

KOMATSU®

PC700LC-8R BACKHOE

HORSEPOWER
Gross: 323 kW 433 HP @ 1800 rpm
Net: 320 kW 429 HP @ 1800 rpm

OPERATING WEIGHT
65700–67800 kg
144,840–149,470 lb

PC
700
LC



Photo may include optional equipment.

HYDRAULIC EXCAVATOR

WALK-AROUND

One-class higher undercarriage to support operations in severe jobsites, PC700LC-8R is a large-sized hydraulic excavator having both high stability and durability.

Productivity Features

- **Large Drawbar Pull and Steering Force**
provide excellent mobility.
- **High Work Equipment Speed**
Increased arm dumping speed and arm speed of compound operation by arm regeneration circuit realize efficient loading operation.
- **Two-mode Setting for Boom**
Switch selection allows either powerful digging or smooth boom operation.
- **Large Digging Force**
Pressing the Power Max function button temporarily increases the digging force 8%.
- **New Design Large SE Bucket (optional for SE spec.)**
4.0m³ (5.2yd³) SE bucket is available.

See page 5.

Excellent Reliability and Durability

- **Sturdy Undercarriage**
One-class higher undercarriage having high reliability and durability
- **Simple Frame Structure (Swing Circle Mount)**
- **Sturdy Guards**
- **Strengthened SE Boom and SE Arm (SE spec.)**
- **Strengthened Quarry Bucket and 4.0m³ SE Bucket**
- **KMAX Tooth**
- **Removed Water and Contamination in Fuel**
 - Fuel pre-filter with water separator
 - High efficiency fuel filter
 - Water separator

Maintenance Features

- Easy checking and maintenance of engine
- Long-life oil, filter
- Electric pump, grease gun with indicator (optional)
- Slip-resistant plates
- Wide catwalk
- Steps connected to the machine cab
- Easy cleaning of cooling unit
- Easy detachable radiator and oil cooler

See page 11.

- **O-ring Face Seal**
- **High-pressure In-line Filtration**
- **Metal Guard Rings**
- **Highly Reliable Electronic Devices**
 - Heat-resistant wiring
 - Circuit breaker
 - Sealed connectors

See pages 6, 7.



Ecology and Economy Features

• High Power Komatsu SAA6D140E-5 Engine

A powerful, turbocharged and air-to-air aftercooled Komatsu SAA6D140E-5 provides **320 kW** 429 HP. This engine is U.S. EPA Tier 2 and EU Stage 2 emissions equivalent.

• Low Ambient Noise

- Electronically controlled variable speed fan drive
- Large hybrid fan
- Glasswool-furnished low-noise muffler and noise reducing cover around the muffler

• Mode Selection

- Working modes selectable
- Economy mode improves fuel consumption.
- ECO gauge for energy-saving operations
- Extended idling caution for fuel conservation
- Auto deceleration and auto idling system reduce fuel consumption.

See pages 4, 5.

Large Liquid Crystal Display (LCD) Monitor

- Easy-to-see and use 7" large multi-function color monitor
- Can be displayed in 12 languages for global support.

See page 10.



Photo may include optional equipment.

HORSEPOWER

Gross:323 kW 433 HP @ 1800 rpm

Net:320 kW 429 HP @ 1800 rpm

OPERATING WEIGHT

65700 – 67800 kg

144,840 – 149,470 lb

Working Environment

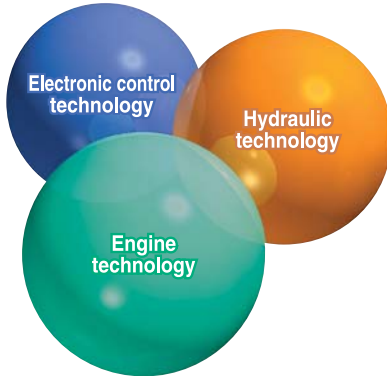
• Large Comfortable Cab

- Low-noise design cab
- Wide newly designed cab
- Pressurised cab
- Multi-position controls
- Low vibrations with cab damper mounting
- Automatic air conditioner (A/C) (optional)
- OPG top guard level 2 (ISO 10262) (optional)

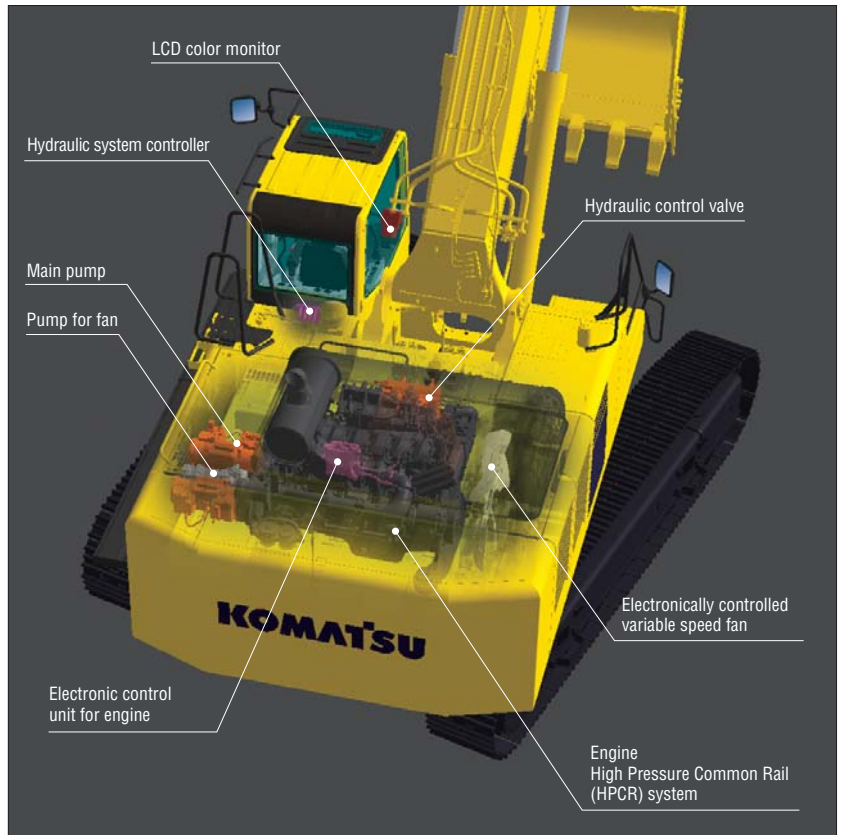
See pages 8, 9.

PRODUCTIVITY & ECOLOGY FEATURES

Komatsu Technology



Komatsu develops and produces all major components, such as engines, electronics and hydraulic components, in house. With this “Komatsu Technology,” and adding customer feedback, Komatsu is achieving great advancements in technology. To achieve both high levels of productivity and economical performance, Komatsu has developed the main components with a total control system. The result is a new generation of high performance and environment friendly excavators.



High Power Komatsu SAA6D140E Engine

Powerful turbocharged and air-to-air aftercooled Komatsu SAA6D140E-5 engine provides 320 kW 429 HP. This Komatsu SAA6D140E engine actualizes high-power to low fuel consumption with the optimum fuel injection by electronic HPCR fuel injection system.



Electronically Controlled Variable Speed Fan Contributes to Low Fuel Consumption and Low Noise

The electronic control system sets the revolution speed of the cooling fan according to the coolant, hydraulic oil, and ambient temperature. Also so, it effectively uses the engine output to prevent wasteful fuel consumption; and reduces noise during low-speed fan revolution.

Low Ambient Noise

Reduced noise by adoption of an electronically controlled variable speed fan drive, large hybrid fan and low-noise muffler.

Working Modes Selectable

P and E work modes are further improved.

P mode – Power or work priority mode has low fuel consumption, but fast equipment speed and maximum production and power are maintained.

E mode – Economy or fuel saving mode further reduces fuel consumption, but maintains the P-mode-like work equipment speed for light duty work.



You can select Power or Economy modes using a one-touch button on the monitor panel depending on the workload.

L mode (Lifting mode) – gives 17% more lifting force when needed for handling rock of heavy lifting applications.

Economy Mode Four-level Setting

Enables operator to set the Economy mode to four levels according to working conditions so that production requirement is achieved at the lowest fuel consumption.



ECO Gauge That Assists Energy-saving Operations

ECO gauge is equipped for environment friendly energy-saving operations. Operation in the green range allows reduction of CO₂ emission and fuel consumption.



ECO gauge

Idling Caution

To prevent unnecessary fuel consumption, an idling caution is displayed on the monitor if the engine idles for 5 minutes or more.



Auto Deceleration and Auto Idling System

Auto deceleration system is equipped to reduce fuel consumption and operating noise. Also, engine idling speed can be reduced on the monitor with the auto idling system.

Large Drawbar Pull and Steering Force

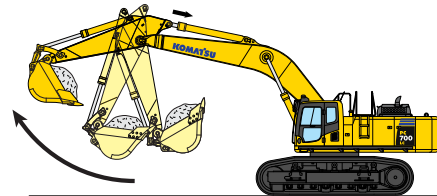
The track length on ground is shorter than the PC600LC-8R1 for higher travel power. Slope climbing performance and trafficability are excellent with large steering force.

Maximum drawbar pull: 465 kN (47.4 ton)



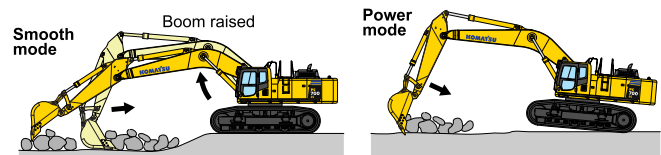
High Work Equipment Speed

Work equipment speed and arm compound operation speed becomes greater with an arm quick return circuit and arm regeneration circuit.



Two-mode Setting for Boom

Smooth mode provides easy operation for gathering blasted rock and scraping operations. When maximum digging force is needed, switch to **Power mode** for more effective excavating.



Large Digging Force

With the addition of one-touch Power Max. function digging force is further increased. (8 seconds of operation)

Maximum arm crowd force (ISO 6015):
272 kN (27.7 ton) ➔ **293 kN (29.9 ton)** **8% UP**
(with Power Max.)

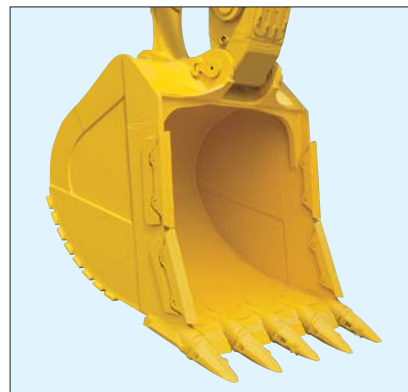
Maximum bucket digging force (ISO 6015):
336 kN (34.3 ton) ➔ **362 kN (36.9 ton)** **8% UP**
(with Power Max.)

*Measured with Power Max function, 2900 mm 9'6" SE arm and ISO 6015 rating

New Design Large SE Bucket (optional for SE spec.)

Performance of scooping rocks and soil is improved by changing the shape of the bucket bottom.

Bucket capacity: 4.0 m³ (5.2 yd³)



RELIABILITY & DURABILITY FEATURES

Sturdy Undercarriage

Travel performance and durability are increased with a one-class higher sturdy undercarriage, even in severe mining and quarry jobsites. High reliability greatly reduces the undercarriage repair cost as well as improves the operating ratio.



Simple Frame Structure

The revolving frame mount and center frame mount on the swing circle are not welded structures so that force is transmitted directly to the thick plate of the frame without passing through any welds.

Strengthened Revolving Frame Underguard

Guards the machine piping against being hit by rocks from below and prevents hydraulic components and the engine from being damaged.

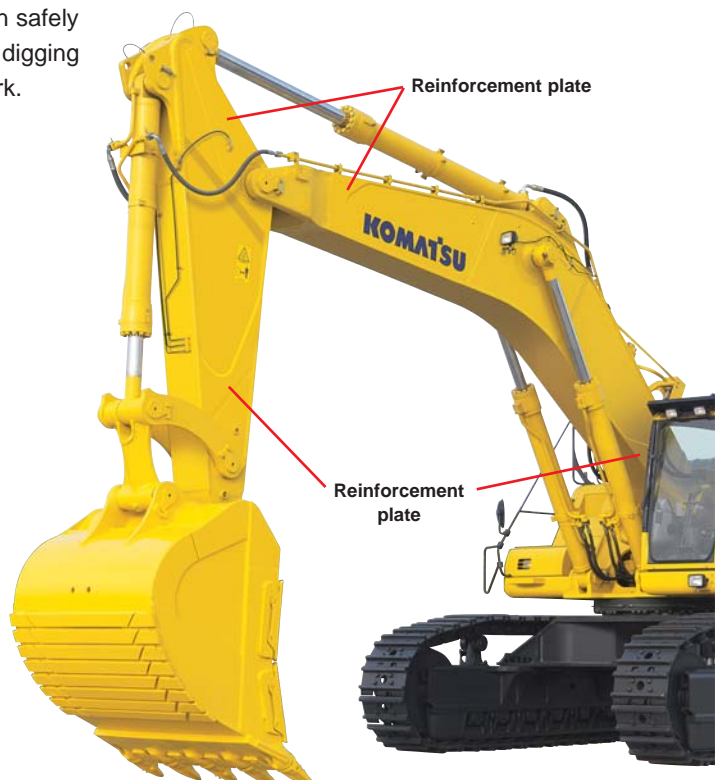
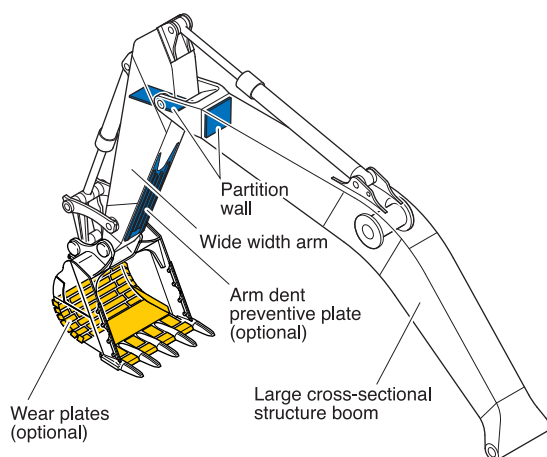


Sturdy guards shield the travel motors and piping against damage from rocks.

Strengthened SE Boom and SE Arm (SE spec.)

Thanks to the large cross-sectional structure employing a high tensile strength steel with a thick plate, partition wall, etc., the boom and arm exhibit excellent durability and are highly resistant to bending and torsional stress.

The sides of the SE boom and SE arm are strengthened and the pin diameters of the bucket cylinder and front link are increased. With high reliability and durability, the operator can safely perform severe digging and loading work.



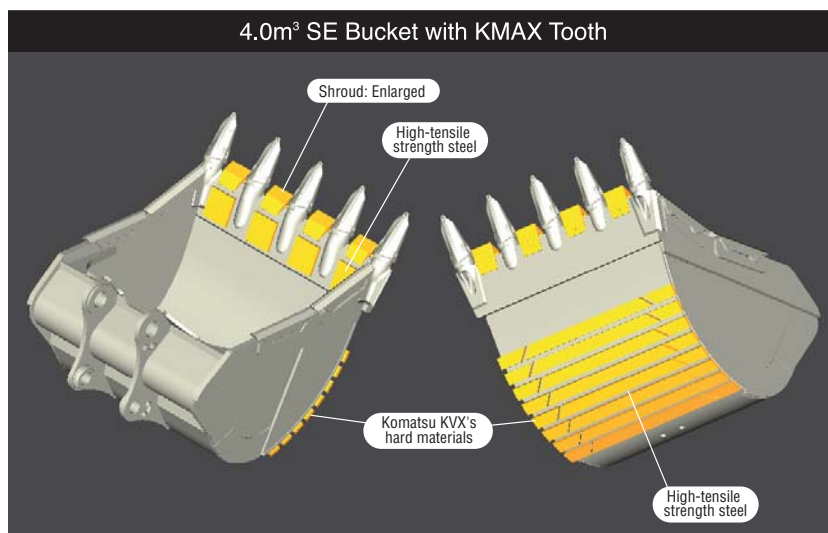
Strengthened Quarry Bucket and 4.0m³ SE Bucket (optional for SE spec.) Provide Outstanding Wear-resistance.

The PC700LC-8R has the bucket for specific use in quarry, this is strong in impact and wear, and providing high performance and long life. Komatsu KVV's hard materials* provide excellent wear-resistance. Combined with adoption of long-life KMAX tooth, durability of bucket is drastically enhanced.

* Komatsu KVV's hard materials:
Komatsu KVV developed, wear-resistant, reinforced materials. Brinell hardness: 500 or more (180 kg/mm² class). Features high wear-resistance and little quality change by the heat generated during rock loading, maintaining the hardness for a long term.

KMAX Tooth

- Unique bucket tooth shape for superior digging performance
- Long-term high sharpness
- Great penetration performance
- Hammerless, safe, and easy tooth replacement
(Tooth replacement time: Half of the conventional machine.)



Fuel Pre-filter (with Water Separator)

Removes water and contaminants from fuel to enhance the fuel system reliability.

High Efficiency Fuel Filter

Fuel system reliability is even better with high efficiency fuel filter.

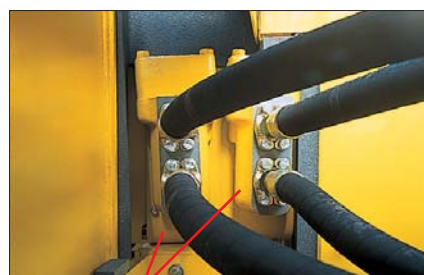


Fuel pre-filter

Fuel filter

High-pressure In-line Filtration

The PC700LC-8R has the most extensive filtration system available, providing in-line filters as standard equipment. An in-line filter in the outlet port of each main hydraulic pump reduces failures caused by contamination.



In-line filter

Heat-resistant Wiring

Heat-resistant wiring is used for the engine electric circuit and other major component circuit.

Circuit Breaker

With circuit breaker, the machine can be easily restarted after repair.



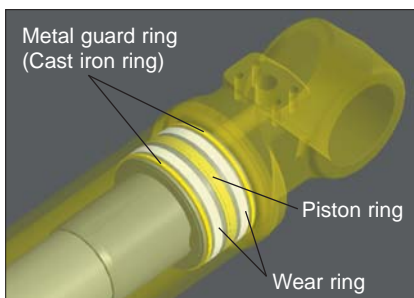
Water Separator

Removes water from the fuel and improves the reliability of fuel systems.



Metal Guard Rings

Metal guard rings protect all the hydraulic cylinders and improve reliability.



Sealed Connectors

Sealed connectors seal tight and have higher reliability.

O-ring Face Seal

The hydraulic hose seal method has been changed from a conventional taper seal to an O-ring seal. This provides improved sealing performance during operation.

WORKING ENVIRONMENT



OPG top guard level 2 (ISO 10262) (optional)

Photo may include optional equipment.

Low Noise Design Cab

The newly-designed cab is highly rigid and has excellent sound absorption. Improvements in noise source reduction combined with the use of a low noise engine, hydraulic equipment, and A/C allows the operator to work in quiet operating condition.

Wide Newly-designed Cab

Newly-designed wide spacious cab includes seat with reclining backrest. The seat height and longitudinal inclination are easily adjusted using a pull-up lever. You can set the appropriate operational position of the armrest and the console. The reclining seat further enables you to place it into the fully flat state with the headrest attached.



Seat with headrest reclined full flat

Pressurized Cab

Optional A/C, air filter and a higher internal air pressure (+6.0 mm Aq +0.2"Aq) prevent external dust from entering the cab.

Multi-position Controls

The multi-position, Pressure Proportional Control (PPC) levers allow the operator to work in comfort while maintaining precise control. A double-slide mechanism allows the seat and control levers to move together or independently, allowing the operator to position the controls for maximum productivity and comfort.



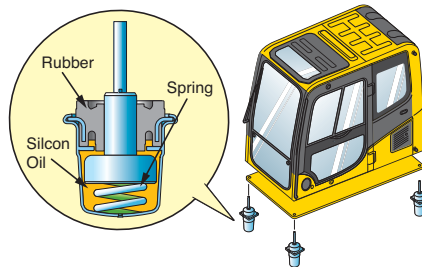
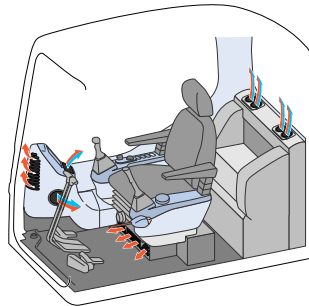
Seat sliding amount: 340 mm 13.4"

Low Vibration with Cab Damper Mounting

PC700LC-8R uses viscous damper mounts for the cab that incorporates longer stroke and the addition of a spring. The cab damper mounting combined with high rigidity deck aids vibration reduction at the operator's seat.

Automatic A/C (optional)

Enables you to easily and precisely set cab atmosphere with the instruments on the large LCD. The automatic A/C uses a bi-level control function that keeps the operator's head and feet cool and warm respectively. This improved air flow function keeps the inside of the cab comfortable throughout the year. Defroster function keeps the front glass clear.



Cab Equipments



Skylight



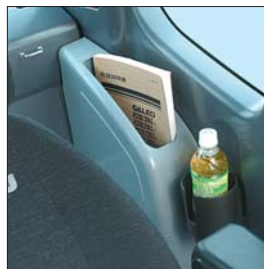
Sliding Window and Large Side Mirror



Defroster (optional)



Cab Frame Mounted Wiper



Bottle Holder and Magazine Rack

Safety Features

Step Light with Timer (optional)

provides light for about one minute to allow the operator to get off the machine safely.



Pump/engine Room Partition

prevents oil from spraying on the engine if a hydraulic hose should burst.



Thermal and Fan Guards

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

Slip-resistant Plates

Spiked plates on working areas provide slip-resistant performance.

Horn Interconnected with Warning Light (optional)

gives visual and audible notice of the excavator's operation when activated.



Rear View Monitoring System (optional)

The operator can view the rear of the machine with a color monitor screen.



OPG Top Guard (optional)

OPG top guard Level 2 (ISO 10262) capable with optional bolt-on top guard.

Large LCD Color Monitor

Large Multi-lingual LCD Monitor

A large user-friendly color monitor enables safe, accurate and smooth work. Improved screen visibility is achieved by the use of LCD that can easily be read at various angles and lighting conditions. The switches are simple and easy to operate. Function keys facilitate multi-function operations. Displays data in 12 languages to support operators around the world.



Indicators

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

Basic operation switches

- | | |
|------------------------------------|---------------------|
| 1 Auto-decelerator (& auto idling) | 4 Buzzer cancel |
| 2 Working mode selector | 5 Wiper |
| 3 Traveling selector | 6 Windshield washer |

Mode Selection

The multi-function color monitor has Power mode (two levels), Economy mode (four levels), and Lifting mode.

| Working Mode | Application | Advantage |
|---------------------------|--------------|---|
| P (P0,P1) | Power Mode | <ul style="list-style-type: none"> Maximum production/power Fast cycle time |
| E (E0,E1,E2,E3) | Economy Mode | <ul style="list-style-type: none"> Good cycle time Good fuel economy |
| L | Lifting Mode | <ul style="list-style-type: none"> Hydraulic pressure is increased 17%. |

Equipment Management Monitoring System Monitor Function

Controller monitors engine oil level, coolant temperature, battery charge and air clogging, etc. If controller finds any abnormality, it is displayed on the LCD.



Maintenance Function

Monitor informs replacement time for oil and filters when the replacement interval is reached.

Trouble Data Memory Function

Monitor stores abnormalities for effective troubleshooting.



MAINTENANCE FEATURES

Easy Checking and Maintenance of Engine

Engine check points are concentrated on one side of the machine to facilitate daily checks. Thermal guards are placed around high-temperature parts such as the turbocharger.



Long-life Oil, Filter

Uses high-performance filtering materials and long-life oil. Extends the oil and filter replacement interval.



Hydraulic oil filter

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

Electric Pump, Grease Gun with Indicator (optional)

Greasing is made easy with the electric pump and grease gun with indicator.



Indicator Grease gun

Steps Connected to the Machine Cab

Steps allows access from left hand catwalk to top of machine for engine check and maintenance.



Slip-resistant Plates

Spiked plates provided on top of the machine cab maintains slip-resistant performance for a prolonged period.

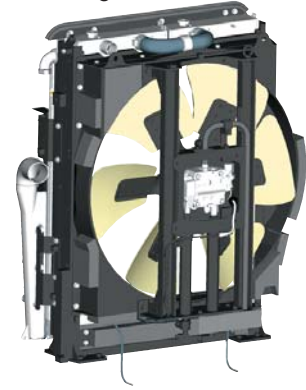
Wide Catwalk

Easier, safer operator cab access and maintenance checks.



Easy Cleaning of Cooling Unit

Reverse-rotation function of the hydraulic driven fan simplifies cleaning out the cooling unit.



Easy Detachable Radiator and Oil Cooler

Engine hood opens fully to facilitate removal and installation of the radiator and oil cooler. The hood can be opened vertically by changing the position of the torsion bar.



Photo may include optional equipment.

SPECIFICATIONS



ENGINE

Model Komatsu SAA6D140E-5
 Type Water-cooled, 4-cycle, direct injection
 Aspiration Turbocharged, aftercooled
 Number of cylinders 6
 Bore **140 mm** 5.51"
 Stroke **165 mm** 6.50"
 Piston displacement **15.24 ltr** 930 in³
 Governor All-speed, electronic
 Horsepower:
 SAE J1995 Gross **323 kW** 433 HP
 ISO 9249 / SAE J1349* Net **320 kW** 429 HP
 Rated rpm 1800 rpm
 Fan drive type Hydraulic
 *Net horsepower at the maximum speed of radiator cooling fan is 288 kW 386HP.
 U.S. EPA Tier 2 and EU Stage 2 emissions equivalent.



HYDRAULIC SYSTEM

Type Open-center load-sensing system
 Number of selectable working modes 3
 Main pump:
 Type Variable-capacity piston pumps
 Pumps for Boom, arm, bucket, swing, and travel circuits
 Maximum flow:
 Main **2 x 410 ltr/min** 2 x 108 U.S. gal/min
 Fan drive pump Variable-capacity piston pump
 Hydraulic motors:
 Travel 2 x axial piston motor with parking brake
 Swing 2 x axial piston motor with swing holding brake
 Relief valve setting:
 Implement circuits
 Backhoe **31.9 MPa** 325 kg/cm² 4,620 psi
 Travel circuit **34.3 MPa** 350 kg/cm² 4,980 psi
 Swing circuit **25.5 MPa** 260 kg/cm² 3,700 psi
 Pilot circuit **2.9 MPa** 30 kg/cm² 430 psi

Hydraulic cylinders:
 (Number of cylinders—bore x stroke x rod diameter)
 Boom **2 – 185 mm x 1725 mm x 120 mm** 7.3" x 67.9" x 4.7"
 Arm
 Std. **1 – 200 mm x 2045 mm x 140 mm** 7.9" x 80.5" x 5.5"
 SE **1 – 200 mm x 2045 mm x 140 mm** 7.9" x 80.5" x 5.5"
 Bucket
 Std. **1 – 185 mm x 1425 mm x 130 mm** 7.3" x 56.1" x 5.1"
 SE **1 – 185 mm x 1610 mm x 130 mm** 7.3" x 63.4" x 5.1"



DRIVES AND BRAKES

Steering control Two levers with pedals
 Drive method Hydrostatic
 Travel motor Axial piston motor, in-shoe design
 Reduction system Planetary gear triple reduction
 Maximum drawbar pull **465kN** 47400 kg 104,500 lb
 Gradeability 70%
 Maximum travel speed
 Low **2.8 km/h** 1.7 mph
 High **4.6 km/h** 2.9 mph
 Service brake Hydraulic lock
 Parking brake Oil disc brake



SWING SYSTEM

Driven method Hydrostatic
 Swing reduction Planetary gear
 Swing circle lubrication Grease-bathed
 Swing lock Oil disc brake
 Swing speed 8.3 rpm



UNDERCARRIAGE

Center frame H-leg frame
 Track frame Box-section
 Seal of track Sealed
 Track adjuster Hydraulic
 No. of shoes 47 each side
 No. of carrier rollers 3 each side
 No. of track rollers 8 each side



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank **880 ltr** 232.5 U.S. gal
 Radiator **58 ltr** 15.3 U.S. gal
 Engine **40 ltr** 10.6 U.S. gal
 Final drive, each side **10 ltr** 2.6 U.S. gal
 Swing drive **2 x 13 ltr** 2 x 3.4 U.S. gal
 Hydraulic tank **360 ltr** 95.0 U.S. gal



OPERATING WEIGHT (APPROXIMATE)

PC700LC-8R :
 Operating weight, including **7660 mm** 25'2" boom, **3500 mm** 11'6" arm, SAE J 296 heaped **2.7 m³** 3.53 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

PC700LC-8R HD spec.:
 Operating weight, including **7300 mm** 23'11" boom, **3500 mm** 11'6" arm, SAE J 296 heaped **2.8 m³** 3.66 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment

| Shoes | PC700LC-8R | | PC700LC-8R HD spec. | |
|---------------------------------|-------------------------------|---|-------------------------------|---|
| | Operating Weight | Ground Pressure | Operating Weight | Ground Pressure |
| Double grouser 610 mm 24" | 65700 kg 144,840 lb | 106.9 kPa 1.09 kg/cm ² 15.5 psi | 66200 kg 145,940 lb | 107.9 kPa 1.10 kg/cm ² 15.6 psi |
| Double grouser 710 mm 28" | 66500 kg 146,610 lb | 93.2 kPa 0.95 kg/cm ² 13.5 psi | 67000 kg 147,710 lb | 94.1 kPa 0.96 kg/cm ² 13.7 psi |

PC700LC-8R SE spec.:
 Operating weight, including **6600 mm** 21'8" boom, **2900 mm** 9'6" arm, SAE J 296 heaped **3.5 m³** 4.58 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment

| Shoes | PC700LC-8R SE spec | |
|---------------------------------|-------------------------------|---|
| | Operating Weight | Ground Pressure |
| Double grouser 610 mm 24" | 67000 kg 147,710 lb | 108.9 kPa 1.11 kg/cm ² 15.8 psi |
| Double grouser 710 mm 28" | 67800 kg 149,470 lb | 95.1 kPa 0.97 kg/cm ² 13.8 psi |

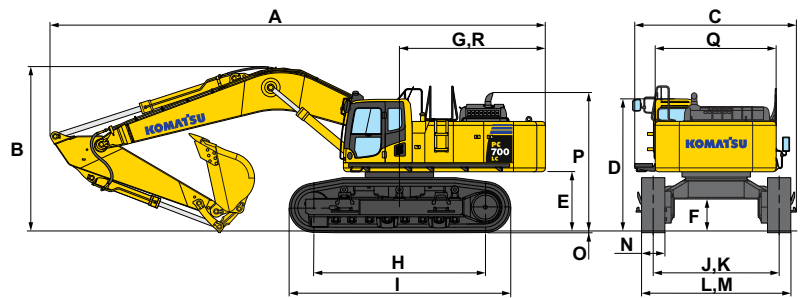


DIMENSIONS

| | | PC700LC-8R | | | | | | | | | |
|---|---------------------------------|------------|-------|----------|-------|----------|-------|----------|--------|----------|--------|
| | | STD | | | HD | | | SE | | | |
| | Boom | 7660 mm | 25'2" | 7660 mm | 25'2" | 7660 mm | 25'2" | 7300 mm | 23'11" | 6600 mm | 21'8" |
| | Arm | 3500 mm | 11'6" | 4300 mm | 14'1" | 5200 mm | 17'1" | 3500 mm | 11'6" | 2900 mm | 9'6" |
| A | Overall length | 12960 mm | 42'6" | 12930 mm | 42'5" | 12700 mm | 41'8" | 12580 mm | 41'3" | 11990 mm | 39'4" |
| B | Overall height (to top of boom) | 4350 mm | 14'3" | 4690 mm | 15'5" | 5230 mm | 17'2" | 4280 mm | 14'1" | 4670 mm | 15'4" |
| C | Overall width | 4290 mm | 14'1" | 4290 mm | 14'1" | 4290 mm | 14'1" | 4290 mm | 14'1" | 4290 mm | 14'1" |
| D | Overall height (to top of cab) | 3475 mm | 11'5" | 3475 mm | 11'5" | 3475 mm | 11'5" | 3595 mm* | 11'10" | 3595 mm* | 11'10" |

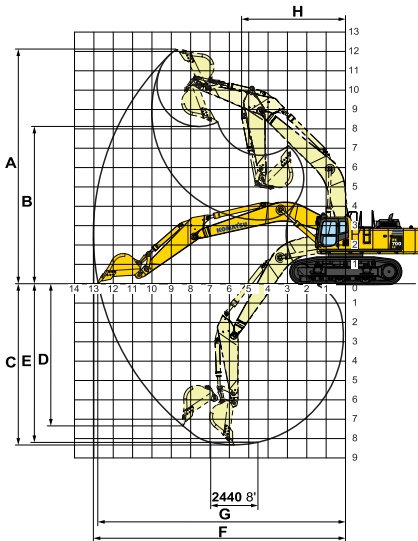
* with OPG top guard

| | | | |
|---|------------------------------------|---------|--------|
| E | Ground clearance, counterweight | 1550 mm | 5'1" |
| F | Ground clearance (minimum) | 830 mm | 2'9" |
| G | Tail swing radius | 3950 mm | 13'0" |
| H | Track length on ground | 4500 mm | 14'9" |
| I | Track length | 5810 mm | 19'1" |
| J | Track gauge | 2590 mm | 8'6" |
| K | Track gauge when expanded | 3300 mm | 10'10" |
| L | Width of crawler | 3200 mm | 10'6" |
| M | Width of crawler when expanded | 3910 mm | 12'10" |
| N | Shoe width | 610 mm | 24" |
| O | Grouser height | 50 mm | 2.0" |
| P | Machine cab height | 3620 mm | 11'11" |
| Q | Machine cab width | 3170 mm | 10'5" |
| R | Distance, swing center to rear end | 3825 mm | 12'7" |



WORKING RANGE

Unit: mm ft in



| | | PC700LC-8R | | | | | | | | | |
|---|--|----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------|---------------------------------|--------|-------|--------|
| | | STD | | | HD | | | SE | | | |
| | Boom | 7660 | 25'2" | 7660 | 25'2" | 7660 | 25'2" | 7300 | 23'11" | 6600 | 21'8" |
| | Arm | 3500 | 11'6" | 4300 | 14'1" | 5200 | 17'1" | 3500 | 11'6" | 2900 | 9'6" |
| A | Max. digging height | 12085 | 39'8" | 12390 | 40'8" | 12750 | 41'10" | 11680 | 38'4" | 11350 | 37'3" |
| B | Max. dumping height | 8120 | 26'8" | 8425 | 27'8" | 8790 | 28'10" | 7810 | 25'7" | 7360 | 24'2" |
| C | Max. digging depth | 8325 | 27'4" | 9115 | 29'11" | 10045 | 32'11" | 8010 | 26'3" | 6910 | 22'8" |
| D | Max. vertical wall digging depth | 7340 | 24'1" | 7730 | 25'4" | 8620 | 28'3" | 6480 | 21'3" | 5470 | 17'11" |
| E | Max. digging depth of cut for 8° level | 8190 | 26'10" | 8995 | 29'6" | 9940 | 32'7" | 7880 | 25'10" | 6765 | 22'2" |
| F | Max. digging reach | 13030 | 42'9" | 13760 | 45'2" | 14630 | 48'0" | 12640 | 41'6" | 11585 | 38'0" |
| G | Max. digging reach at ground level | 12785 | 41'11" | 13520 | 44'4" | 14405 | 47'3" | 12380 | 40'7" | 11295 | 37'1" |
| H | Min. swing radius | 5370 | 17'7" | 5385 | 17'8" | 5510 | 18'1" | 5090 | 16'8" | 4670 | 15'4" |
| Bucket digging force (SAE J 1179) | | 264 kN 26900 kg 59,300 lb | | | | | | 289 kN 29500 kg 65,040 lb | | | |
| Bucket digging force at power max. (SAE J 1179) | | 285 kN 29100 kg 64,150 lbf | | | | | | 312 kN 31770 kg 70,040 lb | | | |
| Arm crowd force (SAE J 1179) | | 222 kN 22600 kg 49,820 lb | 194 kN 19800 kg 43,650 lb | 170 kN 17300 kg 38,140 lb | 222 kN 22600 kg 49,820 lb | 260 kN 26500 kg 58,420 lb | | | | | |
| Arm crowd force at power max. (SAE J 1179) | | 238 kN 24300 kg 53,570 lb | 209 kN 21300 kg 46,960 lb | 182 kN 18600 kg 41,010 lb | 238 kN 24300 kg 53,570 lb | 280 kN 28500 kg 62,830 lb | | | | | |
| Bucket digging force (ISO 6015) | | 294 kN 30000 kg 66,140 lb | | | | | | 336 kN 34300 kg 75,620 lb | | | |
| Bucket digging force at power max. (ISO 6015) | | 317 kN 32300 kg 71,210 lb | | | | | | 362 kN 36900 kg 81,350 lb | | | |
| Arm crowd force (ISO 6015) | | 228 kN 23300 kg 51,370 lb | 202 kN 20600 kg 45,410 lb | 176 kN 17900 kg 39,460 lb | 228 kN 23300 kg 51,370 lb | 272 kN 27700 kg 61,070 lb | | | | | |
| Arm crowd force at power max. (ISO 6015) | | 246 kN 25100 kg 55,340 lb | 218 kN 22200 kg 48,940 lb | 189 kN 19300 kg 42,550 lb | 246 kN 25100 kg 55,340 lb | 293 kN 29900 kg 65,920 lb | | | | | |



BACKHOE BUCKET AND ARM COMBINATION

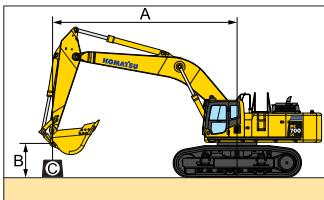
| Bucket Capacity (heaped) | | | | Width | | | Weight (with side shrouds, side cutters) kg lb | Tooth | Arm Length | | | | | | |
|---|------|--|------|---|--|------------------------------|--|-------|------------|------------------|-------|-----|-------|-----|-------|
| SAE J 296, PCSA m ³ yd ³ | | CECE m ³ yd ³ | | With side shrouds, side cutters mm in | Without side shrouds, side cutters mm in | Bucket lip width mm in | | | m | ft | in | | | | |
| use with 7.66m 25'2" boom | | | | | | | | | | 3.5 | 11'6" | 4.3 | 14'1" | 5.2 | 17'1" |
| 2.0 | 2.62 | 1.8 | 2.35 | 1430 | 56.3" | 1250 | 49.2" | — | 2130 | 4,700 | KMAX | ○ | ○ | ○ | |
| 2.3 | 3.01 | 2.0 | 2.62 | 1580 | 62.2" | 1400 | 55.1" | — | 2260 | 4,980 | KMAX | ○ | ○ | — | |
| 2.7 | 3.53 | 2.4 | 3.14 | 1780 | 70.1" | 1600 | 63.0" | — | 2470 | 5,450 | KMAX | ○ | — | — | |
| use with 7.3m 23'11" HD boom | | | | | | | | | | 3.5 11'6" HD arm | | | | | |
| 2.8 | 3.66 | 2.5 | 3.27 | 1725 | 68.0" | 1655 | 65.2" | 1920 | 75.6" | 6,840 | KMAX | ○ | | | |
| 3.1 | 4.05 | 2.8 | 3.66 | 1850 | 72.9" | 1780 | 70.1" | 2040 | 80.3" | 7,120 | KMAX | ○ | | | |
| use with 6.6m 21'8" SE boom | | | | | | | | | | 2.9 9'6" SE arm | | | | | |
| 3.5 | 4.58 | 3.1 | 4.05 | 1950 | 76.8" | 1900 | 74.9" | 2110 | 83.1" | 7,340 | KMAX | ○ | | | |
| 4.0 | 5.23 | 3.5 | 4.58 | 1960 | 77.2" | 1910 | 75.3" | 2110 | 83.1" | 7,580 | KMAX | ○ | | | |

These charts are based on over-side stability with fully loaded bucket at maximum reach.

○ : General purpose use, density up to 1.8 t/m³ 3,000 lb/yd³ — : Not useable



LIFTING CAPACITY



PC700LC-8R

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

Boom : 7.66m 25'2", Arm : 3.5m 11'6", Bucket : 2.7m³ 3.53cu.yd, Shoes : 610mm 24" triple, L mode: "ON"

unit: kg lb

| B | A | ⊗ MAX | | 9.1m 29' | | 7.6m 24' | | 6.1m 20' | | 4.6m 15' | | 3.0m 9' | |
|---------------|---|-------------------|-------------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs |
| 9.1m 29' | | *8550 *18,900 | *8550 *18,900 | | | | | | | | | | |
| 6.1m 20' | | *8450 *18,600 | *8450 *18,600 | *12250 *27,000 | 11950 22,300 | *13500 *29,700 | *13500 *29,700 | | | | | | |
| 3.0m 9' | | 9300 20,500 | 7700 17,000 | *14150 *31,200 | 11100 24,500 | *17000 *37,500 | 14900 32,900 | *22100 *48,700 | 21250 46,800 | | | | |
| 0m 0' | | 10550 23,300 | 7700 17,000 | 14200 31,300 | 10400 22,900 | 18950 41,800 | 13850 30,500 | *25100 *55,300 | 19500 43,000 | *20150 *44,400 | *20150 *44,400 | | |
| -3.0m -9' | | 12500 27,600 | 9150 20,000 | 14000 30,900 | 10250 22,500 | *18600 *41,000 | 13550 29,900 | *23650 *52,100 | 19300 42,500 | *30400 *67,100 | *30400 *67,100 | *17400 *38,300 | *17400 *38,300 |
| -6.1m -20' | | *12350 *27,300 | *12350 *27,300 | | | *11150 *24,600 | *11150 *24,600 | *16350 *36,000 | *16350 *36,000 | *20650 *45,600 | *20650 *45,600 | | |

Boom : 7.3m 23'11", Arm : 3.5m 11'6", Bucket : 2.8m³ 3.66cu.yd, Shoes : 610mm 24" triple, L mode: "ON"

unit: kg lb

| B | A | ⊗ MAX | | 9.1m 29' | | 7.6m 24' | | 6.1m 20' | | 4.6m 15' | | 3.0m 9' | |
|---------------|---|-------------------|-------------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs |
| 9.1m 29' | | *8150 *17,900 | *8150 *17,900 | | | | | | | | | | |
| 6.1m 20' | | *7950 *17,600 | *7950 *17,600 | *12150 *26,800 | 11550 25,400 | *13200 *29,100 | *13200 *29,100 | | | | | | |
| 3.0m 9' | | *8900 *19,700 | 7900 17,400 | *13950 *30,700 | 10800 23,800 | *16700 *36,800 | 14750 32,500 | *21550 *47,500 | *21050 *46,400 | *26500 *58,400 | *26500 *58,400 | | |
| 0m 0' | | 10950 24,100 | 7900 17,500 | 13950 30,700 | 10150 22,300 | 18800 41,500 | 13650 30,100 | *24850 *54,800 | 19500 43,000 | *17800 *39,300 | *17800 *39,300 | | |
| -3.0m -9' | | 13250 29,300 | 9650 21,200 | 13800 30,400 | 10000 22,100 | *18150 *40,100 | 13350 29,500 | *23450 *51,700 | 19200 42,300 | *30700 *67,700 | *30700 *67,700 | *23750 *52,400 | *23750 *52,400 |
| -6.1m -20' | | *12450 *27,400 | *12450 *27,400 | | | | | *14750 *32,600 | *14750 *32,600 | *19500 *43,000 | *19500 *43,000 | | |

Boom : 6.6m 21'8", Arm : 2.9m 9'6", Bucket : 3.5m³ 4.58cu.yd, Shoes : 610mm 24" triple, L mode: "ON"

unit: kg lb

| B | A | ⊗ MAX | | 9.1m 29' | | 7.6m 24' | | 6.1m 20' | | 4.6m 15' | | 3.0m 9' | |
|--------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|
| | | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs | Cf | Cs |
| 9.1m 29' | | *11800 *26,000 | *11800 *26,000 | | | | | | | | | | |
| 6.1m 20' | | *10950 *24,100 | *10950 *24,100 | *10750 *23,700 | *10750 *23,700 | *14500 *32,000 | *14500 *32,000 | | | | | | |
| 3.0m 9' | | *11950 *26,300 | 9450 20,800 | 14500 31,900 | 10600 23,400 | *17450 *38,400 | 14600 32,100 | *22300 *49,200 | 21350 47,000 | *30100 *66,300 | *30100 *66,300 | | |
| 0m 0' | | 13150 29,000 | 9550 21,000 | 13900 30,600 | 10100 22,200 | 18850 41,600 | 13650 30,100 | *24900 *54,900 | 19650 43,300 | *26550 *58,500 | *26550 *58,500 | | |
| -3.0m -9' | | *14550 *32,100 | 12300 27,100 | | | *16600 *36,600 | 13550 29,900 | *22300 *49,100 | 19450 42,900 | *29300 *64,600 | *29300 *64,600 | *27200 *60,000 | *27200 *60,000 |

*Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



Backhoe

Specs shown include the following equipment:

| | Boom | Arm | Bucket | Shoes |
|-----------------------|----------------|---------------|---|-------------------|
| PC700LC-8R | 7660 mm 25'2" | 3500 mm 11'6" | 2.7 m ³ 3.53 yd ³ | 610 mm 24" Double |
| PC700LC-8R (HD spec.) | 7300 mm 23'11" | 3500 mm 11'6" | 2.8 m ³ 3.66 yd ³ | 610 mm 24" Double |
| PC700LC-8R (SE spec.) | 6600 mm 21'8" | 2900 mm 9'6" | 3.5 m ³ 4.58 yd ³ | 610 mm 24" Double |

3 Kits Transportation

Base machine

Width : 3665 12'0"
Weight : 40.5t 44.6 U.S. ton

Work equipment assembly (Backhoe)
Weight : 12.5 t 13.8 U.S. ton

Boom

Arm

Bucket

Boom cylinder & Arm cylinder
Total 1.75 t 1.9 U.S. ton

Others
Weight : 12.3t 13.6 U.S. ton

Weight : 10.75t 11.8 U.S. ton

4 Kits Transportation

Upper structure

Width : 3170 10'5"
Weight : 18.5t 20.4 U.S. ton

Undercarriage

Weight : 22.0t [11.0t x 2] 24.3 U.S. ton [12.1 U.S. ton x 2]

| Work Equipment | | Length mm ft in | Height mm ft in | Width mm ft in | Weight ton US ton |
|-----------------------|--------|--------------------|--------------------|-------------------|----------------------|
| PC700LC-8R | Boom | 7920 26'0" | 2040 6'8" | 1190 3'11" | 4.9 5.4 |
| | Arm | 4870 16'0" | 1210 16'0" | 650 2'2" | 3.3 3.6 |
| | Bucket | 2150 7'1" | 1780 5'8" | 1780 5'10" | 2.5 2.8 |
| PC700LC-8R (HD spec.) | Boom | 7530 24'8" | 1960 6'5" | 1190 3'11" | 4.7 5.2 |
| | Arm | 4870 16'0" | 1240 4'0" | 650 2'2" | 3.3 3.6 |
| | Bucket | 2150 7'1" | 1780 5'10" | 1920 6'4" | 3.1 3.4 |
| PC700LC-8R (SE spec.) | Boom | 6870 22'6" | 2090 6'10" | 1190 3'11" | 4.8 5.3 |
| | Arm | 4230 13'10" | 1490 4'11" | 650 2'2" | 3.5 3.9 |
| | Bucket | 2150 7'1" | 1780 5'8" | 2040 6'8" | 3.4 3.7 |



STANDARD EQUIPMENT

ENGINE AND RELATED ITEMS:

- Air cleaner, double element, dry
- Engine, Komatsu SAA6D140E-5
- Variable speed cooling fan, with fan guard

ELECTRICAL SYSTEM:

- Alternator, 24 V/50 A
- Auto decelerator and auto idling system
- Batteries, 2 x 12 V/170 Ah
- Starting motors, 11kW
- Working lights 2 (boom and right front)

UNDERCARRIAGE:

- Hydraulic track adjusters (each side)
- Sealed track
- 8 track/3 carrier rollers (each side)
- **610 mm** 24" double grouser
- Rock protectors
- Variable track gauge

GUARDS AND COVERS:

- Dust-proof net for radiator and oil cooler
- Pump/engine room partition cover
- Strengthened revolving frame underguard
- Travel motor guards

OPERATOR ENVIRONMENT:

- Cab with pull-up type front window
- Damper mount, all-weather, sound-suppressed cab with tinted safety glass windows, lockable door, intermittent window wiper and washer, floor mat, cigarette lighter and ashtray
- Multi-function color monitor, fuel control dials, service meter, gauges (coolant temperature, hydraulic oil temperature and fuel level), caution lights (electric charge, engine oil pressure, and air cleaner clogging), indicator lights (engine preheating and swing lock), level check lights (coolant and engine oil level) and self-diagnostic system with trouble data memory
- Rear view mirror (RH and LH)
- Seat, fully adjustable with suspension

HYDRAULIC CONTROLS:

- Control levers and pedals for steering and travel with PPC system
- Control levers, wrist control levers for arm, boom, bucket, and swing with PPC system
- Control valves, 5+4 spools (boom, arm, bucket, swing, and travel)
- Fully hydraulic, with Open-Center Load-Sensing and engine speed sensing (pump and engine mutual control system)
- In-line filter
- Lifting mode system
- Oil cooler
- One axial piston motor per track for travel with counter balance valve
- One gear pump for control circuit
- Power max function
- Two axial piston motors for swing with single-stage relief valve
- Two-mode setting for boom
- Two variable capacity piston pumps

DRIVE AND BRAKE SYSTEM:

- Brakes, hydraulic lock travel brakes, oil disc parking
- Hydrostatic two travel speed system with planetary triple reduction final drive

OTHER STANDARD EQUIPMENT:

- Automatic swing holding brake
- Catwalk
- Counterweight, **10750 kg** 23,700 lb
- Horn, electric
- Large handrails
- Marks and plates, English
- One-touch engine oil drainage
- Paint, Komatsu standard
- PM tune-up service connector
- Rear reflector
- Slip-resistant plates
- Travel alarm
- Water separator



OPTIONAL EQUIPMENT

- 12 V electric supply
- Alternator, 24 V/90 A
- Arms (Backhoe):
 - 3500 mm** 11'6" arm assembly
 - 3500 mm** 11'6" HD arm assembly
 - 4300 mm** 14'1" arm assembly
 - 5200 mm** 17'1" arm assembly
 - 2900 mm** 9'6" SE arm assembly
- Automatic A/C
- Booms (Backhoe):
 - 7660 mm** 25'2" boom assembly
 - 7300 mm** 23'11" HD boom assembly
 - 6600 mm** 21'8" SE boom assembly
- Cab front guard level 2 (ISO 10262)
- Cab with fixed front window
- Electric pump, grease gun with indicator
- Fire extinguisher
- Full length track roller guard
- General tool kit
- Interconnected horn and warning light
- Large-capacity batteries
- Lower wiper
- OPG top guard level 2 (ISO 10262)
- Radio AM/FM
- Rain visor
- Rear view monitoring system
- Seat belt **78 mm** 3", **50 mm** 2"
- Service valve
- Shoes:
 - 710 mm** 28" double grouser
 - 810 mm** 32" double grouser
- Spare parts for first service
- Step light with timer
- Sun visor
- Track frame undercover (center)
- Vandalism protection locks
- Working lights 2 (on cab)

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