**HB215LC-3**

Tier 4 Final Engine

**HYBRID HYDRAULIC EXCAVATOR**

**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
WALK-AROUND

HB215LC-3

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110 kW @ 2000 rpm

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BUCKET CAPACITY
0.66–1.57 yd³
0.50–1.20 m³

Photos may include optional equipment.
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
**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.

- **Capacitor**
  - 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.

- **Inverter**
  - Utilizes electricity from the capacitor to assist engine acceleration.

- **Engine**
  - 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.

- **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.

- **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.

- **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**
  - 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.

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).

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.

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.
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.

<table>
<thead>
<tr>
<th>Measured with Power Max. function, 2925 mm arm and ISO 6015 rating.</th>
<th>101 kN (10.3 t)</th>
<th>108 kN (11.0 t)</th>
<th>7% UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum arm crowd force (ISO 6015)</td>
<td>(With Power Max.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum bucket digging force (ISO 6015)</td>
<td>138 kN (14.1 t)</td>
<td>149 kN (15.2 t)</td>
<td>8% UP</td>
</tr>
</tbody>
</table>

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.

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.

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.
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.

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.

General Features

- Secondary engine shut down switch at base of seat to shutdown the engine.
- Left and right side handrails
- Seat belt caution indicator
- Lock lever
- 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**

**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.

**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.

**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.

**Indicators**
- Auto-decelerator
- Working mode
- Travel speed
- Camera direction display
- Ecology gauge
- Camera display
- Hybrid system temperature gauge
- Engine coolant temperature gauge
- Hydrualic oil temperature gauge
- Fuel gauge
- DEF level gauge
- DEF level caution lamp
- Service meter, clock
- Fuel consumption gauge
- Guidance icon
- Function switches

**Basic operation switches**
- Auto-decelerator
- Working mode selector
- Travel speed selector
- Buzzer cancel
- Wiper
- Window washer

**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.

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.
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.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Change Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine oil &amp; engine oil filter</td>
<td>every 500 hours</td>
</tr>
<tr>
<td>Hydraulic oil</td>
<td>every 5000 hours</td>
</tr>
<tr>
<td>Hydraulic oil filter</td>
<td>every 1000 hours</td>
</tr>
</tbody>
</table>

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.

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.

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.
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

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

<table>
<thead>
<tr>
<th>Interval PM</th>
<th>500</th>
<th>1000</th>
<th>1500</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOWA SAMPLING</td>
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<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>LUBRICATE MACHINE</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>LUBRICATE SWING CIRCLE</td>
<td>✓</td>
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<tr>
<td>CHECK SWING PINION GREASE LEVEL AND ADD, WHEN NECESSARY</td>
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<td>✓</td>
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<tr>
<td>CHANGE ENGINE OIL</td>
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<td>✓</td>
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<tr>
<td>REPLACE ENGINE OIL FILTER</td>
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</tr>
<tr>
<td>REPLACE FUEL PRE-FILTER</td>
<td>✓</td>
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<tr>
<td>REPLACE AC FRESH &amp; RECIRC AIR FILTERS</td>
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<tr>
<td>CLEAN AIR CLEANER ELEMENT</td>
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<tr>
<td>DRAIN SEDIMENT FROM FUEL TANK</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>COMPLETE 50 POINT INSPECTION FORM; LEAVE PINK COPY WITH CUSTOMER OR IN CAB</td>
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<td>✓</td>
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<tr>
<td>RESET MONITOR PANEL MAINTENANCE COUNTER FOR APPROPRIATE ITEMS</td>
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<tr>
<td>REPLACE HYDRAULIC TANK BREATHER ELEMENT</td>
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<td>REPLACE DEF TANK BREATHER ELEMENT</td>
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<tr>
<td>REPLACE HYDRAULIC OIL FILTER ELEMENT</td>
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<tr>
<td>CHANGE MOTOR-GENERATOR CASE OIL</td>
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<tr>
<td>CLEAN HYDRAULIC TANK STRAINER</td>
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<tr>
<td>CHANGE FINAL DRIVE OIL</td>
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<tr>
<td>REPLACE KCCV FILTER ELEMENT</td>
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<tr>
<td>REPLACE DEF PUMP FILTER</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>CLEAN ELECTRIC SWING MOTOR COOLING OIL FILTER</td>
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<tr>
<td>FACTORY TRAINED TECHNICIAN LABOR</td>
<td>✓</td>
<td>✓</td>
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</tr>
</tbody>
</table>

| 2 SCR System Maintenance Services at 4,500 Hrs. and 9000 Hrs. |

* 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.
KOMTRAX EQUIPMENT MONITORING

✓ 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.

15
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 2000

Governor ............................................. Mechanical with viscous fan clutch

Aspiration ........................................ hydraulic

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)

Boom .................................. 2-130 mm x 1334 mm x 90 mm 5.1" x 52.5" x 3.5"
Arm ................................ 1-135 mm x 1490 mm x 95 mm 5.3" x 56.7" x 3.7"
Bucket ................................ 1-115 mm x 1200 mm x 80 mm 4.5" x 44.1" x 3.2"

DRIVES AND BRAKES

Steering control ...................................... Two levers with pedals
Drive method ....................................... Fully hydrostatic

Maximum drawbar pull ............................. 202 kN 20570 kg 43,349 lb

Gradeability ......................................... 70%, 35%

Maximum travel speed:
High .................................................. 5.5 km/h 3.4 mph
Mid ................................................... 4.1 km/h 2.5 mph
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

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.

<table>
<thead>
<tr>
<th>Triple-Grouser</th>
<th>Operating Weight</th>
<th>Ground Pressure (ISO 16754)</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 mm 28&quot;</td>
<td>23191 kg 51,127 lb</td>
<td>0.42 kg/cm² 5.99 psi</td>
</tr>
<tr>
<td>800 mm 31.5&quot;</td>
<td>23471 kg 51,745 lb</td>
<td>0.37 kg/cm² 5.30 psi</td>
</tr>
</tbody>
</table>

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 3,868 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 | 700 mm | 28"
| 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**

<table>
<thead>
<tr>
<th>Bucket Type</th>
<th>Bucket Capacity (m³)</th>
<th>Bucket Capacity (yd³)</th>
<th>Bucket Width (mm)</th>
<th>Bucket Width (&quot;&quot;)</th>
<th>Bucket Weight (kg)</th>
<th>Bucket Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Komatsu TL</td>
<td>0.50 m³</td>
<td>0.66 yd³</td>
<td>610 mm</td>
<td>24&quot;</td>
<td>605 kg</td>
<td>1,334 lb</td>
</tr>
<tr>
<td></td>
<td>0.67 m³</td>
<td>0.88 yd³</td>
<td>762 mm</td>
<td>30&quot;</td>
<td>689 kg</td>
<td>1,518 lb</td>
</tr>
<tr>
<td></td>
<td>0.85 m³</td>
<td>1.11 yd³</td>
<td>914 mm</td>
<td>36&quot;</td>
<td>780 kg</td>
<td>1,719 lb</td>
</tr>
<tr>
<td></td>
<td>1.02 m³</td>
<td>1.34 yd³</td>
<td>1067 mm</td>
<td>42&quot;</td>
<td>857 kg</td>
<td>1,890 lb</td>
</tr>
<tr>
<td></td>
<td>1.20 m³</td>
<td>1.57 yd³</td>
<td>1219 mm</td>
<td>48&quot;</td>
<td>949 kg</td>
<td>2,092 lb</td>
</tr>
<tr>
<td>Komatsu HP</td>
<td>0.50 m³</td>
<td>0.66 yd³</td>
<td>610 mm</td>
<td>24&quot;</td>
<td>652 kg</td>
<td>1,437 lb</td>
</tr>
<tr>
<td></td>
<td>0.67 m³</td>
<td>0.88 yd³</td>
<td>762 mm</td>
<td>30&quot;</td>
<td>763 kg</td>
<td>1,681 lb</td>
</tr>
<tr>
<td></td>
<td>0.85 m³</td>
<td>1.11 yd³</td>
<td>914 mm</td>
<td>36&quot;</td>
<td>888 kg</td>
<td>1,913 lb</td>
</tr>
<tr>
<td></td>
<td>1.02 m³</td>
<td>1.34 yd³</td>
<td>1067 mm</td>
<td>42&quot;</td>
<td>950 kg</td>
<td>2,095 lb</td>
</tr>
<tr>
<td></td>
<td>1.20 m³</td>
<td>1.57 yd³</td>
<td>1219 mm</td>
<td>48&quot;</td>
<td>1066 kg</td>
<td>2,349 lb</td>
</tr>
<tr>
<td>Komatsu HPS</td>
<td>0.50 m³</td>
<td>0.66 yd³</td>
<td>610 mm</td>
<td>24&quot;</td>
<td>724 kg</td>
<td>1,597 lb</td>
</tr>
<tr>
<td></td>
<td>0.67 m³</td>
<td>0.88 yd³</td>
<td>762 mm</td>
<td>30&quot;</td>
<td>840 kg</td>
<td>1,851 lb</td>
</tr>
<tr>
<td></td>
<td>0.85 m³</td>
<td>1.11 yd³</td>
<td>914 mm</td>
<td>36&quot;</td>
<td>962 kg</td>
<td>2,120 lb</td>
</tr>
<tr>
<td></td>
<td>1.02 m³</td>
<td>1.34 yd³</td>
<td>1067 mm</td>
<td>42&quot;</td>
<td>1061 kg</td>
<td>2,339 lb</td>
</tr>
<tr>
<td></td>
<td>1.20 m³</td>
<td>1.57 yd³</td>
<td>1219 mm</td>
<td>48&quot;</td>
<td>1193 kg</td>
<td>2,630 lb</td>
</tr>
<tr>
<td>Komatsu HPX</td>
<td>0.50 m³</td>
<td>0.66 yd³</td>
<td>610 mm</td>
<td>24&quot;</td>
<td>824 kg</td>
<td>1,817 lb</td>
</tr>
<tr>
<td></td>
<td>0.67 m³</td>
<td>0.88 yd³</td>
<td>762 mm</td>
<td>30&quot;</td>
<td>939 kg</td>
<td>2,071 lb</td>
</tr>
<tr>
<td></td>
<td>0.85 m³</td>
<td>1.11 yd³</td>
<td>914 mm</td>
<td>36&quot;</td>
<td>1061 kg</td>
<td>2,340 lb</td>
</tr>
<tr>
<td></td>
<td>1.02 m³</td>
<td>1.34 yd³</td>
<td>1067 mm</td>
<td>42&quot;</td>
<td>1161 kg</td>
<td>2,559 lb</td>
</tr>
<tr>
<td></td>
<td>1.20 m³</td>
<td>1.57 yd³</td>
<td>1219 mm</td>
<td>48&quot;</td>
<td>1293 kg</td>
<td>2,850 lb</td>
</tr>
</tbody>
</table>

- Used with material weights up to 3,500 lb/yd³ – Quarry/rock/high abrasion applications
- Used with material weights up to 3,000 lb/yd³ – Tough digging applications
- Used with material weights up to 2,000 lb/yd³ – General construction
- Not useable
<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm Length</td>
<td>2925 mm</td>
<td>9'7&quot;</td>
</tr>
<tr>
<td>Max. digging height</td>
<td>10000 mm</td>
<td>32'10&quot;</td>
</tr>
<tr>
<td>Max. dumping height</td>
<td>7110 mm</td>
<td>23'4&quot;</td>
</tr>
<tr>
<td>Max. digging depth</td>
<td>6620 mm</td>
<td>21'9&quot;</td>
</tr>
<tr>
<td>Max. vertical wall digging depth</td>
<td>5980 mm</td>
<td>19'7&quot;</td>
</tr>
<tr>
<td>Max. digging depth for 8’ level bottom</td>
<td>6370 mm</td>
<td>20'11&quot;</td>
</tr>
<tr>
<td>Max. digging reach</td>
<td>9875 mm</td>
<td>32'5&quot;</td>
</tr>
<tr>
<td>Min. swing radius</td>
<td>3040 mm</td>
<td>10'0&quot;</td>
</tr>
<tr>
<td>SAE rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bucket digging force at power max.</td>
<td>132 kN</td>
<td>13500 kg / 29,762 lb</td>
</tr>
<tr>
<td>Arm crowd force at power max.</td>
<td>103 kN</td>
<td>10500 kg / 23,149 lb</td>
</tr>
<tr>
<td>ISO rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bucket digging force at power max.</td>
<td>149 kN</td>
<td>15200 kg / 33,510 lb</td>
</tr>
<tr>
<td>Arm crowd force at power max.</td>
<td>108 kN</td>
<td>11000 kg / 24,251 lb</td>
</tr>
</tbody>
</table>
### 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  
- Bucket: None  
- Lifting mode: On

#### Arm: 2925 mm 97”  
#### Bucket: None  
#### Shoes: 700 mm 28” triple grouser

<table>
<thead>
<tr>
<th>Unit: kg</th>
<th>1.5 m 5’</th>
<th>3.0 m 10’</th>
<th>4.6 m 15’</th>
<th>6.1 m 20’</th>
<th>7.6 m 25’</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cf</td>
<td>Cs</td>
<td>Cf</td>
<td>Cs</td>
<td>Cf</td>
<td>Cs</td>
</tr>
<tr>
<td>7.6 m</td>
<td>25’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 m</td>
<td>* 6600</td>
<td>5950</td>
<td>7.2</td>
<td>* 3850</td>
<td>* 3850</td>
<td></td>
</tr>
</tbody>
</table>
| 4.6 m    | * 8100   | * 8100   | * 8250  | * 5800   | * 5250   | * 4150  
|          | * 17850  | * 17850  | * 18180 | * 12780  | * 11570  | * 9140 |
| 10’      | * 10450  | * 9250   | 9.4     | * 7000   | * 6500   | * 5500 |
|          | * 12850  | * 12850  | * 13200 | 8.4     | * 8200   | * 7500 |
| 1.5 m    | * 12700  | 7900     | 7.9     | * 6500   | * 5950   | * 5300 |
| 0 m      | * 7500   | 7500     | 8.4     | * 5500   | * 5000   | * 4500 |
| -1.5 m   | * 7600   | * 7600   | 7.9     | * 5250   | * 4750   | * 4300 |
| -5’      | * 8100   | * 8100   | 8.4     | * 6500   | * 6000   | * 5500 |
| -10’     | * 9200   | * 9200   | 7.9     | * 6000   | * 5500   | * 5000 |
| -1.5 m   | * 12850  | * 12850  | 8.4     | * 6500   | * 6000   | * 5500 |

* 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.

**Arm: 2925 mm 97”**  
**Bucket: None**  
**Shoes: 800 mm 31.5” triple grouser**

<table>
<thead>
<tr>
<th>Unit: kg</th>
<th>1.5 m 5’</th>
<th>3.0 m 10’</th>
<th>4.6 m 15’</th>
<th>6.1 m 20’</th>
<th>7.6 m 25’</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Cf</td>
<td>Cs</td>
<td>Cf</td>
<td>Cs</td>
<td>Cf</td>
<td>Cs</td>
</tr>
<tr>
<td>7.6 m</td>
<td>25’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 m</td>
<td>* 6600</td>
<td>5950</td>
<td>7.2</td>
<td>* 3850</td>
<td>* 3850</td>
<td></td>
</tr>
</tbody>
</table>
| 4.6 m    | * 8100   | * 8100   | * 8250  | * 5800   | * 5250   | * 4150  
|          | * 14550  | 13110    | 23.6    | * 8480   | * 8480   |     |
| 10’      | * 12850  | * 12850  | * 13200 | 8.4     | * 8200   | * 7500 |
|          | * 10450  | 8450     | 8.4     | * 6500   | * 6000   | * 5500 |
| 1.5 m    | * 12700  | 7900     | 7.9     | * 6500   | * 6000   | * 5500 |
| 0 m      | * 7500   | 7500     | 8.4     | * 5500   | * 5000   | * 4500 |
| -1.5 m   | * 7600   | * 7600   | 7.9     | * 5250   | * 4750   | * 4300 |
| -5’      | * 8100   | * 8100   | 8.4     | * 6500   | * 6000   | * 5500 |
| -10’     | * 9200   | * 9200   | 7.9     | * 6000   | * 5500   | * 5000 |
| -1.5 m   | * 12850  | * 12850  | 8.4     | * 6500   | * 6000   | * 5500 |

* 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
- 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
- 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

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

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