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

Photo may include optional equipment.
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.

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.
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 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.

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.

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

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.

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)

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 96” SE arm and ISO 6015 rating

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 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.

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.)
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.

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.
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 KVX's hard materials* provide excellent wear-resistance. Combined with adoption of long-life KMAX tooth, durability of bucket is drastically enhanced.

* Komatsu KVX’s hard materials:
Komatsu KVX 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.

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

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.

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.

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

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.

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.

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.

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.

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.

Seat sliding amount: 340 mm 13.4”

Cab Equipments
Skylight
Sliding Window and Large Side Mirror
Defroster (optional)
Cab Frame Mounted Wiper
Bottle Holder and Magazine Rack
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
2. Working mode
3. Travel speed
4. Engine water temperature gauge
5. Hydraulic oil temperature gauge
6. Fuel gauge
7. ECO gauge
8. Function switches menu

Basic operation switches

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

Mode Selection

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

<table>
<thead>
<tr>
<th>Working Mode</th>
<th>Application</th>
<th>Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>P (P0,P1)</td>
<td>Power Mode</td>
<td>● Maximum production/power ● Fast cycle time</td>
</tr>
<tr>
<td>E (E0,E1,E2,E3)</td>
<td>Economy Mode</td>
<td>● Good cycle time ● Good fuel economy</td>
</tr>
<tr>
<td>L</td>
<td>Lifting Mode</td>
<td>● Hydraulic pressure is increased 17%</td>
</tr>
</tbody>
</table>

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.
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.

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.

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

Electric Pump, Grease Gun with Indicator (optional)
Greasing is made easy with the electric pump and grease gun with indicator.
**PC700LC-8R HYDRAULIC EXCAVATOR**

## 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**:
  - **Net horsepower at the maximum speed of radiator cooling fan**: 288 kW 386HP

### 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**: 1 – 200 mm x 2045 mm x 140 mm 7.9” x 80.5” x 5.5”
    - **Bucket**: 1 – 200 mm x 2045 mm x 140 mm 7.9” x 80.5” x 5.5”
    - **SE**: 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 triple reduction
- **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 116” 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 116” arm, SAE J 296 heaped 2.8 m³ 3.66 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment**

#### PC700LC-8R SE spec.:

- **Operating weight, including 6600 mm 21’8” boom, 2900 mm 96” arm, SAE J 296 heaped 3.5 m³ 4.58 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment**

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1. All values are approximate.
2. * indicates performance figures at the maximum speed of radiator cooling fan.
3. All equipment, in ltr, U.S. gallon, kg, and lb, is included.
4. Horsepower ratings are ISO 9249 / SAE J1349*.
5. Net horsepower at the maximum speed of booster fan is 288 kW 386HP.
### Dimensions

<table>
<thead>
<tr>
<th></th>
<th>STD</th>
<th>PC700LC-8R</th>
<th>HD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>7660 mm</td>
<td>25'2&quot;</td>
<td>7660 mm</td>
<td>25'2&quot;</td>
</tr>
<tr>
<td>Arm</td>
<td>3500 mm</td>
<td>11'6&quot;</td>
<td>4300 mm</td>
<td>14'1&quot;</td>
</tr>
<tr>
<td>A Overall length</td>
<td>12960 mm</td>
<td>42'6&quot;</td>
<td>12930 mm</td>
<td>42'5&quot;</td>
</tr>
<tr>
<td>B Overall height (to top of boom)</td>
<td>4350 mm</td>
<td>14'3&quot;</td>
<td>4690 mm</td>
<td>15'9&quot;</td>
</tr>
<tr>
<td>C Overall width</td>
<td>4290 mm</td>
<td>14'1&quot;</td>
<td>4290 mm</td>
<td>14'1&quot;</td>
</tr>
<tr>
<td>D Overall height (to top of cab)</td>
<td>3475 mm</td>
<td>11'5&quot;</td>
<td>3475 mm</td>
<td>11'5&quot;</td>
</tr>
<tr>
<td>E Ground clearance, counterweight</td>
<td>1550 mm</td>
<td>5'1&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Ground clearance (minimum)</td>
<td>830 mm</td>
<td>2'9&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Tail swing radius</td>
<td>3950 mm</td>
<td>13'0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Track length on ground</td>
<td>4500 mm</td>
<td>14'9&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Track length</td>
<td>5810 mm</td>
<td>19'1&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J Track gauge</td>
<td>2590 mm</td>
<td>8'6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K Track gauge when expanded</td>
<td>3300 mm</td>
<td>10'10&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L Width of crawler</td>
<td>3200 mm</td>
<td>10'6&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M Width of crawler when expanded</td>
<td>3910 mm</td>
<td>12'10&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Shoe width</td>
<td>610 mm</td>
<td>24&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Grouser height</td>
<td>50 mm</td>
<td>2.0&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Machine cab height</td>
<td>3620 mm</td>
<td>11'11&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q Machine cab width</td>
<td>3170 mm</td>
<td>10'5&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R Distance, swing center to rear end</td>
<td>3825 mm</td>
<td>12'7&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Working Range

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Boom</td>
<td>7660 mm</td>
<td>25'2&quot;</td>
<td>7660 mm</td>
<td>25'2&quot;</td>
</tr>
<tr>
<td>Arm</td>
<td>3500 mm</td>
<td>11'6&quot;</td>
<td>4300 mm</td>
<td>14'1&quot;</td>
</tr>
<tr>
<td>A Max. digging height</td>
<td>12085 mm</td>
<td>39'8&quot;</td>
<td>12390 mm</td>
<td>40'8&quot;</td>
</tr>
<tr>
<td>B Max. dumping height</td>
<td>8120 mm</td>
<td>26'8&quot;</td>
<td>8425 mm</td>
<td>27'8&quot;</td>
</tr>
<tr>
<td>C Max. digging depth</td>
<td>8325 mm</td>
<td>27'4&quot;</td>
<td>9115 mm</td>
<td>29'11&quot;</td>
</tr>
<tr>
<td>D Max. vertical wall digging depth</td>
<td>7340 mm</td>
<td>24'1&quot;</td>
<td>7730 mm</td>
<td>25'4&quot;</td>
</tr>
<tr>
<td>E Max. digging depth of cut for 8' level</td>
<td>8190 mm</td>
<td>26'10&quot;</td>
<td>8995 mm</td>
<td>29'6&quot;</td>
</tr>
<tr>
<td>F Max. digging reach</td>
<td>13030 mm</td>
<td>42'9&quot;</td>
<td>13760 mm</td>
<td>45'2&quot;</td>
</tr>
<tr>
<td>G Max. digging reach at ground level</td>
<td>12785 mm</td>
<td>41'11&quot;*</td>
<td>13520 mm</td>
<td>44'4&quot;</td>
</tr>
<tr>
<td>H Min. swing radius</td>
<td>5370 mm</td>
<td>17'7&quot;</td>
<td>5385 mm</td>
<td>17'8&quot;</td>
</tr>
<tr>
<td>Bucket digging force (SAE J 1119)</td>
<td>264 kN</td>
<td>29900 kg</td>
<td>59,300 lb</td>
<td>289 kN</td>
</tr>
<tr>
<td>Bucket digging force at power max. (SAE J 1119)</td>
<td>285 kN</td>
<td>30100 kg</td>
<td>66,150 lb</td>
<td>312 kN</td>
</tr>
<tr>
<td>Arm crowd force (SAE J 1119)</td>
<td>222 kN</td>
<td>22800 kg</td>
<td>49,820 lb</td>
<td>194 kN</td>
</tr>
<tr>
<td>Arm crowd force at power max. (SAE J 1119)</td>
<td>236 kN</td>
<td>24300 kg</td>
<td>53,570 lb</td>
<td>209 kN</td>
</tr>
<tr>
<td>Bucket digging force (ISO 6015)</td>
<td>294 kN</td>
<td>30000 kg</td>
<td>66,140 lb</td>
<td></td>
</tr>
<tr>
<td>Bucket digging force at power max. (ISO 6015)</td>
<td>317 kN</td>
<td>29000 kg</td>
<td>61,710 lb</td>
<td></td>
</tr>
<tr>
<td>Arm crowd force (ISO 6015)</td>
<td>228 kN</td>
<td>23300 kg</td>
<td>51,370 lb</td>
<td></td>
</tr>
<tr>
<td>Arm crowd force at power max. (ISO 6015)</td>
<td>246 kN</td>
<td>25100 kg</td>
<td>55,340 lb</td>
<td></td>
</tr>
<tr>
<td>Bucket Capacity (heaped)</td>
<td>Width</td>
<td>Weight</td>
<td>Tooth</td>
<td>Arm Length</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>SAE J 296, PCSA CECE Shrouds, side cutters</td>
<td>With side shrouds, side cutters</td>
<td>Without side shrouds, side cutters</td>
<td>Bucket lip width</td>
<td>kg</td>
</tr>
<tr>
<td>m³</td>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>kg</td>
</tr>
<tr>
<td>2.0</td>
<td>2.62</td>
<td>1.8</td>
<td>2.35</td>
<td>1430</td>
</tr>
<tr>
<td>2.3</td>
<td>3.01</td>
<td>2.8</td>
<td>2.62</td>
<td>1560</td>
</tr>
<tr>
<td>2.7</td>
<td>3.53</td>
<td>3.4</td>
<td>3.14</td>
<td>1780</td>
</tr>
</tbody>
</table>

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
Cl: Rating over front
Cs: Rating over side
*: Rating at maximum reach

<table>
<thead>
<tr>
<th>Boom: 7.66m 25'2&quot;</th>
<th>Arm: 3.5m 11'6&quot;</th>
<th>Bucket: 2.7m 535cu.yd, Shoes: 610mm 24&quot; triple, L mode: &quot;ON&quot;</th>
<th>unit: kg lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>A</td>
<td>MAX</td>
<td>9.1m 29'</td>
</tr>
<tr>
<td>9.1m 29'</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>6.1m 29'</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>9'</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>0'</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>3.0m</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>0'</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>2.8m</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>2.0m</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
<tr>
<td>0'</td>
<td>*8550</td>
<td>*8550</td>
<td>*18,900</td>
</tr>
</tbody>
</table>

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.
### Transportation Specifications

**Backhoe**

Specs shown include the following equipment:

<table>
<thead>
<tr>
<th></th>
<th>Boom</th>
<th>Arm</th>
<th>Bucket</th>
<th>Shoes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC700LC-8R</td>
<td>7660 mm</td>
<td>3500 mm</td>
<td>11'6&quot;</td>
<td>610 mm 24&quot; Double</td>
</tr>
<tr>
<td>PC700LC-8R (HD spec.)</td>
<td>7300 mm</td>
<td>3500 mm</td>
<td>11'6&quot;</td>
<td>610 mm 24&quot; Double</td>
</tr>
<tr>
<td>PC700LC-8R (SE spec.)</td>
<td>6600 mm</td>
<td>2900 mm</td>
<td>9'6&quot;</td>
<td>610 mm 24&quot; Double</td>
</tr>
</tbody>
</table>

#### 3 Kits Transportation

**Base machine**

Height: 3670' 1/2"

Width: 3665' 12-1/2"

Weight: 49.5 t 44.5 US ton

#### 4 Kits Transportation

**Upper structure**

Height: 5170' 17-3/4"

Width: 3178' 10-3/4"

Weight: 18.5 t 20.4 US ton

**Undercarriage**

Height: 980' 3-2/3"

Width: 5810' 19-0"

Weight: 22.0 t (11.0 t x 2) 24.3 US ton (12.1 US ton x 2)

### Work Equipment

<table>
<thead>
<tr>
<th></th>
<th>Length (mm)</th>
<th>Height (mm)</th>
<th>Width (mm)</th>
<th>Weight (ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC700LC-8R</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boom</td>
<td>7920</td>
<td>2040</td>
<td>1190</td>
<td>4.9 (5.4)</td>
</tr>
<tr>
<td>Arm</td>
<td>4870</td>
<td>1210</td>
<td>650</td>
<td>3.3 (3.6)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2150</td>
<td>1780</td>
<td>1190</td>
<td>2.5 (2.8)</td>
</tr>
<tr>
<td><strong>PC700LC-8R (HD spec.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boom</td>
<td>7530</td>
<td>1960</td>
<td>1190</td>
<td>4.7 (5.2)</td>
</tr>
<tr>
<td>Arm</td>
<td>4870</td>
<td>1240</td>
<td>650</td>
<td>3.3 (3.6)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2150</td>
<td>1780</td>
<td>1920</td>
<td>3.1 (3.4)</td>
</tr>
<tr>
<td><strong>PC700LC-8R (SE spec.)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boom</td>
<td>6870</td>
<td>2090</td>
<td>1190</td>
<td>4.8 (5.3)</td>
</tr>
<tr>
<td>Arm</td>
<td>4230</td>
<td>1490</td>
<td>650</td>
<td>3.5 (3.9)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2150</td>
<td>1780</td>
<td>2040</td>
<td>3.4 (3.7)</td>
</tr>
</tbody>
</table>
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, floormat, cigarette lighter and ashtray
- Multi-functional 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 alarm
- 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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