

# PC210LC-10 Tier 4 Interim Engine



## **WALK-AROUND**



**Tier 4 Interim Engine** 

IET HORSEPOWER

158 HP @ 2000rpm 118 kW @ 2000rpm DPERATING WEIGHT

48,950-52,036 lb 22203-23603 kg

BUCKET CAPACITY

0.66-1.57 yd3 0.50-1.20 m<sup>3</sup>



### FAST CYCLE TIMES & LOW FUEL CONSUMPTION

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

New engine and hydraulic pump control technology improves

operational efficiency and lowers fuel consumption.

A powerful Komatsu SAA6D107E-2 engine provides a net output of 118 kW 158 HP. This engine is EPA Tier 4 Interim and EU stage 3B emissions certified.

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

**Komatsu Diesel Particulate Filter (KDPF)** 

captures 90% of particulate matter and provides automatic regeneration that does not interfere with daily operation.

> Large displacement high efficiency pumps provide higher flow output and efficient operation.

**Enhanced working modes** 

are designed to match engine speed, pump delivery, and system pressure to the application.

Increased drawbar pull

provides improved steering and maneuverability.

### Large LCD color monitor panel:

- 7" high resolution screen
- Provides "Eco-Guidance" for fuel efficient operation
- Enhanced attachment control

**Rearview monitoring** system (standard)

**Equipment Management Monitoring System** 

(EMMS) continuously monitors machine operation and vital systems to identify machine issues and assist with troubleshooting.

#### **Enhanced working environment**

- · High back, heated, and air suspension operator seat
- Integrated ROPS cab design (ISO 12117-2)
- Cab meets ISO Level 1 Operator Protective Guard (OPG) top guard (ISO 10262)

Komatsu designed and manufactured components Guardrails (standard) located on the machine upper structure provide a convenient work area in front of the engine.

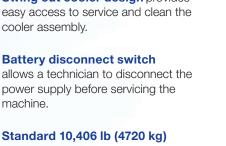
Swing out cooler design provides

power supply before servicing the

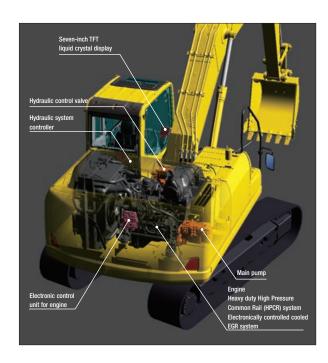
counterweight provides the same lifting performance as the PC200LC-8 (optional 7,937 lb 3600 kg counterweight is available).



Komtrax equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.



### PERFORMANCE FEATURES



### **Advanced Electronic Control System**

The engine control system has been upgraded to effectively manage the air flow rate, EGR gas flow rate, fuel injection parameters, and aftertreatment functions. The new control system also provides enhanced diagnostic capabilities.



### **Environment-Friendly Engine**

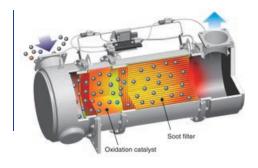
The Komatsu SAA6D107E-2 engine is EPA Tier 4 Interim and EU Stage 3B emissions certified and provides exceptional performance while reducing fuel consumption. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces exhaust gas particulate matter (PM) by more than 90% and nitrogen oxides (NOx) by more than 45% when compared to Tier 3 levels.

Through the in-house development and production of engines, electronics, and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all applications.

### Komatsu Diesel Particulate Filter (KDPF)

Komatsu has developed a high efficiency diesel particulate filter that captures more than 90% of particulate matter. Both passive and active regeneration are automatically initiated by the engine controller depending on the soot level of the KDPF. A special oxidation catalyst with a fuel injection system is used to oxidize and remove particulate matter while the machine is running so the regeneration process will not interfere with daily operation.

The operator can also initiate regeneration manually or disable regeneration depending on the work environment.



### **Closed Crankcase Ventilation (CCV)**

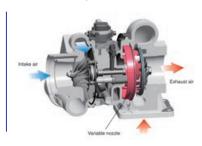
Crankcase emissions (blowby gas) are passed through a CCV filter. The CCV filter traps oil mist which is returned back to the crankcase while the gas, which is almost oil mist free, is fed back to the air intake.



### Komatsu Variable Geometry Turbocharger (KVGT)

Using Komatsu proprietary technology, a newly designed variable geometry turbocharger with a hydraulic actuator is used to manage and deliver optimum air flow to the combustion chamber under all speed and load

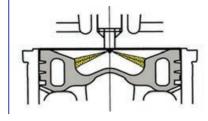
conditions. The robust hydraulic actuator provides power and precision, resulting in cleaner exhaust gas and improved fuel economy while maintaining performance.



### **Redesigned Combustion Chamber**

The combustion chamber located at the top of the

engine piston has a new shape designed to improve combustion and further reduce NOx, PM, fuel consumption, and noise levels.



#### **Low Operational Noise**

The PC210LC-10 provides low noise operation using a low noise engine and methods that reduce noise at the source such as sound absorbing materials.

### **Cooled Exhaust Gas Recirculation (EGR)**

Cooled EGR, a technology that has been well proven in Komatsu Tier 3 engines, reduces NOx emissions to meet Tier 4 levels.

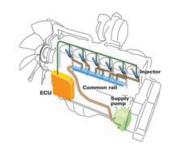
The hydraulically actuated EGR system has increased capacity and uses larger and more robust components to ensure reliability for demanding work conditions.



### Heavy Duty High Pressure Common Rail (HPCR) Fuel Injection System

The heavy duty HPCR system is electronically controlled to deliver a precise quantity of pressurized fuel into the

combustion chamber using multiple injection events to achieve complete fuel burn and reduce exhaust gas emissions. Fuel injector reliability has been improved by using ultra-hard wear resistant materials.



### **Large Digging Force**

The PC210LC-10 is equipped with the Power Max system. This function temporarily increases digging force for 8.5 seconds of operation.

### Maximum arm crowd force (ISO):

101 kN (10.3 t) 108 kN (11.0 t) 7 % UP (with Power Max.)

### Maximum bucket digging force (ISO):

138 kN (14.1 t) 149 kN (15.2 t) 8 % UP

(with Power Max.)

\* Measured with Power Max function, 3045 mm arm and ISO rating



### PERFORMANCE FEATURES

### **Efficient Hydraulic System**

The PC210LC-10 uses a Closed Center Load Sensing (CLSS) hydraulic system that improves fuel efficiency and provides quick response to the operator's demands.

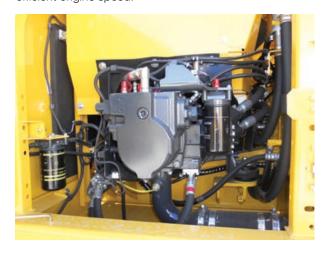
The PC210LC-10 also introduces new technology to enhance the engine and hydraulic pump control. This total control system matches the engine and hydraulics at the most efficient point under any load condition. There have also been improvements in the main valve and hydraulic circuit to reduce hydraulic loss, resulting in higher efficiency and lower fuel consumption.

### Reduced Up To 10% Fuel consumption

vs PC200LC-8
Based on typical work pattern collected via KOMTRAX

### **Large Displacement High Efficiency Pump**

Pump displacement has been increased, providing increased flow output as well as operation at the most efficient engine speed.



### **Idling Caution**

To reduce unnecessary fuel consumption, an idling

caution is displayed on the monitor if the engine idles for 5 minutes or more.



### **Working Mode Selection**

The PC210LC-10 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E). Each mode is designed to match engine speed, pump flow, and system pressure to the application. The PC210LC-10 features a new mode (ATT/E) which allows operators to run attachments while in Economy mode.

| Working<br>Mode | Application                   | Advantage   |
|-----------------|-------------------------------|---|
| P               | Power mode                    | Maximum production/power     Fast cycle times             |
| E               | Economy<br>mode               | •Good cycle times •Better fuel economy                    |
| L               | Lifting mode                  | •Increases hydraulic pressure                             |
| В               | Breaker mode                  | Optimum engine rpm,<br>hydraulic flow                     |
| ATT/P           | Attachment<br>Power mode      | Optimum engine rpm,<br>hydraulic flow, 2-way Power mode   |
| ATT/E           | Attachment<br>Economy<br>mode | Optimum engine rpm,<br>hydraulic flow, 2-way Economy mode |



### **Lifting Mode**

When the Lifting mode is selected, the lift capacity is increased 7% by raising the hydraulic pressure.

### **Eco-Gauge Assists with Energy Saving Operations**

The Eco-gauge and new fuel consumption gauge are viewed on the right side of the color monitor and assist the operator in maintaining low fuel consumption and environment friendly operation.



### **RELIABILITY FEATURES**

### **High Rigidity Work Equipment**

Booms and arms are constructed with thick plates of high tensile strength steel. In addition, these structures are designed with large cross-sectional areas and large one piece castings in the boom foot, the boom tip, and the arm tip. The result is work equipment that exhibits long term durability and high resistance to bending and torsional stress.



### **Komatsu Designed Components**

All of the major machine components such as the engine, hydraulic pumps, hydraulic motors, and control valves are exclusively designed and manufactured by Komatsu.

### **High Efficiency Fuel Filter**

A new high efficiency dual element fuel filter improves fuel system reliability.



### **Equipped with a Fuel Pre-filter** (With Water Separator)

A fuel pre-filter removes water and contaminants in the fuel to increase reliability. For convenience, the fuel pre-filter has a built in priming pump.



### **O-Ring Face Seals**

Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections.

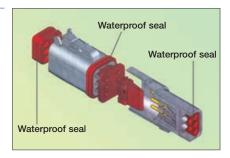


### **Durable Frame Structure**

The revolving frame, center frame, and undercarriage are designed using the most advanced three dimensional CAD and FEM analysis technology.

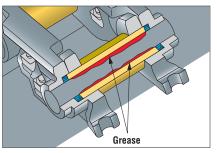
### **DT-type Connectors**

Sealed DT-type connectors provide high reliability, water resistance, and dust resistance.



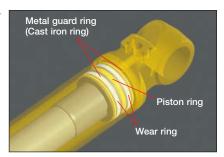
#### **Grease Sealed Track**

The PC210LC-10 uses grease sealed tracks for extended undercarriage life.



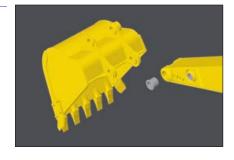
### **Metal Guard Rings**

The PC210LC-10 uses metal guard rings to protect all of the hydraulic cylinders and improve long term reliability.



### **Durable Arm Tip Bushing**

The end face of the arm tip bushing provides high resistance to seizure and wear.

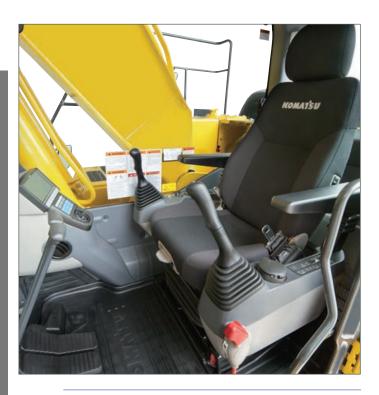


### **Highly Reliable Electronic Devices**

Exclusively designed electronic devices have passed severe testing.

- Controllers
- Sensors
- Connectors
- Heat Resistant Wiring

### **WORKING ENVIRONMENT**



### **Newly Designed Wide Spacious Cab**

The newly designed wide spacious cab features a high back, fully adjustable seat with a reclining backrest. The console and seat have an integrated design so that they

move together and provide additional comfort for the operator.

The new higher capacity operator seat has been enhanced to provide more comfort.

- Heated
- Air Suspension
- Integrated Seat
- Console Mounted Arm Rests



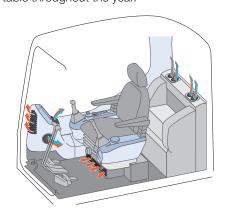
### **Low Cab Noise**

The new cab design is highly rigid and has excellent sound absorption ability. By improving noise source reduction and by using a low noise engine, hydraulic equipment, and air conditioner, this machine is able to generate low noise levels similar to that of a modern automobile.

### **Automatic Air Conditioner**

The automatic air conditioner allows the operator to easily and precisely set the cab atmosphere using the large LCD color monitor panel. The bi-level control function improves air flow and keeps the inside of the cab comfortable throughout the year.



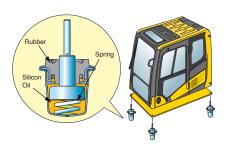


### **Pressurized Cab**

The air conditioner, air filter, and a higher internal cab air pressure minimize the amount of external dust that enters the cab.

### **Low Vibration with Viscous Cab Mounts**

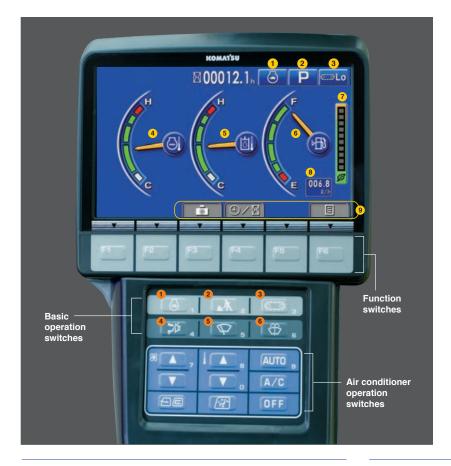
The PC210LC-10 uses viscous mounts for the cab that incorporate a longer stroke and the addition of a spring. The cab damper mounting combined with a high rigidity deck reduces vibration at the operator's seat.



## Auxiliary Input (MP3 Jack)

By connecting an auxiliary device such as an MP3 player to the auxiliary input, the operator can hear the sound through the speakers installed in the cab.

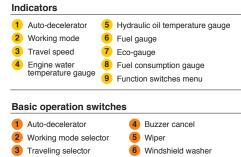




### Large High Resolution LCD Monitor Panel

A new large, user-friendly, high resolution LCD color monitor enables accurate and smooth work. Screen visibility and resolution are further improved compared to the previous LCD monitor panel. The switches and function keys are easy to operate and provide simple navigation through the monitor screens.

Data is displayed in 25 languages to support operators around the world.



### **Operational "ECO" Guidance**

The monitor panel provides operational advice to the operator to help improve machine efficiency and lower fuel consumption. The operator can access the ECO guidance menu to check the Operation Records, Eco Guidance Records, and Average Fuel Consumption Logs.





ECO Guidance

ECO Guidance menu



Attaonin

### **Improved Attachment Control**

The PC210LC-10 is capable of storing up to ten different attachments in the new monitor panel. The name of each attachment can be changed for better tool management. Hydraulic flow rates can be easily adjusted for one-way and two-way flow attachments.



**Attachment Setting Screen** 



Attachment Flow Screen

### **MAINTENANCE FEATURES**

### **Easy Access Coolers**

The radiator and oil cooler are side-by-side modules which simplifies cleaning, removing, and installing. The swing out cooler design provides easier access to the cooling cores.



### Long Life Oils, Filters

High performance filters are used in the hydraulic circuit and engine. By increasing the oil and filter replacement intervals, maintenance costs can be significantly reduced.



Hydraulic oil filter (Eco-white element)

| Engine oil & Engine oil filter | every 500 hours  |
|--------------------------------|------------------|
| Hydraulic oil                  | every 5000 hours |
| Hydraulic oil filter           | every 1000 hours |

### **KDPF Regeneration Notification**

The LCD color monitor panel provides the operator with the status of the KDPF regeneration, without interfering with daily operation.

When the machine initiates active regeneration an icon

will appear to notify the operator.



### **Extended Work Equipment Greasing Intervals**

Special hard material is used for the work equipment bushings to lengthen the greasing intervals. All work equipment bushing lubrication intervals, except the arm tip and bucket linkage, are 500 hours, reducing maintenance costs.

### **Battery Disconnect Switch**

A standard battery disconnect switch allows a technician to disconnect the power supply and lock out before servicing the machine.



### **Manual Stationary Regeneration**

Under most conditions, active regeneration will occur automatically with no effect on machine operation. In case the operator needs to disable active regeneration or initiate a manual stationary regeneration, this can be easily accomplished through the monitor panel.

A soot level indicator is displayed to show how much soot is trapped in the KDPF.



Soot level indicator

### Equipped with Ecodrain Valve

Minimizes ground contamination due to oil leakage when replacing the engine oil.



## **Equipment Management Monitoring System** (EMMS)

The PC210LC-10 features an advanced diagnostic system that continuously monitors the machine's vital systems. EMMS tracks maintenance items, provides advanced troubleshooting tools, reduces diagnostic times, and displays error codes.

Through continuous monitoring, the EMMS helps identify issues before they become worse and allows the operator to concentrate on the work at hand.

### Abnormalities Display with Code

When an abnormality occurs an error code is displayed

on the monitor. When an important code is displayed, a caution lamp blinks and warning buzzer sounds to alert the operator to take action.

The monitor also stores a record of abnormalities for more effective troubleshooting.



### Advanced Monitoring System

The monitor provides advanced monitoring diagnostics to assist with troubleshooting and reduce costly downtime.







KOMATSU

### **GENERAL FEATURES**

### **ROPS Cab Design**

The PC210LC-10 is equipped with an integrated ROPS cab as standard equipment. The cab also meets OPG Top Guard Level 1 requirements.



#### Guardrails

Guardrails have been added on the upper structure of the machine. This provides additional convenience during engine service.



### Thermal and Fan Guards

Thermal and fan guards are placed around high temperature parts of the engine and fan drive.



## Rear-view Monitoring System (standard)

On the large LCD color monitor the operator can view the image from one camera that will display areas directly behind the machine. An optional 2-camera system is available.





Rear view image on monitor

### Seat Belt Caution Indicator

A warning indicator on the monitor appears when the seat belt is not engaged.



### **Lock Lever**

When the lock lever is placed in the lock position, all hydraulic controls (travel, swing, boom, arm, and bucket) are inoperable.



### Secondary Engine Shutdown Switch

A new secondary switch has been added to shutdown the engine.



### **Slip Resistant Plates**

Durable slip resistant plates maintain excellent foot traction



### **KOMTRAX EQUIPMENT MONITORING**



- 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 aids in making repair or



KOMTRAX is standard equipment on all Komatsu construction products



- 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 was done and help you plan for future maintenance needs

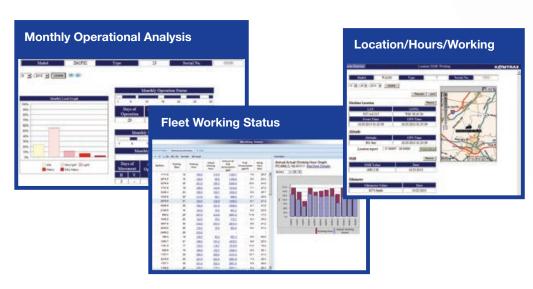




- KOMTRAX data can be accessed virtually anywhere through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications



- 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









# **KOMATSU PARTS & SERVICE SUPPORT**



### Komatsu CARE – Complimentary Scheduled Maintenance

- PM services for the earlier of 3 years / 2000 hours
- Performed by factory certified technicians
- Komatsu Genuine parts and fluids
- Significantly lowers your cost of ownership while maintaining high uptime and reliability
- Increases resale value and provides detailed maintenance records
- Extended PM services can be purchased beyond the complimentary period to provide additional peace of mind and maximize uptime



### 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

### **SPECIFICATIONS**



| Model Komatsu SAA6D107E-2*                              |
|---|
| TypeWater-cooled, 4-cycle, direct injection             |
| AspirationTurbocharged, aftercooled, cooled EGR         |
| Number of cylinders                                     |
| Bore107 mm <b>4.21"</b>                                 |
| Stroke  |
| Piston displacement6.69 ltr <b>408 in³</b>              |
| Horsepower: SAE J1995                                   |
| Fan drive method for radiator cooling Mechanical        |
| Governor  |
| *EPA Tier 4 Interim and EU stage 3B emissions certified |



### **HYDRAULICS**

Type ....... HydrauMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load sensing valves and pressure compensated valves

| Number of selectable working modes | 6 |
|------------------------------------|---|
|                                    |   |

| Type                       | Variable displacement piston type    |
|----------------------------|--------------------------------------|
| Pumps forBoom, arm         | , bucket, swing, and travel circuits |
| Maximum flow               | 475 ltr/min <b>125.5 gal/min</b>     |
| Supply for control circuit | Self-reducing valve                  |

#### Hydraulc motors:

| Travel    | 2 x axial piston mo  | otors with parking brake |
|-----------|----------------------|--------------------------|
| Swing 1 x | axial piston motor w | rith swing holding brake |

### Relief valve setting:

| Implement circuits | 37.3 | MPa   | 380   | kg/cm <sup>2</sup> | 5,400         | psi |
|--------------------|------|-------|-------|--------------------|---------------|-----|
| Travel circuit     | 37.3 | MPa   | 380   | kg/cm <sup>2</sup> | 5,400         | psi |
| Swing circuit      | 28.9 | MPa   | 295   | kg/cm <sup>2</sup> | 4,190         | psi |
| Pilot circuit      |      | 3.2 N | 1Pa 3 | 33 kg/cr           | m² <b>470</b> | 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 58.7" x 3.7"** Bucket.. 1-115 mm x 1120 mm x 80 mm **4.5" x 44.1" x 3.2"** 



### DRIVES AND BRAKES

| Steering control     | Two levers with pedals  |
|----------------------|---|
| Drive method         | Hydrostatic   |
| Maximum drawbar pull | 202 kN 20570 kg <b>45,349 lb</b>  |
| Gradeability         | 70%, 35°  |
| (Auto-Shift)         | 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             | Hydrostatic                    |
|--------------------------|--------------------------------|
| Swing reduction          | Planetary gear                 |
| Swing circle lubrication | Grease-bathed                  |
| Service brake            | Hydraulic lock                 |
| Holding brake/Swing lock | Mechanical disc brake          |
| Swing speed              | 12.4 rpm                       |
| Swing torque             | 6900 kg•m <b>49,907 ft lbs</b> |



### UNDERCARRIAGE

| Center frame                          | X-frame      |
|---------------------------------------|--------------|
| Track frame                           | Box-section  |
| Seal of track                         | Sealed track |
| 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 <b>105.7 U.S. gal</b>  |
|------------------------|--------------------------------|
| Coolant                | . 30.7 ltr <b>8.1 U.S. gal</b> |
| Engine                 | 23.1 ltr <b>6.1 U.S. gal</b>   |
| Final drive, each side | 5.0 ltr <b>1.3 U.S. gal</b>    |
| Swing drive            | 6.5 ltr <b>1.7 U.S. gal</b>    |
| Hydraulic tank         | 132 ltr <b>34.9 U.S. gal</b>   |
| Hydraulic system       | 234 ltr <b>61.8 U.S. gal</b>   |



### **OPERATING WEIGHT** (APPROXIMATE)

Operating weight includes 5700 mm 18'8" one-piece boom, 2925 mm 9'7" arm, SAE heaped 1.02 m<sup>3</sup> 1.34 yd<sup>3</sup> bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

| Triple-Grouser Shoes | Operating Weight | Ground Pressure         |
|----------------------|------------------|-------------------------|
| 700 mm               | 23323 kg         | 0.43 kg/cm <sup>2</sup> |
| 28"                  | 51,419 lb        | 6.2 psi                 |
| 800 mm               | 23603 kg         | 0.38 kg/cm <sup>2</sup> |
| 31.5"                | 52,036 lb        | 5.5 psi                 |

### **Component Weights**

### Arm including bucket cylinder and linkage

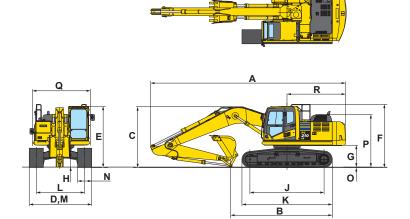
| 2900 mm <b>9'7"</b> HD arm assembly   | 1136 kg <b>2,505 lb</b> |
|---------------------------------------|-------------------------|
| 2900 mm 9'7" HD arm assembly w/piping | 1200 kg <b>2,646 lb</b> |
|                                       |                         |

| One piece boom including arm cylinder   |
|---|
| 5700 mm <b>18'8"</b> boom assembly  |
| Boom cylinders x 2  |
| Counterweight (standard)  |
| 1.02 m <sup>3</sup> <b>1.34 yd<sup>3</sup></b> bucket - 42" width857 kg <b>1,890 lb</b> |

### **SPECIFICATIONS**

### **DIMENSIONS**

|   | Arm Length                           | 2925 mm | 9'7"  |
|---|--------------------------------------|---------|-------|
| Δ | Overall length                       | 9625 mm | 31'7" |
|   | <u> </u>                             |         |       |
| В | Length on ground (transport)         | 5000 mm | 16'5" |
| C | Overall height (to top of boom)*     | 2996 mm | 9'9"  |
| D | Overall width                        | 3180 mm | 10'5" |
| 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"  |
| Н | Ground clearance, minimum            | 440 mm  | 1'5"  |
| 1 | Tail swing radius                    | 2940 mm | 9'8"  |
| 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                     | 3180 mm | 10'5" |
| N | Shoe width                           | 800 mm  | 31.5" |
| 0 | Grouser height                       | 26 mm   | 1.0"  |
| Р | Machine cab height                   | 2605 mm | 8'7"  |
| Q | Machine cab width **                 | 2850 mm | 9'4"  |
| R | Distance, swing center to rear end   | 2910 mm | 9'7"  |





### BACKHOE BUCKET, ARM AND BOOM COMBINATION

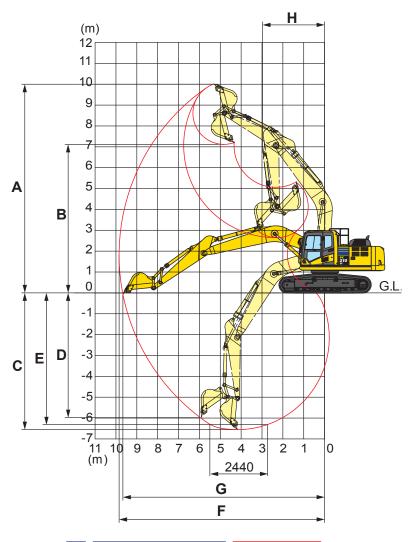
| Bucket         |                     |                      | Buck    | cet   |         |          | 5.7 m (18'8") Boo |  |
|----------------|---------------------|----------------------|---------|-------|---------|----------|-------------------|--|
| Туре           | Сар                 | acity                | Wid     | Width |         | ight     | 2.9 m (9'7")      |  |
|                | 0.50 m <sup>3</sup> | 0.66 yd³             | 610 mm  | 24"   | 605 kg  | 1,334 lb | V                 |  |
| V1-            | $0.67  \text{m}^3$  | 0.88 yd <sup>3</sup> | 762 mm  | 30"   | 689 kg  | 1,518 lb | V                 |  |
| Komatsu<br>TL  | 0.85 m <sup>3</sup> | 1.11 yd³             | 914 mm  | 36"   | 780 kg  | 1,719 lb | V                 |  |
|                | 1.02 m <sup>3</sup> | 1.34 yd <sup>3</sup> | 1067 mm | 42"   | 857 kg  | 1,890 lb | W                 |  |
|                | 1.20 m <sup>3</sup> | 1.57 yd³             | 1219 mm | 48"   | 949 kg  | 2,092 lb | Х                 |  |
|                | 0.50 m <sup>3</sup> | 0.66 yd <sup>3</sup> | 610 mm  | 24"   | 652 kg  | 1,437 lb | ٧                 |  |
|                | 0.67 m <sup>3</sup> | 0.88 yd <sup>3</sup> | 762 mm  | 30"   | 763 kg  | 1,681 lb | V                 |  |
| Komatsu<br>HP  | 0.85 m <sup>3</sup> | 1.11 yd³             | 914 mm  | 36"   | 868 kg  | 1,913 lb | V                 |  |
| HE             | 1.02 m <sup>3</sup> | 1.34 yd <sup>3</sup> | 1067 mm | 42"   | 950 kg  | 2,095 lb | W                 |  |
|                | 1.20 m <sup>3</sup> | 1.57 yd³             | 1219 mm | 48"   | 1066 kg | 2,349 lb | Υ                 |  |
|                | 0.50 m <sup>3</sup> | 0.66 yd <sup>3</sup> | 610 mm  | 24"   | 724 kg  | 1,597 lb | V                 |  |
|                | 0.67 m <sup>3</sup> | 0.88 yd <sup>3</sup> | 762 mm  | 30"   | 840 kg  | 1,851 lb | V                 |  |
| Komatsu<br>HPS | 0.85 m <sup>3</sup> | 1.11 yd³             | 914 mm  | 36"   | 962 kg  | 2,120 lb | V                 |  |
| TIFO           | 1.02 m <sup>3</sup> | 1.34 yd <sup>3</sup> | 1067 mm | 42"   | 1061 kg | 2,339 lb | Χ                 |  |
|                | 1.20 m <sup>3</sup> | 1.57 yd³             | 1219 mm | 48"   | 1193 kg | 2,630 lb | Υ                 |  |
|                | 0.50 m <sup>3</sup> | 0.66 yd <sup>3</sup> | 610 mm  | 24"   | 824 kg  | 1,817 lb | V                 |  |
|                | 0.67 m <sup>3</sup> | 0.88 yd <sup>3</sup> | 762 mm  | 30"   | 939 kg  | 2,071 lb | V                 |  |
| Komatsu<br>HPX | 0.85 m <sup>3</sup> | 1.11 yd³             | 914 mm  | 36"   | 1061 kg | 2,340 lb | W                 |  |
| IIFA           | 1.02 m <sup>3</sup> | 1.34 yd <sup>3</sup> | 1067 mm | 42"   | 1161 kg | 2,559 lb | Χ                 |  |
|                | 1.20 m <sup>3</sup> | 1.57 yd <sup>3</sup> | 1219 mm | 48"   | 1293 kg | 2,850 lb | Υ                 |  |

- V Used with material weights up to 3,500 lb/yd $^{3}$
- X Used with material weights up to 2,500 lb/yd³
- Z Not useable

- W Used with material weights up to 3,000 lb/yd3
- Y Used with material weights up to 2,000 lb/yd3

<sup>\*:</sup> Including grouser height
\*\*: Including handrail

# **WORKING RANGE**

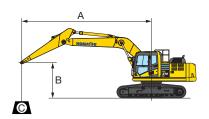


|            | Arm Length                             | 2925 mm               | 9'7"     |
|------------|--|-----------------------|----------|
| Α          | Max. digging height                    | 10000 mm              | 32'10"   |
| В          | Max. dumping height                    | 7110 mm               | 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"   |
| Н          | Min. swing radius                      | 3040 mm               | 10'0"    |
| _          | Bucket digging force at power max.     | 132 kM                | J        |
| SAE rating | backet digging force at power max.     | 13500 kg / <b>2</b> 9 | 9,762 lb |
| SAE        | Arm crowd force at power max.          | 103 kM                | 1        |
|            | 7 IIII Olona loloo at polioi maai      | 10500 kg / <b>2</b> 3 | 3,149 lb |
| 6          | Bucket digging force at power max.     | 149 kN                | J        |
| ISO rating | 3 3                                    | 15200 kg / <b>3</b> 3 | 3,510 lb |
| 180        | Arm crowd force at power max.          | 108 kN                | J        |
|            | •                                      | 11000 kg / <b>2</b> 4 | 1,250 lb |

### LIFT CAPACITIES



### LIFTING CAPACITY WITH LIFTING MODE



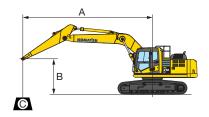
- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- : Rating at maximum reach

#### Conditions:

- 5700 mm 18' 8" one-piece boom
- Counterweight: 4720 kg 10,406 lb
- Bucket: None
- Lifting mode: On

| Arm: 2900 mm 9'7" HD                                 |   | Shoes: 700 mm 28"                                  |                      | Unit: kg lb                     |
|--|---|--|----------------------|---------------------------------|
| A 3.0 m <b>10'</b>                                   | 4.6 m <b>15'</b>                        | 6.1 m <b>20'</b> 7.6 m <b>2</b>                    | 5' 9.1 m <b>30</b> ' | MAX                             |
| B Cf Cs  | Cf Cs                                   | Cf Cs Cf   | Cs Cf Cs             | Cf Cs                           |
| 7.6 m<br><b>25'</b>                                  |   |  | *                    | 4100 4100                       |
| 6.1 m<br><b>20</b> '                                 |   | * 6500 6000<br>* <b>14400 13300</b>                | *                    | 3030 3030                       |
| 4.6 m<br><b>15'</b>                                  | * 8000 * 8000<br>* <b>17700 * 17700</b> | * 7150 5900 * 5250<br>* <b>15850 13000 * 11550</b> | 4200 * <b>9350</b> * | 3000 3000                       |
| 3.0 m * 12800 * 12800<br>10' * 28300 * 28300         | * 10350 8500<br>* <b>22850 18800</b>    | * 8250 5650 6100<br>* <b>18250 12550 13450</b>     | 4150 * <b>9150</b> * | 3930 3030                       |
| 1.5 m<br><b>5'</b>                                   | * 12550 8050<br>* <b>27750 17800</b>    | 8250 5450 5950<br><b>18250 12050 13200</b>         | 4050 * <b>8950</b> * | 4200 3330                       |
| 0 m * 7450 * 7450<br>0' * <b>16500 * 16500</b>       | 12650 7800<br><b>27950 17250</b>        | 8100 5300 5900<br><b>17850 11700 13000</b>         | 3950 * <b>8750</b> * | 4750 5050                       |
| -1.5 m * 12000 * 12000<br>-5' * <b>26500 * 26500</b> | 12550 7750<br><b>27750 17100</b>        | 8000 5250 * 5850<br><b>17700 11550 * 12900</b>     | 3950 * <b>8750</b> * | 3030 3930                       |
| -3.0 m * 18500 14800<br>-10' * 40850 32650           | 12650 7800<br><b>27900 17200</b>        | 8050 5250<br><b>17800 11650</b>                    |                      | 7000 4650<br><b>15450 10300</b> |
| -4.6 m * 15000 * 15000<br>-15' * 33100 * 33100       | * 10750 8050<br>* <b>23750 17800</b>    |  | *                    | 0930 0000                       |

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



- 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:

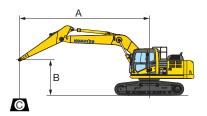
- 5700 mm 18' 8" one-piece boom
- Counterweight: 4720 kg 10,406 lb
- Bucket: None
- Lifting mode: On

| Arm: 2900 mm 9'7" HD                                 |                                      | Shoes: 800                          | ) mm <b>31.5"</b>                  |                  | Unit: kg lb                           |
|--|--------------------------------------|-------------------------------------|------------------------------------|------------------|---------------------------------------|
| A 3.0 m 10'  | 4.6 m <b>15'</b>                     | 6.1 m <b>20'</b>                    | 7.6 m <b>25'</b>                   | 9.1 m <b>30'</b> | ■ MAX                                 |
| B Cf Cs  | Cf Cs                                | Cf Cs                               | Cf Cs                              | Cf Cs            | Cf Cs                                 |
| 7.6 m<br><b>25'</b>                                  |                                      |                                     |                                    |                  | * 4100 * 4100<br>* <b>9050 * 9050</b> |
| 6.1 m<br><b>20 '</b>                                 |                                      | * 6500 6100<br>* <b>14400 13400</b> |                                    |                  | * 3850 * 3850<br>* <b>8500 * 8500</b> |
| 4.6 m<br><b>15'</b>                                  | 0000 0000                            | * 7150 5950<br>* <b>15850 13100</b> | * 5250 4250<br>* <b>11550 9450</b> |                  | * 3800 * 3800<br>* <b>8400 * 8400</b> |
| 3.0 m * 12800 * 12800<br>10' * 28300 * 28300         |                                      | * 8250 5700<br>* <b>18250 12650</b> | 6150 4200<br><b>13600 9250</b>     |                  | * 3950 3700<br>* <b>8700 8200</b>     |
| 1.5 m<br><b>5'</b>                                   | * 12550 8150<br>* <b>27750 18000</b> | 8350 5500<br><b>18450 12150</b>     | 6050 4100<br><b>13350 9050</b>     |                  | * 4200 3600<br>* <b>9300 7950</b>     |
| 0 m * 7450 * 7450<br>0' * 16500 * 16500              | 12800 7900<br><b>28250 17400</b>     | 8200 5350<br><b>18050 11850</b>     | 5950 4000<br><b>13150 8850</b>     |                  | * 4750 3650<br>* <b>10450 8150</b>    |
| -1.5 m * 12000 * 12000<br>-5' * <b>26500 * 26500</b> |                                      | 8100 5300<br><b>17900 11700</b>     | * 5850 4000<br><b>* 12900 8800</b> |                  | * 5650 4000<br>* <b>12500 8800</b>    |
| -3.0 m * 18500 14950<br>-10' * 40850 33000           |                                      | 8150 5350<br><b>18000 11800</b>     |                                    |                  | 7100 4700<br><b>15650 10400</b>       |
| -4.6 m * 15000 * 15000<br>-15' * 33100 * 33100       |                                      |                                     |                                    |                  | * 8950 6650<br>* <b>19750 14700</b>   |

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



### LIFTING CAPACITY WITH LIFTING MODE



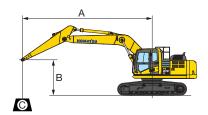
- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- : Rating at maximum reach

#### Conditions:

- 5700 mm 18' 8" one-piece boom
- Counterweight: 3600 kg 7,937 lb
- Bucket: None
- Lifting mode: On

| Arm: 2900 mm 9'7" HD   |                                    | Shoes: 70                           | 0 mm <b>28"</b>                    |                  | Unit: kg lb                                  |
|--|------------------------------------|-------------------------------------|------------------------------------|------------------|--|
| A 3.0 m 10'  | 4.6 m <b>15'</b>                   | 6.1 m <b>20'</b>                    | 7.6 m <b>25'</b>                   | 9.1 m <b>30'</b> | ■ MAX  |
| B Cf Cs  | Cf Cs                              | Cf Cs                               | Cf Cs                              | Cf Cs            | Cf Cs  |
| 7.6 m<br><b>25'</b>  |                                    |                                     |                                    |                  | * 4100 * 4100<br>* <b>9050</b> * <b>9050</b> |
| 6.1 m<br><b>20 '</b>   |                                    | * 6500 5350<br>* <b>14400 11850</b> |                                    |                  | * 3850 * 3850<br>* <b>8500 * 8500</b>        |
| 4.6 m * <b>15'</b> *   | 8000 8000                          | * 7150 5200<br>* <b>15850 11550</b> | * 5250 3700<br>* <b>11550 8250</b> |                  | * 3800 3500<br>* <b>8400 7750</b>            |
| 3.0 m * 12800 * 12800 * <b>10'</b> * <b>28300</b> * <b>28300</b> * | 10350 7550<br>22850 16700          | 7650 5000<br><b>16900 11050</b>     | 5450 3650<br><b>12050 8050</b>     |                  | * 3950 3200<br>* <b>8700 7100</b>            |
| 1.5 m<br><b>5'</b>   | 11650 7100<br><b>25650 15650</b>   | 7400 4800<br><b>16350 10600</b>     | 5350 3550<br><b>11800 7800</b>     |                  | * 4200 3100<br>* <b>9300 6900</b>            |
| 0 m * 7450 * 7450<br><b>0' * 16500 * 16500</b>                     | 11300 6850<br><b>25000 15100</b>   | 7250 4650<br><b>16000 10250</b>     | 5250 3450<br><b>11650 7650</b>     |                  | * 4750 3150<br>* <b>10450 7000</b>           |
| -1.5 m * 12000 * 12000<br>-5' * <b>26500 * 26500</b>               | 11250 6750<br><b>24800 14950</b>   | 7150 4550<br><b>15800 10100</b>     | 5250 3450<br><b>11600 7600</b>     |                  | * 5250 3450<br>* <b>11550 7600</b>           |
| -3.0 m * 18500 13000<br>-10' * 40850 28700                         | 11300 6800<br><b>24950 15100</b>   | 7200 4600<br><b>15900 10200</b>     |                                    |                  | 6250 4050<br><b>13850 9000</b>               |
| -4.6 m * 15000 * 15000 * -15' * 33100 * 33100 *                    | 710750 7100<br>723750 <b>15700</b> |                                     |                                    |                  | * 8950 5800<br>* <b>19750 12800</b>          |

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



- 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:

- 5700 mm **18' 8"** one-piece boom
- Counterweight: 3600 kg 7,937 lb
- Bucket: None
- Lifting mode: On

| Arm: 2900 mm 9       | <b>7"</b> HD                      |                   |                                   | <b>Shoes:</b> 800    | mm 31.5"                 |                     |       |     |                      | Unit: kg lb             |
|----------------------|-----------------------------------|-------------------|-----------------------------------|----------------------|--------------------------|---------------------|-------|-----|----------------------|-------------------------|
| A                    | 3.0 m <b>10'</b>                  | 4.6 m <b>15</b> ' | 6.1                               | m <b>20'</b>         | 7.6 m                    | 25'                 | 9.1 m | 30' | <b>❸</b> N           | ЛАХ                     |
| B (                  | cf Cs                             | Cf (              | Cs Cf                             | Cs                   | Cf                       | Cs                  | Cf    | Cs  | Cf                   | Cs                      |
| 7.6 m<br><b>25'</b>  |                                   |                   |                                   |                      |                          |                     |       | *   | 4100<br><b>9050</b>  | * 4100<br>* <b>9050</b> |
| 6.1 m<br><b>20</b> ' |                                   |                   | * 6500<br>* <b>14400</b>          | 5400<br><b>11950</b> |                          |                     |       | *   | 3850<br><b>8500</b>  | * 3850<br>* <b>8500</b> |
| 4.6 m<br><b>15'</b>  |                                   |                   | 000 * 7150<br>7700 * <b>15850</b> | 5300<br><b>11650</b> | * 5250<br><b>* 11550</b> | 3750<br><b>8350</b> |       | *   | 3800<br><b>8400</b>  | 3550<br><b>7850</b>     |
|                      | 12000                             |                   | 650 7750<br><b>6850 17100</b>     | 5050<br><b>11200</b> | 5500<br><b>12200</b>     | 3700<br><b>8150</b> |       | *   | 3950<br><b>8700</b>  | 3250<br><b>7200</b>     |
| 1.5 m<br><b>5'</b>   |                                   |                   | 200 7500<br><b>5850 16550</b>     | 4850<br><b>10700</b> | 5400<br><b>11950</b>     | 3600<br><b>7900</b> |       | *   | 4200<br><b>9300</b>  | 3150<br><b>6950</b>     |
|                      | 450 * 7450<br><b>500 * 16500</b>  |                   | 900 7300<br><b>5300 16200</b>     | 4700<br><b>10400</b> | 5350<br><b>11750</b>     | 3500<br><b>7750</b> |       | *   | 4750<br><b>10450</b> | 3200<br><b>7100</b>     |
|                      | 000 * 12000<br>500 * <b>26500</b> |                   | 850 7250<br><b>5100 16000</b>     | 4650<br><b>10250</b> | 5300<br><b>11750</b>     | 3500<br><b>7700</b> |       |     | 5300<br><b>11700</b> | 3500<br><b>7700</b>     |
|                      | 500 13150<br><b>850 29050</b>     |                   | 900 7300<br><b>5250 16100</b>     | 4650<br><b>10300</b> |                          |                     |       |     | 6350<br><b>14000</b> | 4100<br><b>9100</b>     |
|                      | 13550 100 <b>29850</b>            |                   | 200<br>5 <b>850</b>               |                      |                          |                     |       | *   | 8950<br><b>19750</b> | 5850<br><b>12950</b>    |

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



### STANDARD EQUIPMENT

- Alternator, 60 Ampere, 24V
- AM/FM radio
- Automatic engine warm-up system
- Automatic air conditioner/heater
- Auxiliary input (3.5mm jack)
- Batteries, large capacity
- Battery disconnect switch
- Boom and arm holding valves
- Converter, (2) x 12V
- Counterweight, 4720 kg 10,406 lb
- Dry type air cleaner, double element
- Electric horn
- EMMS monitoring system
- Engine, Komatsu SAA6D107E-2
- Engine overheat prevention system
- Extended work equipment grease interval
- Fan guard structure

- Fuel system pre-cleaner 10 micron
- High back air suspension seat, with heat
- Hydraulic track adjusters
- KOMTRAX® Level 4.0
- Large LCD color monitor, high resolution
- Lock lever
- Mirrors, (LH and RH)
- Operator Protective Top Guard (OPG), Level 1
- Pattern change valve (ISO to BH control)
- Power maximizing system
- PPC hydraulic control system
- Pump/engine room partition cover
- Radiator and oil cooler dustproof net
- Rear reflectors
- Rearview monitoring system (1 camera)
- Revolving frame deck guard

- Revolving frame undercovers
- ROPS cab
- Seat belt, retractable, 76mm 3"
- Seat belt indicator
- Secondary engine shutoff switch
- Service valve
- Shoes, triple grouser, 800mm 31.5"
- Skvlight
- Slip resistant foot plates
- Starter motor, 5.5kW/24V x 1
- Suction fan
- Thermal and fan guards
- Track frame undercover
- Travel alarm
- Working lights, 2 (boom and RH front)
- Working mode selection system



### **OPTIONAL EQUIPMENT**

- (1) additional rearview camera
- Arms
  - 2925 mm 9'7" arm assembly
  - 2925 mm 9'7" HD arm assembly
- 2925 mm **9'7"** HD arm assembly with piping
- Booms
  - 5700 mm **18'8"** boom assembly
  - 5700 mm **18'8"** HD boom assembly with piping
- Cab guards
  - Full front guard, OPG Level 1
  - Full front guard, OPG Level 2
  - Bolt-on top guard, OPG Level 2
  - Lower front window guard
- Counterweight, 3600 kg 7,937 lb
- High pressure in-line hydraulic filters
- Hydraulic control unit, 1 actuator
- Rain visor
- Revolving frame undercovers, heavy duty
- Shoes, triple grouser, 700 mm 28"
- Sun visor

- Straight travel pedal
- Track roller guards, full length
- Working light, front, one additional



#### **ATTACHMENT OPTIONS**

- Grade control systems
- Hydraulic couplersHydraulic kits, field installed
- Super long fronts

- PSM thumbs
- Rockland thumbs
- Vandalism protection guards with storage box

For a complete list of available attachments, please contact your local Komatsu distributor.

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6/12 (EV-3)

