MINING EXCAVATOR

EX1900-6

SALES BROCHURE

EX1900

BUCKET CAPACITY:
BACKHOE (SAE HEAPED 1:1): 4.4 - 12.0 m^3 (5.8 - 15.7 cu. yd.)
SHOVEL (SAE HEAPED 2:1): 8.8 - 12.0 m^3 (11.5 - 15.7 cu. yd.)

OPERATING WEIGHT:
BACKHOE: 192 000 kg (423,288 lb.)
SHOVEL: 191 000 kg (421,083 lb.)

RATED POWER:
810 kW (1,086 hp)

HITACHI

RELIABLE PERFORMANCE. NO EXCUSES.

EXCAVATOR FOCUSED.

It's no coincidence that over one-third of all hydraulic mining excavators working across the world are Hitachi. All of our excavators, like the EX1900-6, are engineered to give you efficiency, reliability and durability for all kinds of jobs. You get strong horsepower, efficient engines, comfortable cabs, advanced hydraulics, tough frames, powerful arm and bucket-digging forces and more. When you choose the EX1900-6, you get a...

WORLD-CLASS MINING EXCAVATOR.

SPECIALISTS

Bucket Passes to Dump Trucks

	Truck	Nominal Payload	Bucket Capacity	Passes to Fill						
				1	2	3	4	5	6	7
Shovel	EH1700-3	95.2 tonnes (106.6 tons)	11-m³ (14.4 cu. yd.) Bucket							
Backhoe	EH1700-3	95.2 tonnes (106.6 tons)	12-m³ (15.7 cu. yd.) Bucket							

TACKLE YOUR TOUGHEST JOBS.

MAJOR PRODUCTION.

The EXI900-6 is built to tackle your tough jobs. A fuel-efficient, Cummins QSKTA38-CE engine provides powerful performance with an Engine-Pump Control (E-P Control) system that efficiently adjusts power to your load demand. The advanced hydraulic system tops the industry for smooth, efficient combined operations of the front attachment and swing, delivering quick cycle times. This system, combined with the Hitachi-patented auto-leveling mechanism and large bucket capacities, contributes to efficient production. The EXI900-6 pairs well with the EHI700-3 truck and is available in a backhoe or front-shovel configuration. Add the EXI900-6 to your fleet, and you get...

PROVEN PRODUCTIVITY.

Powerful Engine.
A Cummins QSKTA38–CE diesel engine meets U.S. EPA Tier 2 emission regulations.

Efficient E-P Control.
The computer-aided Engine-Pump Control (E-P Control) system senses load demand and adjusts power to the work being performed.

Large, Efficient Bucket.
The large bucket is shaped specifically to enhance digging and loading operations. Its sharp tilt angle helps boost operating efficiency by allowing the operator better use of the bucket digging forces, and after digging, keeping more of the material in the bucket while loading the haul truck.

Auto-Level Mechanism.
An exclusive Hitachi feature available on front shovel attachments, the one-lever leveling control boosts productivity through efficient operation of the bucket through the dig cycle.

TOUGHNESS BUILT IN.
DOWNTIME TOSSED OUT.

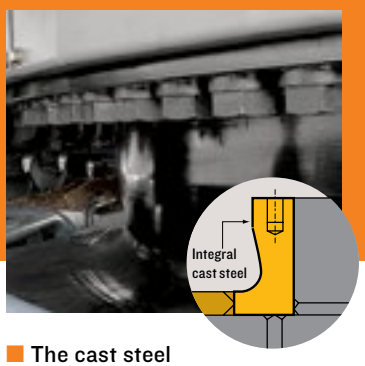
OUTPERFORM. OUTLAST.

The EX1900-6 is designed and built with strength you can count on. Toughness is built-in with the rigid box design and integrated cast steel structures into the center track frame. High-mounted travel motors are guarded against rock damage, and a strategically positioned oil cooler is designed to give you more uptime. Add it all up, and the EX1900-6 is...

DURABLE AND EFFICIENT.

■ The rigid box design resists bending and twisting forces, giving you stability and strength on any job.

■ High-mounted compact travel motors are protected from rock damage. Optional travel motor guards provide an even higher level of protection from damage.



■ The cast steel structures, integrated into the center track frame, assist in avoiding stress concentration and increase reliability.

■ The oil cooler is strategically positioned far from the engine radiator for even better cooling potential.

DURABILITY

COMFORT

- The sturdy cab protects operators from falling objects. The cab's top guard meets OPG Level II (ISO) standards. The entire cab sits on a package of fluid-filled elastic mounts that absorb vibration for a more comfortable ride.
- The six-meter high, forward-sloping cab provides a clear view of the work site – even when loading trucks.
- The air suspension, multi-position seat can be customized to the operator's needs and adjusted according to operator weight.
- The well-insulated, pressurized cab keeps out dust and is air conditioned.

COMFORTABLE CAB, EXTENDED PRODUCTIVITY.

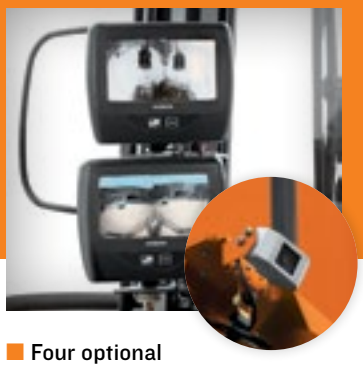
SAFE AND EFFICIENT SPACE.

The EXI900-6 cab is designed to keep operators as comfortable, efficient and productive as possible. The well-insulated, pressurized cab keeps dust out while maintaining a comfortable temperature thanks to a highly efficient heating/air conditioning system. Operators of all sizes have plenty of legroom and storage space with the cab's ergonomic design, which helps operators stay productive even on long work shifts. With the EXI900-6, you get...

MORE COMFORT, MORE PRODUCTIVITY.

■ Electric joystick control levers provide precise and almost effortless operation.

■ The multi-display, color LCD monitor provides machine data, operating status and alerts at a glance. The monitor can be preset to indicate replacement intervals for engine oil, hydraulic oil and filters.



■ Four optional outside cameras can be mounted around the machine for enhanced visibility and help eliminate blind spots.

HIGHER UPTIME, LOWER OPERATING COSTS.

MINIMIZE MAINTENANCE.

When it comes to maintenance, the EX1900-6 provides big advantages. The simple servicing, inspection and cleaning of the EX1900-6 reduces costs and allows you to focus on finishing jobs. This excavator features easy-to-check sight gauges and fluid reservoirs, quick-change remote-mounted filters, advanced self-diagnostics and extended filter replacement intervals. When you're operating an EX1900-6, you save time and money while getting...

MORE PRODUCTIVITY. LESS MAINTENANCE.

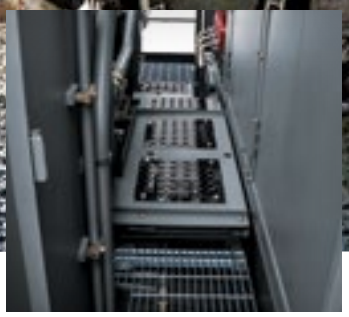
■ Optional folding stairs with wide steps allow for easy accessibility, servicing and maintenance.

■ The centralized filter system makes inspection and maintenance quicker and more convenient.

■ A contamination sensor alerts the operator before it's too late of accumulated contaminants in the oil that could cause damage.

■ A walkway around the entire counterweight provides easy access to rear areas for faster, safer inspections and maintenance.

MAINTENANCE



■ Located at the center of the machine, a wide-open service area gives you access to the engine as well as hydraulic and electrical systems.

■ The compartment floor slides down to lower a grease drum can for quick replacement.

■ An ejector automatically expels dust from the air cleaner, giving you one less maintenance task.

■ The auto-lubrication system for the front joint pins and swing circle saves you time.

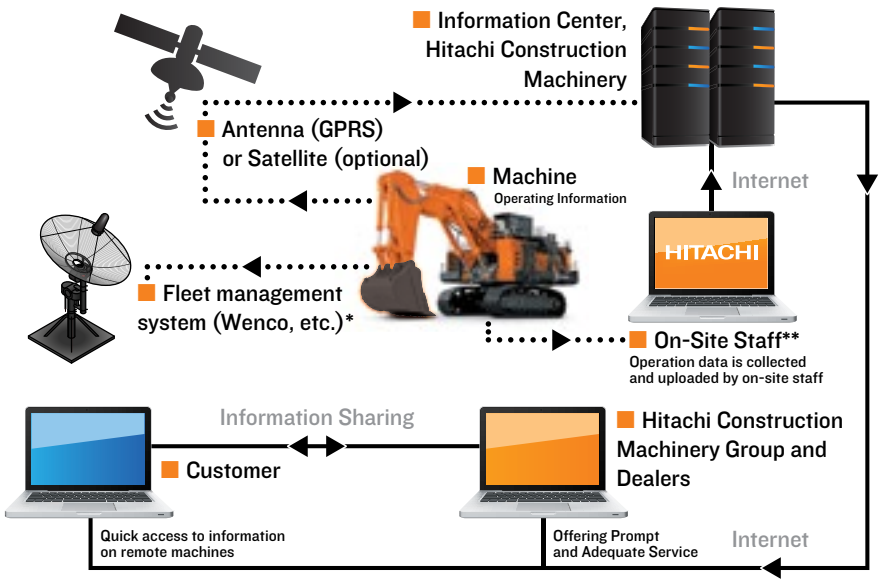
SUPPORT

WHAT YOU NEED, WHEN YOU NEED IT.

QUICK SUPPORT. NO HASSLE.

At Hitachi, we specialize in excavators and trucks. So you can count on us to respond rapidly when you need support. You'll get the parts you need, the service you want and the customer support you deserve. We stand behind you with a strong dealer network; a skilled factory support team; trained mechanics; and one of the best, most comprehensive warranty and maintenance programs available. We focus on supporting you and...

YOUR BOTTOM LINE.

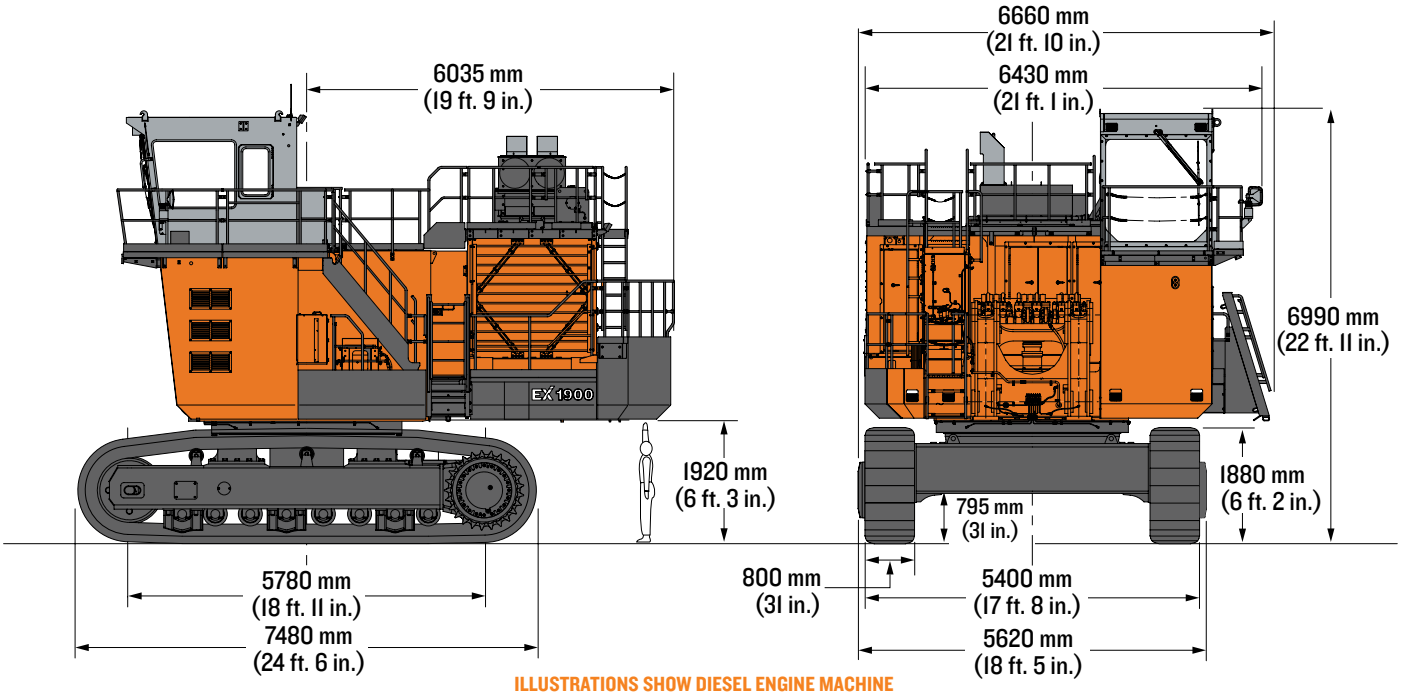


Note: In some regions, the Satellite Communication Device is not available by local regulations; the GPRS (mobile) communication device is an option for these regions.

* DTU (Data Transfer Unit) (optional) is required for connection to fleet management systems.
**WIU (Wireless Interface Unit) transmits operating data via wireless connection for downloading data.

Remote Machine Management with Global e-Service.
This online machine management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers. This system is available 24/7/365.

EX1900-6 SPECS



ILLUSTRATIONS SHOW DIESEL ENGINE MACHINE

Diesel Engine	EXI900-6
Manufacturer and Model	**Cummins QSKTA38-CE**
Type	4 cycle
Aspiration	Water-cooled, I2-cylinder, turbocharged and aftercooled, direct-injection chamber-type diesel engine
Emission certification	U.S. EPA Tier 2
Rated power	
Gross (SAE JI995)	810 kW (1,086 hp) @ 1800 min^{-1} (rpm)
Net	775 kW (1,039 hp) @ 1800 min^{-1} (rpm)
Maximum torque	4725 Nm (482 kgf-m) @ 1300 min^{-1} (rpm)
Piston displacement	37.8 L (2,307 cu. in.)
Bore and stroke	159 mm x 159 mm (6.3 in. x 6.3 in.)
Starting system	24 V electric motor
Batteries	4 x 12 V, 4 x 220 AH
Cold starting	Ether aided

Electric Motor	EXI900E-6
Manufacturer and Model	**HITACHI TFOA-KK**
Type	High voltage, three-phase, squirrel cage induction motor, totally enclosed air-to-air-cooled (TEAAC).
Rating	
Rated continuous output	610 kW
Voltage	AC 6000 - 6600 V / 50 Hz
	AC 6600 - 6900 V / 60 Hz
Number of poles	4
Synchronous RPM	1 500 min-1 / 50 Hz
	1 800 min-1 / 60 Hz
Rated current	69 A @ 6 600 V
Insulation class	F class B raise
Space heater included	
Thermo-guard (temperature detector)	
Starting condition	Reactor 50% tap

Hydraulic System

Hitachi's ETS (Electronic Total control System) can achieve maximum job efficiency by reducing fuel consumption and noise levels, while maximizing productivity through the optimization of engine-pump functions with excellent controllability increasing operator comfort.

Computer-Aided Engine-Pump Control System (E-P Control)

Main pumps regulated by electric engine speed sensing control system.

Optimum Hydraulic System (OHS)

Three tandem-axial piston pump groups (six pumps in total), supply a three-valve hydraulic system enabling both independent and combined operations of all functions.

Additional Features

Fuel-saving Pump System (FPS) minimizes energy loss with superior performance in fine control

Auto-idle system saves fuel and reduces noise

Hydraulic drive cooling-fan system for oil cooler

Forced-lubrication and forced-cooling pump drive system

Main Pumps

6 variable-displacement, axial piston pumps for front attachment, travel and swing

Maximum oil flow: 6 x 335 L/min (6 x 88.5 gal./min.)

Pilot Pump

Gear pump

Maximum oil flow: 110 L/min (29.06 gal./min.)

Relief Valve Settings

Implement circuit	29.4 MPa (300 kgf/cm^2) (4,264 psi)
Travel circuit	29.4 MPa (300 kgf/cm^2) (4,264 psi)
Swing circuit	29.4 MPa (300 kgf/cm^2) (4,264 psi)
Pilot circuit	4.4 MPa (45 kgf/cm^2) (640 psi)

Hydraulic Cylinders

High-strength piston rods and tubes adopted. Cylinder cushion mechanisms are provided for boom, arm, bucket and dump cylinders.

Bucket cylinders of loading shovel are provided with protector.

Cylinder Dimensions (Backhoe)			
	Quantity	**Bore**	**Rod Diameter**
Boom	2	280 mm (11 in.)	200 mm (7.9 in.)
Arm	2	250 mm (9.8 in.)	170 mm (6.7 in.)
Bucket	2	200 mm (7.9 in.)	150 mm (5.9 in.)

Cylinder Dimensions (Loading Shovel)			
	Quantity	**Bore**	**Rod Diameter**
Boom	2	280 mm (11 in.)	200 mm (7.9 in.)
Arm	1	240 mm (9.4 in.)	180 mm (7.1 in.)
Bucket	2	225 mm (8.9 in.)	170 mm (6.7 in.)
Dump	2	190 mm (7.5 in.)	110 mm (4.3 in.)
Level	1	280 mm (11 in.)	200 mm (7.9 in.)

Hydraulic Filters

All hydraulic circuits have high-quality hydraulic filters for protection against oil contamination and longer life of hydraulic components. Filters are centralized for convenient maintenance.

	Quantity	
Full-flow filter	3	10 μm
High-pressure strainer (in main and swing pump line)	3	120 μm
Drain filter (for all plunger-type pumps and motors)	1	10 μm
Bypass filter (in oil cooler by-pass line)	1	5 μm
Pilot filter	1	10 μm

Controls

Two Implement Levers

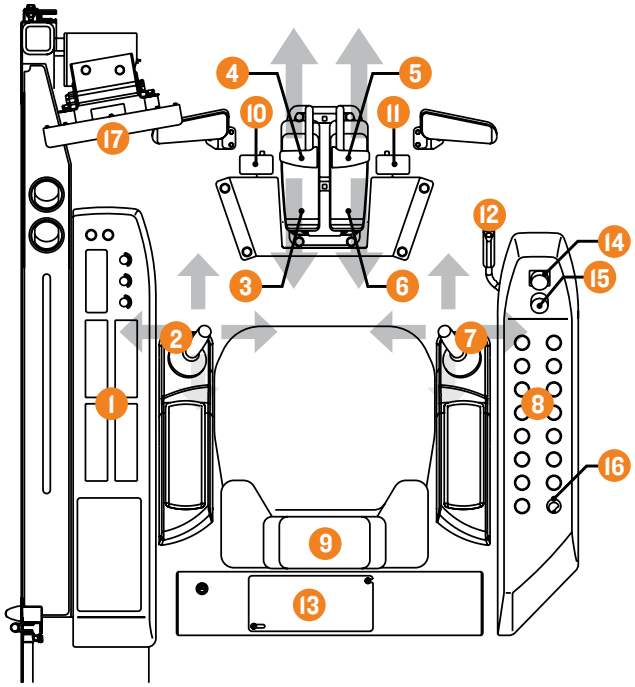
Electric joystick control levers. Right lever is for boom and bucket control, left lever for swing and arm control.

2 pedals provided for opening/closing the bottom dump bucket.

Two Travel Levers with Pedals

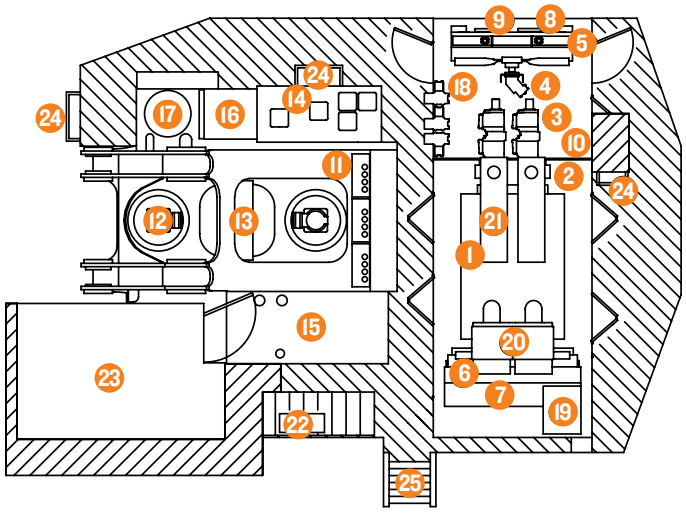
Remote-controlled hydraulic servo system. Independent drive at each track allows counter rotation of tracks.

1 Left Console
2 Left Control Lever/Horn Switch
3 Left Travel Pedal
4 Left Travel Lever
5 Right Travel Lever
6 Right Travel Pedal
7 Right Control Lever/Horn Switch
8 Right Console
9 Operator's Seat
10 Bucket Close Pedal (for loading shovel)
11 Bucket Open Pedal (for loading shovel)
12 Pilot Control Shut-Off Lever
13 Rear Console
14 Emergency Engine Stop Switch
15 Engine Speed Control Dial
16 Key Switch
17 Monitor Display



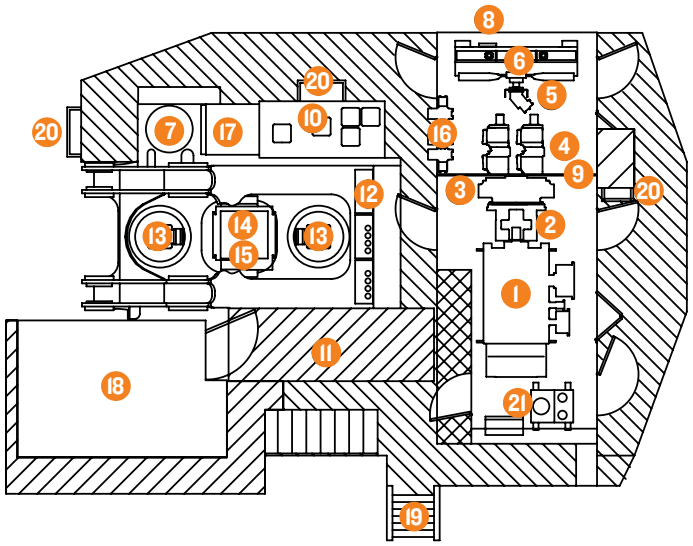
DIESEL ENGINE CONTROLS

Upperstructure	EX1900-6
Revolving Frame	
Deep, full-reinforced box section. Heavy-gauge steel plates used for ruggedness.	
Deck Machinery	
Maintenance accessibility is the major feature in the layout of deck machinery. Sidewalks provide easy access to engine, hydraulic, and electrical components.	
1	Engine
2	Pump-Drive Unit
3	Hydraulic Pump x 6 (3 pump groups)
4	Hydraulic Oil Cooling-Fan Motor
5	Hydraulic Oil Cooler
6	Engine Radiator
7	LTA Radiator
8	Fuel Cooler
9	Transmission Pump Oil Cooler
10	Engine-Pump Bulkhead
11	Control Valve x 3
12	Swing Device x 2
13	Center Joint
14	Hydraulic Tank
15	Fuel Tank
16	Battery Unit
17	Lubricator
18	High-Pressure Strainer x 3
19	Reserve Tank (coolant)
20	Air Filter x 2 (Outer/Inner)
21	Muffler
22	Fuel Filter (water separator)
23	Cab
24	Ladder
25	Retractable-Type Ladder



DECK MACHINERY
FOR DIESEL ENGINE MACHINE

Upperstructure	EX1900E-6
Revolving Frame	
Deep, full-reinforced box section. Heavy-gauge steel plates used for ruggedness.	
Deck Machinery	
Maintenance accessibility is the major feature in the layout of deck machinery. Sidewalks provide easy access to engine, hydraulic, and electrical components.	
1	Main Motor
2	Coupler
3	Pump Drive Unit
4	Hydraulic Pump x 6
5	Hydraulic Oil Cooling Fan Motor
6	Hydraulic Oil Cooler x 2
7	Lubricator
8	Pump Transmission Oil Cooler
9	Motor-Pump Bulkhead
10	Hydraulic Oil Tank
11	Cubicle
12	Control Valve x 3
13	Swing Device x 2
14	Slip Ring
15	Center Joint
16	High-Pressure Strainer x 6
17	Battery x 2
18	Cab
19	Retractable-Type Ladder
20	Ladder
21	Cab Heater Unit



DECK MACHINERY
FOR ELECTRIC MOTOR MACHINE

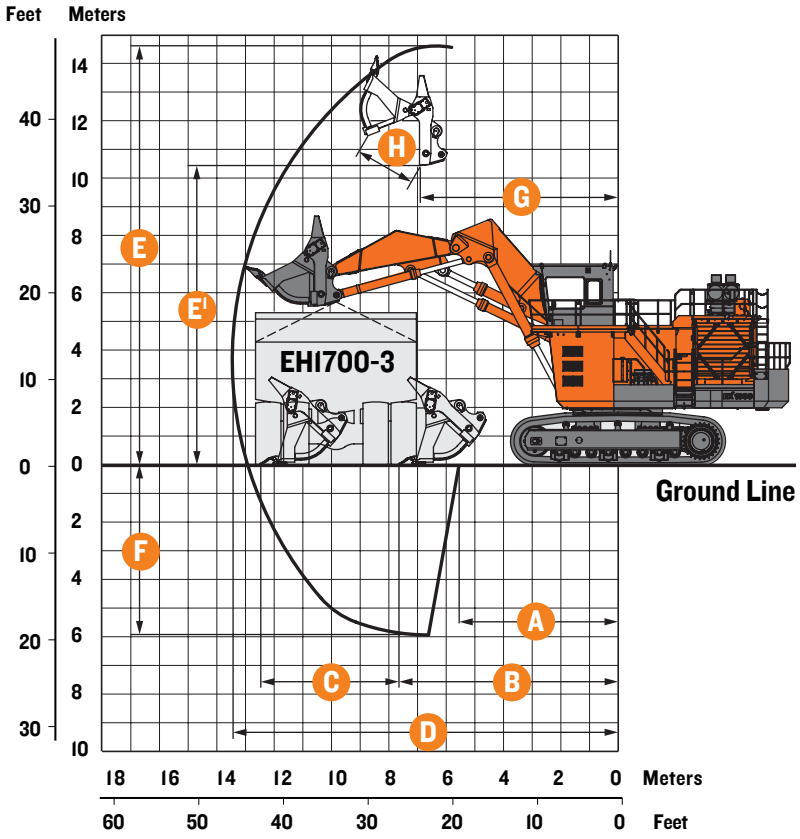
EX1900-6

Swing Device			
Two high-torque, axial-piston motors with planetary reduction gear bathed in oil. Swing circle with dirt seals is a heavy-duty, single-row, shear-type ball bearing. Induction-hardened internal swing circle gear and pinion immersed in lubricant. Parking brake of springset/hydraulic-released disc type. This parking brake is manually releasable.			
Swing speed	4.7 min^{-1} (rpm)		
Operator's Cab			
The sturdy cab, with the top guard conforming to OPG Level II (ISO), helps protect the operator from falling objects. 1800-mm (5 ft. 11 in.) width, 1938-mm (6 ft. 4 in.) length, 2150-mm (7 ft. 1 in.) height, roomy cab with tinted-glass windows features all-around visibility. Multi-display (267-mm [10.5 in.] LCD) for centralized information of machine status. Color monitor cameras for rear, right side and left lower views. Three separate pressurized air-conditioning systems.			
Noise level	72 dB(A) in the cab at maximum engine speed under no-load condition		
Eye-level height	6030 mm (19 ft. 9 in.)		
Undercarriage			
Tracks			
Tractor-type undercarriage. Bolt linkage for side frame assures durability. Heavy-duty track frame of all-welded, stress-relieved structure. Top-grade materials used for toughness. Lifetime-lubricated induction-hardened track rollers, idlers and drive tumblers with floating seals. Specially heat-treated connection pins. Hydraulic track adjuster provided with N2 gas accumulator with relief valve. Track adjuster provided with protection device against abnormal tension. Travel motion alarm device.			
Tractor-Type Undercarriage			
Triple grouser shoes specially heat treated cast steel			
Shoe width	800 mm (32 in.)		
Number of Rollers and Shoes (each side)			
Upper rollers	3		
Lower rollers	8		
Track shoes	49		
Travel Device			
Each track driven by high-torque, axial piston motors, allowing counter rotation of tracks. Two-stage planetary gear plus spur gears reduction device. Dual-support-type traction device. Parking brake of springset/hydraulic-released disc type. This parking brake is manually releasable.			
Travel speeds	Low: 0 – 2.1 km/h (0 – 1.3 mph)		
	High: 0 – 2.8 km/h (0 – 1.7 mph)		
Maximum traction force	941.5 kN / 96 000 kgf (211,644 lbf.)		
Gradeability	58% (30°) maximum		
Weights and Ground Pressure			
Loading Shovel			
Equipped with 11.0 m^3 (14.4 cu. yd.) (SAE heaped 2:1) bottom-dump bucket.			
Diesel Engine			
Shoe Type	**Shoe Width**	**Operating Weight**	**Ground Pressure**
Triple Grousers	800 mm (32 in.)	191 000 kg (421,083 lb.)	183 kPa (1.87 kgf/cm^2) (26.5 psi)
Electric Motor			
Shoe Type	**Shoe Width**	**Operating Weight**	**Ground Pressure**
Triple Grousers	800 mm (32 in.)	190 000 kg (418,878 lb.)	182 kPa (1.86 kgf/cm^2) (26.4 psi)
Backhoe			
Equipped with 8.3-m (27 ft. 3 in.) boom, 3.6-m (11 ft. 10 in.) arm, and 12.0-m^3 (15.7 cu. yd.) (SAE heaped 1:1) bucket.			
Diesel Engine			
Shoe Type	**Shoe Width**	**Operating Weight**	**Ground Pressure**
Triple Grousers	800 mm (32 in.)	192 000 kg (423,288 lb.)	184 kPa (1.88 kgf/cm^2) (26.7 psi)
Electric Motor			
Shoe Type	**Shoe Width**	**Operating Weight**	**Ground Pressure**
Triple Grousers	800 mm (32 in.)	191 000 kg (418,878 lb.)	183 kPa (1.87 kgf/cm^2) (26.5 psi)

Service Refill Capabilities	**Diesel Powered**	**Electric Powered**
Fuel tank	4140 L (1,094 gal.)	
Engine coolant	395 L (104 gal.)	
Engine oil	166 L (44 gal.)	
Pump transmission device	26 L (7 gal.)	26 L (7 gal.)
Swing device	2 x 67 L (2 x 17 gal.)	2 x 67 L (2 x 17 gal.)
Travel device	2 x 70 L (2 x 18 gal.)	2 x 70 L (2 x 18 gal.)
Hydraulic system	2200 L (581 gal.)	2200 L (581 gal.)
Hydraulic oil tank	1050 L (277 gal.)	1050 L (277 gal.)

EX1900-6 SPECS

Loading Shovel Attachment	EX1900-6



Working Ranges	
Bucket Capacity (SAE Heaped 2:1)	**11.0 m³ (14.4 cu. yd.)**
A Min digging distance	5550 mm (18 ft. 3 in.)
B Min level crowding distance	7650 mm (25 ft. 1 in.)
C Level crowding distance	4820 mm (15 ft. 10 in.)
D Max digging reach	13 430 mm (44 ft. 1 in.)
E Max cutting height	14 610 mm (47 ft. 11 in.)
E' Max dumping height	10 440 mm (34 ft. 3 in.)
F Max digging depth	5920 mm (19 ft. 5 in.)
G Working radius at max dumping height	6890 mm (22 ft. 7 in.)
H Max bucket opening width	2100 mm (6 ft. 11 in.)
Bucket digging force	754 kN / 76 890 kgf (169,506 lbf.)
Arm crowding force	720 kN / 73 420 kgf (161,862 lbf.)

Bucket

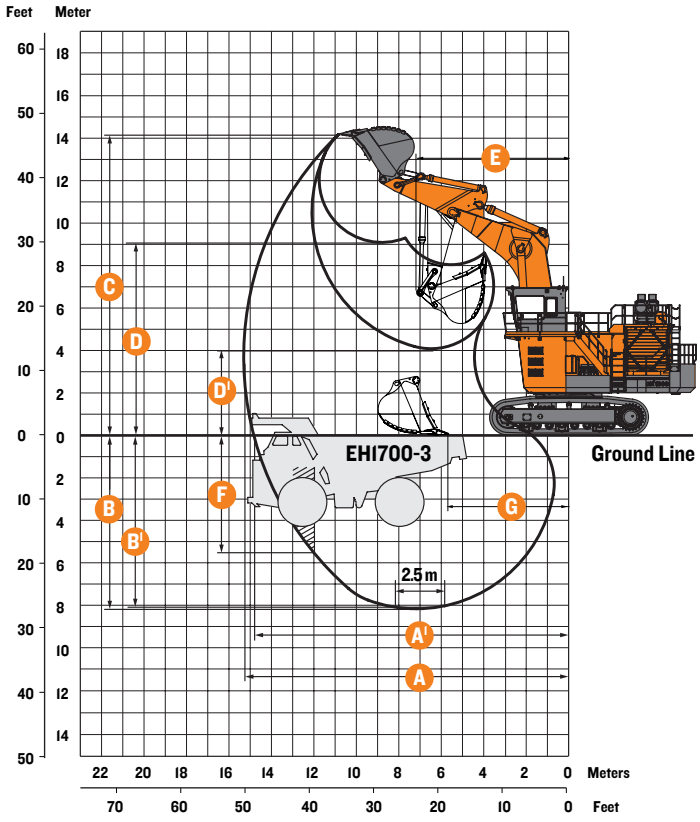
Boom and arm are of all-welded, low-stress, high-tensile strength steel full-box section design.

Capacity (SAE heaped 2:1)	Width	Number of Teeth	Weight	Type	Materials density
11.0 m³ (14.4 cu. yd.)	3260 mm (10 ft. 8 in.)	6	15 100 kg (33,290 lb.)	Bottom-dump-type general purpose	1800 kg/m³ (3,034 lb./cu. yd.) or less

Note: These buckets do not include any type of wear protection for sides, bottom, and inside the bucket. Please consult your local Hitachi dealer for a proper wear protection system for your application. Please do not use the buckets without proper wear protection for your application.

EX1900-6

Backhoe Attachment	EX1900-6



Working Ranges		
BE-boom length		**8.3 m (27 ft. 3 in.)**
BE-arm length		**3.6 m (11 ft. 10 in.)**
A Max digging reach		15 250 mm (50 ft.)
A' Max digging reach (on ground)		14 770 mm (48 ft. 6 in.)
B Max digging depth		8180 mm (26 ft. 10 in.)
B' Max digging depth (2.5 m level)		8070 mm (26 ft. 6 in.)
C Max cutting height		14 140 mm (46 ft. 5 in.)
D Max dumping height		9060 mm (29 ft. 9 in.)
D' Min dumping height		4060 mm (13 ft. 4 in.)
E Min swing radius		7140 mm (23 ft. 5 in.)
F Max vertical wall		5520 mm (18 ft. 1 in.)
G Min level crowding distance		4480 mm (14 ft. 8 in.)
Bucket digging force	SAE	617 kN / 62 900 kgf (138,707 lbf.)
	ISO	671 kN / 68 400 kgf (150,847 lbf.)
Arm crowding force	SAE	609 kN / 62 100 kgf (136,909 lbf.)
	ISO	620 kN / 63 200 kgf (139,382 lbf.)

Bucket

Boom and arm are of all-welded, low-stress, full-box section design. Bucket of all-welded, high-strength steel structure. Bucket/arm and arm/boom joint pins are floating type. Replaceable thrust plates are provided with bucket/arm joint part. Auto-lubrication system for all pins is standard.

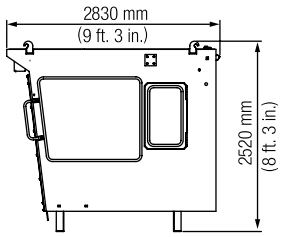
Capacity (SAE heaped 1:1)	Width (without side cutters)	Number of Teeth	Weight	Type	Materials density
12.0 m^3 (15.7 cu. yd.)	3050 mm (10 ft.)	6	13 200 kg (29,101 lb.)	General purpose	1800 kg/m^3 (3,034 lb./cu. yd.) or less

Note: These buckets do not include any type of wear protection for sides, bottom, and inside the bucket. Please consult your local Hitachi dealer for a proper wear protection system for your application.
Please do not use the buckets without proper wear protection for your application.

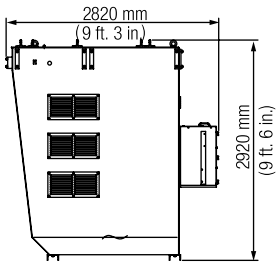
TRANSPORTATION

Upperstructure	EX1900-6

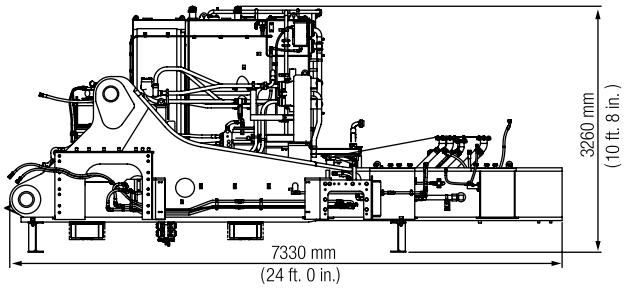
CAB ASSEMBLY
Weight: 1740 kg (3,836 lb.)
Width: 1880 mm (6 ft. 2 in.)



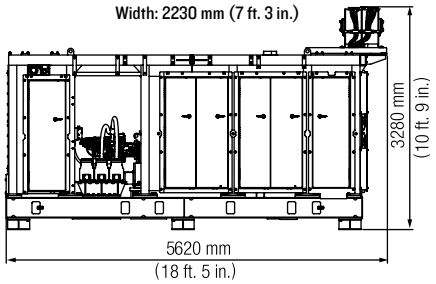
CAB BED
Weight: 2560 kg (5,643 lb.)
Width: 1860 mm (6 ft. 1 in.)



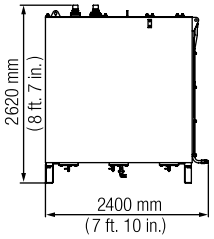
MAIN FRAME ASSEMBLY
Weight: 26 900 kg (59,304 lb.)
Width: 3500 mm (11 ft. 5 in.)



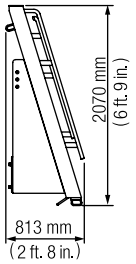
ENGINE UNIT
Weight: 14 600 kg (32,187 lb.)
Width: 2230 mm (7 ft. 3 in.)



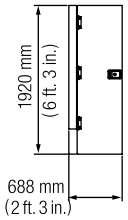
FUEL TANK
Weight: 2060 kg (4,541 lb.)
Width: 1170 mm (3 ft. 10 in.)



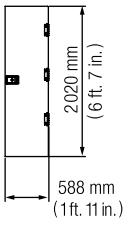
LADDER
Weight: 292 kg (187 lb.)
Width: 748 mm (2 ft. 5 in.)



DOOR
Weight: 38 kg (84 lb.)
Width: 153 mm (6 in.)



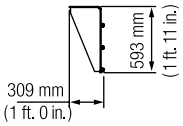
DOOR
Weight: 31 kg (68 lb.)
Width: 153 mm (6 in.)



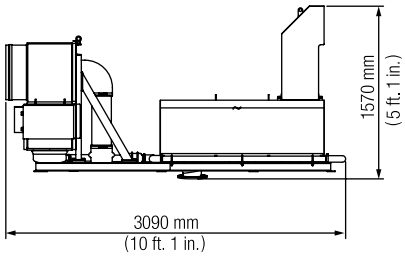
TRANSPORTATION

Upperstructure (continued) **EX1900-6**

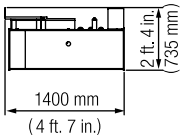
BRACKET
Weight: 15 kg (33 lb.)
Width: 55 mm (2 in.)



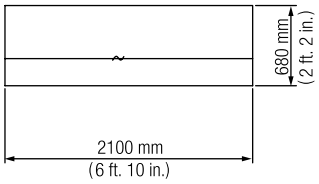
AIR CLEANER AND MUFFLER
Weight: 613 kg (1,351 lb.)
Width: 1210 mm (3 ft. 11 in.)



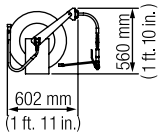
BRACKET
Weight: 236 kg (520 lb.)
Width: 748 mm (2 ft. 5 in.)



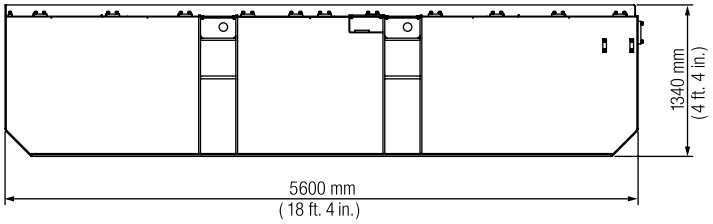
FENDER
Weight: 96 kg (212 lb.)
Width: 950 mm (3 ft. 1 in.)



HOSE REEL
Weight: 51 kg (112 lb.)
Width: 204 mm (8 ft. 0 in.)



COUNTERWEIGHT
Weight: 25 300 kg (55,780 lb.)
Width: 1220 mm (4 ft. 0 in.)



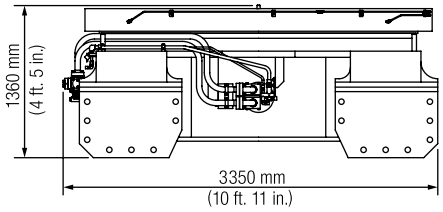
TRANSPORTATION

Upperstructure (continued)		EX1900-6			
Other parts		Dimensions			
Content	Quantity	Length	Width	Height	Weight
Step 1	1	1590 mm (5 ft. 3 in.)	634 mm (25 in.)	3020 mm (9 ft. 11 in.)	147 kg (324 lb.)
Step 2	1	1070 mm (3 ft. 6 in.)	1330 mm (4 ft. 4 in.)	819 mm (32 in.)	70 kg (154 lb.)
Step 3	1	1300 mm (4 ft. 3 in.)	31 mm (1 in.)	693 mm (27 in.)	25 kg (55 lb.)
Sidewalk 1	1	1850 mm (6 ft. 1 in.)	1290 mm (4 ft. 3 in.)	660 mm (26 in.)	74 kg (163 lb.)
Sidewalk 2	1	1770 mm (5 ft. 10 in.)	1290 mm (4 ft. 3 in.)	612 mm (24 in.)	70 kg (154 lb.)
Sidewalk 3	1	1810 mm (5 ft. 11 in.)	1290 mm (4 ft. 3 in.)	711 mm (28 in.)	77 kg (170 lb.)
Sidewalk 4	1	2080 mm (6 ft. 10 in.)	1150 mm (3 ft. 9 in.)	1700 mm (5 ft. 7 in.)	357 kg (707 lb.)
Sidewalk 5	1	2240 mm (7 ft. 4 in.)	695 mm (27 in.)	2260 mm (7 ft. 5 in.)	153 kg (337 lb.)
Sidewalk 6	1	2300 mm (7 ft. 7 in.)	944 mm (3 ft. 1 in.)	1700 mm (5 ft. 7 in.)	272 kg (600 lb.)
Sidewalk 7	1	1770 mm (5 ft. 10 in.)	950 mm (3 ft. 1 in.)	1700 mm (5 ft. 7 in.)	209 kg (461 lb.)
Sidewalk 8	1	1350 mm (4 ft. 5 in.)	965 mm (3 ft. 2 in.)	1710 mm (5 ft. 7 in.)	157 kg (346 lb.)
Handrail 1	1	2140 mm (7 ft.)	322 mm (13 in.)	1190 mm (3 ft. 11 in.)	33 kg (73 lb.)
Handrail 2	1	1390 mm (4 ft. 7 in.)	374 mm (15 in.)	1160 mm (3 ft. 10 in.)	32 kg (71 lb.)
Handrail 3	1	2050 mm (6 ft. 9 in.)	413 mm (16 in.)	1020 mm (3 ft. 4 in.)	37 kg (82 lb.)
Handrail 4	1	2960 mm (9 ft. 9 in.)	281 mm (9 in.)	1020 mm (3 ft. 4 in.)	47 kg (104 lb.)
Handrail 5	1	763 mm (30 in.)	373 mm (15 in.)	1020 mm (3 ft. 4 in.)	20 kg (44 lb.)
Handrail 6	1	509 mm (20 in.)	373 mm (15 in.)	1640 mm (5 ft. 5 in.)	18 kg (40 lb.)
Handrail 7	1	1190 mm (3 ft. 11 in.)	233 mm (9 in.)	1020 mm (3 ft. 4 in.)	16 kg (35 lb.)
Handrail 8	1	957 mm (3 ft. 2 in.)	489 mm (19 in.)	1180 mm (3 ft. 10 in.)	46 kg (101 lb.)
Handrail 9	1	2130 mm (7 ft.)	223 mm (9 in.)	1020 mm (3 ft. 4 in.)	27 kg (60 lb.)
Handrail 10	1	755 mm (30 in.)	851 mm (34 in.)	1440 mm (4 ft. 9 in.)	70 kg (154 lb.)
Handrail 11	1	832 mm (33 in.)	55 mm (2 in.)	1020 mm (3 ft. 4 in.)	13 kg (29 lb.)
Handrail 12	1	1950 mm (6 ft. 5 in.)	461 mm (18 in.)	1320 mm (4 ft. 4 in.)	83 kg (183 lb.)
Handrail 13	1	870 mm (34 in.)	55 mm (2 in.)	1020 mm (3 ft. 4 in.)	14 kg (31 lb.)
Handrail 14	1	755 mm (30 in.)	887 mm (35 in.)	1336 mm (4 ft. 5 in.)	65 kg (143 lb.)
Handrail 15	1	1670 mm (5 ft. 6 in.)	517 mm (21 in.)	1190 mm (3 ft. 11 in.)	31 kg (68 lb.)
Handrail 16	1	687 mm (27 in.)	637 mm (25 in.)	1010 mm (3 ft. 4 in.)	18 kg (40 lb.)
Handrail 17	1	618 mm (24 in.)	339 mm (13 in.)	1550 mm (5 ft. 1 in.)	19 kg (42 lb.)
Handrail 18	1	650 mm (26 in.)	258 mm (10 in.)	1100 mm (3 ft. 7 in.)	16 kg (35 lb.)
Handrail 19	1	618 mm (24 in.)	339 mm (13 in.)	1550 mm (5 ft. 1 in.)	19 kg (42 lb.)
Handrail 20	1	500 mm (20 in.)	240 mm (9 in.)	1280 mm (4 ft. 2 in.)	24 kg (53 lb.)
Handrail 21	1	2780 mm (9 ft. 1 in.)	1260 mm (4 ft. 2 in.)	1010 mm (3 ft. 4 in.)	36 kg (79 lb.)
Handrail 22	1	2950 mm (9 ft. 8 in.)	855 mm (34 in.)	1010 mm (3 ft. 4 in.)	36 kg (79 lb.)

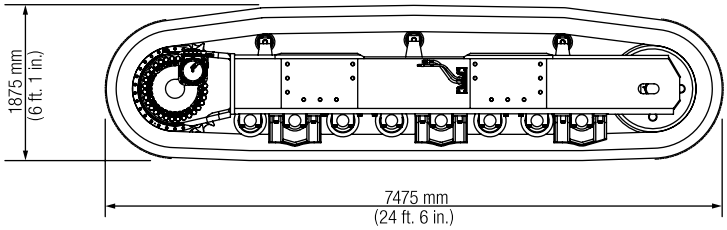
TRANSPORTATION

Undercarriage	EX1900-6

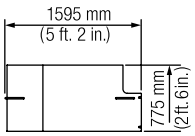
TRACK CENTER FRAME ASSEMBLY
Weight: 16 800 kg (37,040 lb.)
Width: 4740 mm (15 ft. 7 in.)



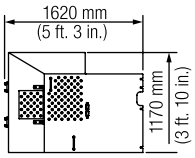
TRACK SIDE FRAME ASSEMBLY
Weight: 22 100 kg (48,720 lb.) x 2
Width: 1630 mm (5 ft. 4 in.)



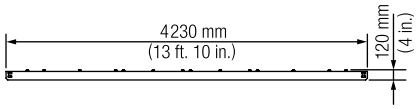
CENTER COVER
Weight: 30 kg (66 lb.) x 2
Width: 440 mm (1 ft. 5 in.)



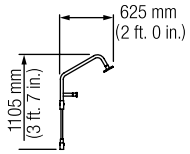
SIDE COVER
Weight: 78 kg (172 lb.) x 2
Width: 380 mm (1 ft. 3 in.)



STAY
Weight: 79 kg (174 lb.)
Width: 100 mm (4 in.)



STEP
Weight: 14 kg (31 lb.)
Width: 530 mm (1 ft. 9 in.)

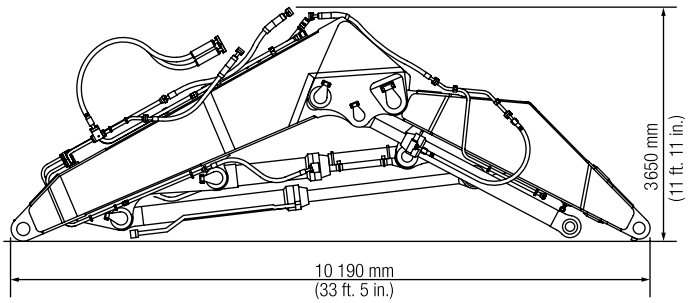


TRANSPORTATION

Loader Attachments **EX1900-6**

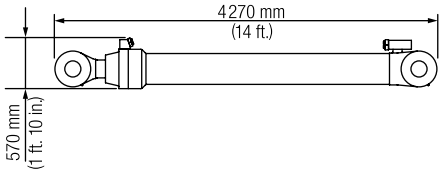
BOOM AND ARM ASSEMBLY

Weight: 25 260 kg (55,689 lb.)
Width: 2160 mm (7 ft. 1 in.)

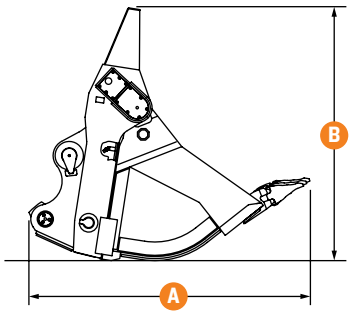


BOOM CYLINDER

Weight: 2270 kg (5,004 lb.)



BUCKET ASSEMBLY



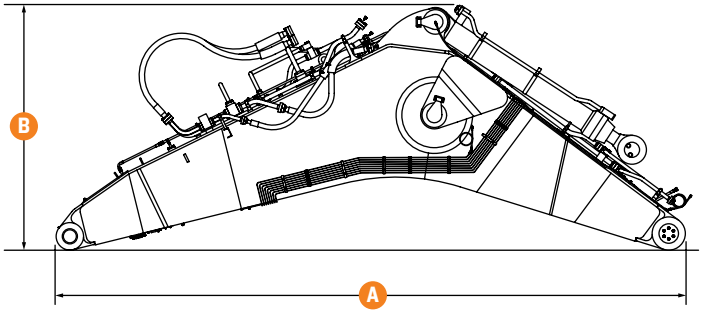
Loader Assembly	Dimensions			
Bucket Capacity (SAE heaped 2:1)	A	B	Max. Width	Weight
8.8 m³ (11.5 cu. yd.)	3380 mm (11 ft. 1 in.)	3140 mm (10 ft. 4 in.)	2900 mm (9 ft. 6 in.)	16 300 kg (35,935 lb.)*
11.0 m³ (14.4 cu. yd.)	3480 mm (11 ft. 5 in.)	3130 mm (10 ft. 3 in.)	3440 mm (11 ft. 3 in.)	15 100 kg (33,290 lb.)
12.0 m³ (15.7 cu. yd.)	3730 mm (12 ft. 3 in.)	3130 mm (10 ft. 3 in.)	3440 mm (11 ft. 3 in.)	15 520 kg (34,216 lb.)

*With wear plate

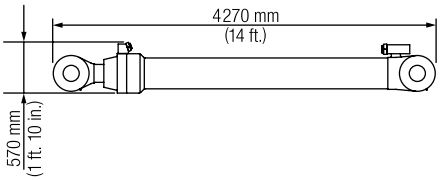
TRANSPORTATION

Backhoe Attachments **EX1900-6**

BOOM ASSEMBLY

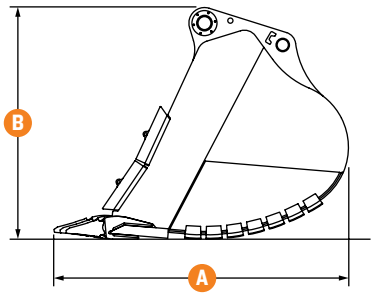


BOOM CYLINDER
Weight: 2270 kg (5,004 lb.)
Width: 440 mm (1 ft. 5 in.)



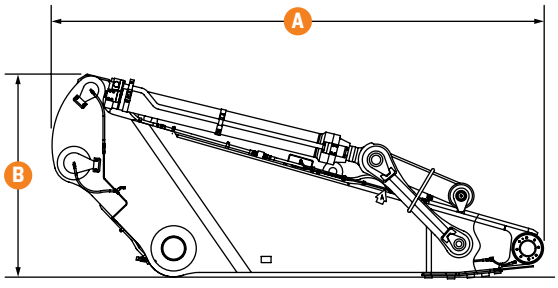
Boom Assembly	Dimensions			
Boom Length	A	B	Width	Weight
8.30 m (27 ft. 3 in.)	8720 mm (28 ft. 7 in.)	3400 mm (11 ft. 2 in.)	2050 mm (6 ft. 9 in.)	18 700 kg (41,226 lb.)
8.70 m (28 ft. 6 in.)	9120 mm (29 ft 11 in.)	3500 mm (11 ft. 6 in.)	2050 mm (6 ft. 9 in.)	19 100 kg (42,108 lb.)
11.80 m (38 ft. 9 in.)	12 220 mm (40 ft. 1 in.)	3700 mm (12 ft. 2 in.)	2050 mm (6 ft. 9 in.)	22 700 kg (50,044 lb.)

BUCKET ASSEMBLY



Backhoe Assembly	Dimensions			
Capacity (SAE heaped 1:1)				
Boom Length	A	B	Width	Weight
4.4 m³ (5.8 cu. yd.)	2630 mm (8 ft. 8 in.)	2180 mm (7 ft. 2 in.)	2070 mm (6 ft. 10 in.)	4830 kg (10,648 lb.)
4.8 m³ (6.5 cu. yd.)	2950 mm (9 ft. 8 in.)	2470 mm (8 ft. 1 in.)	1650 mm (5 ft. 5 in.)	5180 kg (11,420 lb.)
6.0 m³ (7.8 cu. yd.)	2950 mm (9 ft. 8 in.)	2470 mm (8 ft. 1 in.)	1950 mm (6 ft. 5 in.)	6390 kg (14,088 lb.)
8.0 m³ (10.5 cu. yd.)	3090 mm (10 ft. 2 in.)	2480 mm (8 ft. 2 in.)	2325 mm (7 ft. 8 in.)	7430 kg (16,380 lb.)
9.6 m³ (12.6 cu. yd.)	3090 mm (10 ft. 2 in.)	2480 mm (8 ft. 2 in.)	2710 mm (8 ft. 11 in.)	8080 kg (17,813 lb.)
12.0 m³ (15.7 cu. yd.)	3410 mm (11 ft. 2 in.)	2680 mm (8 ft. 10 in.)	3050 mm (11 ft. 0 in.)	12 900 kg (28,440 lb.)

ARM ASSEMBLY



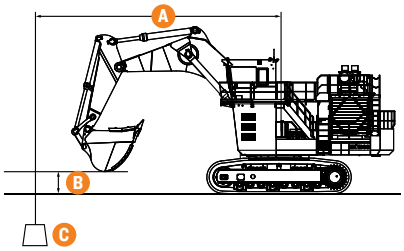
Arm Assembly	Dimensions			
Arm Length	A	B	Width	Weight
3.6 m (11 ft. 10 in.)	5000 mm (16 ft. 5 in.)	2060 mm (6 ft. 9 in.)	1720 mm (5 ft. 8 in.)	10 600 kg (23,369 lb.)
4.0 m (13 ft. 2 in.)	5280 mm (17 ft. 4 in.)	1950 mm (6 ft. 5 in.)	1720 mm (5 ft. 8 in.)	10 500 kg (23,149 lb.)
5.5 m (18 ft. 1 in.)	6780 mm (22 ft. 3 in.)	1700 mm (5 ft. 7 in.)	1720 mm (5 ft. 8 in.)	11 500 kg (25,353 lb.)
7.0 m (23 ft.)	8370 mm (27 ft. 6 in.)	2140 mm (7 ft.)	1780 mm (5 ft. 10 in.)	10 900 kg (24,030 lb.)

LIFTING CAPACITIES

EX1900-6 BE Unit: 1000 kg (1,000 lbs.)

Load Point Height	6.0 m (19 ft. 6 in.)		8.0 m (26 ft. 3 in.)		10.0 m (32 ft. 10 in.)		12.0 m (39 ft. 4 in.)		14.0 m (45 ft. 11 in.)		At Maximum Reach		
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	meters (feet)
EX1900-6 BE with 8.3-m (27 ft. 3 in.) boom, 3.6-m (11 ft. 10 in.) arm, 12.0-m³ (15.7 cu. yd.) bucket (SAE) and 800-mm (32 in.) shoes													
8.0 m (26 ft. 3 in.)							*17.2 (*37.9)	*17.2 (*37.9)			*7.7 (*17.0)	*7.7 (*17.0)	14.5 (47.6)
6.0 m (19 ft. 8 in.)					*25.5 (*56.2)	*25.5 (*56.2)	*22.1 (*48.7)	*22.1 (*48.7)			*8.1 (*17.9)	*8.1 (*17.9)	14.8 (48.6)
4.0 m (13 ft. 1 in.)					*29.4 (*64.8)	*29.4 (*64.8)	*23.7 (*52.3)	*23.7 (*52.3)			*8.9 (*19.6)	*8.9 (*19.6)	14.7 (48.2)
2.0 m (6 ft. 7 in.)					*32.9 (*72.5)	*32.9 (*72.5)	*25.4 (*56.0)	22.9 (50.5)			*10.2 (*22.5)	*10.2 (*22.5)	14.3 (46.9)
Ground Line					*34.8 (76.7)	31.1 (68.6)	*26.3 (*58.0)	21.9 (*48.3)			*10.5 (*23.2)	*10.5 (*23.2)	13.6 (44.6)
–2.0 m (–6 ft. 7 in.)			*46.8 (*103.2)	45.8 (101.0)	*34.3 (*75.6)	30.4 (67.0)	*25.3 (*55.8)	21.5 (47.4)					
–4.0 m (–13 ft. 1 in.)	*53.1 (*117.1)	*53.1 (*117.1)	*41.4 (*91.3)	*41.4 (*91.3)	*30.5 (*67.2)	*30.5 (*67.2)							
–6.0 m (–19 ft. 8 in.)			*30.3 (*66.8)	*30.3 (*66.8)									

*Indicates hydraulically limited capacity; numbers without * indicate stability-limited capacities, in kg. The load point is a hook (not standard equipment) loaded on the back of the bucket.
Lifting capacity of the EX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity. Ratings are based on SAE J1097.



A LOAD RADIUS
B LOAD POINT HEIGHT
C LIFTING CAPACITY

EX1900-6

STANDARD / OPTIONAL EQUIPMENT

For the EX1900-6 equipped with a diesel engine.

Key: ● Standard ▲ Optional or special kit

1900	Engine
●	140 A alternator
●	Heavy-duty type air cleaner with dust ejector
●	Cartridge-type engine oil filter
●	Cartridge-type engine oil bypass filter
●	Cartridge-type fuel filter
●	Water filter
●	Radiator reserve tank
●	Fan guard
●	Isolation-mounted engine
●	Pre-lubrication system
●	Auto-idle engine
●	Emergency engine stop system
●	Engine oil reserve system
	Hydraulic System
●	Engine Pump control system (EP)
●	Optimum Hydraulic System (OHS)
●	Fuel-saving Pump System (FPS)
●	Hydraulic drive cooling-fan system
●	Forced-lubrication and forced cooling pump drive system
●	Control valve with main relief valve
●	Suction filter
●	Full-flow filter
●	Bypass filter
●	Pilot filter
●	Drain filter
●	High-pressure strainer
	Undercarriage
●	Travel parking brake
●	Travel motion alarm device
●	Hydraulic track adjuster with N2 gas accumulator and relief valve
●	800 mm (32 in.) triple grouser shoes
	Upperstructure
●	Lockable machine covers
●	25 300 kg (55,777 lb.) counterweight
●	Hydraulic drive grease gun with hose reel
●	Retractable ladder with spring-type balancer
●	Swing parking brake
	Cab
●	OPG top guard level II (ISO) helps protect the operator from falling objects
●	All-weather sound-suppressed steel integrated cab
●	Fluid-filled elastic mounts
●	Laminated glass windshield
●	Reinforced/tinted (bronze color) side and rear windows
●	Parallel-link-type intermittent windshield wiper
●	Front windshield washer
●	LCD monitor display with various meters, pilot indicators, and warning indicators
●	Air-suspension seat with automatic weight-adjusting function
●	Wrist-control-type electric lever with height-adjusting function

1900	Cab (continued)
●	Electric / hydraulic operation travel pedals
●	Electric / hydraulic operation bucket open/close pedals -shovel
●	LED type room lamps
●	Footrest
●	Air horn with electric compressor
●	Auto-tuning AM-FM radio with digital clock
●	Seat belt
●	Hot and cool box
●	Storage spaces
●	Floor mat
●	Auto air conditioner with defroster
●	Rearview mirror
●	Evacuation hammer
●	Emergency escape device
●	Trainer's seat
●	Pilot control shut-off lever
	Monitor Systems
	Meters
●	Hour meter
●	Fuel gauge
●	Hydraulic oil temperature gauge
●	Engine coolant temperature gauge
●	Tachometer
●	Engine oil pressure gauge
●	Engine oil temperature gauge
●	Battery voltage gauge
●	Ambient temperature
	Pilot indicators (green)
●	Pre-lubrication system
●	Auto-idle
●	Travel mode
	Warning indicators (red)
●	Alternator
●	Engine stop
●	Coolant overheat
●	Hydraulic oil level
●	Auto lubrication
●	Fast-filling
●	Tension (Track Adjuster)
●	Electric lever
●	Emergency engine stop
●	Stop valve
●	Engine over run
●	Coolant level
●	Engine oil pressure
●	Pump transmission oil level indicator
	Warning indicators (yellow)
●	Exhaust temperature
●	Fuel temperature
●	Engine warning
●	Hydraulic oil overheat
●	Stairway position
●	Electrical equipment box
●	Pump contamination
●	Air cleaner restriction
	Alarm buzzers
●	Overheat
●	Engine coolant pressure

1900	Monitor Systems (continued)
●	Engine coolant level
●	Fuel temperature
●	Engine oil pressure
●	Engine oil temperature
●	Air intake manifold temperature
●	Crankcase pressure
●	Pump transmission oil level
●	Hydraulic oil level
●	Stop valve close
●	Fast-filling system panel position
●	Stairway position
●	Electric lever fault
	Data Logging System
●	Data-Logging Unit (DLU) continuously records the performance of the engine and the hydraulic system; data can be downloaded by PC
	Communication system**
●	Satellite data-transmitting system
●	WIU (Wireless Interface Unit)
	Lights
●	8 high-brightness (HID) working lights
●	2 entrance lights
●	3 maintenance lights
●	2 cab lights
	Miscellaneous
●	ISO conforming stairs and handrails
●	Recirculation air filter for air conditioner
●	Ventilation air filter for air conditioner
●	12-V power terminal board
●	Stop valve for transport and reassembly
●	Lincoln auto-lubrication system for front-attachment pins, swing bearing, and center joint
●	Fast-fill fixed panel with Wiggins coupler for fuel, engine oil, engine coolant, grease, pump transmission oil, and swing device oil
●	Camera monitor system
	4 cameras and 2 color monitors
	Optional Equipment
▲	Cold-weather package
▲	Travel motor guard
▲	Travel device guard
▲	3rd Party Fleet Management Interface Connection Kit
▲	Folding stairs
▲	Full length track guard
▲	Wide Pad Shoes for soft ground conditions only
▲	High elevation application

*Engineered on request.

**The availability of the system depends on licensing regulations in each country.

See your Hitachi dealer for further information.

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Hitachi Construction & Mining Division – Americas
1515 5th Avenue • Moline, IL 61265