KOMATSU®

# PC390LL-10

## Tier 4 Interim Engine

PC390LL

**NET HORSEPOWER**
**257 HP @ 1950rpm**
192 kW @ 1950rpm

**OPERATING WEIGHT**

| | | |
|---|---|---|
| **Log Loader** | **106,920 lb** | 48,500 kg |
| **Road Builder** | **103,400 lb** | 46,900 kg |


PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

# WALK-AROUND




1. HD reinforced front idler
2. HD straddle mounted carrier rollers
3. Ski-type roller guards with 9" pitch track
4. PC450 class final drives
5. PC490 class swing system
6. HD full under cover guards
7. Full length grip strut walkways
8. HD rear compartment doors
9. Engine heat shields
10. Rear view camera
11. Komatsu Oregon OSHA ROPS/OPS/FOPS/TOPS/WCB certified forestry cab with Komatsu excavator interior
12. 48" hydraulic tilting or 7" fixed cab riser
13. Komatsu 42' live heel logging boom
14. Boom and arm cylinder guards
15. Komatsu designed cylinders and cylinder components
16. Factory installed 58" & 60" opening forestry grapples
17. High and wide carbody with 2-piece hinged HD swivel guard and front/rear pull hooks
18. Reinforced revolving frame
19. High pressure pump outlet screens

PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

| NET HORSEPOWER | | |
|---|---|---|
| **257 HP @ 1950rpm** | | |
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| OPERATING WEIGHT | | |
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KOMATSU CARE®

## EXCEPTIONAL STABILITY & LOW FUEL CONSUMPTION

**Large Undercarriage Design** significantly increases overside lift capacity and provides exceptional lateral stability in applications that require long arms or heavy attachments.

**New engine and hydraulic pump control technology** improves operational efficiency and lowers fuel consumption.

**A powerful Komatsu SAA6D114E-5 engine** provides a net output of 192 kW **257 HP**. This engine is EPA Tier 4 Interim and EU Stage 3B emission 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. Special forestry regeneration logic prompts the operator to select a location for initiating a manual stationary regeneration.


**Komatsu certified forestry cab Oregon OSHA/ROPS/OPS/FOPS/TOPS/WCB**

- High back, heated, and air suspension operator seat
- Enhanced working environment

**Heavy duty Komatsu live heel forestry boom**
42' reach logging boom design with Komatsu cylinders and cylinder guards

**Robust undercarriage** is designed using larger size class components for increased performance, reliability and component longevity.

**Large maximum drawbar pull** provides excellent maneuverability and shovel logging performance.

**Large LCD color monitor panel:**

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

**Rearview monitoring system (standard)**

**Enhanced working modes** are designed to match engine speed, pump delivery, and system pressure to the application.

**Two boom mode settings** provide power mode for maximum digging force or smooth mode for fine grading operations.

**Equipment Management Monitoring System (EMMS)** continuously monitors machine operation and vital systems to identify machine issues and assist with troubleshooting.

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

**Grip strut walkways and handrails** located on the machine upper structure provide a more convenient work area along both sides of the machine for maintenance and service.

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

**Heavy duty forestry guarding** package for rugged logging applications.

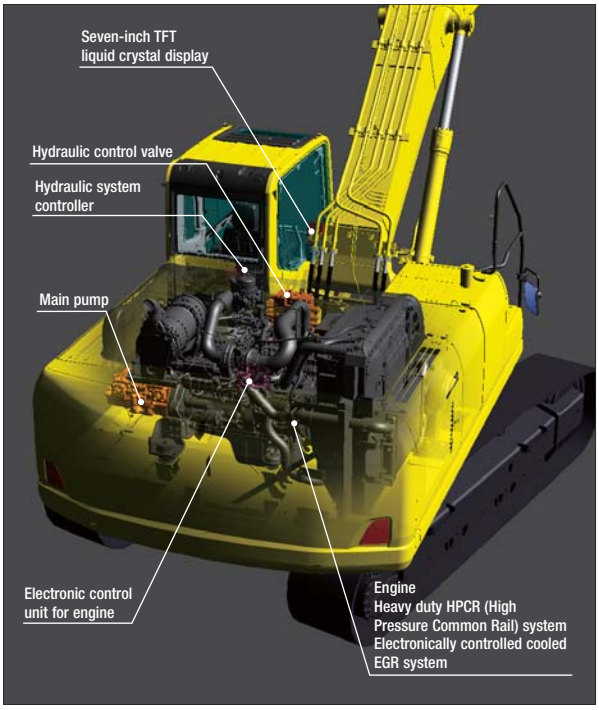
**Komatsu designed and manufactured components** including: high & wide undercarriage, 42' live heel logging boom, forestry boom, forestry cab, engine, hydraulic pumps, hydraulic motors, control valves and hydraulic cylinders.

KOMTRAX®

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.

## Environmentally-Friendly Engine

The Komatsu SAA6D114E-5 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.

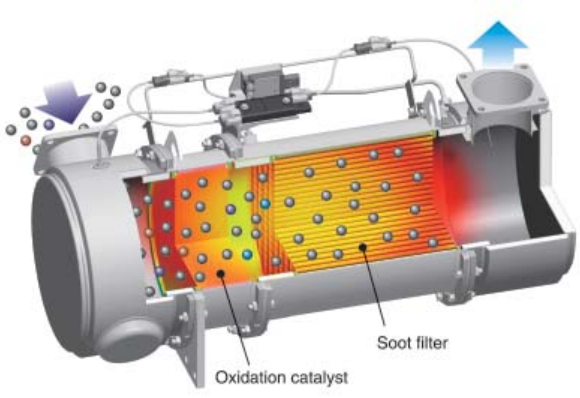
## Low Operational Noise

The PC390LL-10 provides low noise operation using a low noise engine and methods that reduce noise at the source such as sound absorbing materials.

## Komatsu Diesel Particulate Filter (KDPF)

Komatsu has developed a high efficiency diesel particulate filter that captures more then 90% of particulate matter. When required, the engine controller displays a message that a manual stationary regeneration is needed so the operator can select a time and location for regeneration. 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.

When regeneration is required, special forestry logic allows the operator to initiate a manual regeneration at a time and location of his choosing.

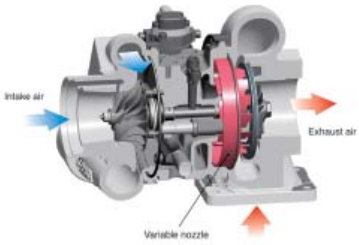





Photos may include optional equipment

## 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.

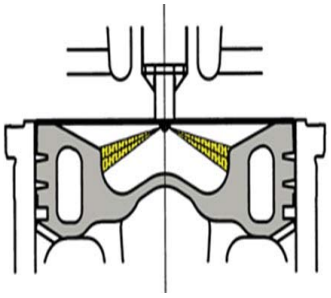



## Komatsu Closed Crankcase Ventilation (KCCV)

Crankcase emissions (blow-by gas) are passed through a Komatsu CCV filter. The KCCV 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.

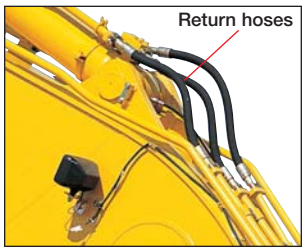
## Redesigned Combustion Chamber

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



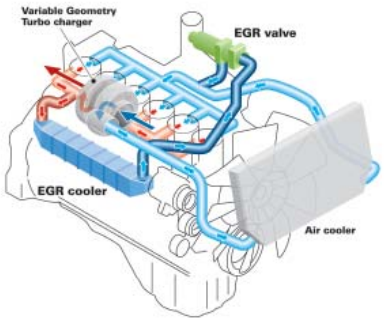
## Smooth Loading Operation Road Builder

Two return hoses improve hydraulic performance. During the arm out function, a portion of the oil is returned directly back to the tank for smooth operation.



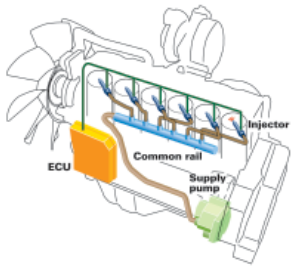

## Cooled Exhaust Gas Recirculation (EGR)

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 - Road Builder

The PC390LL-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):**

160 kN (16.3 t) ➡ **171 kN (17.4 t)** **7 % UP**

(with Power Max.)

**Maximum bucket digging force (ISO):**

213 kN (21.7 t) ➡ **228 kN (23.2 t)** **7 % UP**

(with Power Max.)

* Measured with Power Max function, 3185 mm arm and ISO rating

# PERFORMANCE FEATURES



## Efficient Hydraulic System

The PC390LL-10 uses a Closed Center Load Sensing (CLSS) hydraulic system that improves fuel efficiency and provides quick response to the operator's demands.

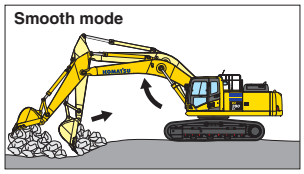
The PC390LL-10 also introduces new technology to enhance the engine and hydraulic pump control. This total control system matches the engine and hydraulics at the most efficient point under any load condition. There have also been improvements in the main valve and hydraulic circuit to reduce hydraulic loss, resulting in higher efficiency and lower fuel consumption.

**Reduced Up To 10% Fuel consumption**

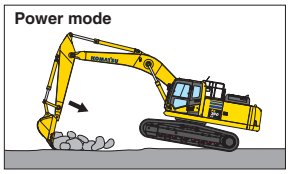
vs PC350HD-8
Based on typical work pattern collected via KOMTRAX

## Two Boom Mode Settings - Road Builder

Smooth boom mode provides easy operation for gathering blasted rock or when scraping down. Power boom mode maximizes digging force for more effective excavating.




Boom floats upward, reducing lifting of the machine. This improves comfort while gathering blasted rock and scraping down.




Boom pushing force is increased, ditch digging and box digging operation on hard ground are improved.

## Large Undercarriage Design

The PC390LL-10 uses a large high and wide undercarriage design that increases overside lift capacity and improves lateral stability, especially for applications that require long reach or heavy attachments.

## Large Maximum Drawbar Pull

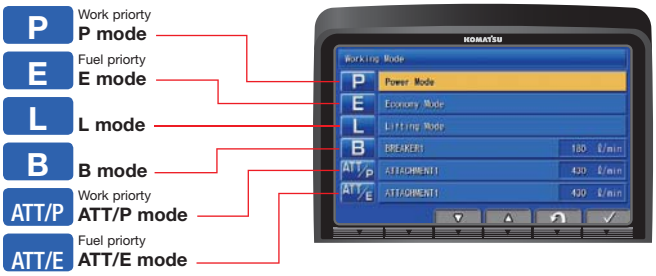
Provides excellent maneuverability and shovel logging performance

**Maximum Drawbar Pull** 329 kN 33510 kgf **73,880 lb**

## Working Mode Selection

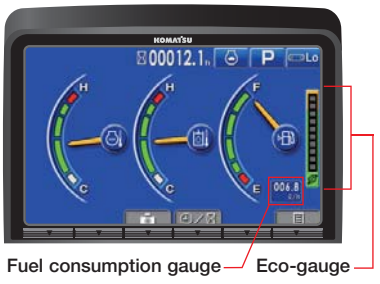
The PC390LL-10 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E). Each mode is designed to match engine speed, pump flow, and system pressure to the application. The PC390LL-10 features a new mode (ATT/E) which allows operators to run attachments while in Economy mode.

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




## 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 lower fuel consumption and more environment friendly operation.






PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

# 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.

### High Efficiency Fuel Filter with a Fuel Pre-filter (With Water Separator)

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


### Durable Frame Structure

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

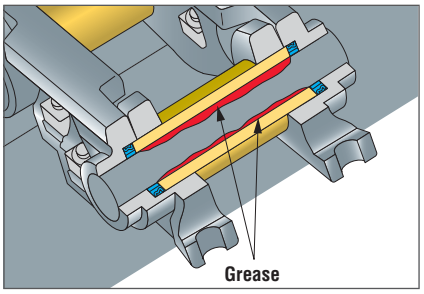
### Highly Reliable Electronic Devices

Exclusively designed electronic devices have passed severe testing.

- Controllers
- Connectors
- Sensors
- Heat Resistant Wiring

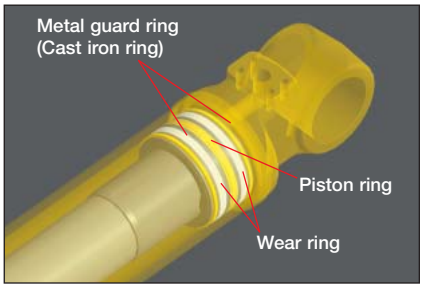
### Grease Sealed Track

The PC390LL-10 uses grease sealed tracks for extended undercarriage life.



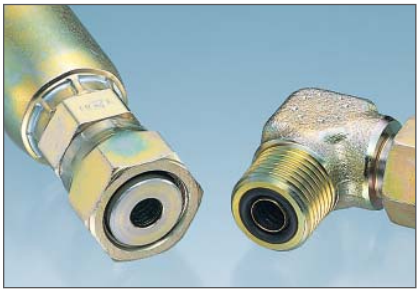

### Metal Guard Rings

The PC390LL-10 uses metal guard rings to protect all of the hydraulic cylinders and improve long term reliability.




### O-Ring Face Seals

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



### Robust Forestry Undercarriage

The undercarriage is designed using larger size class components for improved reliability and long component life.

### Protective Forest Debris Screens

Engine hood, side access door and exhaust outlet cover screens provide added engine protection.

# WORKING ENVIRONMENT

## KOMATSU FORESTRY CAB FEATURES & BENEFITS



### Komatsu Oregon OSHA ROPS/OPS/FOPS/ TOPS/OPS/WCB Certified Forestry 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
- Cab Risers

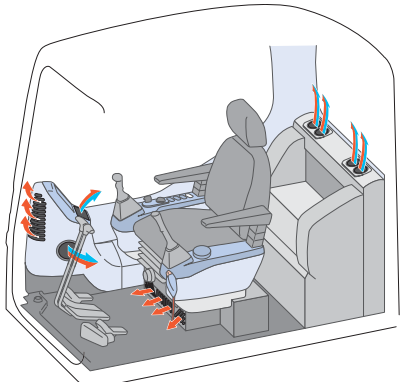
The cab is available with 7" fixed riser or 48" hydraulic tilt cab riser.

### 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 & Heater

The automatic air conditioner & heater 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.

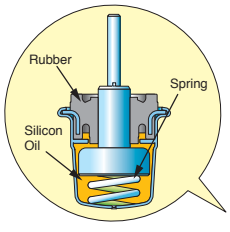



### Pressurized Cab

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 Floor Mounts

The PC390LL-10 uses viscous mounts for the seat platform 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 or satellite radio receiver to the auxiliary input, the operator can hear the sound through the speakers installed in the cab.

PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT


## Large 7" 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.

### Indicators

1. Auto-decelerator
2. Working mode
3. Travel speed
4. Engine water temperature gauge
5. Hydraulic oil temperature gauge
6. Fuel gauge
7. Eco-gauge
8. Fuel consumption gauge
9. Function switches menu

### Basic operation switches

1. Auto-decelerator
2. Working mode selector
3. Traveling selector
4. Buzzer cancel
5. Wiper
6. Windshield washer

## Operational "ECO" Guidance

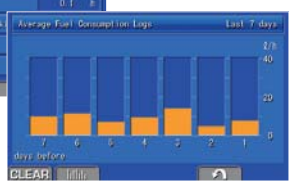
The monitor panel provides operational advice to the operator to help improve machine efficiency and lower fuel consumption. The operator can access the ECO guidance menu to check the Operation Records, Eco Guidance Records, and Average Fuel Consumption Logs.


ECO Guidance


ECO Guidance menu


ECO Guidance Records


Operation Records




Average Fuel Consumption Logs

## Improved Attachment Control

The PC390LL-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**

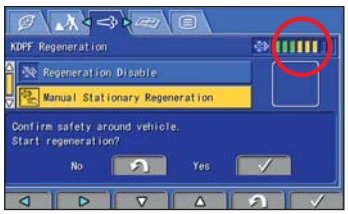

**Attachment Flow Screen**

# MAINTENANCE FEATURES



## KDPF Condition Monitor

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




## Special Forestry KDPF Regeneration

When the machine requires KDPF regeneration, a manual stationary regeneration icon appears. Manual stationary regeneration allows the operator to select a time and location of his choosing to initiate the regeneration process.


## Easier Engine Access

Engine maintenance is made easier with a new platform.

## Sloped Track Frame

Reduces dirt and sand accumulation while allowing easier mud removal.

## Battery Disconnect Switch

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

## 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 |

## Engine Debris Screens

Engine debris screens are easily removed and cleaned (without the need for tools).

## Gas Assisted Engine Hood Damper Cylinders

The engine hood can be opened and closed easier by using the gas assisted engine hood damper cylinders.

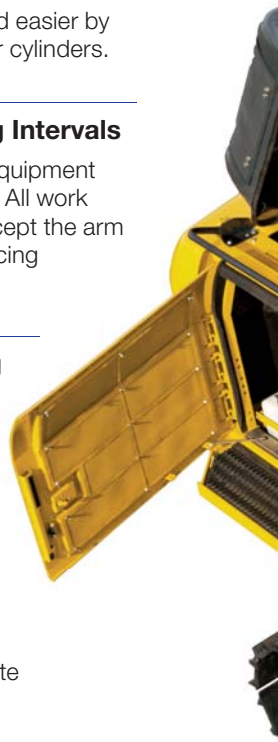
## Extended Work Equipment Greasing Intervals

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.

## Equipment Management Monitoring System (EMMS)

The PC390LL-10 features an advanced diagnostic system that continuously monitors the machine's vital systems. EMMS tracks maintenance items, provides advancedtroubleshooting 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.





PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

## 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.

## Maintenance Tracking


When the machine approaches or exceeds the oil and filter replacement interval, the monitor panel will display lights to inform the operator.

# GENERAL FEATURES



### Thermal Protective Covers

Thermal protective covers for variable geometry turbocharger and diesel particulate filter.

### Handrails

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


### Fan Guards

Fan guards are placed around parts of the engine and fan drive.

### Working Lights

Standard work light package includes: (4) cab front top, (2) cab rear top, (1) cab left side, (1) right hand box, (2) boom, and (1) front of optional 48" cab riser.

### 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.


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.

### Tilting Cab Riser

Optional 48" riser has a hydraulic cab tilt feature to reduce transport height. Operates with a convienent remote control from ground level.

### Compartment Covers

Rear compartment doors/covers are more than 3 times thicker and door hinges are stronger than on comparably-sized excavators.

PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

# KOMTRAX EQUIPMENT WORKING ENVIRONMENT MONITORING

GET THE WHOLE STORY WITH KOMTRAX®

## WHAT

KOMTRAX is Komatsu's remote equipment monitoring and management system

- KOMTRAX **continuously monitors and records** machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history **aids in making repair or replacement decisions**

## 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 was done** 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 Log Loader Forestry products


**KOMTRAX®**

For construction and compact equipment.

**KOMTRAX Plus**

For production and mining class machines.

# 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

PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

# SPECIFICATIONS

## ENGINE

Model.....Komatsu SAA6D114E-5*
Type .....Water-cooled, 4-cycle, direct injection
Aspiration..... Turbocharged, aftercooled, cooled EGR
Number of cylinders..... 6
Bore / Stroke.....114 mm **4.49" /** 144.5 mm **5.69"**
Piston displacement..... 8.85 ltr **540 in³**
Horsepower: SAE J1995.....Gross 202 kW **271 HP**
ISO 9249 / SAE J1349 ..... Net 192 kW **257 HP**
Rated rpm..... 1950
Fan drive method for radiator cooling..... Mechanical
Governor..... All-speed control, electronic

*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
Main pump (type) .....Variable displacement piston type
Pumps for.....Boom, arm, bucket, swing, and travel circuits
Maximum flow ..... 535 ltr/min **141.3 gal/min**
Supply for control circuit.....Self-reducing valve
Hydraulc 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 **5,400 psi**
Travel circuit . . . . . .37.3 MPa 380 kg/cm² **5,400 psi**
Swing circuit. . . . . 27.9 MPa 285 kg/cm² **4,050 psi**
Pilot circuit . . . . . 3.2 MPa 33 kg/cm² **470 psi**
Service valve . . . . . 21.6 MPa 220 kg/cm² **3,129 ps**

Hydraulic cylinders: (Number of cylinders – bore x stroke x rod diameter)

| | Road Builder | Log Loader |
|---|---|---|
| Boom (2) | 140mm x 1480mm x 100mm **5.5" x 58.3" x 3.9"** | 160mm x 1429mm x 100mm **6.3" x 56.3" x 4.33"** |
| Arm (1) | 160 mm x 1825 mm x 110 mm **6.3" x 71.9" x 4.3"** | 200 mm x 1625 mm x 140 mm **7.87" x 64.0" x 5.51"** |
| Bucket (1) | 140 mm x 1285 mm x 100 mm **5.5" x 50.6" x 3.9"** | 160 mm x 1133 mm x 100 mm **6.3" x 44.6" x 3.9"** |

Service valve maximum flow:
First valve . . . . . .535 ltr **141 U.S. gal**
Second valve . . . . . 250 ltr **66 U.S. gal**

## DRIVES AND BRAKES

Steering control.....Two levers with pedals
Drive method ..... Hydrostatic
Maximum drawbar pull .....329 kN 33510 kg **73,880 lb**
Gradeability.....70%, 35°
Maximum travel speed: High..... 5.5 km/h **3.4 mph**
(Auto-Shift) Mid..... 4.4 km/h **2.7 mph**
(Auto-Shift) 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..... 7.5 rpm
Swing torque.....13414 kg•m **97,024 ft lbs**

## UNDERCARRIAGE

Center frame.....X-frame
Track frame.....Box-section
Seal of track.....Sealed track
Track adjuster .....Hydraulic
Number of shoes (each side)..... 46
Number of carrier rollers (each side)..... 2
Number of track rollers (each side)..... 7

## COOLANT & LUBRICANT CAPACITY (REFILLING)

Fuel tank ..... 605 ltr **159.8 U.S. gal**
Coolant ..... 37 ltr **9.7 U.S. gal**
Engine.....35 ltr **9.2 U.S. gal**
Final drive, each side.....10.5 ltr **2.77 U.S. gal**
Swing drive .....20 ltr **5.3 U.S. gal**
Hydraulic tank..... 188 ltr **49.7 U.S. gal**
Hydraulic system..... 365 ltr **96.4 U.S. gal**

## OPERATING WEIGHT (APPROXIMATE)

**Log Loader:**
Includes: high-wide track frame, 700 mm double grouser shoes, Forestry cab with 48" riser, Komatsu 42' live heel logging boom, heavy counterweight, battery box guard, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

**Road Builder:**
Includes: Forestry cab with 7" riser, 700mm double grouser shoes 6500 mm 21'3" one-piece HD boom, 3185 mm 10'5" arm, 1.4m³ (1.8yd³)bucket, heavy counterweight, battery box guard, rated capacity of lubricants, coolant, full fuel tank; operator, and standard equipment.

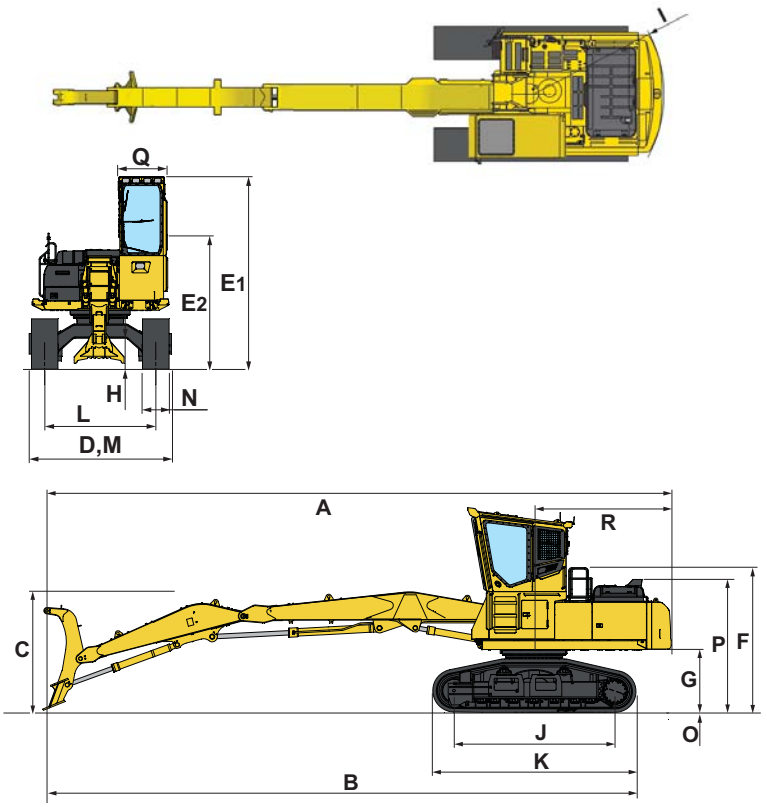
| Configuration | Operating Weight | Ground Pressure |
|---|---|---|
| Log Loader | 48,500 kg | 0.79 kg/cm2 |
| | **106,920lb** | **11.24 psi** |
| Road Builder | 46,900 kg | 0.77 kg/cm2 |
| | **103,400 lb** | **10.95 psi** |

# SPECIFICATIONS

## DIMENSIONS - LOG LOADER

| | Live Heel | 12,800 mm | 42' |
|---|---|---|---|
| A | Overall length | 15,601 mm | 51'2" |
| B | Length on ground (transport) | 14,725mm | 48'4" |
| C | Overall height (to top of boom)* | 3,487 mm | 11'5" |
| D | Overall width | 3,754 mm | 12'4" |
| E1 | Overall height (to top of cab upright)* + | 4951 mm | 16'3" |
| E2 | Overall height (to top of cab tilted)* | 3,487 mm | 11'5" |
| F | Overall height (to top of handrail)* | 3,555 mm | 11'8" |
| G | Ground clearance, counterweight | 1,467.5 mm | 4'10" |
| H | Ground clearance, minimum | 773 mm | 2'6" |
| I | Tail swing radius | 3,441 mm | 11'3" |
| J | Track length on ground | 3,996 mm | 13'1" |
| K | Track length | 5,004 mm | 16'7" |
| L | Track gauge | 2,932 mm | 9'7" |
| M | Width of crawler | 3,632 mm | 11'1" |
| N | Shoe width | 700 mm | 2'4" |
| O | Grouser height | 46 mm | 1.8" |
| P | Engine hood height | 3,257 mm | 10'8" |
| Q | Machine cab width ** | 3,610 mm | 11'10" |
| R | Distance, swing center to rear end | 3,403 mm | 11'2" |

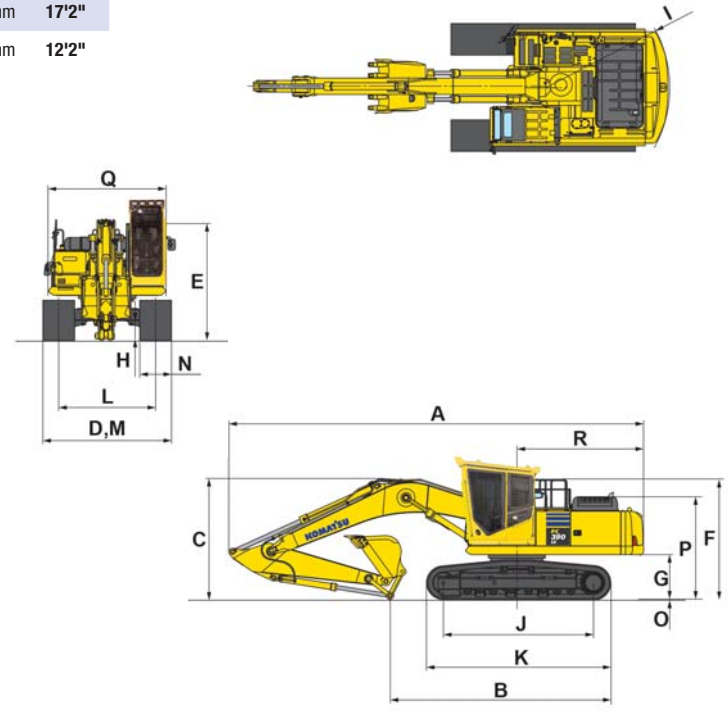
* : Including grouser height
** : Including handrail
+ : without light bar




## DIMENSIONS - ROAD BUILDER

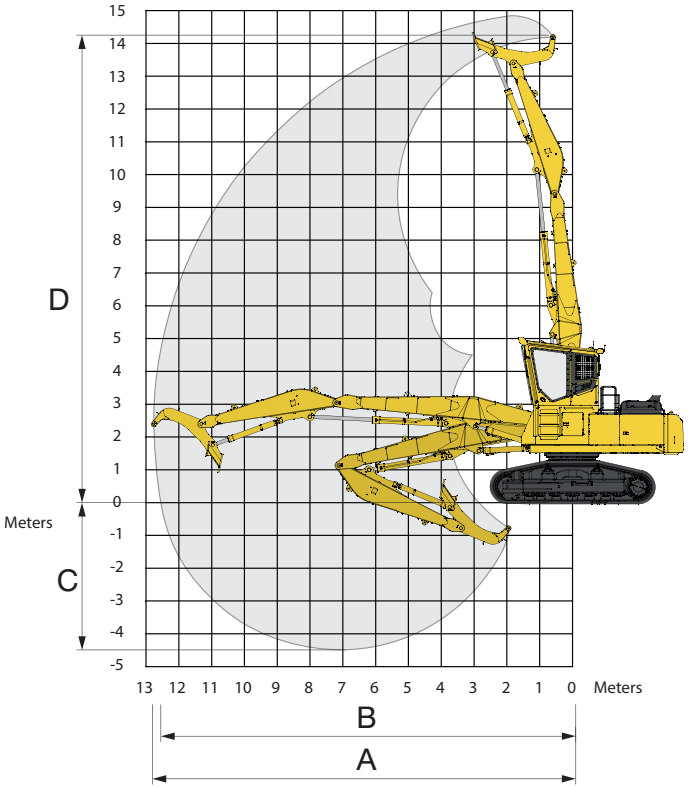
| | Arm Length | 3185 mm | 10'5" | 4020 mm | 13'2" |
|---|---|---|---|---|---|
| A | Overall length | 11,027 mm | 36'2" | 11,610 mm | 36'8" |
| B | Length on ground (transport) | 5,711mm | 18'9" | 5,220 mm | 17'2" |
| C | Overall height (to top of boom)* | 3,297 mm | 10'10" | 3,695 mm | 12'2" |
| D | Overall [crawler] width | 3,754 mm | 12'4" | | |
| E | Overall height (to top of cab)* + | 3,931 mm | 12'11" | | |
| F | Overall height (to top of handrail)* | 3,555 mm | 11'8" | | |
| G | Ground clearance, counterweight | 1,467.5 mm | 4'10" | | |
| H | Ground clearance, minimum | 773 mm | 2'6" | | |
| I | Tail swing radius | 3,445 mm | 11'4" | | |
| J | Track length on ground | 3,996 mm | 13'1" | | |
| K | Track length | 5,004 mm | 16'7" | | |
| L | Track gauge | 2,932 mm | 9'7" | | |
| M | Width of crawler | 3,632 mm | 11'1" | | |
| N | Shoe width | 700 mm | 2'4" | | |
| O | Grouser height | 37 mm | 1.5" | | |
| P | Engine hood height | 3,245 mm | 10'8" | | |
| Q | Machine cab width ** | 3,610 mm | 11'10" | | |
| R | Distance, swing center to rear end | 3,403 mm | 11'2" | | |

* : Including grouser height
** : Including handrail
+ : without light bar



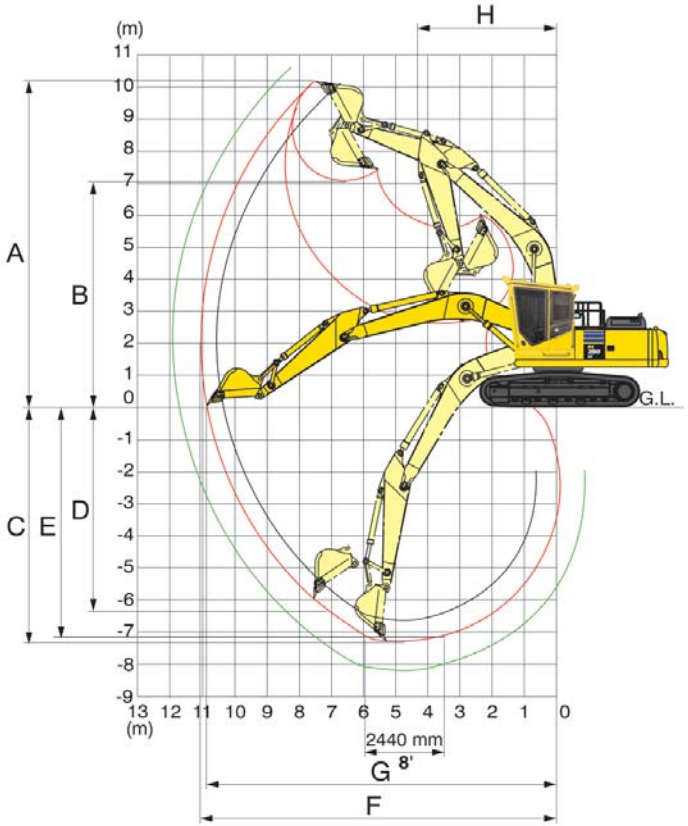

Photos may include optional equipment

## LOG LOADER WORKING RANGE




| | Live Heel | 12,800 mm | 42'0" |
|---|---|---|---|
| A | Max reach | 12,767 mm | **41'11"** |
| B | Max reach at ground level | 12,544 mm | **41'2"** |
| C | Max below grade depth | 4,546 mm | **14'11** |
| D | Max above grade height | 14,838 mm | **48'8"** |

## ROAD BUILDER WORKING RANGE

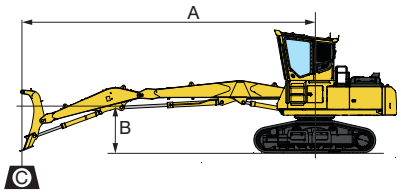



| | Arm Length | 3185 mm | 10'5" | 4020 mm | 13'2" |
|---|---|---|---|---|---|
| A | Max. digging height | 10,412 mm | **34'2"** | 10,875 mm | **35'8"** |
| B | Max. dumping height | 7,378 mm | **24'2"** | 7,820 mm | **25'8"** |
| C | Max. digging depth | 7,045 mm | **23'2"** | 7,875 mm | **25'10"** |
| D | Max. vertical wall digging depth | 6,145 mm | **20'2"** | 7,740 mm | **25'5"** |
| E | Max. digging depth, 8' level bottom | 6,845 mm | **22'5"** | 6,975 mm | **22'10"** |
| F | Max. digging reach | 11,080 mm | **36'4"** | 11,895 mm | **39'0"** |
| G | Max. digging reach at ground level | 10,825 mm | **35'6"** | 11,655 mm | **38'3"** |
| H | Min. swing radius | 4,320 mm | **14'2"** | 4,320 mm | **14'2"** |
| SAE rating | Bucket digging force at power max. | 200 kN | **44,970 lb** | 200 kN | **44,970 lb** |
| | Arm crowd force at power max. | 165 kN | **37,040 lb** | 139 kN | **31,310 lb** |
| ISO rating | Bucket digging force at power max. | 227 kN | **51,150 lb** | 227 kN | **50,930 lb** |
| | Arm crowd force at power max. | 171 kN | **38,360 lb** | 144 kN | **32,410 lb** |

# LIFT CAPACITIES



## LIFTING CAPACITY WITH LIFTING MODE - LOG LOADER




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

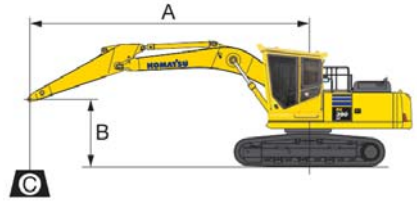
Conditions :
- Boom: Komatsu 42' Live Heel
- Grapple: None
- Lifting mode: On
- Counterweight: Heavy
- Cab: Komatsu forestry with 48" riser

**Arm:** Komatsu 42' Live Heel **Shoes:** 700 mm **28" - Double Grouser** **Unit:** kg **lb**

| A / B | 6.11 m **20'** | | 7.61 m **25'** | | 9.11 m **30'** | | 10.71 m **35'** | | 12.2 m **40'** | | MAX Reach | ⊗ MAX | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | | Cf | Cs |
| 12.2 m | 13,800 | 13,800 | 12,550 | 10,900 | | | | | | | 8.0 | 11,000 | 9,900 |
| **40'** | * **30,450** | * **30,450** | * **27,700** | **24,050** | | | | | | | **26'** | * **24,250** | **21,850** |
| 10.7 m | 12,950 | 12,950 | 11,700 | 11,250 | 10,800 | 8,250 | | | | | 9.6 | 9,500 | 7,500 |
| **35'** | * **28,650** | * **28,650** | * **25,900** | **24,850** | * **23,850** | **18,250** | | | | | **32'** | * **20,950** | **16,550** |
| 9.1 m | | | 11,550 | 11,350 | 10,500 | 8,450 | 8,500 | 6,400 | | | 10.8 | 8,350 | 6,300 |
| **30'** | | | * **25,450** | **25,050** | * **23,200** | **18,600** | **18,800** | **14,150** | | | **35'** | **18,450** | **13,900** |
| 7.6 m | 13,200 | 13,200 | 11,750 | 11,300 | 10,550 | 8,450 | 8,650 | 6,500 | | | 11.6 | 7,450 | 5,550 |
| **25'** | * **29, 150** | * **29, 150** | * **25,900** | **24,900** | * **23,300** | **18,600** | **19,050** | **14,400** | | | **38'** | **16,450** | **12,300** |
| 6.1 m | 14,150 | 14,150 | 12,250 | 11,100 | 10,800 | 8,350 | 6,600 | 6,500 | | | 12.2 | 6,900 | 5150 |
| **20'** | * **31,250** | * **31,250** | * **27,050** | **24,500** | * **23,800** | **16,400** | **19,000** | **14,350** | | | **40'** | **15,200** | **11,050** |
| 4.6 m | 15,500 | 15,250 | 12,950 | 10,800 | 10,850 | 8,150 | 8,500 | 6,400 | 6,900 | 5,150 | 12.6 | 6,550 | 4,900 |
| **15'** | * **34,250** | **33,650** | * **28,600** | **23,850** | **23,900** | **18,050** | **18,800** | **14,150** | **15,200** | **11,350** | **41'** | **14,450** | **10,800** |
| 3.0 m | 16,950 | 14,550 | 13,650 | 10,450 | 10,600 | 7,950 | 8,400 | 6,300 | 6,850 | 5,100 | 12.7 | 6,400 | 4,750 |
| **10'** | * **37,350** | **32,150** | * **30,100** | **23,050** | **23,450** | **17,600** | **18,550** | **13,950** | **15,150** | **11,300** | **42'** | **14,100** | **10,500** |
| 1.5m | 17,800 | 13,900 | 13,600 | 10,100 | 10,400 | 7,750 | 8,300 | 6,200 | 6,800 | 5,050 | 12.7 | 6,150 | 4,750 |
| **5'** | * **39,300** | **30,750** | **30,050** | **22,300** | **22,950** | **17,150** | **18,300** | **13,700** | **15,050** | **11,200** | **42'** | * **13,600** | **10,500** |
| 0 m | 17,700 | 13,450 | 13,300 | 9,800 | 10,200 | 7,600 | 8,200 | 6,100 | 6,450 | 5,050 | 12.5 | 5,350 | 4,850 |
| **0'** | * **39,100** | **29,650** | **29,350** | **21,650** | **22,550** | **16,750** | **18,100** | **13,450** | * **14,250** | **11,150** | **41'** | * **11,850** | **10,750** |
| -1.5 m | 16,400 | 13,150 | 12,900 | 9,600 | 10,100 | 7,500 | 7,850 | 6,050 | | | | | |
| **-5'** | * **36,200** | **29,000** | * **28,400** | **21,250** | **22,300** | **16,500** | * **17,300** | **13,350** | | | | | |
| -3 m | 13,800 | 13,050 | 10,950 | 9,550 | 8,450 | 7,450 | 5,800 | 5,800 | | | | | |
| **-10'** | * **30,500** | **28,650** | * **24,200** | **21,100** | * **16,700** | **16,450** | * **12,600** | * **12,600** | | | | | |

*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 - ROAD BUILDER




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 :
- Boom: 21'3" 6500 mm one piece
- Bucket: 1.4 m³, 997 kg
- Lifting mode: On
- Counterweight: Heavy
- Cab: Komatsu forestry with 7" riser

**Arm:** 3185 mm **10'5"** **Shoes:** 700 mm **28" - Double Grouser** **Unit:** kg **lb**

| A / B | 3.01 m **10'** | | 4.61 m **15'** | | 6.11 m **20'** | | 7.61 m **25'** | | 9.11 m **30'** | | Max Reach | ⊗ MAX | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | | Cf | Cs |
| **7.6 m** | | | | | | | **6,350** | **6,350** | | | 7.8 | **5,400** | **5,400** |
| 25' | | | | | | | * 14,000 | * 14,000 | | | 25' | * 11,950 | * 11,950 |
| **6.1 m** | | | | | | | **7,150** | **7,150** | | | 8.6 | **5,300** | **5,300** |
| 20' | | | | | | | * 15,750 | * 15,750 | | | 28' | * 11,750 | * 11,750 |
| **4.6 m** | | | **12,250** | **12,250** | **9,250** | **9,250** | **7,700** | **7,700** | | | 9.1 | **5,500** | **5,500** |
| 15' | | | * 27,000 | * 27,000 | * 20,500 | * 20,500 | * 17,000 | * 17,000 | | | 30' | * 12,100 | * 12,100 |
| **3.0 m** | | | **14,950** | **14,950** | **10,600** | **10,600** | **8,350** | **8,350** | **7,000** | **6,850** | 9.4 | **5,850** | **5,850** |
| 10' | | | * 33,050 | * 33,050 | * 23,400 | * 23,400 | * 18,500 | * 18,500 | * 15,500 | * 15,150 | 31' | * 12,950 | * 12,950 |
| **1.5 m** | | | **16,500** | **16,500** | **11,600** | **11,600** | **8,900** | **8,900** | **7,200** | **6,750** | 9.4 | **6,650** | **6,500** |
| 5' | | | * 36,400 | * 36,400 | * 25,550 | * 25,550 | * 19,650 | * 19,650 | * 15,650 | 14,900 | 31' | * 14,400 | 14,300 |
| **0 m** | **6,550** | **6,550** | **16,550** | **16,550** | **11,900** | **11,900** | **9,100** | **8,900** | | | 9.1 | **7,050** | **6,750** |
| 0' | * 14,500 | * 14,500 | * 36,450 | * 36,450 | * 26,300 | * 26,300 | * 20,050 | 19,650 | | | 30' | * 15,600 | 14,900 |
| **-1.5 m** | **13,450** | **13,450** | **15,500** | **15,500** | **11,450** | **11,450** | **8,650** | **8,650** | | | 8.6 | **7,100** | **7,100** |
| -5' | * 29.750 | * 29.750 | * 34,150 | * 34,150 | * 25,300 | * 25,300 | * 19,100 | * 19,100 | | | 28' | * 15,700 | * 15,700 |
| **-3.0 m** | **12,650** | **12,650** | **13,400** | **13,400** | **10,050** | **10,050** | **7,100** | **7,100** | | | 7.78 | **7,000** | **7,000** |
| -10' | * 38,950 | * 38,950 | * 29,550 | * 29,550 | * 22,200 | * 22,200 | * 15,700 | * 15,700 | | | 25' | * 15,450 | * 15,450 |
| **-4.6 m** | **12,350** | **12,350** | **9,700** | **9,700** | **6,750** | **6,750** | | | | | 6.3 | **6,300** | **6,300** |
| -15' | * 27,250 | * 27,250 | * 21,450 | * 21,450 | * 14,750 | * 14,750 | | | | | 21' | * 13,950 | * 13,950 |

*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.



PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

# PC390LL-10

PC390LL-10

## STANDARD EQUIPMENT

- Alternator, 60 Ampere, 24 V
- 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
- Cab: Komatsu Oregon OSHA ROPS/OPS/ FOPS/TOPS/OPS/WCB Certified Forestry Cab
- Converter, 24 V to 12 V
- Counterweight, 7090 kg **15,631 lb**
- KDPF insulation wrap and heat shields
- Dry type air cleaner, double element
- Electric horn
- EMMS monitoring system
- Engine doors, HD (6mm)
- Engine, Komatsu SAA6D114E-5
- Engine overheat prevention system
- Extended work equipment grease interval
- Forest debris screens, removeable for cleaning
- Fuel system pre-cleaner 10 micron
- High back air suspension seat, with heat
- High and wide forestry undercarriage
- High pressure in-line hydraulic filters
- Grip strut walkways
- Hydraulic track adjusters
- KOMTRAX® Level 4.0
- Large 177mm **7"** LCD color monitor, high resolution
- Lock lever
- Mirrors, (LH and RH)
- 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 undercovers, HD (9mm)
- Seat belt, retractable, 76 mm **3"**
- Seat belt indicator
- Secondary engine shutoff switch
- Service valve
- Shoes, triple grouser, 700 mm **28"**
- Swivel guard, HD
- Skylight
- Slip resistant foot plates
- Starter motor, 11.0 kW/24 V x 1
- Suction fan
- Thermal and fan guards
- Travel alarm
- Working light package includes: (4) cab front top, (2) cab rear top, (1) cab left side, (1) right hand box, (2) boom, and (1) front of optional 48" cab riser.
- Working mode selection system

## OPTIONAL EQUIPMENT

- Arm holding valve
- Arms
  - 3185 mm **10'5"** arm assembly
  - 3185 mm **10'5"** arm assembly w/1 actuator piping
  - 4020 mm **13'2"** arm assembly
  - 4020 mm **13'2"** arm assembly w/1 actuator piping
- Battery box guard
- Boom
  - 6500 mm **21'3"** HD boom assembly
  - 6500 mm **21'3"** HD boom assembly w/1 actuator piping
- Boom cylinders only
- Cab Risers
  - Forestry cab, 177 mm **7"** fixed riser
  - Forestry cab, 1220 mm **48"** tilting riser
- Counterweight 8105 kg **17,868 lb**
- Flow control and spool limiters
- Forestry Grapples: 58" or 60" opening
- Live heel logging boom, 12800 mm **42'**
- Shoes
  - double grouser, 700 mm **28"**
  - triple grouser, 800 mm **31.5"**
- Soft swing
- Straight travel system pedal

FPSB1004-01

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KOMATSU®

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

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www.komatsuforest.us