

KOMATSU®

HB215LC-3

Tier 4 Final Engine

Hybrid

HYBRID HYDRAULIC EXCAVATOR



Photos may include optional equipment.

NET HORSEPOWER

148 HP @ 2000 rpm
110 kW @ 2000 rpm

OPERATING WEIGHT

51,127–51,745 lb
23191–23471 kg

BUCKET CAPACITY

0.66–1.57 yd³
0.50–1.20 m³

HB215LC

WALK-AROUND

HB215LC-3



Photos may include optional equipment.

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110 kW @ 2000 rpm

OPERATING WEIGHT

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0.50–1.20 m³



HIGH PRODUCTION & LOW FUEL CONSUMPTION

Hybrid excavator technology provides fast and responsive swing. When swinging, all available hydraulic power is sent to boom, arm and bucket for improved cycle time and high production.

The Hybrid energy conservation system combined with Tier 4 Final technology provides up to 20% fuel savings compared to the non-hybrid excavator design.

**7 year/10,000 hr.
Hybrid Component
Warranty**



A powerful **Komatsu SAA4D107E-3 engine** provides a net output of 110 kW **148 HP**. This engine is EPA Tier 4 Final emissions certified.

Temperature controlled fan clutch helps improve fuel efficiency and lower sound levels.

An **ultra low idle speed** and Komatsu hybrid technology work together to help reduce fuel consumption up to 20%.

DEF (Diesel Exhaust Fluid) tank and pump are separated and located for easy service access. DEF system components are heated for operation in cold temperatures.

Variable Geometry Turbocharger (VGT) uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

Komatsu Diesel Oxidation Catalyst (KDOC) and Selective Catalytic Reduction (SCR) reduce particulate matter and NOx without the need for active or manual regeneration.

Large displacement high efficiency pumps help provide high flow output at lower engine speed, improving efficiency.

Electrically Driven Swing Motor powered by a Komatsu Ultra Capacitor provides high swing power and speed. Oil normally used for swing is sent to the boom, arm, and bucket functions.

Motor-generator charges the Komatsu ultra capacitor and provides electric assist to the engine for on-demand power.

Six working modes match engine speed, pump delivery and system pressure to a wide variety of applications.

Komatsu's Closed Center Load Sensing (CLSS) hydraulic system provides quick response and smooth operation to maximize productivity.

KOMTRAX®

The KOMTRAX® telematics system is standard on Komatsu equipment with no subscription-fees throughout the life of the machine. Using the latest wireless technology, KOMTRAX® transmits valuable information such as location, utilization, and maintenance records to a PC or smartphone app. Custom machine reports are provided for identifying machine efficiency and operating trends. KOMTRAX® also provides advanced machine troubleshooting capabilities by continuously monitoring machine health.

Large LCD color monitor:

- 7" high resolution display
- Provides "Ecology Guidance" for fuel efficient operation

Rearview monitoring system (standard) displays a video image of the area behind the machine, together with machine gauges on a large LCD monitor.

Enhanced working environment

- High-back, heated, air suspension operator seat with adjustable armrests
- Climate control system automatically adjusts heating and cooling for comfortable operator environment.
- Integrated ROPS cab design (ISO 12117-2)
- Cab meets ISO Level 1 Operator Protective Guard (OPG) top guard (ISO 10262)
- Standard pattern change valve to switch from ISO to BH control pattern
- Aux jack and two 12V power outlets

Komatsu designed and manufactured components

Handrails (standard) located on the machine upper structure provide a convenient work area in front of the engine.

Battery disconnect switch allows a technician to disconnect the power supply before servicing the machine.

Komatsu Auto Idle and Auto Idle Shutdown systems help reduce nonproductive engine idle time and reduce operating costs.

Operator Identification System scan track key machine operation and application information for up to 100 individual ID codes and provide information through KOMTRAX®.

HYBRID TECHNOLOGY

Working together, the leading technology Komatsu Hybrid System, Tier 4 Final engine design, and an integrated complete vehicle control system notably reduce fuel consumption.

Fuel consumption

Reduced by up to **25% / 20% / 7%**

(vs PC210LC-10) (vs PC210LC-11) (vs HB215LC-2)

Based on typical work pattern collected via KOMTRAX.



Enhanced Productivity (North America)

The HB215LC-3's enhanced P mode provides improved performance and productivity.

Improved productivity Compared to HB215LC-1 in P mode

Up to **8%** increase

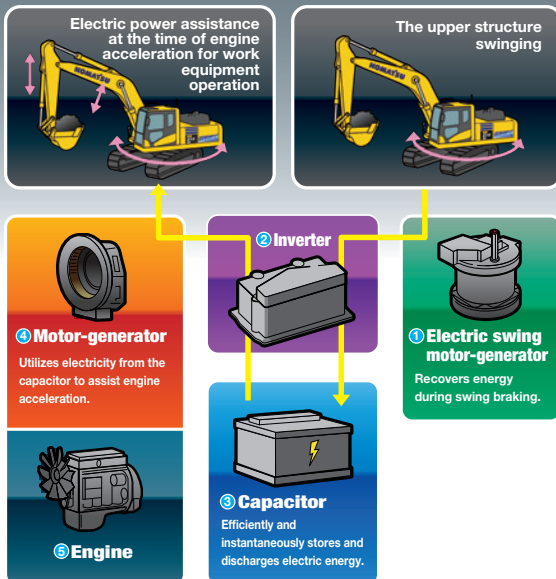
90 degree swing truck loading

HB215LC-3

KOMATSU HYBRID SYSTEM

Reliable and Durable Hybrid Components Developed and Manufactured by Komatsu

In Komatsu's unique hybrid system, the electric swing motor-generator captures and regenerates energy as the upper structure slows down and converts it into electric energy. The regenerated energy is stored in the capacitor and used by the motor-generator to assist the engine when it needs to accelerate. The hybrid system reduces fuel consumption significantly. Most components of the system are developed and manufactured by Komatsu.

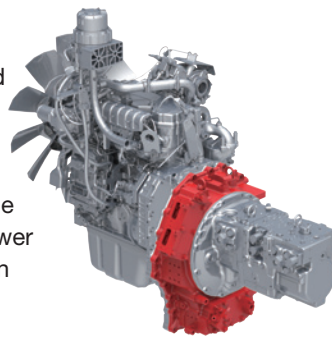


Ultra Capacitor Assembly

The ultra-capacitor assembly includes an inverter that switches the AC electricity from the generator motor and swing motor into DC electricity for storage in the capacitor. Since capacitors require migration of electrons and ions for charging and discharging, they can transfer power much faster than batteries, which use chemical reactions to produce electricity. The industrial quality designed inverter and capacitor provide long service life, and require no periodic maintenance.

Motor-generator

A motor-generator is positioned between the engine and hydraulic pumps to assist in rapid engine response from ultra low idle when required. The generator produces electric power and charges the capacitor when required.



Electric swing motor-generator

An electric swing motor-generator recovers energy during swing braking. The motor-generator also accelerates the swing of the upper structure more efficiently than a conventional hydraulic motor and provides excellent swing performance. Dedicated lubrication and cooling systems are used for reliability and durability.



Easy-to-understand Hybrid Operation Monitor Screen

Hybrid system temperature gauge

The hybrid system temperature gauge is displayed on the screen. This allows the operator to understand the severity of the load on the hybrid system at a glance.

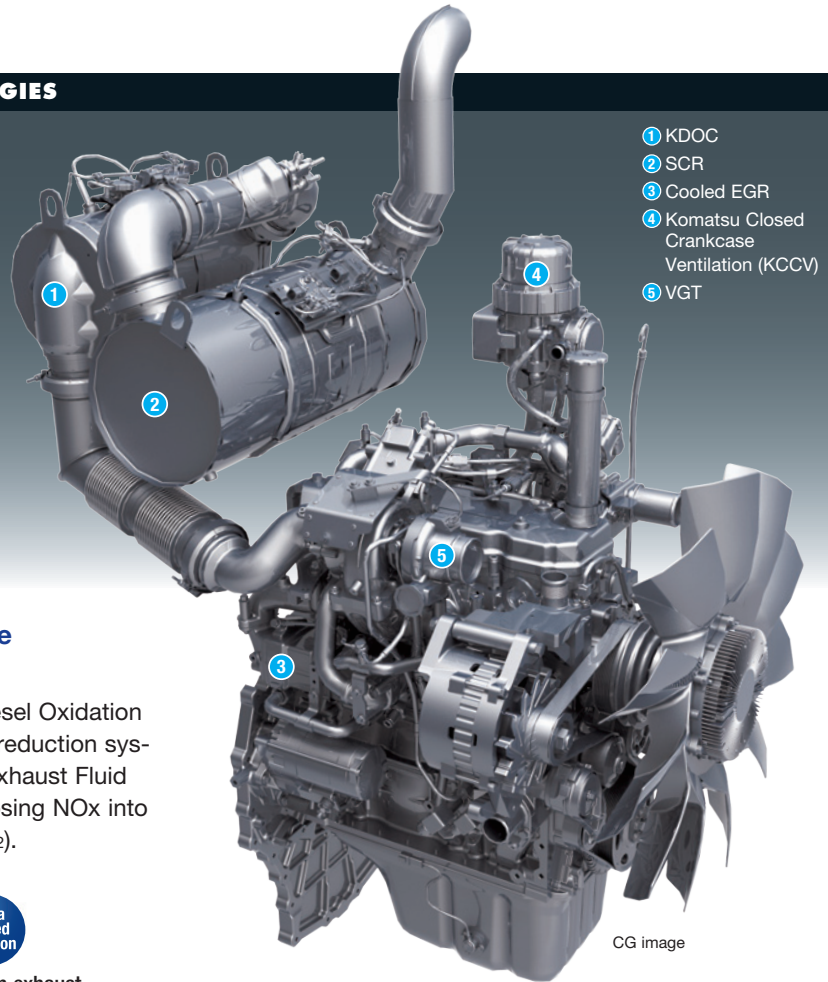


PERFORMANCE FEATURES

KOMATSU NEW ENGINE TECHNOLOGIES

Komatsu's New Emission Regulations-compliant Engine

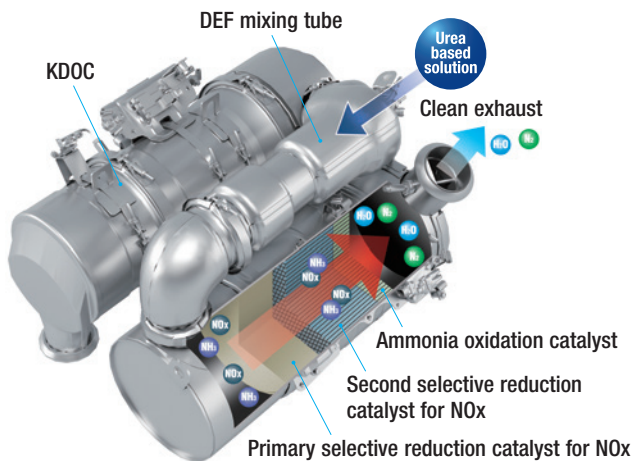
New regulations effective in 2014 require the reduction of NOx emissions to one tenth or below from the preceding regulations. In addition to refining the U.S. EPA Tier 4 Interim and EU Stage 3B technologies, Komatsu has developed a new Selective Catalytic Reduction (SCR) device in-house.



CG image

Technologies Applied to New Engine Heavy-duty aftertreatment system

This new system combines a Komatsu Diesel Oxidation Catalyst (KDOC) and SCR. The SCR NOx reduction system injects the correct amount of Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into non-toxic water (H₂O) and nitrogen gas (N₂).

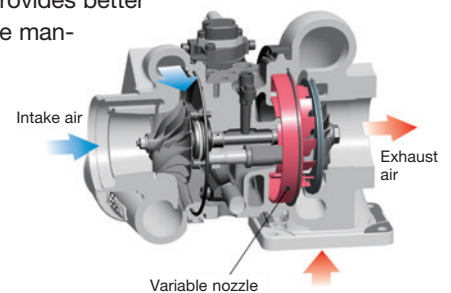


Electronic control system

The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle, providing total control of equipment in all conditions of use. Engine condition information is displayed via an on-board network to the monitor inside the cab, providing necessary information to the operator. Additionally, managing the information via KOMTRAX helps customers keep up with required maintenance.

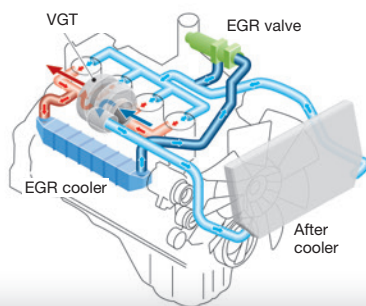
Variable Geometry Turbocharger (VGT) system

The VGT system features for variable control of air-flow and supplies optimal air according to load conditions. The upgraded version provides better exhaust temperature management.



Heavy-duty cooled Exhaust Gas Recirculation (EGR) system

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby reducing NOx emissions. EGR gas flow has been decreased for U.S. EPA Tier 4 Final with the addition of SCR technology. The system achieves a dynamic reduction of NOx, while helping reduce fuel consumption.



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Komatsu Auto Idle

Komatsu auto idle automatically reduces engine RPM after four seconds of work equipment inactivity to reduce unnecessary fuel consumption and exhaust emissions.

Komatsu Auto Idle Shutdown

Komatsu auto idle shutdown automatically shuts the engine down after idling for a set period of time to reduce unnecessary fuel consumption and exhaust emissions. The amount of time before the engine is shutdown can be easily programmed from five to 60 minutes.

Working Modes Selectable

Ecology Guidance

Ecology Gauge & Fuel Consumption Gauge

Idling Caution

Increased Work Efficiency

Large digging force

With the one-touch Power Max. function, digging force is increased for up to 8.5 seconds of operation.

Maximum arm crowd force (ISO 6015)

101 kN(10.3 t) ➔ **108 kN(11.0 t)** **7% UP**
(With Power Max.)

Maximum bucket digging force (ISO 6015)

138 kN(14.1 t) ➔ **149 kN(15.2 t)** **8% UP**
(With Power Max.)

Measured with Power Max. function, 2925 mm arm and ISO 6015 rating.



GENERAL FEATURES

ROPS CAB STRUCTURE

ROPS Cab (ISO 12117-2)

The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. The ROPS cab has high shock absorption performance, featuring excellent durability and impact strength. It also satisfies the requirements of ISO OPG top guard level 1 (ISO 10262) for falling objects.



HB215LC-3

Rearview Monitor System

A new rearview monitor system display has a rearview camera image that is continuously displayed together with the gauges and important machine information. This enables the operator to carry out work while easily checking the surrounding area.



Rearview camera



Rearview image on monitor

General Features

Secondary engine shut down switch at base of seat to shutdown the engine.



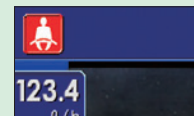
Lock lever



Left and right side handrails



Seat belt caution indicator



- Retractable seat belt
- Tempered & tinted glass
- Large mirrors
- Slip-resistant plates
- Large cab entrance step
- Pump/engine room compartment partition
- Thermal and fan guards
- Travel alarm

WORKING ENVIRONMENT



Comfortable Working Space

Wide spacious cab

Wide, spacious cab includes seat with reclining backrest. The seat height and recline position are easily adjusted using a pull-up lever. You can set the appropriate operational posture of armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

Arm rest with simple height adjustment

A plunger and lock permits simple and fast adjustments of arm rest height.



Low vibration with cab damper mounting

Automatic climate control with air conditioner (A/C) and heater

Pressurized cab

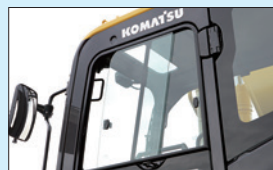
Auxiliary input jack

An auxiliary radio input makes it easy to connect a device to play audio speakers through the standard speakers.



Standard Equipment

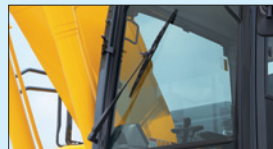
Sliding window glass (Left side)



AM/FM stereo radio & ashtray



Remote intermittent wiper with windshield washer



Cigarette lighter



Opening & closing skylight



Magazine box & cup holder



Defroster (Conforms to the ISO 10263-5)



Front lower window glass storage



WORKING ENVIRONMENT

HB215LC-3

LARGE HIGH RESOLUTION LCD MONITOR



New Monitor Panel Interface Design

An updated, large, high-resolution LCD color monitor enables accurate and smooth work. The interface has been redesigned to display key machine information in a new user-friendly interface. A rearview camera and DEF level gauge display have been added to the default main screen. The interface has a function that enables the main screen mode to be switched, thus enabling the optimum screen information for the particular work situation to be displayed.

Indicators

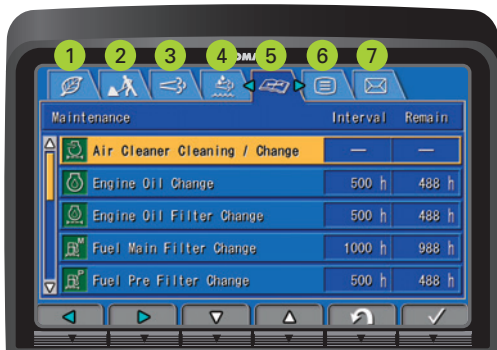
- | | |
|------------------------------------|-----------------------------------|
| 1 Auto-decelerator | 9 Hydraulic oil temperature gauge |
| 2 Working mode | 10 Fuel gauge |
| 3 Travel speed | 11 DEF level gauge |
| 4 Camera direction display | 12 DEF level caution lamp |
| 5 Ecology gauge | 13 Service meter, clock |
| 6 Camera display | 14 Fuel consumption gauge |
| 7 Hybrid system temperature gauge | 15 Guidance icon |
| 8 Engine coolant temperature gauge | 16 Function switches |

Basic operation switches

- | | |
|-------------------------|-----------------|
| 1 Auto-decelerator | 4 Buzzer cancel |
| 2 Working mode selector | 5 Wiper |
| 3 Travel speed selector | 6 Window washer |

Visual user menu

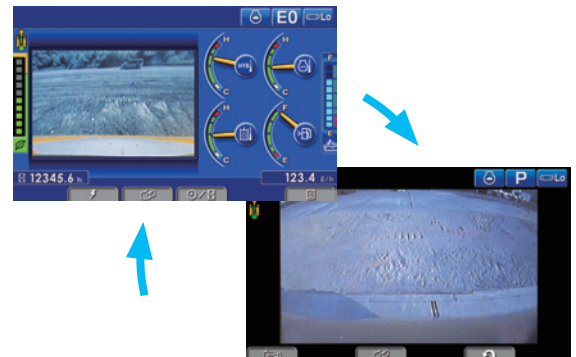
Pressing the F6 key on the main screen displays the user menu screen. The menus are grouped for each function, and use easy-to-understand icons, which enable the machine to work easily.



- | | |
|---------------------------------------|--------------------|
| 1 Energy saving guidance | 2 Machine settings |
| 3 Aftertreatment devices regeneration | 4 SCR information |
| 5 Maintenance | 6 Monitor setting |
| 7 Message check | |

Switchable Display Modes

The main screen display mode can be changed by pressing the F3 key. Screen images shown are for the standard rearview camera.



Support Efficiency Improvement

Ecology guidance

While the machine is operating, ecology guidance pops up on the monitor screen to notify the operator of the status of the machine in real time.

Ecology gauge & fuel consumption gauge

The monitor screen has an ecology and fuel consumption gauge, which are displayed continuously. In addition, the operator can set any desired target value of fuel consumption (within the range of the green display), enabling the machine to operate with better fuel economy.



Ecology gauge Ecology guidance Fuel consumption gauge

Operation record, fuel consumption history, and ecology guidance record

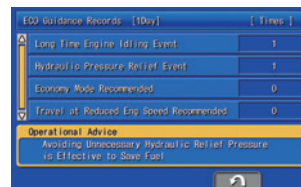
The ecology guidance menu enables the operator to check the operation record, fuel consumption history and ecology guidance record from the ecology guidance menu, using a single touch. This helps operators reduce fuel consumption.



Operation record



Fuel consumption history



Ecology guidance record



MAINTENANCE FEATURES

HB215LG-3



Engine access

Large, rear-opening hood provides excellent maintenance and service access to key engine components.

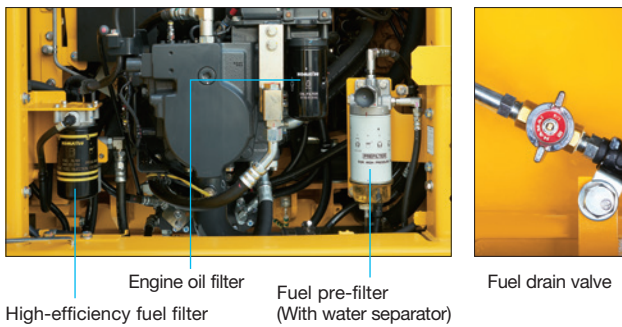


Fuel filters

Large, high-efficiency fuel filter and pre-filter with water separator removes contaminants from fuel for improved fuel injection system life. Built-in priming pump simplifies maintenance.

Easy access to engine oil filter and fuel drain valve

Engine oil filter and fuel drain valve are remote mounted to improve accessibility.



High-efficiency fuel filter Engine oil filter Fuel pre-filter (With water separator) Fuel drain valve

Battery disconnect switch

A standard battery master disconnect switch allows a technician to disconnect the power supply for servicing the machine.



A/C filter

The A/C filter can be removed and installed without the use of tools for easy filter maintenance.

Washable cab floormat

Sloping track frame

Long-life oils, filter

Engine oil & engine oil filter	every 500 hours
Hydraulic oil	every 5000 hours
Hydraulic oil filter	every 1000 hours

Diesel Exhaust Fluid (DEF) tank

A large tank volume extends operating time before refilling and can be found on the right front platform with a sight gauge for easy service. DEF tank and pump are separated for improved service access.



Maintenance Information

“Maintenance time caution lamp” display

When the remaining time to maintenance becomes less than 30 hours*, the maintenance time monitor appears. Pressing the F6 key switches the monitor to the maintenance screen.

* The setting can be changed within the range between 10 and 200 hours.



Maintenance screen

Aftertreatment devices regeneration automatic display

When it is necessary to carry out manual regeneration of the KDOC, the display automatically switches to the aftertreatment device regeneration screen to inform the operator.

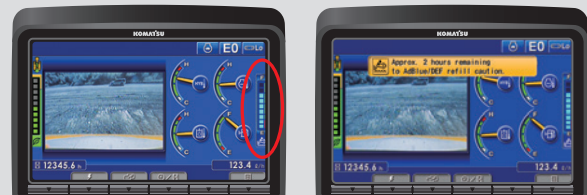
Soot level indicator



Aftertreatment device regeneration screen

Supports the DEF level and refill timing

The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when DEF level* is low, DEF low level guidance messages appear in pop up displays to inform the operator in real time.



DEF level gauge

DEF low level guidance

KOMATSU PARTS & SERVICE SUPPORT



KOMATSU CARE

Program Includes:

*The HB215LC-3 comes standard with complimentary factory scheduled maintenance for the first 3 Years or 2,000 Hours, whichever comes first.

Planned Maintenance Intervals at:

500/1000/1500/2000 hour intervals. (250 hr. initial interval for some products) Complimentary Maintenance Interval includes: Replacement of Oils & Fluid Filters with genuine Komatsu Parts, 50-Point inspection, Komatsu Oil & Wear Analysis Sampling (KOWA) / Travel & Mileage (distance set by distributor; additional charges may apply)

Benefits of Using Komatsu CARE

- Assurance of Proper Maintenance with OEM Parts & Service
- Increased Uptime & Efficiency
- Factory Certified Technicians Performing Work
- Cost of Ownership Savings
- Transferable Upon Resale

Complimentary SCR System Maintenance

The HB215LC-3 also includes 2 factory recommended services of the Selective Catalytic Reduction (SCR) Diesel exhaust fluid (DEF) system during the first 5 years—including: Factory recommended DEF tank flush and strainer cleaning at 4,500 hours and 9,000 hours.

Komatsu CARE® – Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs



Komatsu Parts Support

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction



Interval PM	500	1000	1500	2000
KOWA SAMPLING – (Engine, Hydraulics, Swing Circle, L & R Final Drives, electric swing motor case, motor-generator case, and electric swing motor cooling oil)	✓	✓	✓	✓
LUBRICATE MACHINE	✓	✓	✓	✓
LUBRICATE SWING CIRCLE	✓	✓	✓	✓
CHECK SWING PINION GREASE LEVEL AND ADD, WHEN NECESSARY	✓	✓	✓	✓
CHANGE ENGINE OIL	✓	✓	✓	✓
REPLACE ENGINE OIL FILTER	✓	✓	✓	✓
REPLACE FUEL PRE-FILTER	✓	✓	✓	✓
REPLACE AC FRESH & RECIRC AIR FILTERS	✓	✓	✓	✓
CLEAN AIR CLEANER ELEMENT	✓	✓	✓	✓
DRAIN SEDIMENT FROM FUEL TANK	✓	✓	✓	✓
COMPLETE 50 POINT INSPECTION FORM; LEAVE PINK COPY WITH CUSTOMER OR IN CAB	✓	✓	✓	✓
RESET MONITOR PANEL MAINTENANCE COUNTER FOR APPROPRIATE ITEMS	✓	✓	✓	✓
REPLACE HYDRAULIC TANK BREATHER ELEMENT		✓		✓
REPLACE DEF TANK BREATHER ELEMENT		✓		✓
REPLACE FUEL MAIN FILTER		✓		✓
CHANGE SWING MACHINERY OIL		✓		✓
CHANGE ELECTRIC SWING MOTOR CASE OIL		✓		✓
REPLACE HYDRAULIC OIL FILTER ELEMENT		✓		✓
CHANGE MOTOR-GENERATOR CASE OIL		✓		✓
CLEAN MOTOR-GENERATOR CASE OIL FILTER		✓		✓
CLEAN HYDRAULIC TANK STRAINER				✓
CHANGE FINAL DRIVE OIL				✓
REPLACE KCCV FILTER ELEMENT				✓
REPLACE DEF PUMP FILTER				✓
CLEAN ELECTRIC SWING MOTOR COOLING OIL FILTER				✓
FACTORY TRAINED TECHNICIAN LABOR	✓	✓	✓	✓
2 SCR System Maintenance Services at 4,500 Hrs. and 9000 Hrs.				

Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

* Certain exclusions and limitations apply. Refer to the customer certificate for complete program details and eligibility. Komatsu® and Komatsu Care® are registered trademarks of Komatsu Ltd. Copyright 2018 Komatsu America Corp.

HB215LC-3

KOMTRAX EQUIPMENT MONITORING

GET THE WHOLE STORY WITH
KOMTRAX[®]

✓ **WHAT**

- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX **continuously monitors and records** machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history **lowering owning and operating cost**

✓ **WHEN**

- Know when your machines are **running or idling** and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to **know when maintenance is due** and help you plan for future maintenance needs

✓ **WHERE**

- KOMTRAX data **can be accessed virtually anywhere** through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications

✓ **WHY**

- Knowledge is power - **make informed decisions** to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- **Take control of your equipment** - any time, anywhere

✓ **WHO**

- KOMTRAX is **standard** equipment on all Komatsu construction products



KOMTRAX[®]

For construction and compact equipment.

KOMTRAX Plus[®]

For production and mining class machines.

SPECIFICATIONS



ENGINE

Model..... Komatsu SAA4D107E-3*
 Type..... Water-cooled, 4-cycle, direct injection
 Aspiration..... Turbocharged, aftercooled, cooled EGR
 Number of cylinders..... 4
 Bore..... 107 mm **4.21"**
 Stroke..... 124 mm **4.88"**
 Piston displacement..... 4.46 ltr **272 in³**
 Horsepower:
 SAE J1995.....Gross 110 kW **148 HP**
 ISO 9249 / SAE J1349.....Net 110 kW **148 HP**
 Fan at maximum speed..... Net 103 kW **138 HP**
 Rated rpm..... 2000
 Fan drive method for radiator cooling..... Mechanical with viscous fan clutch
 Governor..... All-speed control, electronic
 *EPA Tier 4 Final emissions certified



HYDRAULICS

Type ..HydrauMind (Hydraulic Mechanical Intelligence) system, closed-center system with load sensing valves and pressure compensated valves
 Number of selectable working modes 6
 Main pump:
 Type.....Variable displacement piston type
 Pumps for..... Boom, arm, bucket, and travel circuits
 Maximum flow 452 ltr/min **119 gal/min**
 Supply for control circuit..... Self-reducing valve
 Hydraulic motors:
 Travel 2 x axial piston motors with parking brake
 Swing 1 x axial piston motor with swing holding brake
 Relief valve setting:
 Implement circuits 37.3 MPa 380 kg/cm² **5,409 psi**
 Travel circuit..... 37.3 MPa 380 kg/cm² **5,409 psi**
 Pilot circuit 3.2 MPa 33 kg/cm² **470 psi**
 Hydraulic cylinders:
 (Number of cylinders – bore x stroke x rod diameter)



DRIVES AND BRAKES

Steering control..... Two levers with pedals
 Drive method Fully hydrostatic
 Maximum drawbar pull202 kN 20570 kg **43,349 lb**
 Gradeability..... 70%, 35°
 Maximum travel speed: High..... 5.5 km/h **3.4 mph**
 (Auto-shift) Mid..... 4.1 km/h **2.5 mph**
 (Auto-shift) Low 3.0 km/h **1.9 mph**
 Service brake..... Hydraulic lock
 Parking brake..... Mechanical disc brake



SWING SYSTEM

Drive method Electric drive
 Swing reduction..... Planetary gear
 Swing circle lubrication Grease-bathed
 Service brake..... Electric brake
 Holding brake/Swing lock..... Mechanical disc brake
 Swing speed..... 12.4 rpm
 Swing torque..... 7040 kg•m **50,920 ft lbs**



UNDERCARRIAGE

Center frame..... X-frame
 Track frame Box-section
 Track type Sealed
 Track adjuster Hydraulic
 Number of shoes (each side) 49
 Number of carrier rollers (each side) 2
 Number of track rollers (each side) 9



COOLANT & LUBRICANT CAPACITY (REFILLING)

Fuel tank 400 ltr **105.7 U.S. gal**
 Coolant (engine)..... 28.0 ltr **7.39 U.S. gal**
 Ultra capacitor cooling system 5.0 ltr **1.32 U.S. gal**
 Engine..... 18.0 ltr **4.75 U.S. gal**
 Final drive, each side..... 5.0 ltr **1.32 U.S. gal**
 Swing drive 6.5 ltr **1.72 U.S. gal**
 Swing motor - generator 6.5 ltr **1.72 U.S. gal**
 Motor-generator 1.6 ltr **0.42 U.S. gal**
 Hydraulic tank 132 ltr **34.8 U.S. gal**
 DEF tank 23.1 ltr **6.07 U.S. gal**



SOUND PERFORMANCE

Exterior – ISO 6395..... 99 dB(A)
 Operator – ISO 6396..... 68 dB(A)



OPERATING WEIGHT (APPROXIMATE)

Operating weight including 5700 mm **18'8"** one-piece boom, 2925 mm **9'7"** arm, SAE heaped 1.19 m³ **1.57 yd³** bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Triple-Grouser	Operating Weight	Ground Pressure (ISO 16754)
700 mm 28"	23191 kg 51,127 lb	0.42 kg/cm ² 5.99 psi
800 mm 31.5"	23471 kg 51,745 lb	0.37 kg/cm ² 5.30 psi

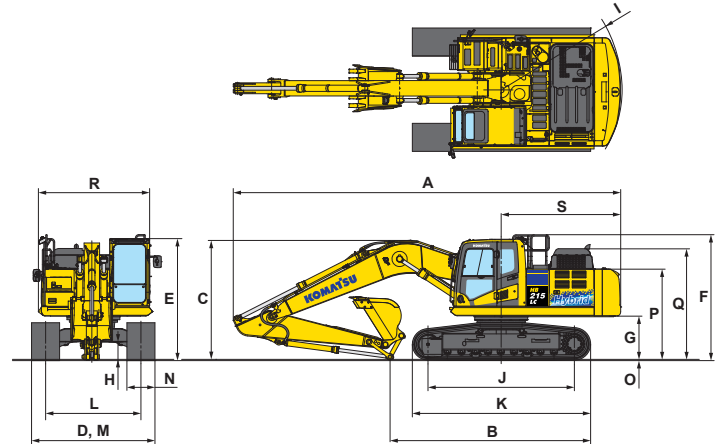
Component Weights
 Arm including bucket cylinder and linkage
 2925 mm **9'7"** arm assembly 1182 kg **2,605 lb**
 One piece boom including arm cylinder
 5700 mm **18'8"** boom assembly 1755 kg **3,869 lb**
 Boom cylinders x 2 210 kg **463 lb**
 Counterweight 3580 kg **7,892 lb**
 1.20 m³ **1.57 yd³** HP bucket - **48"** width .. 1066 kg **2,349 lb**



DIMENSIONS

Arm Length	2925 mm	9'7"	
A Overall length	9705 mm	31'10"	
B Length on ground (transport)	5000 mm	16'5"	
C Overall height (to top of boom)*	2970 mm	9'7"	
D Overall width	3080 mm	10'1"	
E Overall height (to top of cab)*	3045 mm	10'0"	
F Overall height (to top of handrail)*	3135 mm	10'3"	
G Ground clearance, counterweight	1085 mm	3'7"	
H Ground clearance, minimum	440 mm	1'5"	
I Tail swing radius	3020 mm	9'11"	
J Track length on ground	3655 mm	12'0"	
K Track length	4450 mm	14'7"	
L Track gauge	2380 mm	7'10"	
M Width of crawler	700mm 28" shoe	3080 mm	10'1"
	800mm 31.5" shoe	3180 mm	10'5"
N Shoe width	700 mm	28"	
O Grouser height	26 mm	1"	
P Machine height to top of counterweight	2250 mm	7'5"	
Q Machine height to top of engine cover	2765 mm	9'1"	
R Machine upper width	2850 mm	9'4"	
S Distance, swing center to rear end	2990 mm	9'10"	

* : Including grouser height



BACKHOE BUCKET, ARM AND BOOM COMBINATION

Bucket Type	Bucket			5.7 m (18'8") Boom	
	Capacity	Width	Weight	2.9 m (9'7")	
Komatsu TL	0.50 m ³	0.66 yd ³	610 mm 24"	605 kg 1,334 lb	●
	0.67 m ³	0.88 yd ³	762 mm 30"	689 kg 1,518 lb	●
	0.85 m ³	1.11 yd ³	914 mm 36"	780 kg 1,719 lb	●
	1.02 m ³	1.34 yd ³	1067 mm 42"	857 kg 1,890 lb	○
	1.20 m ³	1.57 yd ³	1219 mm 48"	949 kg 2,092 lb	□
Komatsu HP	0.50 m ³	0.66 yd ³	610 mm 24"	652 kg 1,437 lb	●
	0.67 m ³	0.88 yd ³	762 mm 30"	763 kg 1,681 lb	●
	0.85 m ³	1.11 yd ³	914 mm 36"	868 kg 1,913 lb	●
	1.02 m ³	1.34 yd ³	1067 mm 42"	950 kg 2,095 lb	○
	1.20 m ³	1.57 yd ³	1219 mm 48"	1066 kg 2,349 lb	⊙
Komatsu HPS	0.50 m ³	0.66 yd ³	610 mm 24"	724 kg 1,597 lb	●
	0.67 m ³	0.88 yd ³	762 mm 30"	840 kg 1,851 lb	●
	0.85 m ³	1.11 yd ³	914 mm 36"	962 kg 2,120 lb	●
	1.02 m ³	1.34 yd ³	1067 mm 42"	1061 kg 2,339 lb	□
	1.20 m ³	1.57 yd ³	1219 mm 48"	1193 kg 2,630 lb	⊙
Komatsu HPX	0.50 m ³	0.66 yd ³	610 mm 24"	824 kg 1,817 lb	●
	0.67 m ³	0.88 yd ³	762 mm 30"	939 kg 2,071 lb	●
	0.85 m ³	1.11 yd ³	914 mm 36"	1061 kg 2,340 lb	○
	1.02 m ³	1.34 yd ³	1067 mm 42"	1161 kg 2,559 lb	□
	1.20 m ³	1.57 yd ³	1219 mm 48"	1293 kg 2,850 lb	⊙

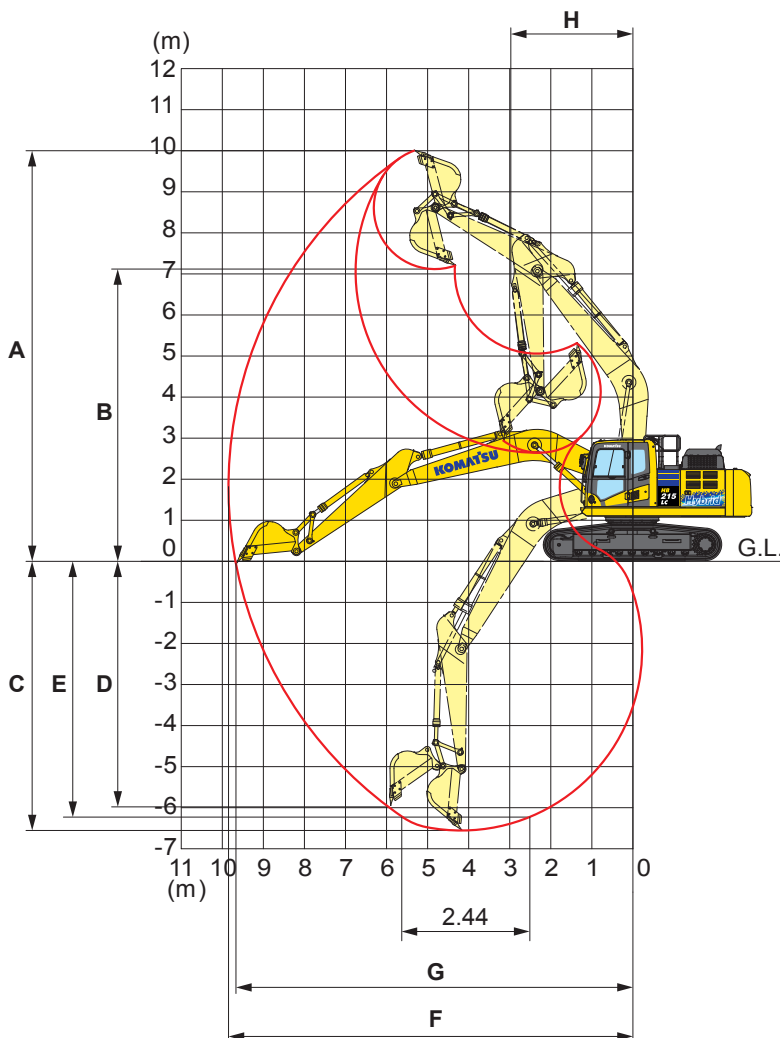
● - Used with material weights up to 3,500 lb/yd³ - Quarry/rock/high abrasion applications
 □ - Used with material weights up to 2,500 lb/yd³ - General construction

○ - Used with material weights up to 3,000 lb/yd³ - Tough digging applications
 ⊙ - Used with material weights up to 2,000 lb/yd³ - Light materials applications
 X - Not useable

SPECIFICATIONS



WORKING RANGE

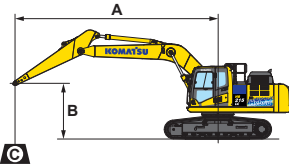


	Arm Length	2925 mm	9'7"
A	Max. digging height	10000 mm	32'10"
B	Max. dumping height	7110 mm	23'4"
C	Max. digging depth	6620 mm	21'9"
D	Max. vertical wall digging depth	5980 mm	19'7"
E	Max. digging depth for 8' level bottom	6370 mm	20'11"
F	Max. digging reach	9875 mm	32'5"
G	Max. digging reach at ground level	9700 mm	31'10"
H	Min. swing radius	3040 mm	10' 0"
SAE rating	Bucket digging force at power max.	132 kN 13500 kg / 29,762 lb	
	Arm crowd force at power max.	103 kN 10500 kg / 23,149 lb	
ISO rating	Bucket digging force at power max.	149 kN 15200 kg / 33,510 lb	
	Arm crowd force at power max.	108 kN 11000 kg / 24,251 lb	

LIFT CAPACITIES



LIFTING CAPACITY WITH LIFTING MODE



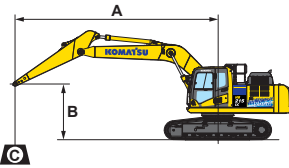
- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊗: Rating at maximum reach

- Conditions :
- Counterweight: 3580 kg **7,892 lb**
 - Bucket: None
 - Lifting mode: On

Arm: 2925 mm 9'7" Bucket: None Shoes: 700 mm 28" triple grouser Unit: kg lb

B	A		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		⊗ MAX	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m 25'												
6.1 m 20'							* 6600	5900			7.2	* 3850 * 3850
4.6 m 15'							* 14550	13000			23.6	* 8480 * 8480
3.0 m 10'					* 8100	* 8100	* 8250	5800	* 5250	4150	7.9	* 3850 * 3850
1.5 m 5'					* 17850	* 17850	* 18180	12780	* 11570	9140	25.9	* 8480 * 8480
0 m 0'			* 12850	* 12850	* 10450	8350	* 8350	5600	6000	4100	8.3	* 3950 3600
-1.5 m -5'	* 7600	* 7600	* 12050	* 12050	* 23030	18400	* 18400	12340	13220	9030	27.2	* 8700 7930
-3.0 m -10'	* 16750	* 16750	* 18550	14450	* 12700	7900	8150	5350	5900	4000	8.4	* 4250 3500
-4.6 m -15'	* 27220	* 27220	* 40890	31850	* 27990	17410	17960	11790	13000	8810	27.6	* 9360 7710
			* 7500	* 7500	12500	7650	8000	5200	5850	3900	8.1	* 4750 3600
			* 16530	* 16530	27550	16860	17630	11460	12890	8590	26.5	* 10470 7930
			* 12050	* 12050	12400	7600	7900	5150	5800	3900	7.6	* 5700 3850
			* 26560	* 26560	27330	16750	17410	11350	12780	8590	24.9	* 12560 8480
			* 18550	14450	12450	7650	7950	5150			6.7	* 6900 4550
			* 40890	31850	27440	16860	17520	11350			22.0	* 15210 10030
			* 15100	14800	* 10800	7800					5.3	* 9000 6450
			* 33280	32620	* 23800	17190					17.4	* 19840 14210

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊗: Rating at maximum reach

- Conditions :
- Counterweight: 3580 kg **7,892 lb**
 - Bucket: None
 - Lifting mode: On

Arm: 2925 mm 9'7" Bucket: None Shoes: 800 mm 31.5" triple grouser Unit: kg lb

B	A		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		⊗ MAX	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m 25'												
6.1 m 20'							* 6600	5950			7.2	* 3850 * 3850
4.6 m 15'							* 14550	13110			23.6	* 8480 * 8480
3.0 m 10'					* 8100	* 8100	* 7250	5850	* 5250	4200	7.9	* 3850 * 3850
1.5 m 5'					* 17850	* 17850	* 15980	12890	* 11570	9250	25.9	* 8480 * 8480
0 m 0'			* 12850	* 12850	* 10450	8450	* 8350	5650	6100	4100	8.3	* 3950 3650
-1.5 m -5'	* 7600	* 7600	* 12050	* 12050	* 23030	18620	* 18400	12450	13440	9030	27.2	* 8700 8040
-3.0 m -10'	* 16750	* 16750	* 18550	* 14600	* 12700	8000	8250	5400	6000	4000	8.4	* 4250 3550
-4.6 m -15'	* 27220	* 27220	* 40890	32180	* 27990	17630	18180	11900	13220	8810	27.6	* 9360 7820
			* 7500	* 7500	12600	7750	8100	5250	5900	3950	8.1	* 4750 3600
			* 16530	* 16530	27770	17080	17850	11570	13000	8700	26.5	* 10470 7930
			* 12050	* 12050	12550	7650	8000	5200	5850	3900	7.6	* 5700 3900
			* 26560	* 26560	27660	16860	17630	11460	12890	8590	24.9	* 12560 8590
			* 18550	14600	12600	7700	8050	5250			6.7	* 7000 4600
			* 40890	32180	27770	16970	17740	11570			22.0	* 15430 10140
			* 15100	* 14950	* 10800	7900					5.3	* 9000 6500
			* 33280	* 32950	* 23800	17410					17.4	* 19840 14330

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.



STANDARD EQUIPMENT

ENGINE

- Auto idle
- Auto idle shutdown
- Automatic engine warm-up system
- Dry type air cleaner, double element
- Engine, Komatsu SAA4D107E-3
- Engine overheat prevention system
- Fuel pre-filter (with water separator)

HYBRID SYSTEM

- Ultra capacitor with inverter
- Electric swing motor/generator
- Engine mounted motor/generator
- Hybrid component cooling system

ELECTRICAL SYSTEM

- Alternator, 24 V/90 A
- Auto-decelerator
- Batteries, large capacity
- Converter, 12 V
- Electric horn
- Starting motor, 24 V/5.5 kW
- Working light, 2 (Boom and RH front)

HYDRAULIC SYSTEM

- 3 speed travel with auto shift
- Arm holding valve
- Boom holding valve
- Pattern change valve (ISO to BH)
- Power maximizing system
- Pressure Proportional Control (PPC) hydraulic control system
- Service valve
- Working mode selection system

GUARDS AND COVERS

- Fan guard structure
- Pump/engine partition cover
- Revolving frame undercovers
- Track frame undercover
- Track roller guards, center section

UNDERCARRIAGE

- Hydraulic track adjusters (Each side)
- Track roller, 9 each side
- Track shoe, 700mm **28"**

OPERATOR ENVIRONMENT

- Auto climate control with A/C defroster and heater
- AM/FM radio
- Auxiliary input (3.5 mm jack)
- High back air suspension seat with heat
- Large 7" high resolution LCD monitor
- Lock lever, work equipment
- Mirrors (RH, LH, sidewise)
- OPG top guard level 1 (ISO 10262)
- Rearview monitor system- one camera
- ROPS cab (ISO 12117-2)
- Seat belt, retractable
- Skylight, opening

OTHER EQUIPMENT

- Battery master disconnect switch
- Cooling fan, suction type with viscous clutch
- Counterweight, 3580kg **7,892 lb**
- Engine shutdown secondary switch
- Equipment Management Monitoring System
- KOMTRAX level 5.0
- Lock out/tag out
- Rear reflector
- Removable cooler debris screens
- Slip-resistant plates
- Travel alarm



OPTIONAL EQUIPMENT

GUARDS AND COVERS

- Cab guards
 - Bolt-on top guard, OPG level 2 (ISO 10262)
 - Full front guard, OPG level 2 (ISO 10262)
 - Lower front window guard
 - Full front guard, OPG level 1, (ISO 10262)

OPERATOR ENVIRONMENT

- Cab accessories
 - Rain visor
 - Sun visor

WORK EQUIPMENT

- Arms
 - 2925 mm **9'7"** HD arm assembly
- Booms
 - 5700mm **18'8"** HD boom assembly

KOMATSU®

Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.