

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

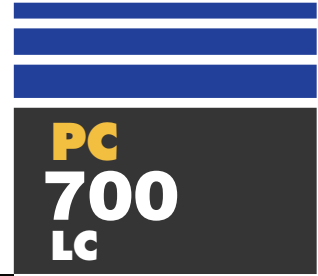


Photo may include optional equipment.

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)
- Anti-slip 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
 - DT-type 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.
- **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 TFT LCD Monitor

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

TFT : Thin Film Transistor LCD : Liquid Crystal Display

See page 10.

Working Environment

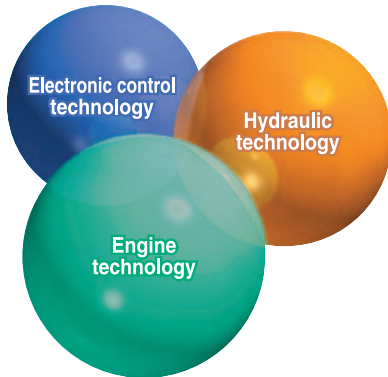
- **Large Comfortable Cab**
 - Low-noise design cab
 - Wide newly designed cab
 - Pressurised cab
 - Multi-position controls
 - Low vibrations with cab damper mounting
 - Automatic air conditioner (optional)
 - OPG top guard (optional)

See pages 8, 9.

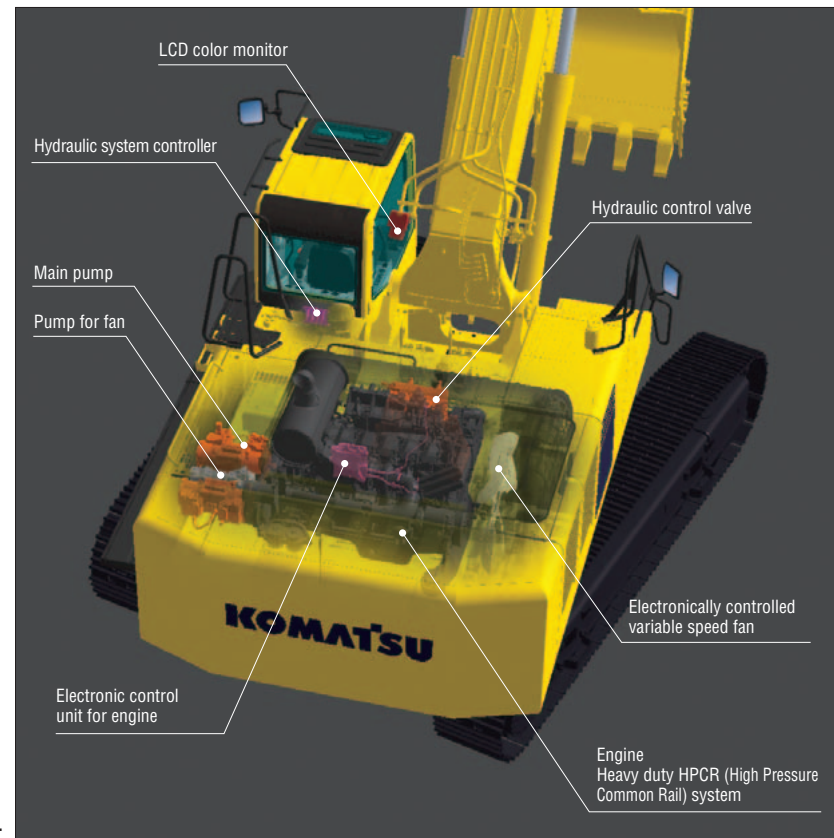
Photo may include optional equipment.

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 heavy duty HPCR (High Pressure Common Rail) 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

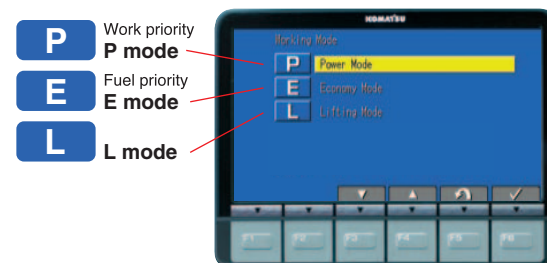
Reduced noise by adoption of an electronically controlled variable speed fan drive, large hybrid fan and low-noise muffler.

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

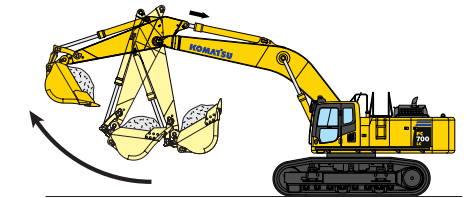
The track length on ground is shorter than the PC600LC-8R1 for higher travel power. Slope climbing performance and trafficability are excellent with large steering force.

Maximum drawbar pull: **465 kN (47.4 tonf)**



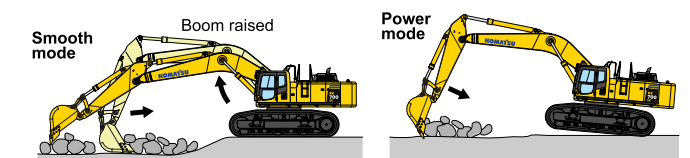
High Work Equipment Speed

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):
272 kN (27.7 tonf) ➔ **293 kN (29.9 tonf)** **8% UP**
(with Power Max.)

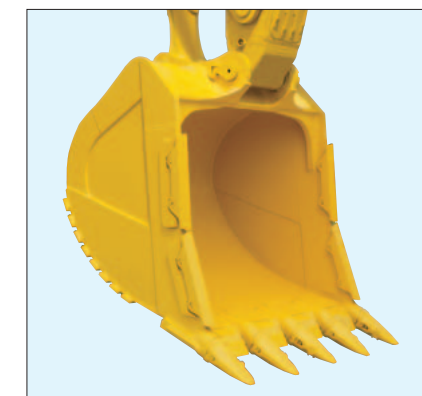
Maximum bucket digging force (ISO):
336 kN (34.3 tonf) ➔ **362 kN (36.9 tonf)** **8% UP**
(with Power Max.)

*Measured with Power Max function, 2900 mm 9'6" SE arm and ISO 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: **4.0m³ (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.



One-class higher large-sized undercarriage

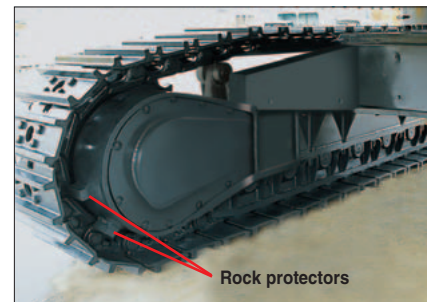
Full length track roller guard (optional)

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.



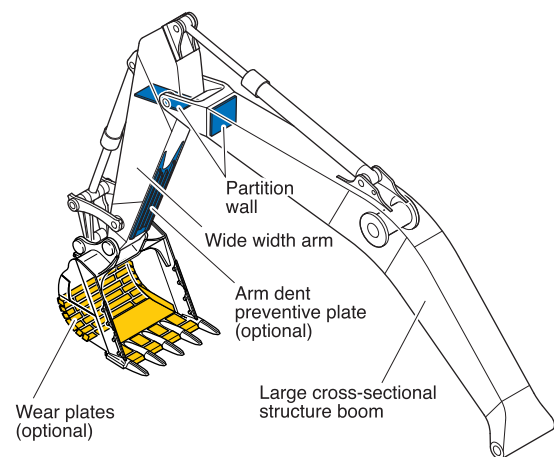
Rock protectors

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.



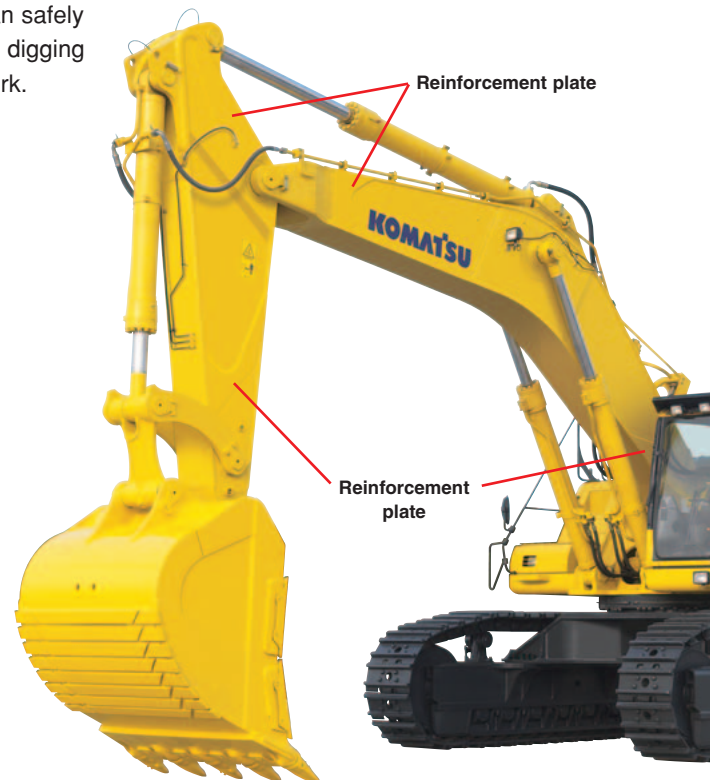
Wear plates (optional)

Partition wall

Wide width arm

Arm dent preventive plate (optional)

Large cross-sectional structure boom



Reinforcement plate

Reinforcement plate

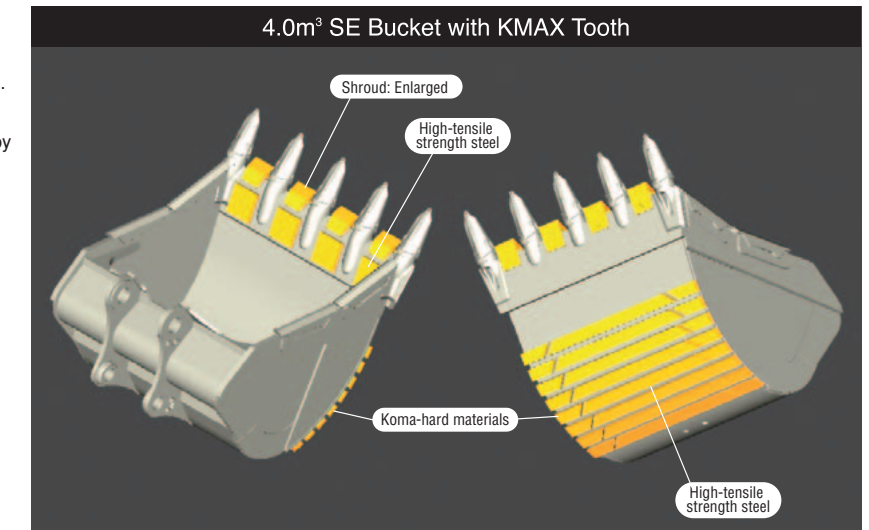
Strengthened Quarry Bucket and 4.0m³ SE Bucket (optional for SE spec.) Provide Outstanding Wear-resistance.

The bucket for specific use in quarry is impact and wear resistant, providing high performance and long life. Koma-hard materials* provide excellent wear-resistance. Combined with adoption of long-life KMAX tooth, durability of bucket is drastically enhanced.

* Koma-hard materials (KVX materials): Komatsu developed, wear-resistant, reinforced materials. Brinell hardness: 500 or more (180kgf/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.)



4.0m³ SE Bucket with KMAX Tooth

Shroud: Enlarged

High-tensile strength steel

Koma-hard materials

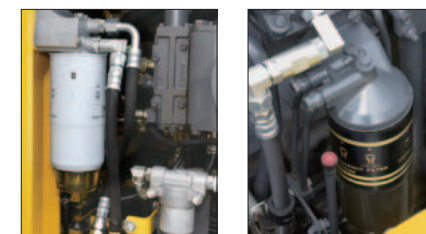
High-tensile strength steel

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

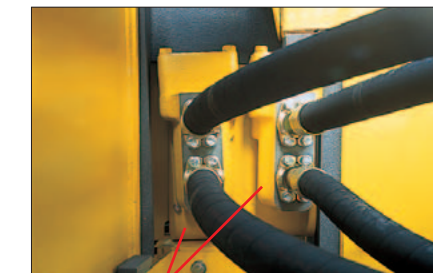
Water Separator

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



High-pressure In-line Filtration

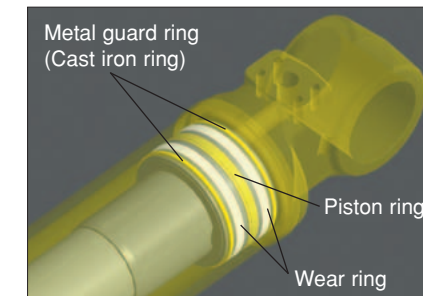
The PC700LC-8R has the most extensive filtration system available, providing in-line filters as standard equipment. An in-line filter in the outlet port of each main hydraulic pump reduces failures caused by contamination.



In-line filter

Metal Guard Rings

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



Metal guard ring (Cast iron ring)

Piston ring

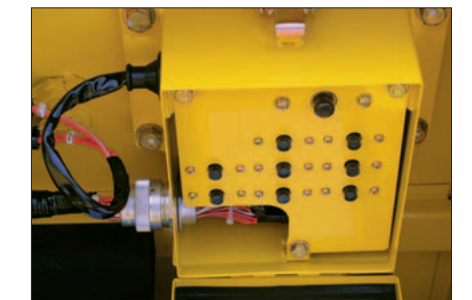
Wear ring

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.



DT-type Connectors

DT-type 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 (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 air conditioner 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 air conditioner, 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

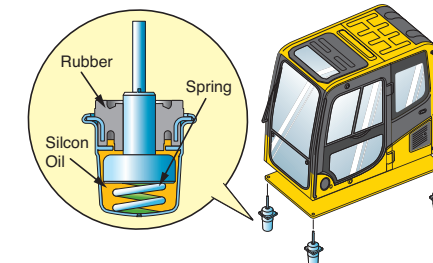
The multi-position, PPC (proportional pressure control) levers allow the operator to work in comfort while maintaining precise control. A double-slide mechanism allows the seat and control levers to move together or independently, allowing the operator to position the controls for maximum productivity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



Cab Equipments



Skylight



Sliding Window and Large Side Mirror



Defroster (optional)



Cab Frame Mounted Wiper



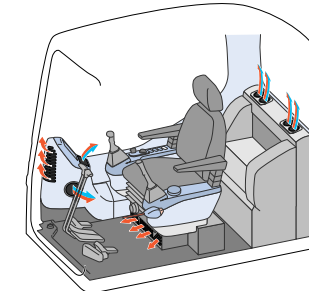
Bottle Holder and Magazine Rack

Automatic Air Conditioner (optional)

Enables you to easily and precisely set cab atmosphere with the instruments on the large LCD.



The automatic air conditioner 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

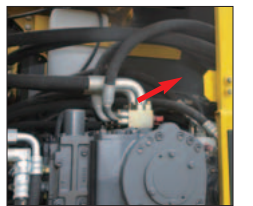
Step Light with Timer (optional)

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.

Anti-slip Plates

Spiked plates on working areas provide anti-slip 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 (by ISO 10262) capable with optional bolt-on top guard.

MAINTENANCE FEATURES

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 TFT liquid crystal display 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 Traveling 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.

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%.

EMMS

(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.



Long-life Oil, Filter

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

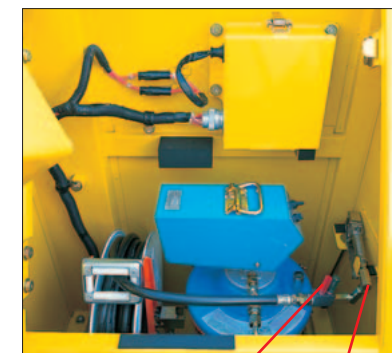


Hydraulic oil filter (Eco-white element)

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

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.



Anti-slip Plates

Spiked plates provided on top of the machine cab maintains anti-slip 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.



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 kgf/cm² 4,620 psi
 Travel circuit 34.3 MPa 350 kgf/cm² 4,980 psi
 Swing circuit 25.5 MPa 260 kgf/cm² 3,700 psi
 Pilot circuit 2.9 MPa 30 kgf/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 kgf 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 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 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 kgf/cm ² 15.5 psi	66200 kg 145,940 lb	107.9 kPa 1.10 kgf/cm ² 15.6 psi
Double grouser 710 mm 28"	66500 kg 146,610 lb	93.2 kPa 0.95 kgf/cm ² 13.5 psi	67000 kg 147,710 lb	94.1 kPa 0.96 kgf/cm ² 13.7 psi

PC700LC-8R SE spec.:
 Operating weight, including 6600 mm 21'8" boom, 2900 mm 9'6" arm, SAE 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 kgf/cm ² 15.8 psi
Double grouser 710 mm 28"	67800 kg 149,470 lb	95.1 kPa 0.97 kgf/cm ² 13.8 psi

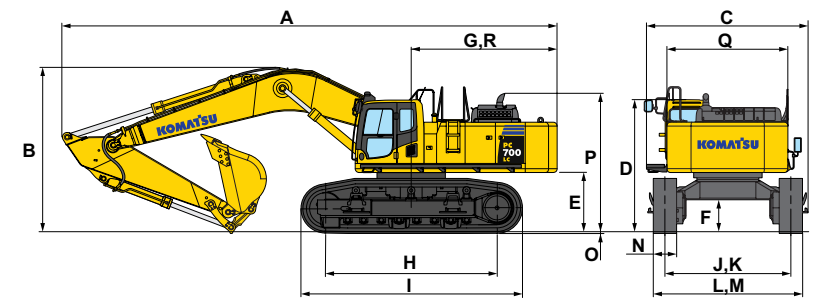


DIMENSIONS

	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"	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"	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"	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"	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"	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"	3595 mm* 11'10"

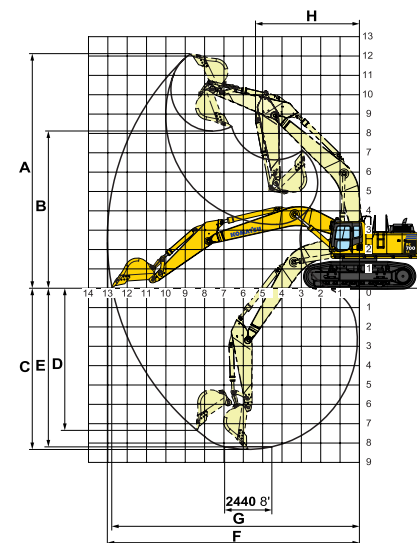
* with OPG top guard

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)	264 kN 26900 kgf 59,300 lb		289 kN 29500 kgf 65,040 lb		
Bucket digging force at power max. (SAE)	285 kN 29100 kgf 64,150 lbf		312 kN 31770 kgf 70,040 lb		
Arm crowd force (SAE)	222 kN 22600 kgf 49,820 lb	194 kN 19800 kgf 43,650 lb	170 kN 17300 kgf 38,140 lb	222 kN 22600 kgf 49,820 lb	260 kN 26500 kgf 58,420 lb
Arm crowd force at power max. (SAE)	238 kN 24300 kgf 53,570 lb	209 kN 21300 kgf 46,960 lb	182 kN 18600 kgf 41,010 lb	238 kN 24300 kgf 53,570 lb	280 kN 28500 kgf 62,830 lb
Bucket digging force (ISO)	294 kN 30000 kgf 66,140 lb		336 kN 34300 kgf 75,620 lb		
Bucket digging force at power max. (ISO)	317 kN 32300 kgf 71,210 lb		362 kN 36900 kgf 81,350 lb		
Arm crowd force (ISO)	228 kN 23300 kgf 51,370 lb	202 kN 20600 kgf 45,410 lb	176 kN 17900 kgf 39,460 lb	228 kN 23300 kgf 51,370 lb	272 kN 27700 kgf 61,070 lb
Arm crowd force at power max. (ISO)	246 kN 25100 kgf 55,340 lb	218 kN 22200 kgf 48,940 lb	189 kN 19300 kgf 42,550 lb	246 kN 25100 kgf 55,340 lb	293 kN 29900 kgf 65,920 lb

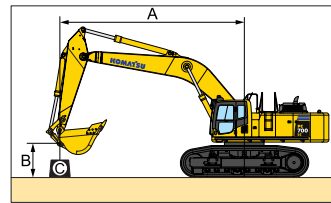
Bucket Capacity (heaped)				Width				Weight (with side shrouds, side cutters) kg lb	Tooth	Arm Length			
SAE, PCSA m ³ yd ³		CECE m ³ yd ³		With side shrouds, side cutters mm in		Without side shrouds, side cutters mm in				m	ft	in	
use with 7.66m 25'2" boom													
2.0	2.62	1.8	2.35	1430	56.3"	1250	49.2"	2130	4,700	KMAX	3.5 11'6"	4.3 14'1"	5.2 17'1"
2.3	3.01	2.1	2.75	1580	62.2"	1400	55.1"	2260	4,980	KMAX	○	○	○
2.7	3.53	2.4	3.14	1780	70.1"	1600	63.0"	2475	5,460	KMAX	○	—	—
use with 7.3m 23'11" HD boom													
2.8	3.66	2.5	3.27	1920	75.6"	1920	75.6"	2430	5,360	KMAX	○	○	○
3.1	4.05	2.8	3.66	2040	80.3"	2040	80.3"	3210	7,080	KMAX	○	○	○
use with 6.6m 21'8" SE boom													
3.5	4.58	3.1	4.05	2110	83.1"	2110	83.1"	3335	7,350	KMAX	○	○	○
4.0	5.23	3.5	4.58	2110	83.1"	2110	83.1"	3440	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 □ : General purpose use, density up to 1.5 t/m³ 2,500 lb/yd³

— : Not useable

* : Bucket lip width



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	*8550										
		*18,900	*18,900										
6.1m 20'		*8450	*8450	*12250	11950	*13500	*13500						
		*18,600	*18,600	*27,000	22,300	*29,700	*29,700						
3.0m 9'		*9300	*7700	*14150	11100	*17000	14900	*22100	21250				
		20,500	17,000	*31,200	24,500	*37,500	32,900	*48,700	46,800				
0m 0'		10550	7700	14200	10400	18950	13850	25100	19500	*20150	*20150		
		23,300	17,000	31,300	22,900	41,800	30,500	55,300	43,000	*44,400	*44,400		
-3.0m -9'		12500	9150	14000	10250	*18600	13550	*23650	19300	*30400	*30400	*17400	*17400
		27,600	20,000	30,900	22,500	*41,000	29,900	*52,100	42,500	*67,100	*67,100	*38,300	*38,300
-6.1m -20'		*12350	*12350			*11150	*11150	*16350	*16350	*20650	*20650		
		*27,300	*27,300			*24,600	*24,600	*36,000	*36,000	*45,600	*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	*8150										
		*17,900	*17,900										
6.1m 20'		*7950	*7950	*12150	11550	*13200	*13200						
		*17,600	*17,600	*26,800	25,400	*29,100	*29,100						
3.0m 9'		*8900	*7900	*13950	10800	*16700	14750	*21550	*21050	*26500	*26500		
		*19,700	17,400	*30,700	23,800	*36,800	32,500	*47,500	*46,400	*58,400	*58,400		
0m 0'		10950	7900	13950	10150	18800	13650	24850	19500	*17800	*17800		
		24,100	17,500	30,700	22,300	41,500	30,100	54,800	43,000	*39,300	*39,300		
-3.0m -9'		13250	9650	13800	10000	*18150	13350	*23450	19200	*30700	*30700	*23750	*23750
		29,300	21,200	30,400	22,100	*40,100	29,500	*51,700	42,300	*67,700	*67,700	*52,400	*52,400
-6.1m -20'		*12450	*12450					*14750	*14750	*19500	*19500		
		*27,400	*27,400					*32,600	*32,600	*43,000	*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	*11800										
		*26,000	*26,000										
6.1m 20'		*10950	*10950	*10750	*10750	*14500	*14500						
		*24,100	*24,100	*23,700	*23,700	*32,000	*32,000						
3.0m 9'		*11950	*9450	*14500	10600	*17450	14600	*22300	21350	*30100	*30100		
		*26,300	20,800	31,900	23,400	*38,400	32,100	*49,200	47,000	*66,300	*66,300		
0m 0'		13150	9550	13900	10100	18850	13650	24900	19650	*26550	*26550		
		29,000	21,000	30,600	22,200	41,600	30,100	54,900	43,300	*58,500	*58,500		
-3.0m -9'		*14550	12300			*16600	13550	*22300	19450	*29300	*29300	*27200	*27200
		*32,100	27,100			*36,600	29,900	*49,100	42,900	*64,600	*64,600	*60,000	*60,000

*Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard NO. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

Transportation specifications (length x height x width)

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 44.6U.S.ton

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

Others
Weight : 12.3t 13.6U.S.ton

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

Arm
Weight : 10.75t 11.8U.S.ton

Bucket
Weight : 1.75t 1.9 U.S.ton

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

4 Kits Transportation

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

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

	Work Equipment	Length		Height		Width		Weight	
		mm	ft in	mm	ft in	mm	ft in	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, 50 amp, 24 V
- Auto decelerator and auto idling system
- Batteries, 170 Ah, 2 x 12 V
- 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 (OLSS) 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:

- Anti-slip plates
- 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
- Travel alarm
- Water separator



OPTIONAL EQUIPMENT

- Alternator, 90 amp, 24 V
- 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 air conditioner
- 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 (ISO 10262 level 2)

- Cab with fixed front window
- Electric pump, grease gun with indicator
- 12V electric supply
- Fire extinguisher
- Full length track roller guard
- General tool kit
- Interconnected horn and warning light
- Large-capacity batteries
- Lower wiper
- OPG top guard
- 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)

KOMATSU®