MINING EXCAVATOR

EX1900-6
SALES BROCHURE

EX1900

BUCKET CAPACITY:
BACKHOE (SAE HEAPED 1:1): 4.4 - 12.0 m³ (5.8 - 15.7 cu. yd.)
SHOVEL (SAE HEAPED 2:1): 8.8 - 12.0 m³ (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)
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...
<table>
<thead>
<tr>
<th>Truck</th>
<th>Nominal Payload</th>
<th>Bucket Capacity</th>
<th>Passes to Fill</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHovel</td>
<td>EH1700-3</td>
<td>96.2 tonnes (106.6 tons)</td>
<td><img src="hep" alt="" /></td>
</tr>
<tr>
<td>Backhoe</td>
<td>EH1700-3</td>
<td>96.2 tonnes (106.6 tons)</td>
<td><img src="hep" alt="" /></td>
</tr>
</tbody>
</table>
TACKLE YOUR TOUGHEST JOBS.

The EX1900-6 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 EX1900-6 pairs well with the EH1700-3 truck and is available in a backhoe or front-shovel configuration. Add the EX1900-6 to your fleet, and you get...

MAJOR PRODUCTION.

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.
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...

- 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
The six-meter high, forward-sloping cab provides a clear view of the work site – even when loading trucks.

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 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.
The EX1900-6 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 EX1900-6, you get...

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.

COMFORTABLE CAB, EXTENDED PRODUCTIVITY.

SAFE AND EFFICIENT SPACE.

MORE COMFORT, MORE PRODUCTIVITY.
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...

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

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.

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

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.

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.
### Diesel Engine EX1900-6

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer and Model</td>
<td>Cummins QSXTA38-CE</td>
</tr>
<tr>
<td>Type</td>
<td>4 cycle</td>
</tr>
<tr>
<td>Aspiration</td>
<td>Water-cooled, I2-cylinder, turbocharged and aftercooled, direct-injection chamber-type diesel engine</td>
</tr>
<tr>
<td>Emission certification</td>
<td>U.S. EPA Tier 2</td>
</tr>
<tr>
<td>Rated power</td>
<td></td>
</tr>
<tr>
<td>Gross (SAE J1995)</td>
<td>810 kW (1,086 hp) @ 1,800 min⁻¹ (rpm)</td>
</tr>
<tr>
<td>Net</td>
<td>775 kW (1,039 hp) @ 1,800 min⁻¹ (rpm)</td>
</tr>
<tr>
<td>Maximum torque</td>
<td>4725 Nm (482 kgf-m) @ 1,300 min⁻¹ (rpm)</td>
</tr>
<tr>
<td>Piston displacement</td>
<td>37.8 L (2,307 cu. in.)</td>
</tr>
<tr>
<td>Bore and stroke</td>
<td>159 mm x 159 mm (6.3 in. x 6.3 in.)</td>
</tr>
<tr>
<td>Starting system</td>
<td>24 V electric motor</td>
</tr>
<tr>
<td>Batteries</td>
<td>4 x 12 V, 4 x 220 AH</td>
</tr>
<tr>
<td>Cold starting</td>
<td>Ether aided</td>
</tr>
</tbody>
</table>

### Electric Motor EX1900E-6

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer and Model</td>
<td>HITACHI TFOA-KK</td>
</tr>
<tr>
<td>Type</td>
<td>High voltage, three-phase, squirrel cage induction motor, totally enclosed air-to-air-cooled (TEAAC).</td>
</tr>
<tr>
<td>Rated continuous output</td>
<td>610 kW</td>
</tr>
<tr>
<td>Voltage</td>
<td>AC 6000 - 6600 V / 50 Hz</td>
</tr>
<tr>
<td>Number of poles</td>
<td>4</td>
</tr>
<tr>
<td>Synchronous RPM</td>
<td>1,500 min⁻¹ / 50 Hz</td>
</tr>
<tr>
<td>Rated current</td>
<td>69 A @ 6,000 V</td>
</tr>
<tr>
<td>Insulation class</td>
<td>F class B raise</td>
</tr>
<tr>
<td>Space heater included</td>
<td></td>
</tr>
<tr>
<td>Thermo-guard (temperature detector)</td>
<td></td>
</tr>
<tr>
<td>Starting condition</td>
<td>Reactor 50% tap</td>
</tr>
</tbody>
</table>

### 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/cm²) (4,264 psi)
- Travel circuit 29.4 MPa (300 kgf/cm²) (4,264 psi)
- Swing circuit 29.4 MPa (300 kgf/cm²) (4,264 psi)
- Pilot circuit 4.4 MPa (65 kgf/cm²) (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.
**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.

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**SPECS**

**Cylinder Dimensions (Backhoe)**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>280 mm (11 in.)</td>
</tr>
<tr>
<td>Arm</td>
<td>2</td>
<td>250 mm (9.8 in.)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2</td>
<td>200 mm (7.9 in.)</td>
</tr>
</tbody>
</table>

**Cylinder Dimensions (Loading Shovel)**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>280 mm (11 in.)</td>
</tr>
<tr>
<td>Arm</td>
<td>1</td>
<td>240 mm (9.4 in.)</td>
</tr>
<tr>
<td>Bucket</td>
<td>2</td>
<td>225 mm (8.9 in.)</td>
</tr>
<tr>
<td>Dump</td>
<td>2</td>
<td>190 mm (7.5 in.)</td>
</tr>
<tr>
<td>Level</td>
<td>1</td>
<td>280 mm (11 in.)</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-flow filter</td>
<td>3</td>
<td>10 µm</td>
</tr>
<tr>
<td>High-pressure strainer (in main and swing pump line)</td>
<td>3</td>
<td>20 µm</td>
</tr>
<tr>
<td>Drain filter (for all plunger-type pumps and motors)</td>
<td>1</td>
<td>10 µm</td>
</tr>
<tr>
<td>Bypass filter (in oil cooler by-pass line)</td>
<td>1</td>
<td>5 µm</td>
</tr>
<tr>
<td>Pilot filter</td>
<td>1</td>
<td>10 µm</td>
</tr>
</tbody>
</table>

**Controls**

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
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

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
**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. 8 in.) |

**Undercarriage**

Tracks


<table>
<thead>
<tr>
<th>Tractor-Type Undercarriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triple grouser shoes specially heat treated cast steel</td>
</tr>
<tr>
<td>Number of Rollers and Shoes (each side)</td>
</tr>
<tr>
<td>Upper rollers</td>
</tr>
<tr>
<td>Lower rollers</td>
</tr>
<tr>
<td>Track shoes</td>
</tr>
</tbody>
</table>

**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) |
| 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 m³ (14.4 cu. yd.) (SAE heaped 2:1) bottom-dump bucket.

<table>
<thead>
<tr>
<th>Shoe Type</th>
<th>Shoe Width</th>
<th>Operating Weight</th>
<th>Ground Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triple Grousers</td>
<td>800 mm (32 in.)</td>
<td>191 000 kg (421,083 lb.)</td>
<td>183 kPa (1.87 kgf/cm²) (26.5 psi)</td>
</tr>
<tr>
<td>Electric Motor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triple Grousers</td>
<td>800 mm (32 in.)</td>
<td>190 000 kg (418,878 lb.)</td>
<td>182 kPa (1.86 kgf/cm²) (26.4 psi)</td>
</tr>
</tbody>
</table>

**Backhoe**

Equipped with 8.3-m (27 ft. 3 in.) boom, 3.6-m (11 ft. 10 in.) arm, and 12.0-m³ (15.7 cu. yd.) (SAE heaped 1:1) bucket.

<table>
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<td>183 kPa (1.87 kgf/cm²) (26.5 psi)</td>
</tr>
</tbody>
</table>

**Service Refill Capabilities**

| Fuel tank | 4410 L (1,194 gal.) |
| Engine coolant | 395 L (104 gal.) |
| Engine oil | 166 L (44 gal.) |
| Pump transmission device | 26 L (7 gal.) |
| Swing device | 2 x 67 L (2 x 17 gal.) |
| Travel device | 2 x 70 L (2 x 18 gal.) |
| Hydraulic system | 2200 L (561 gal.) |
| Hydraulic oil tank | 1050 L (277 gal.) |

**Diesel Powerful**

**Electric Powered**
Bucket and arm are of all-welded, low-stress, high-tensile strength steel full-box section design.

<table>
<thead>
<tr>
<th>Capacity (SAE heaped 2:1)</th>
<th>Width</th>
<th>Number of Teeth</th>
<th>Weight</th>
<th>Type</th>
<th>Materials density</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0 m³ (14.4 cu. yd.)</td>
<td>3260 mm (10 ft. 8 in.)</td>
<td>6</td>
<td>15 100 kg (33,290 lb.)</td>
<td>Bottom-dump-type general purpose</td>
<td>1800 kg/m² (3,034 lb./cu. yd.) or less</td>
</tr>
</tbody>
</table>

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.
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.

<table>
<thead>
<tr>
<th>Capacity (SAE heaped 1:1)</th>
<th>Width (without side cutters)</th>
<th>Number of Teeth</th>
<th>Weight</th>
<th>Type</th>
<th>Materials density</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.0 m³ (15.7 cu. yd.)</td>
<td>3050 mm (10 ft.)</td>
<td>6</td>
<td>13200 kg (29,101 lb.)</td>
<td>General purpose</td>
<td>1800 kg/m³ (3,034 lb./cu. yd.) or less</td>
</tr>
</tbody>
</table>

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.

Working Ranges

<table>
<thead>
<tr>
<th>Working Ranges</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE-boom length</td>
<td>9.3 m (27 ft. 3 in.)</td>
</tr>
<tr>
<td>BE-arm length</td>
<td>3.6 m (11 ft. 10 in.)</td>
</tr>
<tr>
<td>A Max digging reach</td>
<td>15250 mm (50 ft.)</td>
</tr>
<tr>
<td>A' Max digging reach (on ground)</td>
<td>14770 mm (48 ft. 6 in.)</td>
</tr>
<tr>
<td>B Max digging depth</td>
<td>8180 mm (26 ft. 10 in.)</td>
</tr>
<tr>
<td>B' Max digging depth (2.5 m level)</td>
<td>8070 mm (26 ft. 6 in.)</td>
</tr>
<tr>
<td>C Max cutting height</td>
<td>14140 mm (46 ft. 5 in.)</td>
</tr>
<tr>
<td>D Max dumping height</td>
<td>9060 mm (29 ft. 9 in.)</td>
</tr>
<tr>
<td>D' Min dumping height</td>
<td>4060 mm (13 ft. 4 in.)</td>
</tr>
<tr>
<td>E Min swing radius</td>
<td>7140 mm (23 ft. 5 in.)</td>
</tr>
<tr>
<td>F Max vertical wall</td>
<td>5520 mm (18 ft. 1 in.)</td>
</tr>
<tr>
<td>G Min level crowding distance</td>
<td>4480 mm (14 ft. 8 in.)</td>
</tr>
</tbody>
</table>

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.

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 SPECS**

**MINING EXCAVATOR**

**Upperstructure**

**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: 26900 kg (59,304 lb.)
- Width: 3500 mm (11 ft. 5 in.)

**ENGINE UNIT**
- Weight: 14600 kg (32,187 lb.)
- Width: 2230 mm (7 ft. 3 in.)

**FUEL TANK**
- Weight: 2060 kg (4,543 lb.)
- Width: 1170 mm (3 ft. 10 in.)

**LADDER**
- Weight: 292 kg (647 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.)

**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.)

**BRACKET**
- Weight: 15 kg (33 lb.)
- Width: 55 mm (2 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: 25300 kg (55,780 lb.)
- Width: 1220 mm (4 ft. 0 in.)

**TRANSPORTATION**
**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: 26900 kg (59,304 lb.)
Width: 3500 mm (11 ft. 5 in.)

**ENGINE UNIT**
Weight: 14600 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.)

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

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

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

**BRACKET**
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: 25300 kg (55,780 lb.)
Width: 1220 mm (4 ft. 0 in.)
<table>
<thead>
<tr>
<th>Upperstructure (continued)</th>
<th>EX1900-6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>Step 1</td>
<td>1</td>
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<td>Step 2</td>
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<td>Step 3</td>
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<td>Sidewalk 1</td>
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<tr>
<td>Sidewalk 2</td>
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<td>Sidewalk 3</td>
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<tr>
<td>Sidewalk 4</td>
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<td>Sidewalk 5</td>
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<tr>
<td>Handrail 21</td>
<td>1</td>
</tr>
<tr>
<td>Handrail 22</td>
<td>1</td>
</tr>
</tbody>
</table>
**Undercarriage EX1900-6**

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

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

**BOOM CYLINDER**
- Weight: 2270 kg (5,004 lb.)
- 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.)
### 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.)
- **Dimensions:**
  - Length: 4270 mm (14 ft.)
  - Width: 120 mm (4.7 in.)

#### BUCKET ASSEMBLY
- **Weight:** 14 kg (31 lb.)
- **Width:** 530 mm (1 ft. 9 in.)

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

#### SIDE COVER
- **Weight:** 78 kg (172 lb.)
- **Width:** 380 mm (1 ft. 3 in.)

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

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

#### CENTER COVER
- **Weight:** 30 kg (66 lb.)
- **Width:** 440 mm (1 ft. 5 in.)

---

**Loader Assembly**

<table>
<thead>
<tr>
<th>Bucket Capacity (SAE heaped 2:1)</th>
<th>A</th>
<th>B</th>
<th>Max. Width</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.8 m³ (11.5 cu. yd.)</td>
<td>3380</td>
<td>3140</td>
<td>2900 mm</td>
<td>6,300 kg</td>
</tr>
<tr>
<td>11.0 m³ (14.4 cu. yd.)</td>
<td>3480</td>
<td>3130</td>
<td>3440 mm</td>
<td>15,100 kg</td>
</tr>
<tr>
<td>12.0 m³ (15.7 cu. yd.)</td>
<td>3730</td>
<td>3130</td>
<td>3440 mm</td>
<td>15,520 kg</td>
</tr>
</tbody>
</table>

*With wear plate

---

**Transportation**

### Loader Assembly Dimensions

- **Bucket Capacity (SAE heaped 2:1):**
  - 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.), 6,300 kg (13,935 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
## Backhoe Attachments EX1900-6

### Boom Assembly Dimensions

<table>
<thead>
<tr>
<th>Boom Length</th>
<th>A (8 ft. 8 in.)</th>
<th>B (7 ft. 2 in.)</th>
<th>Width (6 ft. 10 in.)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30 m (27 ft. 3 in.)</td>
<td>9720 mm</td>
<td>3400 mm</td>
<td>2060 mm</td>
<td>18,650 kg (40,923 lb.)</td>
</tr>
<tr>
<td>9.70 m (31 ft. 1 in.)</td>
<td>10120 mm</td>
<td>3500 mm</td>
<td>2060 mm</td>
<td>19,100 kg (42,106 lb.)</td>
</tr>
<tr>
<td>11.80 m (38 ft. 9 in.)</td>
<td>12220 mm</td>
<td>3700 mm</td>
<td>2060 mm</td>
<td>22,700 kg (49,984 lb.)</td>
</tr>
</tbody>
</table>

### Bucket Assembly Dimensions

<table>
<thead>
<tr>
<th>Capacity (SAE heaped 1:1)</th>
<th>A (8 ft. 8 in.)</th>
<th>B (7 ft. 2 in.)</th>
<th>Width (ft. 10 in.)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4 m³ (5.8 cu. yd.)</td>
<td>2630 mm</td>
<td>2180 mm</td>
<td>2070 mm</td>
<td>4830 kg (10,648 lb.)</td>
</tr>
<tr>
<td>4.8 m³ (6.5 cu. yd.)</td>
<td>2950 mm</td>
<td>2470 mm</td>
<td>1650 mm</td>
<td>5180 kg (11,420 lb.)</td>
</tr>
<tr>
<td>6.0 m³ (7.8 cu. yd.)</td>
<td>2950 mm</td>
<td>2470 mm</td>
<td>1950 mm</td>
<td>6390 kg (14,088 lb.)</td>
</tr>
<tr>
<td>8.0 m³ (10.5 cu. yd.)</td>
<td>3090 mm</td>
<td>2480 mm</td>
<td>2325 mm</td>
<td>7430 kg (16,380 lb.)</td>
</tr>
<tr>
<td>9.6 m³ (12.6 cu. yd.)</td>
<td>3090 mm</td>
<td>2480 mm</td>
<td>2710 mm</td>
<td>8080 kg (17,813 lb.)</td>
</tr>
<tr>
<td>12.0 m³ (15.7 cu. yd.)</td>
<td>3410 mm</td>
<td>2680 mm</td>
<td>3050 mm</td>
<td>12,900 kg (28,440 lb.)</td>
</tr>
</tbody>
</table>

### Arm Assembly Dimensions

<table>
<thead>
<tr>
<th>Arm Length</th>
<th>A (16 ft. 5 in.)</th>
<th>B (6 ft. 9 in.)</th>
<th>Width (ft. 8 in.)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6 m (11 ft. 10 in.)</td>
<td>5000 mm</td>
<td>2060 mm</td>
<td>1720 mm</td>
<td>10,600 kg (23,369 lb.)</td>
</tr>
<tr>
<td>4.0 m (13 ft. 2 in.)</td>
<td>5280 mm</td>
<td>1950 mm</td>
<td>1720 mm</td>
<td>10,500 kg (23,149 lb.)</td>
</tr>
<tr>
<td>5.5 m (18 ft. 1 in.)</td>
<td>6780 mm</td>
<td>1700 mm</td>
<td>1720 mm</td>
<td>11,500 kg (25,353 lb.)</td>
</tr>
<tr>
<td>7.0 m (23 ft.)</td>
<td>8370 mm</td>
<td>2140 mm</td>
<td>1780 mm</td>
<td>10,900 kg (24,030 lb.)</td>
</tr>
</tbody>
</table>
**MINING EXCAVATOR**

**EX1900-6 SPECS**

<table>
<thead>
<tr>
<th>Load Point Height</th>
<th>0.0 m (0 ft. 0 in.)</th>
<th>0.0 m (0 ft. 0 in.)</th>
<th>0.0 m (0 ft. 0 in.)</th>
<th>0.0 m (0 ft. 0 in.)</th>
<th>0.0 m (0 ft. 0 in.)</th>
<th>0.0 m (0 ft. 0 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal Distance from Centerline of Rotation</td>
<td>Over Front</td>
<td>Over Side</td>
<td>Over Front</td>
<td>Over Side</td>
<td>Over Front</td>
<td>Over Side</td>
</tr>
<tr>
<td>8.0 m (26 ft. 3 in.)</td>
<td>*25.5</td>
<td>*25.5</td>
<td>*22.1</td>
<td>*22.1</td>
<td>*8.1</td>
<td>*8.1</td>
</tr>
<tr>
<td>6.0 m (19 ft. 8 in.)</td>
<td>*29.4</td>
<td>*29.4</td>
<td>*23.7</td>
<td>*23.7</td>
<td>*11.6</td>
<td>*11.6</td>
</tr>
<tr>
<td>4.0 m (13 ft. 1 in.)</td>
<td>*32.9</td>
<td>*32.9</td>
<td>*25.4</td>
<td>*25.4</td>
<td>*15.0</td>
<td>*15.0</td>
</tr>
<tr>
<td>2.0 m (6 ft. 7 in.)</td>
<td>*34.6</td>
<td>*34.6</td>
<td>*28.3</td>
<td>*28.3</td>
<td>*18.4</td>
<td>*18.4</td>
</tr>
<tr>
<td>Ground Line</td>
<td>*94.8</td>
<td>*94.8</td>
<td>*82.3</td>
<td>*82.3</td>
<td>*69.6</td>
<td>*69.6</td>
</tr>
</tbody>
</table>

*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**

- The lifting capacity of the EX Series does not exceed 76% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity. Ratings are based on SAE J1097.
### 1900 Engine
- 40 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

### Undercarriage
- 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

### Cab
- 800 mm (32 in.) triple grouser shoes
- 25 300 kg (55,777 lb.) counterweight
- Hydraulic drive grease gun with hose reel
- Retractable ladder with spring-type balancer
- Swing parking brake

### Carriage
- 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

### Monitor Systems (continued)
- 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

### Lights
- 8 high-brightness (HID) working lights
- 2 entrance lights
- 3 maintenance lights
- 2 cab lights

### Miscellaneous
- ISD conforming stairs and handrails
- Recirculation air filter for air conditioner
- Ventilation air filter for air conditioner
- 12-V power terminal board
- ISO-conforming stairs and handrails
- 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.