-7 fuel consumption.

**Spacious cab** provides the operator with improved comfort and visibility.

#### New high-resolution monitor panel:

- · Enhanced and intuitive onboard diagnostics
- Integrated with Komtrax Level 5
- Integrated with Komatsu Tier 4 Final technology

#### Rearview monitoring system is standard.

New high capacity air suspension seat with heat is standard.

#### **Energy saving guidance:**

- Six operator guidance messages
- Enhanced ecology gauge

Komatsu Auto Idle Shutdown helps reduce idle time and operating costs.

Remote boom positioner can set kickout.

Versatile parallel Z-bar (PZ) linkage for parallel lift.

Variable displacement piston pumps with closed-center load sensing system (CLSS) help reduce fuel consumption.

Komtrax equipped machines send location, SMR and operation maps to a secure website or smartphone via wireless technology. Machines also relay error codes, cautions, maintenance items and fuel and DEF levels.

**Operator identification system** tracks machine operation for up to 100 operators.



All comparisons are made with respect to the prior Komatsu model unless otherwise specifically stated.

# **Performance features**

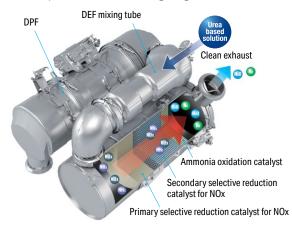
## Komatsu new engine technologies

### **New Tier 4 Final engine**

The Komatsu SAA6D107E-3 engine is EPA Tier 4 Final emissions certified, promotes reduced fuel consumption and provides exceptional performance. Based on Komatsu proprietary technologies developed over many years, this diesel engine reduces nitrogen oxides by more than 80% compared to Tier 4 Interim levels.

## New engine technologies Heavy-duty after treatment system

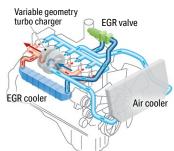
This new system combines a Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the precise amount of Diesel Exhaust Fluid (DEF) to break down nitrogen oxide into non-toxic water vapor (H2O) and nitrogen gas (N2).

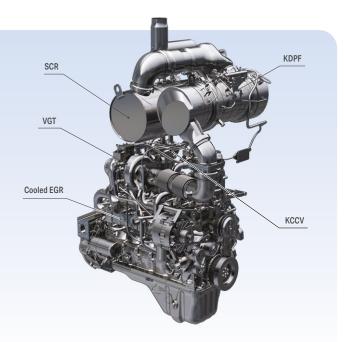


# Heavy-duty cooled exhaust gas recirculation (EGR) system

Reduce nitrogen oxide emissions and enhance fuel efficiency with the heavy-duty cooled exhaust gas recirculation (EGR) system. This system recirculates a portion of exhaust gas into the air intake and lowers

combustion temperatures to help reduce thermal stress and protect the engine. Combining this system with SGR technology allows for lower EGR gas flow while still meeting Tier 4 Final emission standards.



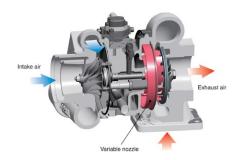


## Advanced electronic control system

Manage your engine parameters more effectively with an improved electronic control system. Fine-tune your airflow rate, EGR gas flow rate, fuel injection parameters and aftertreatment function for an efficient and optimized performance. Get enhanced diagnostics through the monitor panel and track your maintenance information via Komtrax.

## Variable geometry turbocharger (VGT) system

Designed to improve engine performance and efficiency, the VGT features proven hydraulic technology for precise, responsive control in a wide range of conditions. The VGT also provides precise exhaust temperature control for efficient KDPF regeneration. The Tier 4 Final version has a smaller impeller to promote improved performance.



# Heavy-duty, high-pressure common rail fuel injection system

This system is designed to deliver fuel precisely and efficiently to the engine's combustion chambers at extremely high pressures to help decrease particulate matter (PM) emissions and nitrogen oxide. With efficient combustion, this system also helps promote

ECU

a reduction in fuel consumption.

## Komatsu SmartLoader Logic

Engineered to optimize your machine's performance,

Komatsu SmartLoader Logic automatically

adjusts your engine torque to match the application. Get more torque for higher digging in V-shape loading and less torque when driving with an empty bucket. This system functions automatically for a smooth operation to help promote minimized fuel consumption and enhanced productivity.

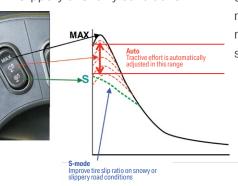
## Hydrostatic transmission (HST)

Easily adapt to a variety of mining tasks with this wheel loader's HST. Getting precise speed and directional control enables the operator to handle different materials effectively and navigate tight, confined areas. Auto-shifting provides a smooth operation and allows operators to work efficiently and productively.

## Variable traction control system

Maneuver confidently through challenging terrain with this wheel loader's variable traction control system. S-mode helps reduce tire spin in slippery or snowy conditions.

Auto-mode automatically optimizes the tractive effort for various working conditions. Max traction provides 100% tractive effort.



Suppl

## New HST transmission coasting mode

Get precise control over the wheel loader's speed and power with the ability to simulate the operation of a torque converter-style transmission. The operator can choose between three selectable settings (default, medium and soft) to help optimize performance.

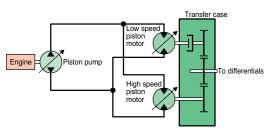
## **Creep mode**

Creep mode limits the travel speed in the first speed range while still allowing for full hydraulic flow.



## Closed-center load sensing system (CLSS)

Get optimized machine performance and enhanced fuel efficiency with a one-pump, two-motor system that utilizes a CLSS pump designed to help minimize hydraulic loss.



## Komatsu Auto Idle Shutdown

Designed to enhance the efficiency of your wheel loader, the Komatsu Auto Idle Shutdown turns off the engine after a specified period of inactivity. Less idling means fewer emissions, which helps conserve natural resources and contributes to a cleaner and more sustainable working environment.



# **Operator environment**



### New operator seat

Work comfortably and stay productive with a heated, air-suspension seat designed to

provide support on rough roads and dampen machine vibrations. The angle of the armrest is fully adjustable for optimum operator comfort. A secondary forwardneutral-reverse switch is incorporated into the standard Multi-Function Monolever.



### Tiltable/telescopic steering wheel

Adjust the steering wheel to a position that

best suits your ergonomic needs. The two-spoke tilt/telescope steering wheel allows operators to optimize their view of the work area, the bucket or attachment and their surroundings.



**Low-noise design** Operator's ear noise level: 68 dbA Dynamic noise level (outside): 105 dbA

Minimize operator fatigue and help promote operator alertness and productivity with a spacious ROPS/FOPS cab that features Komatsu's unique viscous mounts. The low-noise engine, hydraulic drive fan and hydraulic pumps are mounted with rubber cushions to help provide a quiet, low-vibration, comfortable operating environment.



### Increased cab storage area

The WA320-8 cab features a storage box on each side of the cab to allow the operator to store items such as a beverage or lunch.





### Standard rearview monitoring system

Promote safe operation with a clear view of the area behind the wheel loader from a dedicated full-color monitor on the right side of the cab. Always have the monitor on or only when the loader is in reverse. Guidelines provide the operator with visual cues for the width of the loader.



# Auxiliary input (MP3 jack) and 12V outlets

Stay connected with a conveniently located auxiliary input (MP3 jack) and two 12-volt outlets on the cab's rear wall.





### Engine shutdown secondary switch

In case of an emergency, operators have a quick and accessible secondary shutdown switch when accessing the key switch is not possible.





### **Multifunction audio**

Stay connected with an AM/FM radio and Bluetooth wireless technology with microphone for hands-free operation.

# **Working environment**



### **Multi-Function Monolever**

Get enhanced hydraulic control of your third spool attachments and streamline your tasks with a single lever. The Multi-Function Monolever with electronic pilot control includes a forward-neutral-reverse switch for quick and easy travel. Set attachments to continual or proportional control via the monitor panel, allowing the operator to manage the boom, bucket and attachment with one hand.



### **Remote boom positioner**

Operators can stay out of harm's way by conveniently setting the upper boom limit from the cab.

### Remote boom positioner



Attachment selector switch

### **Attachment selector switch**

Easily switch between different attachments such as buckets, forks or grapples to handle various materials and tasks. Coupler-equipped machines that use buckets and forks require a different flat level setting when switching between attachments. The attachment selector switch informs the loader which flat level to use.

### **Easy access**

Easily enter and exit the cab on an inclined ladder with wide steps and well-placed handholds. The door latch is accessible from the ground level.

# Electronically controlled suspension system (ECSS)

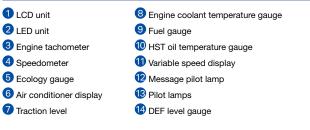
Get a smooth, comfortable ride during your load and carry operations with this wheel loader's ECSS. An accumulator absorbs the shock in the boom arm to help stabilize the machine, promoting reduced operator fatigue and mitigating material spillage. Ride control is speed-sensitive, and you can adjust the activation speed in the monitor panel.

# Information and communication technology

### New high-resolution LCD monitor panel

Stay informed of the machine's settings and conditions with a 7-inch color LCD monitor panel that displays operational information, ecology guidance and maintenance records. Information such as traction mode, coolant temp, oil levels and fuel levels are easy to read.

#### Machine monitor



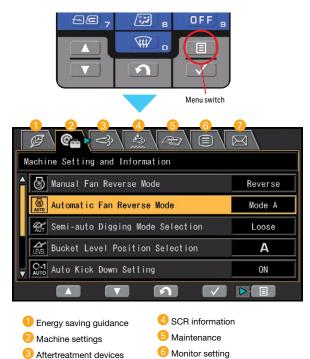
#### Switch panel

1 Air conditioner switches / Numeral key pad 2 Function switches

## Visual user menu

regeneration

Navigate the user menu quickly from the switch panel with easy-to-understand, intuitive icons for easier machine operation.



7 Mail check



### **Operator identification function**

Set preferences and performance settings for individual operators with operator identification (ID) codes. Identify areas for efficiency enhancement and

performance optimization by tracking and managing machine data through Komtrax by job or machine.



## Monitor panel with troubleshooting function

Quickly identify issues and take appropriate action with feedback from a centrally arranged monitor panel featuring a troubleshooting function. The monitor simplifies start-up inspection and warns the operator with a lamp and buzzer if any abnormalities occur. There are four levels of warnings, which the operator must acknowledge and clear. There are

also indications for oil and filter replacement times.



# Maintenance features



### Side-opening gull-wing engine doors

Simplify maintenance with large, gull-wing engine doors that open and close easily with gas-assisted struts. Quick access to the engine, components and service

points helps reduce downtime and increase productivity. Large steps on each side of the frame also enhance accessibility.



# Swing-out cooling fan and wide core radiator

The cooling fan swings out for easier cleaning. The coolers feature wide-spaced cooling fins to reduce clogging.



### Auto-reversing fan

Maintain optimal operating temperatures with a hydraulically driven engine cooling fan that can be set to reverse automatically during operation. Operators

can control the fan reverse mode and timing through the monitor.

	$\boxtimes \setminus$
Machine Setting and Information	
🛞 Manual Fan Reverse Mode	Reverse
Automatic Fan Reverse Mode	Mode A
😭 Semi-auto Digging Mode Selection	Loose
Bucket Level Position Selection	Α
Auto Kick Down Setting	ON

## Diesel emission fluid (DEF) tank

Easily access the DEF tank behind the right-hand side ladder. An external sight gauge helps prevent overflow and spillage while refilling.

### **Battery disconnect switch**

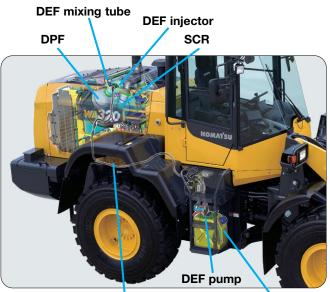
A standard battery disconnect switch allows a technician to disconnect the power supply to lock out before servicing the machine. The switch is located on the right side of the machine.





### **Engine compartment**

The design of the WA320-8 engine compartment makes it easy to service. Access to filters, dipsticks and oil fill locations are at the ground level to simplify maintenance.



DEF tank



Engine oil dipstick Fuel filter Engine oil fill

### **Rear full fenders (optional)**

Get easy access to the engine compartment and simplify maintenance with rear fenders that open upward

and use gas-assist struts, requiring low lift force. Easyto-open rear fenders swing up with gull-wing doors to give the technician convenient access to the engine compartment.



### **Cabin air filter**

Replace the inside and outside cabin air filters quickly and conveniently without the need for tools. The outside filter is located behind a lockable door for security.



Maintenance time caution lamp display

When the time before required maintenance dips below 30 hours\*, the maintenance time monitor appears. Pressing the menu switch displays the maintenance screen.

\*The setting can be changed within the range of 10 and 200 hours





Maintenance screen

### Supports DEF level and refill timing

The DEF level gauge is displayed continuously on the monitor panel. In addition, when the refill timing is reached, the DEF-low-level icon appears to alert the operator.





DEF level gauge

DEF low level guidance

# Komatsu helps you bring it all together

# Get the most out of your fleet with My Komatsu

We've designed a portal that makes it easy to collect, visualize and monitor data for both Komatsu machines and other OEM machines. My Komatsu also gives you one easy source for accessing manuals and purchasing parts for your machines.

- Quickly collect, view and manage intuitive data displays in one location
- Help keep costs under control
- Benchmark machine performance and track fuel consumption
- Monitor for theft and unauthorized use
- Receive timely maintenance alerts



My Komatsu, our comprehensive portal, analyzes telematics data from your on-machine technology — Komtrax and Komtrax Plus, or from other OEMs — and displays it on easy-to-read dashboards. Now you can get the powerful analytics you need to manage your costs and enhance your fleet's efficiency without a complicated process or expensive third-party solutions.



Data Telematics data is generated by on-machine technology.

Storage

Telematics data flows into data storage. ISO 15143-3 (AEMP 2.0) facilitates the extraction and raw data to your choice of databases.



Analytics

My Komatsu connects telematics data from Komatsu and non-Komatsu equipment and creates powerful analytics dashboard views.

mykomatsu.komatsu

## Connect your machines to Smart Construction to optimize your job sites

Your projects depend on robust data that is easily shared, replicated, updated and — most important of all — correct.



Take a step toward a digital transformation of your job sites with Komatsu's suite of Smart Construction solutions, where advanced automation and integrated technologies intersect to help you:

- Track costs of labor, machines and materials
- Receive real-time insights straight from the field
- Enhance workflow with fully integrated data
- Visualize your data for actionable results
- Quickly map your job site
- Attract and retain talent



Not sure where to begin? Komatsu-certified solution experts are available on the phone, online or at your job site to help you navigate and thrive along your digitalization journey.

### komatsu.com/smart-construction

# Komatsu maintenance and repair programs

Get the service and repairs you need your way. Komatsu offers a tiered maintenance and repair program that simplifies the upkeep of your machine to help control operating costs and get the most from your equipment. Manage your active coverage programs through the My Komatsu customer interface and take advantage of attractive financing options.

- Solutions that fit your needs and ease your mind
- Fixed maintenance and repair costs for the life of the contract
- National coverage



### Komatsu Care Complimentary

Complimentary maintenance

Our complimentary scheduled maintenance program for the first three years or 2,000 hours, whichever occurs first.

### Komatsu Care Plus

Extended maintenance

A continuation of the Komatsu Care program. Along with regularly scheduled maintenance and national distributor coverage, you get a variety of added benefits.

### Komatsu Care Plus II

Extended maintenance and repair

Everything in the Komatsu Care Plus program bundled with comprehensive repair coverage for qualifying repairs.

### Komatsu Care Plus III

Extended maintenance, repair and consumables

A comprehensive program that simplifies your equipment's total cost of ownership with a fixed cost per hour for qualifying repairs and replacements.

#### Komatsu Care Advantage Warranty Extended warranty

Extended warranty

Protect your equipment in the event a covered component fails due to a defect in material or workmanship. Repairs are performed by Komatsutrained experts using Komatsu genuine parts.

### **Komatsu Financial**

Financial services built for your business success.

### komatsu.com/financing

### **Komatsu Genuine Parts**

Engineered to help extend the life of your Komatsu machine. Now available on the My Komatsu parts store.

komatsu.com/parts

### Komatsu training

Comprehensive training support — virtually, at our facility or where most convenient.

### komatsu.com/training



# **Specifications**

### Engine

Model	Komatsu SAA6D107E-3*	
Туре	Water-cooled, 4-cycl	
Aspiration	Variable geometry turbocharge aftercooled, cooled EG	
Number of cylinders		6
Bore	4.21"	107 mm
Stroke	4.88"	124 mm
Piston displacement	408 in <sup>3</sup>	6.69 L
Horsepower		
SAE J1995 (gross)	170 HP	127 kW
ISO 9249/SAE J1349 (net)	165 HP	123 kW
Rated rpm		1,850 rpm
Max power - ISO 14396	169 HP (126 kW) @ 1,900 rpi	
Fan drive method for radiator cooling		Hydraulic
Fuel system	D	irect injection
Lubrication system		
Method	Gear pump, for	ce-lubrication
Filter		Full-flow type
Air cleaner	Dry type with double dust evacuator, plus	
*ILLS_EPA Tier 4 Final emission certified		

\*U.S. EPA Tier 4 Final emission certified

#### Transmission

Туре		Hydro		two motors) with beed range select
Speed	Forward		Reverse	
1st	0.6-8.1 mph	1.0-13.0 km/h	0.6-8.1 mph	1.0-13.0 km/h
2nd	8.1 mph	13.0 km/h	8.1 mph	13.0 km/h
3rd	11.6 mph	18.7 km/h	11.6 mph	18.7 km/h
4th	23.6 mph	38.0 km/h	23.6 mph	38.0 km/h
	11 00 F DOF			

Measured with 20.5-R25 tires

#### **Axles and final drives**

Drive system	Four-wheel drive
Front	Fixed, semi-floating
Rear	Center-pin support, semi floating, 24-degree 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 brakes	Wet, multi-disc brake on transfer output shaft
Secondary brakes	Parking brake is commonly used

### Steering system

Туре	Articulated type, fully-hydraulic power steering		
Steering angle	38.5-degree each direction (40-degree to max end stop)		
Minimum turning radius at the center of outside tire	17'7" 5,380 m	ım	

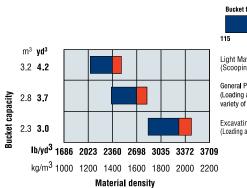
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TypeDouble-acting, piston typeNumber of cylinders - bore x strokeLift cylinder (2)4.7 x 28.7" (120 x 729 mm)Bucket cylinder (1)5.9 x 22" (150 x 558 mm)Control valveTwo-spool typeControl positionsExampleBoomRaise, hold, lower, and floatBucketTilt-back, hold, and dumpHydraulic cycle time (rated load in bucket)6.3 secDump1.9 sec	Relief valve setting	3,000 psi (20.6 MPa 210 kgf/cm²)	
Number of cylinders - bore x stroke     Lift cylinder (2)   4.7 x 28.7" (120 x 729 mm)     Bucket cylinder (1)   5.9 x 22" (150 x 558 mm)     Control valve   Two-spool type     Control positions   Boom     Bucket   Tilt-back, hold, lower, and float     Bucket   Tilt-back, hold, and dump     Hydraulic cycle time (rated load in bucket)   6.3 sec     Dump   1.9 sec	Hydraulic cylinders		
Lift cylinder (2)4.7 x 28.7" (120 x 729 mm)Bucket cylinder (1)5.9 x 22" (150 x 558 mm)Control valveTwo-spool typeControl positionsBoomBoomRaise, hold, lower, and floatBucketTilt-back, hold, and dumpHydraulic cycle time (rated load in bucket)6.3 secDump1.9 sec	Туре	Double-acting, piston type	
Bucket cylinder (1)   5.9 x 22" (150 x 558 mm)     Control valve   Two-spool type     Control positions   Boom     Boom   Raise, hold, lower, and float     Bucket   Tilt-back, hold, and dump     Hydraulic cycle time (rated load in bucket)   Raise     Raise   6.3 sec     Dump   1.9 sec	Number of cylinders - bore x stroke		
Control value Two-spool type   Control positions Boom   Boom Raise, hold, lower, and float   Bucket Tilt-back, hold, and dump   Hydraulic cycle time (rated load in bucket) Raise   Raise 6.3 sec   Dump 1.9 sec	Lift cylinder (2)	4.7 x 28.7" (120 x 729 mm)	
Control positions     Boom   Raise, hold, lower, and float     Bucket   Tilt-back, hold, and dump     Hydraulic cycle time (rated load in bucket)   Raise     Raise   6.3 sec     Dump   1.9 sec	Bucket cylinder (1)	5.9 x 22" (150 x 558 mm)	
BoomRaise, hold, lower, and floatBucketTilt-back, hold, and dumpHydraulic cycle time (rated load in bucket)Raise6.3 secDump1.9 sec	Control valve	Two-spool type	
Bucket Tilt-back, hold, and dump   Hydraulic cycle time (rated load in bucket) Raise   Raise 6.3 sec   Dump 1.9 sec	Control positions		
Hydraulic cycle time (rated load in bucket)   Raise   Dump   1.9 sec	Boom	Raise, hold, lower, and float	
Raise     6.3 sec       Dump     1.9 sec	Bucket	Tilt-back, hold, and dump	
Dump     1.9 sec	Hydraulic cycle time (rated load in bucket)		
	Raise	6.3 sec	
Lower (empty) 3.5 sec	Dump	1.9 sec	
	Lower (empty)	3.5 sec	

#### **Service refill capacities**

Cooling system	9.3 gal	35.1 L
Fueltank	64.7 gal	245 L
Engine	6.1 gal	23 L
Hydraulic system	24.3 gal	92 L
Axle front	7.1 gal	27 L
Axle rear	7.5 gal	28.5 L
Transfer case	1.5 gal	5.8 L
DEFtank	3.7 gal	14 L

#### **Bucket selection guide**



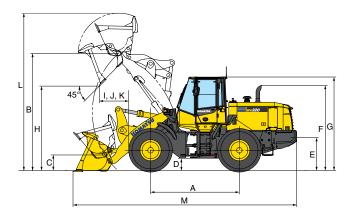


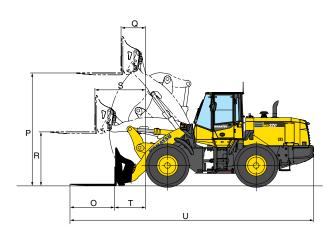
Light Material Bucket with BOCE (Scooping and loading of light material)

General Purpose Bucket with BOCE (Loading and excavating of soil, sand and a variety of other commonly handled material)

Executing Rucket with POCE

Excavating Bucket with BOCE (Loading and excavating of crushed or blasted rock)





Tread		6'9" (2,050 mm)
Width over tires		8'6" (2,590 mm)
Wheelbase		9'11" (3,030 mm)
Hinge pin height,	Standard boom	13'2" (4,005 mm)
max. height	High lift boom	14'11" (4,545 mm)

C Hinge pin height,	Standard boom	1'9" (545 mm)
carry position	High-lift boom	2'4" (705 mm)
D Ground clearance		1′5″ (425 mm)
E Hitch height		3'7" (1,085 mm)
F Overall height, top of the stack	k	10'0" (3,040 mm)
G Overall height, ROPS cab		10'6" (3,200 mm)

Measured with 20.5-R25(L3) tires, ROPS/FOPS cab

#### **Bucket**

AB

Ducket						
		General purpose bucket w/pin on	Light material bucket w/pin on	Excavating bucket w/pin on	General purpose bucket w/ quick coupler	General purpose bucket w/ pin on**
		B.O.C.E.	B.O.C.E.	B.O.C.E.	B.O.C.E.	B.O.C.E.
Bucket capacity: heaped		3.7 yd <sup>3</sup> (2.8 m <sup>3</sup> )	4.2 yd3 (3.2 m3)	3.0 yd3 (2.3 m3)	3.27 yd <sup>3</sup> (2.5 m <sup>3</sup> )	3.0 yd3 (2.3 m3)
struck		3.1 yd <sup>3</sup> (2.4 m <sup>3</sup> )	3.7 yd <sup>3</sup> (2.8 m <sup>3</sup> )	2.5 yd <sup>3</sup> (1.9 m <sup>3</sup> )	2.75 yd <sup>3</sup> (2.1 m <sup>3</sup> )	2.5 yd <sup>3</sup> (1.9 m <sup>3</sup> )
Bucket width		9'0" (2,740 mm)	9'0" (2,740 mm)	9'0" (2,740 mm)	9'0" (2,740 mm)	9'0" (2,740 mm)
Bucket weight		2,932 lbs. (1,330 kg)	3,186 lbs. (1,445 kg)	3,020 lbs. (1,370 kg)	2,690 lbs. (1,220 kg)	2,767 lbs. (1,255 kg)
H Dumping clearance, max. height and	15-degree dump angle*	9'5" (2,880 mm)	9'0" (2,745 mm)	9'9" (2,965 mm)	9'3" (2,825 mm)	11'7" (3,525 mm)
I Reach at max. height and 45-degree d	ump angle*	3'3" (1,000 mm)	3'8" (1,110 mm)	2'9" (840 mm)	3'11" (1,200 mm)	3'3" (980 mm)
J Reach at 2130 mm 7' clearance and 4	5-degree dump angle*	5'3" (1,595 mm)	5'4" (1,620 mm)	5'1" (1,540 mm)	5'11" (1,805 mm)	6'9" (2,060 mm)
K Reach with arm horizontal and bucket	level*	8'2" (2,500 mm)	8'9" (2,665 mm)	7'9" (2,350 mm)	8'9" (2,680 mm)	9'3" (2,825 mm)
L Operating height (fully raised)		17'8" (5,375 mm)	17'11" (5,465 mm)	17'0" (5,175 mm)	17'7" (5,365 mm)	19'2" (5,845 mm)
M Overall length (bucket on ground)		25'3" (7,690 mm)	25'9" (7,855 mm)	24'9" (7,540 mm)	25'6" (7,780 mm)	26'8" (8,125 mm)
Loader clearance circle (bucket at carry	, outside corner of bucket)	41'5" (12,620 mm)	41'9" (12,715 mm)	41'0" (12,500 mm)	41'5" (12,625 mm)	42'8" (13,010 mm)
Digging depth: 0 degrees		6.5" (165 mm)	6.5" (165 mm)	6.5" (165 mm)	3" (65 mm)	11" (270 mm)
10 degrees		1'3" (375 mm)	1'4" (410 mm)	1'2" (350 mm)	1'0" (310 mm)	1'6" (460 mm)
Static tipping load: straight		25,353 lbs. (11,500 kg)	25,155 lbs. (11,410 kg)	25,320 lbs. (11,485 kg)	24,956 lb (11,320 kg)	20,227 lbs. (9,175 kg)
40-degree full turn		21,561 lbs. (9,780 kg)	21,319 lbs. (9,670 kg)	21,484 lbs. (9,745 kg)	21,120 lb (9,580 kg)	16,998 lbs. (7,710 kg)
Breakout force		36,310 lbs. 162 kN	31,151 lb s.139 kN	41,601 lbs. 185 kN	32,915 lb 146 kN	44,287 lbs. 197 kN
		(16,470 kgf)	(14,130 kgf)	(18,870 kgf)	(14,930 kgf)	(20,088 kgf)
Operating weight		34,128 lbs. (15,480 kg)	34,392 lbs. (15,600 kg)	34,216 lbs. (15,520 kg)	34,899 lb (15,830 kg)	34,568 lbs. (15,680 kg)

\*At the end of tooth or B.O.C.E. \*\* Bucket shown for comparison purposes. Please contact local Komatsu Distributor for availability. 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 tire size and attachments.

Fo	ork		Fork with quick coupler
0	Fork tine length		5'0" (1,524 mm)
Ρ	Ground to top of tine at maximum lift	t	12'7" (3,855 mm)
Q	Reach at maximum lift		2'9" (840 mm)
R	Ground to top of tine - boom and tine	elevel	6'0" (1,845mm)
S	Reach - boom and tine level		5'8" (1,730 mm)
Т	Reach - tine level on ground		3'6" (1,066 mm)
U	Overall length - tine level on ground		27'6" (8,375 mm)
	Static tipping load fork level,	straight boom level	18,850 lbs. (8,550 kg)
	tine center	40-degree full turn boom	16,402 lbs. (7,440 kg)
_	Operating weight		33,378 lbs. (15,140 kg)

Operating load per SAE J1197 (Feb. 1991), 50% of static tipping load.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab and operator. Machine stability and operating weight affected by tire size and attachments.

# Weight changes

Time of other barrents		Change in		Change in tipping load				Width over tires		Ground clearance		Change in	
Tires or attachments	operating weight		Straight		Full turn						vertical dimensions		
	kg	lbs.	kg	lbs.	kg	lbs.	mm	ft. in	mm	ft. in	mm	ft. in	
20.5-25-12PR (L2)	-165	-364	-105	-231	-95	-209	2585	8'6"	425	1'5"	0	0	
Remove additional counterweight	-250	-551	-440	-970	-380	-838	0	0	0	0	0	0	

# **Standard and optional equipment**

standard ullet optional ullet

Two-spool valve for boom and bucket control	٠
Alternator, 24V/90 A	•
Automatic hydraulic-driven fan with automatic reverse rotation	٠
Back-up alarm	٠
Batteries (2) 12V/92 Ah, 680 CCA	•
Battery disconnect	٠
Boom kick-out, in-cab adjustable	٠
Bucket positioner	٠
Color, rearview camera and monitor	٠
Counterweight, standard and additional	•
Electronically controlled suspension system (ECSS)	•
Engine, Komatsu SAA6D107E-3 diesel	•
Engine shut-off system, electric	•
Equipment Management Monitoring System (EMMS) Lights (central warning, brake oil pressure, engine oil pressure, parking brake, cooling fan reverse, KDPF restriction, seat belt caution, Komtrax message) Gauges (DEF level, engine water temperature, ecology, fuel level, HST oil temperature, speedometer/tachometer), variable speed display	•
Front fenders	٠
Fuel pre-filter with water separator	٠
Horn, electric	٠
Hydrostatic transmission	٠
Komatsu SmartLoader Logic	•
Komatsu Auto Idle Shutdown	٠
Komtrax Level 5	•
Lift cylinders and bucket cylinder	•
LED Lights Back-up light Stop and tail light Turn signal lamps, front (2) and rear (2) with hazard switch Working lights, front cab mount (2) Working lights, front fender mount (2) Working lights, rear grill mount (2)	٠
Loader linkage with standard lift arm	•
Multi-Function Monolever (MFML)	•
Parking brake, electric	•
Radiator, wider core	•
Radiator mask, swing up	•
· • • •	

Rims for 20.5R25 tires	•
ROPS/FOPS cab, level 2	•
DC 12V electrical outlets (2)	•
Ashtray	•
Auto air conditioner	•
Cigarette lighter, 24V	•
Color LCD/TFT multi-monitor	•
Cup holder	•
Floor mat	•
Operator seat, reclining, air suspension type, heated	•
Bluetooth AM/FM radio with microphone and auxiliary input jack	•
Rear defroster, electric	•
Seatbelt, two-point retractable, 3" (76 mm) width	•
Space for lunch box	•
Steering wheel, tilt and telescopic	•
Sun visor, front window	•
Windshield washer and wiper, front with intermittent	•
Windshield washer and wiper, rear	•
Service brakes, wet disc type	•
Starting motor, 5,500 W (5.5 kW)	•
Transmission speed ranges, four forward and four reverse	•
Vandalism protection kit, padlocks for battery box (2)	•
Parking brake, electric	•
Radiator, wider core	•
Radiator mask, swing up	•
Rear view mirrors, outside (2) inside (2)	•
Rims for 20.5-R25 tires	•
Auxiliary steering (SAE)	0
Cutting edge (bolt-on type)	0
Engine oil and coolant heater	0
Guarding package	0
Limited slip differential (F&R)	0
Lubesystem	0
Quick coupler	0
Rear full fenders	0
Three-spool valve (will utilize integrated proportional control switch included in the multi-function mono-lever) and piping	0

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