HORSEPOWER
Gross: 370 kW 496 HP / 1800 rpm
Net: 363 kW 487 HP / 1800 rpm

OPERATING WEIGHT
78600 – 79800 kg
173,280 – 175,930 lb

KOMATSU®

PC850-8E0 BACKHOE

ecot3

PC 850

HYDRAULIC EXCAVATOR

Photo may include optional equipment.

WALK-AROUND

Productivity Features

- ***High Work Equipment Speed***
  Arm quick return circuit enables loading work to be quicker than ever, by reducing hydraulic pressure loss of arm dumping.
- ***Heavy Lift Mode***
  The heavy lift mode increases lifting force by 10%.
- ***Large Digging Force***
  Pressing the Power Max. function button temporarily increases the digging force.
- ***Two-mode Setting for Boom***
  Switch selection allows either powerful digging or smooth boom operation.
- ***Large Drawbar Pull and Steering Force*** provide excellent mobility.
- ***Swing Priority Mode***
  The swing priority mode improves efficiency for loading dump trucks.
- ***Shockless Boom Control***
  Switch selection reduces chassis vibration after sudden stops.

See page 5.

Maintenance Features

- ***Easy Cleaning of Cooling Unit***
  Fan reverse-rotation function facilitates clogged radiator cleaning.
- ***Easy Checking and Maintenance of Engine***
- ***Large Handrail, Step and Catwalk*** provide easy access to the engine and hydraulic equipment.

See page 11.

Excellent Reliability and Durability

- ***Strengthened Boom and Arm***
- ***KMAX Bucket Teeth*** offer superior penetration and long-term sharpness.
- ***Fuel Pre-filter*** with water separator and ***High Efficiency Fuel Filter*** equipped as standard.
- ***O-ring Face Seals,*** which have excellent sealing performance, are used for the hydraulic hoses.
- ***High-pressure In-line Filtration***
  The cool-running hydraulic system is protected with the most extensive filtration system available, including a high pressure in-line filter for each main pump.
- ***Highly Reliable Electronic Devices***
  Exclusively designed electronic devices have passed severe testing.
  • Controllers • Sensors • Connectors
  • Heat resistant wiring • Circuit breaker
- ***Boom Foot Hoses*** are arranged under the boom foot, improving hose life and safety.

See pages 6, 7.

HORSEPOWER
Gross: 370 kW 496 HP / 1800 rpm
Net: 363 kW 487 HP / 1800 rpm

OPERATING WEIGHT
Backhoe
78600 – 79800 kg
173,280 – 175,930 lb

Ecology and Economy Features

- ***Low Emission Engine***
  A powerful, turbocharged and air-to-air aftercooled Komatsu SAA6D140E-5 provides **363 kW** 487 HP. This engine is U.S. EPA Tier 3 and EU Stage 3A emissions certified, without sacrificing power or machine productivity.

- ***Economy Mode Four-level Setting***
  Enables operator to select the appropriate Economy mode level to match production requirement with lowest fuel consumption.

- ***Reduction of Ambient Noise***
  - Electronically controlled variable speed fan drive
  - Large hybrid fan
  - Low-noise muffler

- ***Mode Selection***
  - 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.

Photo may include optional equipment.

Working Environment

- ***Large Comfortable Cab***
  - Low-noise cab
  - Low vibration with cab damper mounting
  - Highly pressurized cab with optional air conditioner (A/C)
  - Operator seat and console with armrest that enables operations in the appropriate operational posture.
  - OPG top guard level 2 (ISO 10262) capable with bolt-on top guard

See pages 8, 9.

Large Liquid Crystal Display (LCD) Monitor

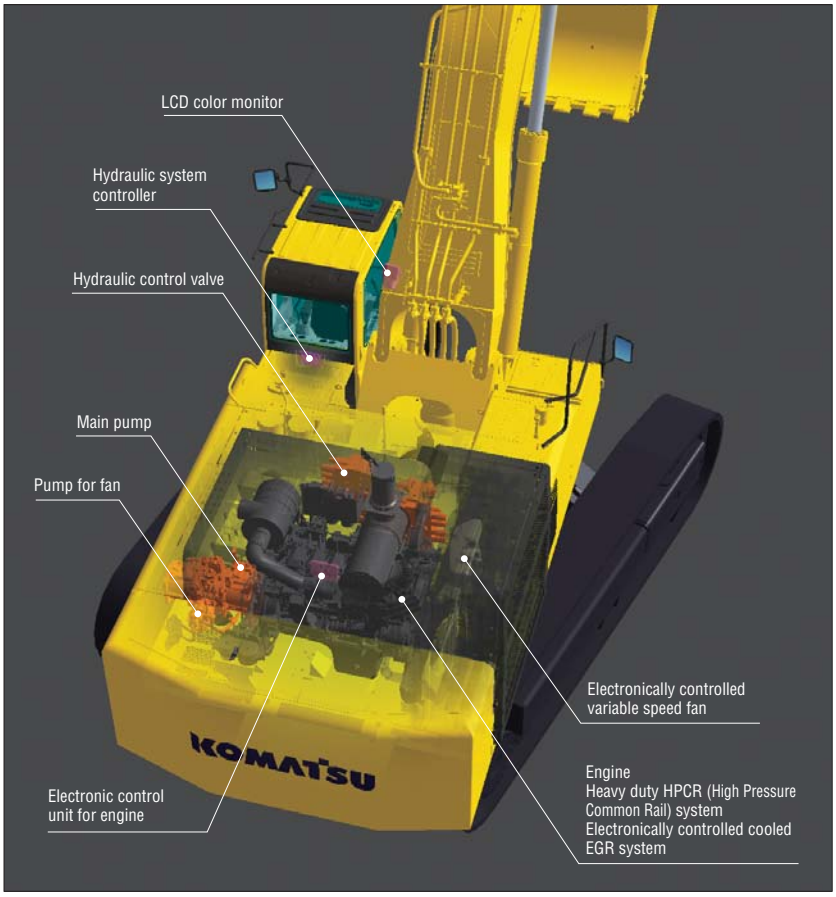
- Easy-to-see and use 7" large multi-function color monitor
- Can be displayed in 12 languages for global support.

See page 10.

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.



Low Emission Engine

Komatsu SAA6D140E-5 engine is U.S. EPA Tier 3 and EU Stage 3A emissions certified, without sacrificing power or machine productivity.

ecot3
ecology & economy - technology 3

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; effectively uses the engine output to prevent wasteful fuel consumption; and reduces noise during low-speed fan revolution.

Lower and Economical Fuel Consumption Using Economy Mode

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

Reduction of Ambient Noise

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

ECO gauge that Assists Energy-saving Operations

ECO gauge is equipped for environment friendly energy-saving operations. Focus on operation in the green range allows reduction of CO_2 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

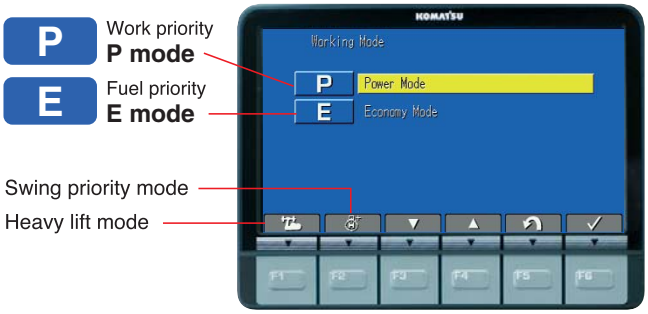
Auto deceleration system is equipped to reduce fuel consumption and operating noise. Also, engine idling speed can be set at a lower speed on monitor with auto idling system.

Working Modes Selectable

P and E modes established 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 working equipment speed for light duty work.



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

Heavy Lift Mode

Gives 10% more lifting force when needed for handling rock or heavy lifting applications.

Swing Priority Mode

The swing priority mode allows the operator to use the same easy motion for 180˚ loading as 90˚ loading operations. By altering the oil flow, this setting allows you to select either boom or swing as the priority for increased production.

Selection	Result
ON	Oil flow to the swing motor is increased. 180˚loading operations are most efficient.
OFF	Oil flow to the boom is increased. 90˚loading operations are most efficient.

Large Digging Force

With the one-touch Power Max. function digging force is further increased. (8.0 seconds of operation)

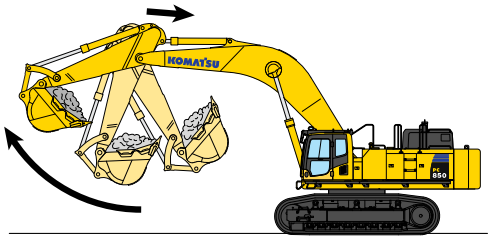
Maximum arm crowd force (ISO 6015):
298 kN (30.4 tonf) ➡ **327 kN (33.3 tonf)** **9.4% UP**
(With Power Max.)

Maximum bucket digging force (ISO 6015):
363 kN (37.0 tonf) ➡ **397 kN (40.5 tonf)** **9.4% UP**
(With Power Max.)

*Measured with Power Max. function, **3600 mm** 11'10" arm and ISO 6015 rating

Work Equipment Speed

An arm quick return circuit is provided for arm dumping. This returns a portion of oil flow directly to the hydraulic tank at arm dumping to reduce the hydraulic pressure loss. Speedier loading work can be accomplished by work equipment with quicker movement.

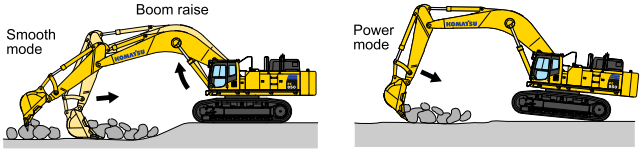


Large Drawbar Pull and Steering Force

Since the machine has a large drawbar pull and a high steering force, it demonstrates excellent mobility even when it is on inclined sites.

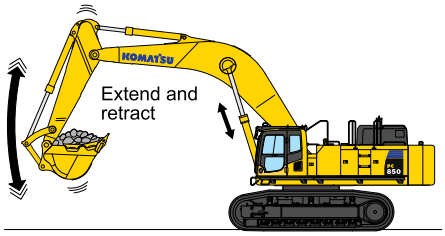
Two-mode Setting for Boom

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.



Shockless Boom Control

The PC850-8E0 boom circuit features a shockless valve (Double-check slow return valve) to automatically reduces the amount of vibration present when operating the boom. Operator fatigue is reduced (Which can improve safety and productivity), and spillage caused by vibration is minimized.

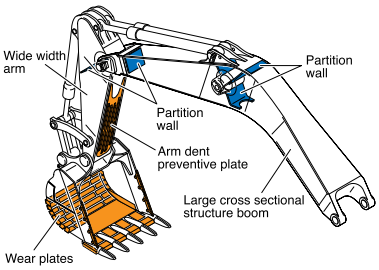


RELIABILITY & DURABILITY FEATURES

Excellent Reliability and Durability

Boom Foot Hoses
The boom foot hoses are arranged under the boom foot to reduce hose bend during operation, extending hose life and improving operator safety.

Strengthened Boom and Arm
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.



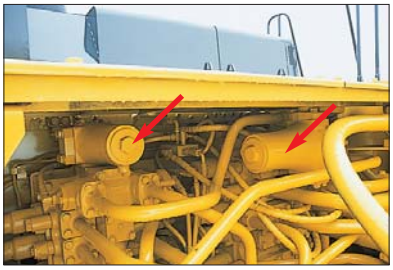
Strengthened Revolving Frame Underguard
Guards the machine pipings against being hit by rocks from below and prevents hydraulic components and the engine from being damaged.

Frame Structure
The revolving frame mount and center frame mount on the swing circle are no welding structure so that force is transmitted directly to the thick plate of the frame without passing through any welding.

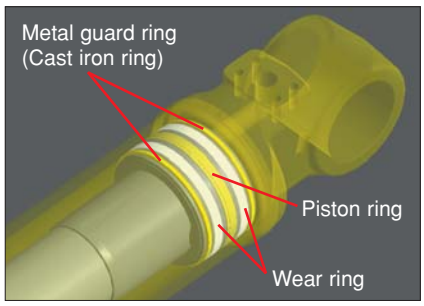
Fuel Pre-filter (With Water Separator)
Removes water and contaminants from fuel to enhance the fuel system reliability.

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

High-pressure In-line Filtration
The PC850-8E0 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.

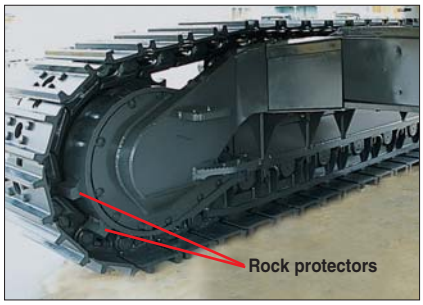


Metal Guard Rings
Metal guard rings protect all the hydraulic cylinders and improve reliability.

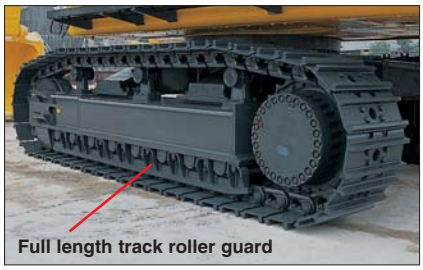


Circuit Breaker
With circuit breaker, the machine can be easily restarted after repair.

Sturdy Undercarriage
The undercarriage is strengthened to provide excellent reliability and durability when working on rocky ground or blasted rock.



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



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.

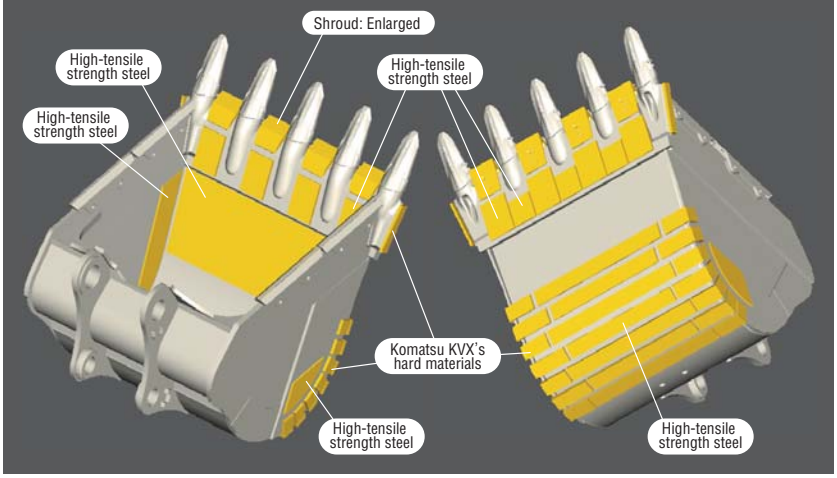
Heat-resistant Wiring
Heat-resistant wiring is used for the engine electric circuit and other major component circuit.

Strengthened Quarry Bucket Provides Outstanding Wear-resistance

The PC850-8E0 has the bucket for specific use in quarry, that 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 teeth, durability of bucket is drastically enhanced.

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

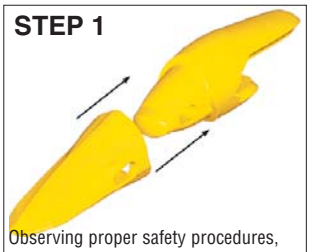
Quarry Bucket with KMAX Tooth



KMAX Tooth

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

STEP 1

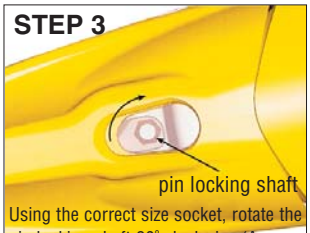


Observing proper safety procedures, place tooth onto adapter (As shown).

STEP 2

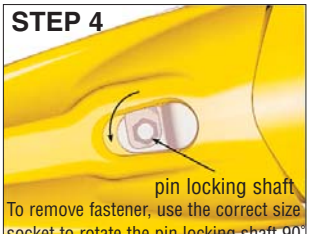
Insert fastener, making sure it is in the unlocked position (As shown).

STEP 3



Using the correct size socket, rotate the pin locking shaft 90° clockwise (As shown) to finish the installation.

STEP 4



To remove fastener, use the correct size socket to rotate the pin locking shaft 90° counter-clockwise (As shown). Remove fastener and tooth. Repeat steps 1-3 for a new installation.

Photo may include optional equipment.

WORKING ENVIRONMENT

Photo may include optional equipment.

Low Noise Design Cab

The newly-designed cab is highly rigid and has excellent sound absorption ability. Thorough improvement of noise source reduction and use of low noise engine, hydraulic equipment, and air conditioner allows the operator to work in quiet condition.

Operator ear's noise **2 dB(A) reduced**

Compared with the current model

Rigid and Safe Operator's Cab

OPG top guard level 2 (ISO 10262)

The OPG top guard securely protects the operator's cab and conforms to the ISO 10262.

Additional head lamp

Night operation is safe.

Single sheet fixed glass

The glass installed in the machine has excellent visibility since it is laminated to prevent shortening and has less vibration.

See-through skylight equipped with a sun shade

The upward visibility is excellent.

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 posture of armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

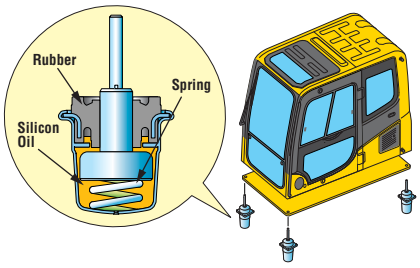
Seat with headrest reclined full flat

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.

Low Vibration with Cab Damper Mounting

PC850-8E0 uses viscous damper mounting for cab that incorporates longer stroke and the addition of a spring. The cab damper mounting combined with high rigidity deck aids vibration reduction at operator seat.



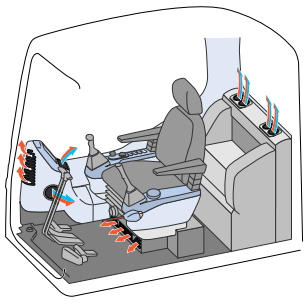
Multi-position Controls

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"

Automatic A/C (Optional)

Enables you to easily and precisely set cab atmosphere with the instruments on the large LCD.
The bi-level control function 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 front glass clear.



Defroster (Optional)

Cab frame mounted wiper

Bottle holder and magazine rack

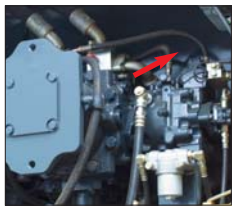
Safety Features

Step Light with Timer

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 plates performance.

Horn Interconnected with Warning Light (Optional)

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

Lower Wiper (Optional)

Lower windshield wiper improves visibility in rain.

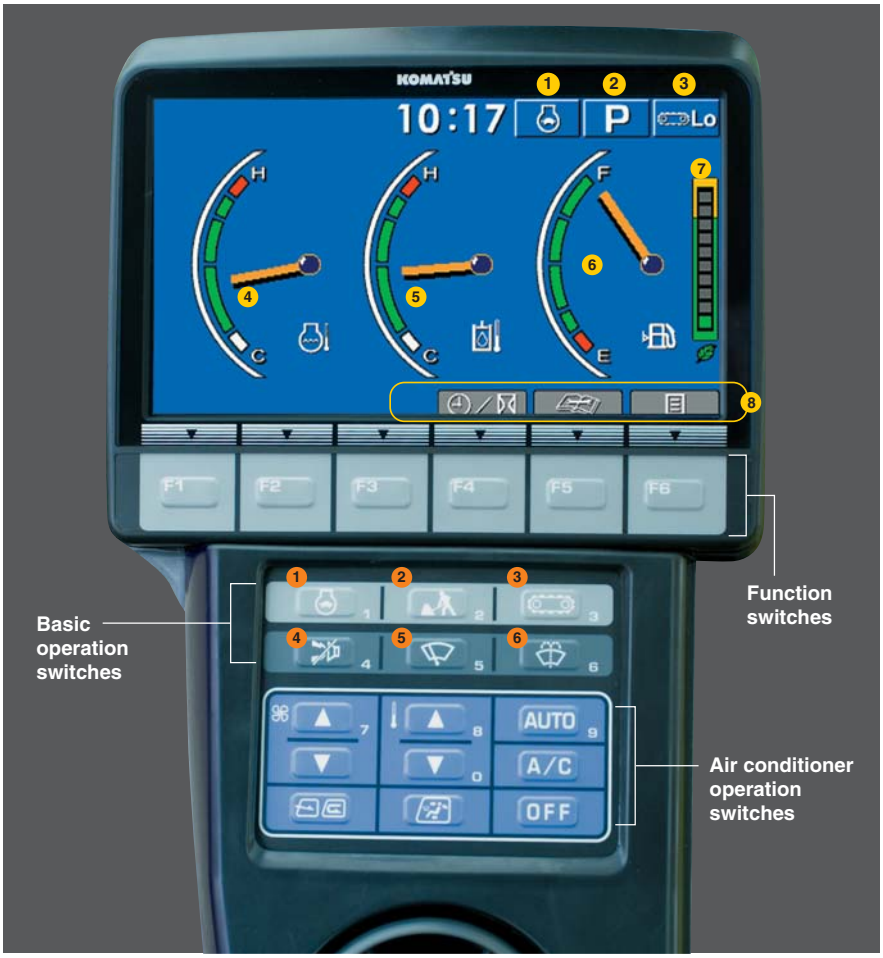
Rear View Monitoring System (Optional)

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

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. Simple and easy to operate switches. 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 and Economy mode (Four levels).

Working Mode	Application	Advantage
P (P0,P1)	Power Mode	● Maximum production/power ● Fast cycle time
E (E0,E1,E2,E3)	Economy Mode	● Good cycle time ● Good fuel economy

Additionally, it is possible to select “Heavy lift mode” or “Swing priority mode” for each Power mode and Economy mode.

Selection	Display on the monitor
Heavy lift mode	P E
Swing priority mode	P E

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 of oil and filters on LCD 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 engine to facilitate daily checks. Thermal guards are placed around high-temperature parts such as turbocharger.

One-touch Drain Cock

Easier, cleaner engine oil changes.

Easy Cleaning of Cooling Unit

Reverse-rotation function of the hydraulic driven fan facilitates cleaning of the cooling unit. In addition, this function contributes to reducing warming-up run time in low temperature and discharging hot air from the engine room to keep appropriate heat balance.

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

Dust Indicator with 5-step Indication

Informs of air cleaner clogging in 5 steps to warn of filter condition.

Wide Catwalk

Easier, safer operator cab access and maintenance checks.

Steps Connected to the Machine Cab

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

Convenient Utility Space

Utility space provides great convenience to store tools, spare parts, etc.

Divided Type Engine Cover

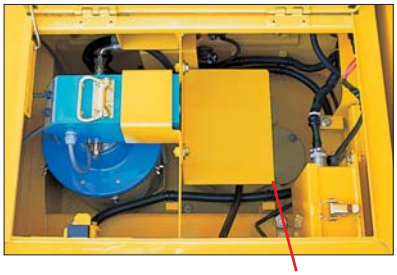
The divided engine cover allows easily access to inspection points around the engine.

Washable Cab Floormat

Cab floormat is easy to keep clean. The gently inclined surface has a flanged floormat and drainage holes to facilitate runoff.

Electric Pump, Grease Gun with Indicator (Optional)

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



Grease can drum storage location

Grease gun
The grease gun can be reached from ground level.

Indicator

Photo may include optional equipment.

SPECIFICATIONS

ENGINE

Model . . . . . Komatsu SAA6D140E-5
Type . . . . . 4-cycle, water-cooled, direct injection
Aspiration . . . . . Turbocharged, aftercooled, cooled EGR
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 **370 kW** 496 HP
ISO 9249 / SAE J1349* . . . . . Net **363 kW** 487 HP
Rated rpm . . . . . 1800 rpm
Fan drive type . . . . . Hydraulic

*Net horsepower at the maximum speed of radiator cooling fan is **338 kW** 454HP.
U.S. EPA Tier 3 and EU Stage 3A emissions certified.

HYDRAULIC SYSTEM

Type . . . . . Open-center load-sensing system
Number of selectable working modes 2

Main pump:
Type . . . . . Variable-capacity piston pumps
Pumps for . . . . . Boom, arm, bucket, swing, and travel circuits
Maximum flow . . . . . **2 x 494 ltr/min** 2 x 130.5 U.S. gal/min

Fan drive pump . . . . . Variable capacity piston type

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	**31.4 MPa**	320 kg/cm²	4,550 psi
Travel circuit	**34.3 MPa**	350 kg/cm²	4,980 psi
Swing circuit	**28.4 MPa**	290 kg/cm²	4,120 psi
Heavy lift circuit	**34.3 MPa**	350 kg/cm²	4,980 psi
Pilot circuit	**2.9 MPa**	30 kg/cm²	430 psi

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

Boom	**2 – 200 mm x 1950 mm x 140 mm**	7.9" x 76.8" x 5.5"
Arm	**2 – 185 mm x 1610 mm x 120 mm**	7.3" x 63.4" x 4.7"
Bucket		
Std.	**1 – 185 mm x 1820 mm x 130 mm**	7.3" x 71.7" x 5.1"
SE	**1 – 225 mm x 1420 mm x 160 mm**	8.9" x 55.9" x 6.3"

SWING SYSTEM

Driven method . . . . . Hydraulic motors
Swing reduction . . . . . Planetary gear
Swing circle lubrication . . . . . Grease-bathed
Swing lock . . . . . Oil disc brake
Swing speed . . . . . 6.8 rpm

DRIVES AND BRAKES

Steering control . . . . . Two levers with pedals
Drive method . . . . . Fully hydrostatic
Travel motor . . . . . Axial piston motor, in-shoe design
Reduction system . . . . . Planetary triple reduction
Maximum drawbar pull . . . . . **559 kN** 57000 kgf 125,660 lb
Gradeability 70%
Maximum travel speed
Low . . . . . **2.8 km/h** 1.7 mph
High . . . . . **4.2 km/h** 2.6 mph
Service brake . . . . . Hydraulic lock
Parking brake . . . . . Oil disc brake

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	**980 ltr**	258.9 U.S. gal
Radiator	**100 ltr**	26.4 U.S. gal
Engine	**53 ltr**	14.0 U.S. gal
Final drive, each side	**20 ltr**	5.3 U.S. gal
Swing drive	**24.5 x 2 ltr**	6.5 x 2 U.S. gal
Hydraulic tank	**470 ltr**	124.2 U.S. gal

OPERATING WEIGHT (APPROXIMATE)

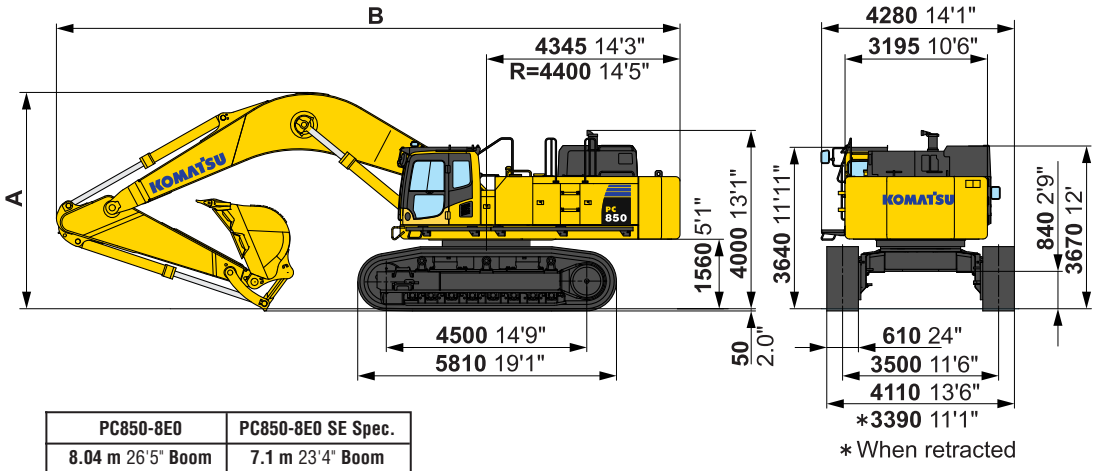
PC850-8E0: Operating weight, including **8040 mm** 26'5" boom, **3600 mm** 11'10" arm, SAE heaped **3.4 m³** 4.45 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

PC850-8E0 Super Earth mover (SE) spec.: Operating weight, including **7100 mm** 23'4" boom, **2945 mm** 9'8" arm, SAE heaped **4.3 m³** 5.62 yd³ backhoe bucket, operator, lubricant, coolant, full fuel tank, and the standard equipment.

Shoes	PC850-8E0		PC850-8E0 SE Spec.	
	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
610 mm 24"	**79000 kg** 174,160 lb	**128 kPa** 1.31 kgf/cm² 18.6 psi	**78600 kg** 173,280 lb	**128 kPa** 1.31 kgf/cm² 18.6 psi
710 mm 28"	**79800 kg** 175,930 lb	**112 kPa** 1.14 kgf/cm² 16.2 psi	**79400 kg** 175,050 lb	**111 kPa** 1.13 kgf/cm² 16.1 psi

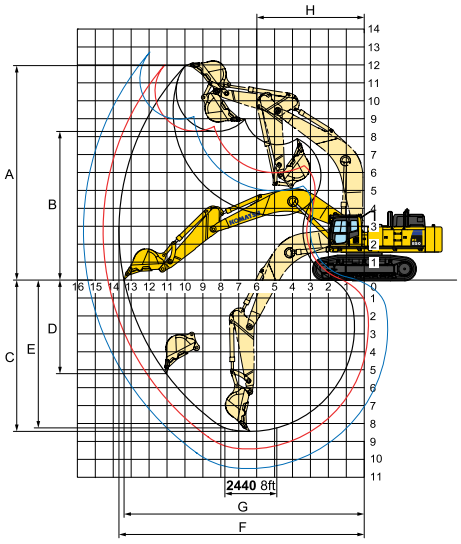
BACKHOE DIMENSIONS

Unit: **mm** ft in



		PC850-8E0	PC850-8E0 SE Spec.
		8.04 m 26'5" **Boom**	**7.1 m** 23'4" **Boom**
		3.6 m 11'10" **Arm**	**2.9 m** 9'8" **Arm**
A	Overall Height	**4850 mm** 15'11"	**4615 mm** 15'2"
B	Overall Length	**13995 mm** 45'11"	**13130 mm** 43'1"

WORKING RANGE



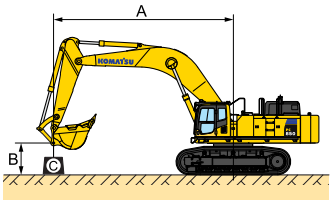
		PC850-8E0	PC850-8E0 SE Spec.	
Boom length		**8040 mm** 26'5"	**7100 mm** 23'4"	
Arm length		**3600 mm** 11'10"	**2945 mm** 9'8"	**3600 mm** 11'10"
A	Max. digging height	**11955 mm** 39'3"	**11330 mm** 37'2"	**11055 mm** 36'3"
B	Max. dumping height	**8235 mm** 27'0"	**7525 mm** 24'8"	**7430 mm** 24'5"
C	Max. digging depth	**8445 mm** 27'8"	**7130 mm** 23'5"	**7790 mm** 25'7"
D	Max. vertical wall digging depth	**5230 mm** 17'2"	**4080 mm** 13'5"	**4260 mm** 14'0"
E	Max. digging depth of cut for 8' level	**8310 mm** 27'3"	**6980 mm** 22'11"	**7680 mm** 25'2"
F	Max. digging reach	**13660 mm** 44'10"	**12265 mm** 40'3"	**12710 mm** 41'8"
G	Max. digging reach at ground level	**13400 mm** 44'0"	**11945 mm** 39'2"	**12400 mm** 40'8"
H	Min. swing radius	**5985 mm** 19'8"	**5645 mm** 18'6"	**5440 mm** 17'10"
Bucket digging force (SAE J 1179) at power max.		**345 kN** 35200 kgf / 77,600 lb	**428 kN** 43600 kgf / 96,120 lb	**345 kN** 35200 kgf / 77,600 lb
Arm crowd force (SAE J 1179) at power max.		**312 kN** 31800 kgf /70,110 lb	**363 kN** 37000 kgf / 81,570 lb	**312 kN** 31800 kgf / 70,110 lb
Bucket digging force (ISO 6015) at power max.		**397 kN** 40500 kgf / 89,290 lb	**471 kN** 48000 kgf / 105,820 lb	**397 kN** 40500 kgf / 89,290 lb
Arm crowd force (ISO 6015) at power max.		**327 kN** 33300 kgf / 73,410 lb	**374 kN** 38100 kgf / 84,000 lb	**327 kN** 33300 kgf / 73,410 lb

BACKHOE BUCKET, ARM, AND BOOM COMBINATION

Bucket Capacity (Heaped)		**Width**		**Weight** (With Side Cutters)	**Arm Length**	
SAE J 296, PCSA m^3 yd^3	**CECE** m^3 yd^3	**Without Side Shrouds** mm in	**With Side Shrouds** mm in	**kg** lb	**m** ft in	
PC850-8E0 (Use with **8.04 m** 26'5" Boom)					**3.6** 11'10"	
3.4 4.45	**3.0** 3.92	**1820** 71.7"	**1870** 73.6"	**3990** 8,800	○	
PC850-8E0 SE Spec. (Use with **7.1 m** 23'4" Boom)					**2.9** 9'8"	**3.6** 11'10"
4.0* 5.23	**3.5** 4.58	**2000** 78.7"	**2050** 80.7"	**4230** 9,330	○	—
4.0* 5.23	**3.5** 4.58	**2000** 78.7"	**2050** 80.7"	**4260** 9,390	—	○
4.0 5.23	**3.5** 4.58	**2000** 78.7"	**2100** 82.7"	**3730** 8,230	○	—
4.3 5.62	**3.8** 4.97	**2150** 84.6"	**2250** 88.6"	**3940** 8,690	○	—
4.5 5.89	**4.0** 5.23	**2230** 87.8"	**2330** 91.7"	**4030** 8,890	□	—

*For heavy duty

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



PC850-8E0

Equipment:
- Boom: **8.04 m** 26'5"
- Arm: **3.6 m** 11'10"
- Bucket: **3.4 m³** 4.45 yd³
- Shoe: **610 mm** 24"
- Counterweight: **11.85 ton** 26,120 lb

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

HEAVY LIFT "OFF"

Unit: **kg** lb

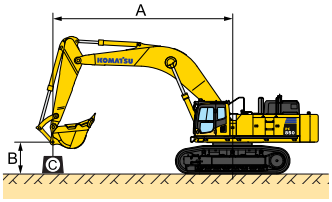
A / B	Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***9300** *20,500	**8650** 19,000	***11050** *24,400	***11050** *24,400	***12800** *28,200	***12800** *28,200						
3.0 m 9'	**9850** 21,700	**7250** 16,000	***13250** *29,200	**12300** 27,100	***16450** *36,300	***16450** *36,300	***22050** *48,600	***22050** *48,600				
0 m 0'	**9850** 21,900	**7150** 15,800	***14800** *32,600	**10950** 24,100	***18700** *41,200	**14750** 32,500	***20950** *46,200	***20950** *46,200	***19850** *43,800	***19850** *43,800		
–3.0 m –9'	***11800** *26,100	**8600** 19,000	***14350** *31,600	**10550** 23,200	***18150** *40,000	**14250** 31,400	***21250** *46,800	**20750** 45,700	***21150** *46,600	***21150** *46,600	***24450** *53,900	***24450** *53,900
–6.0 m –19'	***12550** *27,700	***12550** *27,700			***12900** *28,400	***12900** *28,400	***17050** *37,600	***17050** *37,600	***21300** *47,000	***21300** *47,000		

HEAVY LIFT "ON"

Unit: **kg** lb

A / B	Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***10550** *23,200	**8650** 19,000	***12850** *28,300	***12850** *28,300	***14750** *32,500	***14750** *32,500						
3.0 m 9'	**9850** 21,700	**7250** 16,000	***15400** *33,900	**12300** 27,100	***18950** *41,800	***16800** *37,000	***23400** *51,600	***23400** *51,600				
0 m 0'	**9850** 21,700	**7150** 15,700	**14800** 32,600	**10950** 24,100	**19950** 43,900	**14750** 32,500	***20950** *46,200	***20950** *46,200	***22100** *48,700	***22100** *48,700		
–3.0 m –9'	**11800** 26,000	**8600** 19,000	**14350** 31,700	**10550** 23,200	**19400** 42,800	**14250** 31,400	***21250** *46,800	**20750** 45,700	***21150** *46,700	***21150** *46,700	***24450** *53,900	***24450** *53,900
–6.0 m –19'	***14850** *32,700	***14850** *32,700			***15250** *33,600	***15250** *33,600	***20000** *44,100	***20000** *44,100	***21300** *46,900	***21300** *46,900		

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



PC850-8E0 Super Earth mover (SE) spec.

Equipment:
- Boom: **7.1 m** 23'4"
- Arm: **2.9 m** 9'8"
- Bucket: **4.3 m³** 5.62 yd³
- Shoe: **610 mm** 24"
- Counterweight: **11.85 ton** 26,120 lb

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

HEAVY LIFT "OFF"

Unit: **kg** lb

A / B	Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***12150** *26,800	**11100** 24,500	***12650** *27,900	***12650** *27,900	***14250** *31,400	***14250** *31,400						
3.0 m 9'	**12400** 27,300	**9250** 20,400	***14500** *32,000	**12350** 27,200	***17700** *39,000	**17100** 37,700	***23250** *51,300	***23250** *51,300				
0 m 0'	**12700** 28,000	**9400** 20,700	**15250** 33,600	**11350** 25,000	***19700** *43,400	**15450** 34,100	***26050** *57,400	**22250** 49,100	***28450** *62,700	***28450** *62,700		
–3.0 m –9'	***14400** *31,700	**12350** 27,200			***17850** *39,400	**15300** 33,700	***23350** *51,500	**22200** 48,900	***30850** *68,000	***30850** *68,000	***31850** *70,200	***31850** *70,200

HEAVY LIFT "ON"

Unit: **kg** lb

A / B	Maximum		9.0 m 29'		7.5 m 24'		6.0 m 19'		4.5 m 14'		3.0 m 9'	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
6.0 m 19'	***14100** *31,000	**11100** 24,500	***14650** *32,300	**13600** 30,000	***16350** *36,000	***16350** *36,000						
3.0 m 9'	**12400** 27,300	**9250** 20,400	**16300** 35,900	**12350** 27,300	***20350** *44,800	**17100** 37,800	***26550** *58,600	**24850** 54,700				
0 m 0'	**12700** 28,000	**9400** 20,800	**15250** 33,600	**11350** 25,100	**20650** 45,600	**15450** 34,000	***29800** *65,700	**22250** 49,000	***31350** *69,100	***31350** *69,100		
–3.0 m –9'	**16500** 36,400	**12350** 27,200			**20550** 45,300	**15300** 33,700	***26850** *59,200	**22200** 49,000	***32100** *70,800	***32100** *70,800	***31850** *70,200	***31850** *70,200

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

Transportation specifications (Length x height x width)

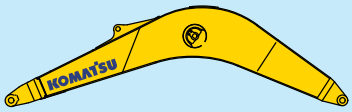
Backhoe

Specs shown include the following equipment:
STD spec.: Boom **8040 mm** 26'5", Arm **3600 mm** 11'10", Bucket **3.4 m³** 4.45 yd³, Shoes **610 mm** 24" double grouser
SE spec.: Boom **7100 mm** 23'4", Arm **2945 mm** 9'8", Arm **3600 mm** 11'10", Bucket **4.3 m³** 5.62 yd³, Shoes **610 mm** 24" double grouser

3 Kits Transportation

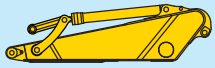
Work equipment assembly (Backhoe)
Weight : STD spec. : **18.9 t** 20.8 U.S.ton
SE spec. : **18.5 t** 20.5 U.S.ton

Boom



STD spec. : **8.1 t : 8370 x 2695 x 1500**
8.9 U.S.ton : 27'6" x 8'10" x 4'11"
SE spec. : **7.3 t : 7430 x 2480 x 1500**
8.0 U.S.ton : 24'5" x 8'2" x 4'11"

Arm



STD spec. : **4.5 t : 4765 x 1450 x 710**
5.0 U.S.ton : 15'8" x 4'9" x 2'4"
SE spec. : **4.9 t : 4075 x 1690 x 715 (2.9m** 9'8" **SE arm)**
5.4 U.S.ton : 13'4" x 5'7" x 2'4"
: **4.5 t : 4765 x 1450 x 710 (3.6m** 11'10" **SE arm)**
5.0 U.S.ton : 15'8" x 4'9" x 2'4"

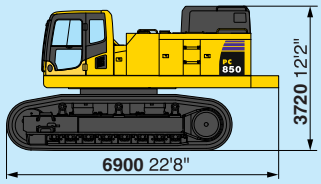
Bucket

STD spec. : **3.8 t : 2470 x 1880 x 2070**
4.2 U.S.ton : 8'1" x 6'2" x 6'9"
SE spec. : **3.8 t : 2280 x 1950 x 2250 (2.9m** 9'8" **arm)**
4.2 U.S.ton : 7'6" x 6'5" x 7'5"

Boom & Arm cylinder

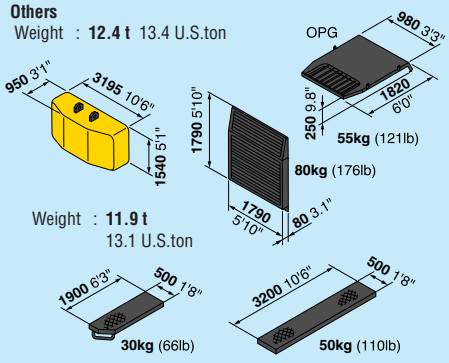
Total 2.5 t 2.8 U.S.ton

Base machine
(Both PC850-8E0 and PC850-8E0 SE spec. are designed with the same weight and dimensions.)



Width : **3390** 11'1"
Weight : **47.7 t** 52.6 U.S.ton

Others
Weight : **12.4 t** 13.4 U.S.ton

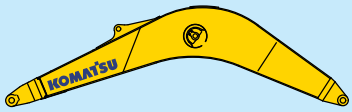


Weight : **11.9 t**
13.1 U.S.ton

4 Kits Transportation

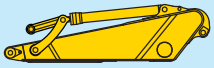
Work equipment assembly (Backhoe)
Weight : STD spec. : **18.9 t** 20.8 U.S.ton
SE spec. : **18.5 t** 20.5 U.S.ton

Boom



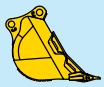
STD spec. : **8.1 t : 8370 x 2695 x 1500**
8.9 U.S.ton : 27'6" x 8'10" x 4'11"
SE spec. : **7.3 t : 7430 x 2480 x 1500**
8.0 U.S.ton : 24'5" x 8'2" x 4'11"

Arm



STD spec. : **4.5 t : 4765 x 1450 x 710**
5.0 U.S.ton : 15'8" x 4'9" x 2'4"
SE spec. : **4.9 t : 4075 x 1690 x 715 (2.9m** 9'8" **SE arm)**
5.4 U.S.ton : 13'4" x 5'7" x 2'4"
: **4.5 t : 4765 x 1450 x 710 (3.6m** 11'10" **SE arm)**
5.0 U.S.ton : 15'8" x 4'9" x 2'4"

Bucket

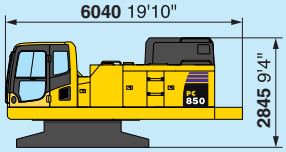


STD spec. : **3.8 t : 2470 x 1880 x 2070**
4.2 U.S.ton : 8'1" x 6'2" x 6'9"
SE spec. : **3.8 t : 2280 x 1950 x 2250**
4.2 U.S.ton : 7'6" x 6'5" x 7'5"

Boom & Arm cylinder

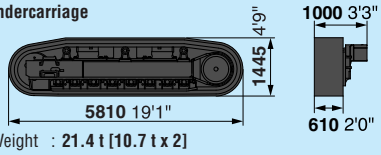
Total 2.5 t 2.8 U.S.ton

Upper structure



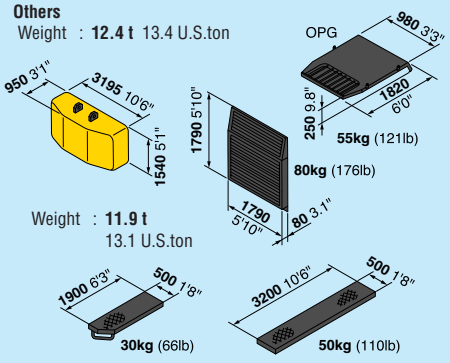
Width : **3225** 10'7"
Weight : **26.3 t** 29.0 U.S.ton

Undercarriage



Weight : **21.4 t [10.7 t x 2]**
23.6 U.S.ton [11.8 U.S.ton x 2]

Others
Weight : **12.4 t** 13.4 U.S.ton



Weight : **11.9 t**
13.1 U.S.ton

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/60 A
- Auto decelerator and auto idling system
- Batteries, 2 x 12 V/170 A
- Starting motors, 11 kW
- Step light with timer
- Working lights: 2 boom, 2 cab top front, 1 right front

UNDERCARRIAGE:

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

GUARDS AND COVERS:

- Dust-proof net for radiator and oil cooler
- Full length track guard
- OPG top guard level 2 (ISO 10262)
- Pump/engine room partition cover
- Strengthened revolving frame underguard
- Travel motor guards

OPERATOR ENVIRONMENT:

- Cab with fixed 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-function color monitor, electronically-controlled throttle dials, electric 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 light) level check lights (Coolant, engine oil, and hydraulic oil level), 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
- Fully hydraulic, with Electronic Open-center Load Sensing System (EOLSS) and engine speed sensing (Pump and engine mutual control system)
- Heavy lift mode system
- In-line filter
- Oil cooler
- One axial piston motor per track for travel with counter balance valve
- Power max. function
- Shockless boom control
- Swing priority mode system
- Two axial piston motors for swing with single-stage relief valve
- Two control valves, 5+4 spools (Boom, arm, bucket, swing, and travel)
- 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, **11850 kg** 26,120 lb
- Horn, electric
- Large handrails
- Marks and plates, English
- One-touch engine oil drainage
- Paint, Komatsu standard
- Preventive Maintenance (PM) tune-up service connector
- Rear reflector
- Slip-resistant plates
- Travel alarm

OPTIONAL EQUIPMENT

- 12 V electric supply
- Air suspension seat
- Alternator, 24 V/90 A
- Arms (Backhoe):
  PC850-8E0:
  —**3600 mm** 11'10" HD arm assembly
  PC850-8E0 SE spec.:
  —**2945 mm** 9'8" SE arm assembly
  —**3600 mm** 11'10" SE arm assembly
- Auto A/C
- Booms (Backhoe):
  PC850-8E0:
  —**8040 mm** 26'5" boom assembly
  PC850-8E0 SE spec.:
  —**7100 mm** 23'4" boom assembly
- Cab front guard level 2 (ISO 10262)
- Coolant heater
- Double flange track roller
- Electric pump, grease gun with indicator
- Fire extinguisher
- General tool kit
- Interconnected horn and warning light
- Large-capacity batteries
- Lower wiper
- Provision for fast fuel fill
- Radio AM/FM
- Rain visor
- Rear view monitoring system
- Seat belt **78 mm** 3"
- Shoes:
  —**710 mm** 28" double grouser
- Spare parts for first service
- Track frame undercover (Center)
- Vandalism protection locks

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Printed in Japan 201506 IP.As

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CEN00384-03

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