



the EX3600-7 reduces fuel consumption by 4 percent.* Plus, it features enhanced safety and features like an

improved hydraulic system, engine options and simplified

EFFICIENT OPERATION.

*Comparison of Cummins engine configuration against the EX3600-6.

maintenance.

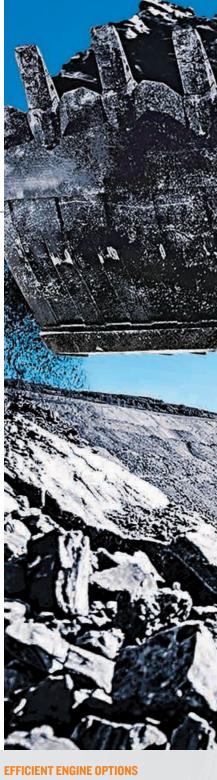
The EX3600-7 provides



INCREASED EFFICIENCY. REDUCED CONSUMPTION.

The EX3600-7 features the latest engine and energy optimizing technologies to provide a 4 percent reduction in fuel consumption.* Additionally, this workhorse includes electronically controlled hydraulic pumps, an optimized cooling package and enhanced hydraulic circuits for a sustainable solution that doesn't compromise performance.

This excavator gives you FUEL-EFFICIENT PERFORMANCE.



MAIN PUMP ELECTRIC REGULATORS

Each individually controlled hydraulic pump has its own electric regulator, enhancing engine power, lowering fuel consumption, and increasing productivity to lower the total cost of operation.

HYDRAULIC REGENERATION CIRCUIT

The flow regeneration valve fitted to the hydraulic system reduces pump demand, ultimately reducing power requirements from the hydraulic system and engine. The result is lower fuel consumption and improved pump life.

HYDRAULIC OIL COOLER

A larger hydraulic oil cooler with variable speed fan reduces energy demand and creates a more reliable hydraulic system. The oil cooler is kept separate from the radiator to effectively reduce hydraulic oil temperatures, increase hydraulic service life and improve maintainability.

Choose from Cummins or MTU U.S. EPA Final Tier 4 (FT4) engines, and Cummins or MTU Fuel-Calibration Optimization (FC0) options for fuel-efficient operation.





ELECTRIC MOTOR OPTION

The EX3600-7E electric excavator option with a Hitachi AC electric motor is available.



ELECTRONIC CYLINDER STROKE CONTROL

The new on-board electronic controller receives signals from angle sensors fitted to the main frame, boom and arm to control the pump flow rate and cylinder speed. Shock at stroke end of the cylinder cycle is reduced, improving operator comfort and lowering impact on cylinders and structures for more reliable operation.

FRONT ATTACHMENT HOSES

Hitachi's hose design has been tested on a high cyclic fatigue rate to maximize longevity and improve safety. Front attachment hoses have been rearranged from the traditional arch style to an underslung configuration, removing the need for clamping, reducing chafing and increasing reliability.



Equipped with more than IOO years of technological innovation from Hitachi, Ltd. group companies, our EX-7 Series excavators are engineered to achieve more for your mine site. The EX3600-7 delivers exceptional around-the-clock performance while optimizing consumption, taking productivity to a new level.

When you choose the EX3600-7,

NOTHING'S STOPPING YOU.

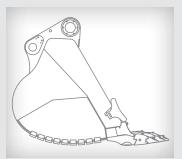


FRONT ATTACHMENT

With a front attachment design optimized for machine performance, the EX3600-7 can achieve superior productivity under various digging profiles.

The boom and arm are welded, utilizing a low stress, full-box section design to evenly distribute stress throughout the high tensile strength steel structure and provide for ease of maintenance.





SHOVEL DESIGN

The Loading Shovel attachment is equipped with an auto-leveling crowd mechanism that controls the bucket at a constant angle. The EX3600-7 now has a larger 22 m³ (28.8 cu. yd.) bucket, designed to enhance loading capability with a tilt angle that enhances operational efficiency.

BACKHOE DESIGN

The Backhoe attachment is designed using computer aided box frame analysis to determine the optimal structure for integrity and longevity. Complete with floating pin and bush, Hitachi buckets are designed to match the geometry of the attachment to maximize productivity.

SHOVEL EXCAVATING FORCE

Arm crowding force on ground II90 kN/I05 000 kgf (23I,485 lbf.)

Bucket digging force IO30 kN/97 000 kgf (2I3,848 lbf.)

BACKHOE EXCAVATING FORCE

Arm crowding force*
95I kN/97 000 kgf (213,848 lb.)

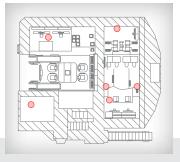
Bucket digging force 1050 kN/107 000 kgf (235,895 lbf.)



OPERATOR FRIENDLY. FOCUSED.

At Hitachi, safety is a top priority. And the design of the EX3600-7 provides for a safety-focused machine. The EX3600-7 includes spacious walkways, improved handrails, and standard features like an on-board inclinometer and dual isolator switch.

This excavator provides advanced **SAFETY FEATURES.**



EMERGENCY STOP SWITCHES

Seven emergency stop switches are easily accessible around the machine to improve safety. The emergency switch located in the cab has the added feature of releasing the hydraulic tank pressure when activated to reduce the parasitic pressure in the hydraulic system.



DUAL ISOLATOR SWITCH

The dual isolator switch can deactivate the engine and battery individually. The battery isolator isolates the positive and negative battery terminals for safe inspections. The engine isolator deactivates the engine starter motor while allowing battery power to the electric system.







ON-BOARD INCLINOMETER

The on-board inclinometer offers two predetermined safety limits to assist the operator. If the first safety limit is exceeded, the operator receives a visual alert prompting corrective action. The alert escalates to an audible alarm if the second safety limit is breached.



PERIMETER MONITORING CAMERAS

Optional perimeter monitoring cameras offer better visibility of a surrounding area, reducing blind spots for the operator. Two cameras are located at both the front and rear of the excavator, and are linked to monitors inside the cab.

EMERGENCY ESCAPE CHUTE

An escape chute has been added to the side of the cab for use in an emergency. The chute allows evacuees to descend vertically down from the machine, providing a safe and fast route of escape when all other means of exit are blocked.

ACCESS AND WALKWAYS

Anti-slip walkways and specially designed handrails reduce the risk of tripping. Wide, low-gradient, non-slip, hydraulic folding stairs allow for easy and safe access to the machine.



ROLL SCREENS

Retractable front and side roll screens protect the operator from UV glare and reduce heat buildup in the cab, improving the efficiency of the climate controlled air conditioner for a superior operating environment.

CLIMATE CONTROLLED AIR CONDITIONING

The pressurized cab's climate controlled air conditioning optimizes filtering of interior and exterior air. Plus, a new flexi-vent system provides a personalized environment.

OPERATOR SEAT

The automatic weight-adjusting air suspension seat calculates optimal cushioning to match the operator's weight, enhancing comfort and minimizing vibration.

ELECTRONIC JOYSTICKS

Connected to the machine's microprocessor, the integrated electronic joysticks enable precise and almost effortless operation.

COMFORTABLE CAB. PRODUCTIVE OPERATOR.

Hitachi's EX3600-7 maximizes productivity by giving operators complete comfort and control in the cab. Features include ergonomic layout, electronic joysticks, intelligent multi-functional display, advanced air suspension seating and better climate control for effortless operation.

This excavator offers MAXIMUM COMFORT.



OPERATOR CABIN

Laminated, tinted windows reduce heat and glare. The Level II Operator Protective Guard (OPG) provides secure protection from falling objects, ensuring operator safety.

MULTI-FUNCTIONAL DISPLAY

Fitted with an LED back-light to provide improved clarity with reduced glare and reflection, the multi-functional display provides key machine information and performance indicators through use of an integrated dial switch interface.

LESS MAINTENANCE. MORE UPTIME.

Hitachi's EX-7 Series excavators are now easier and safer to maintain than ever before with an intuitive design. The EX3600-7 features a layout with open passageways and work platforms to simplify daily upkeep and major component inspections.

The EX3600-7 provides SIMPLE SERVICING.



AUTO-LUBRICATING SYSTEM

A redesigned auto-lubrication system comes with a 500 L (132 gal.) large capacity grease tank, new grease pump, in-line grease filter with breather, grease level indicator in cab and provision for fitting of a second grease pump in the lubrication tank.



GREASE-LESS CENTER JOINT

The redesigned center joint is selflubricating utilizing the machine's hydraulic oil, reducing the need for daily maintenance.



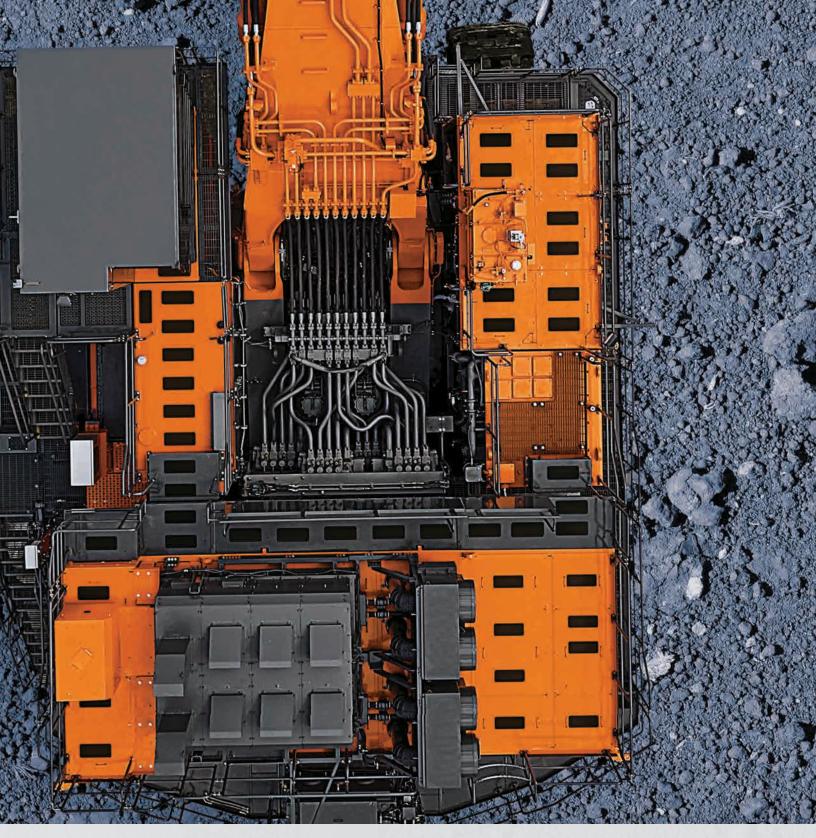
SWING CIRCLE COVER

A cover has been added to the outside of the swing bearing to provide protection to the lubrication piping against damage from debris.



MAINTENANCE ACCESS

Walkways, platforms and wide open service areas provide ease of access for daily maintenance tasks, and to engine, hydraulic and electrical components for quick and easy inspections.



CONTAMINATION SENSORS

Contamination sensors are located on all main hydraulic pumps to detect any contaminants that may cause damage to the hydraulic system. The sensors alert the operator and record the fault code in the Data Logging Unit (DLU).

CENTRALIZED LUBRICATION SYSTEM

The centralized fast-filling system provides easy access from the ground to refill and evacuate lubricants, water, grease and fuel. The fast-filling system can be fitted with an optional quick coupler.



TRAVEL TRANSMISSION GUARD

An optional guard protects the travel transmission from rough operating surfaces often encountered in backhoe benching operations.

CENTER TRACK FRAME

Hitachi's exclusive center track frame delivers optimal stress dispersion through the use of specifically designed castings to reduce welds in critical high stress areas.

TRACK SHOES

The proven Hitachi patented track shoe design helps reduce premature wear of the drive-lugs. Each shoe is induction hardened to deliver a more durable solution.





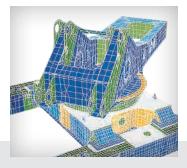
The EX3600-7 is built to withstand the harshest mining conditions while delivering outstanding productivity. Advanced computer modelling, specialized forgings, and pedestal design track shoes are just some of the features that make this excavator one of the most durable machines on the market.

The EX3600-7 is built to OUTWORK AND OUTLAST.



OIL FILLED ROLLERS & IDLERS

The oil-filled idlers, and upper and lower rollers eliminate the need for daily lubrication, helping reduce maintenance costs.



RIGID BOX DESIGN

Computer assisted analysis is used to determine the most effective design for frame longevity to withstand the demands of the mining operation.



UPPER ROLLERS

The EX3600-7 undercarriage has three double-sided pedestal-designed upper rollers on each side of the track frame to maintain track shoe clearance and provide protection from debris buildup, reducing shoe and roller wear.



CENTER FRAME UNDERGUARD

The optional heavy duty guard protects hoses and accumulators located in the track center frame from rocks and debris ingress, providing extra protection and reliability.

ON-DEMAND PERFORMANCE. SOLUTION.

Hitachi's EX-7 Series is loaded with intelligent features that minimize downtime and optimize excavator longevity. The EX3600-7 is designed to provide a reliable solution every hour of the day.

With the EX3600-7, you get **DEPENDABLE DESIGN.**



A pressurizer system has been introduced to the cab riser to reduce dust infiltration, maximizing the service life of the electronic components and devices located within.

The introduction of solid conduit harnesses and junction boxes prevents dust and moisture ingress, improving longevity. Electrical harnesses between junction boxes can be replaced individually, ultimately reducing maintenance time and cost.



OPERATING LIGHTS

Strategically placed long-life LED working lights provide greater longevity and reliability in night operations.





JUNCTION BOX CONNECTIONS

All junction boxes now use removable, major wire connections. If a wire harness section is damaged, it can be replaced without removing the entire wire harness, reducing maintenance time and costs.

TRAVEL MOTOR GUARD

An optional travel motor guard, now upgraded with a top cover, covers and helps protect the travel motors and hydraulic piping from tough terrain.

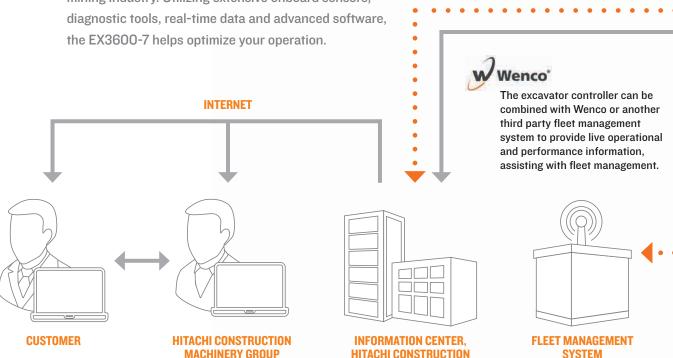
SWING LUBRICATION PIPING COVER

A new, standard cover protects hydraulic piping on the turn base from damage.

INTELLIGENT SYSTEMS FOR RAPID RESPONSE.

Hitachi's EX-7 Series excavators connect physical and digital technologies to drive transformation in the mining industry. Utilizing extensive onboard sensors, diagnostic tools, real-time data and advanced software the EX3600-7 helps optimize your operation.

AND DEALERS





▲erial **▲**ngle

MACHINERY

Aerial Angle(optional) provides the operator with a real-time continuous birds-eye view around their excavator. Cameras strategically mounted on the machine generate a single aerial view of the EX3600-7 surroundings. Multiple screen display options can be selected on the cab's 7-inch Aerial Angle monitor for ease of operation.

GLOBAL E-SERVICE

Global e-Service is a Hitachi web-based platform which sends vital machine information directly to the customer in an easy-to-understand format.

SATELLITE / GPRS COMMUNICATION (OPTIONAL)

Standard machine information is transmitted daily through either satellite or GPRS (General Packet Radio Service) communication, sending data directly to Hitachi's Global e-Service platform to support the mining operation.



ANTENNA (GPRS) OR SATELLITE

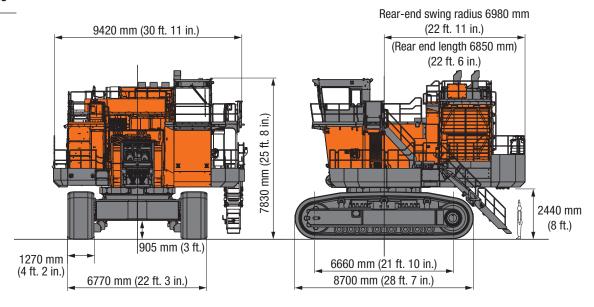
WIRELESS INTERFACE (OPTIONAL) Detailed machine information recorded on the Data Logging Unit (DLU) can be remotely downloaded via the Wireless Interface Unit (WIU), providing vital operational & performance data.

INTERNET



ON-SITE STAFF

Operation data is collected and uploaded by on-site staff.



ILLUSTRATIONS SHOW DIESEL ENGINE MACHINE

EX3600-7			
Cummins QSKTA60-CE	Cummins QSKTA60-CE	MTU 12V 4000 C35	MTU 12V 4000 C33
4 cycle	4 cycle	4 cycle	4 cycle
Water-cooled, 16-cylinder,	Water-cooled, 16-cylinder,	Water-cooled, I2-cylinder,	Water-cooled, I2-cylinder,
turbocharged and aftercooled,	turbocharged and aftercooled,	turbocharged and aftercooled,	turbocharged and aftercooled,
direct-injection chamber-type	direct-injection chamber-type	direct-injection chamber-type diesel	direct-injection chamber-type
diesel engine	diesel engine	engine, Miller cycle, Cooled EGR	diesel engine
U.S. EPA Tier 4 Final	Fuel consumption optimized	U.S. EPA Tier 4 Final	Fuel consumption optimized
1450 kW (1,944 hp)	1450 kW (1,944 hp)	1500 kW (1,944 hp)	1450 kW (1,944 hp)
@ 1800 min ⁻¹ (rpm)	@ 1800 min-1 (rpm)	@ 1800 min-1 (rpm)	@ 1800 min-1 (rpm)
8364 Nm (853 kgf-m)	8364 Nm (853 kgf-m)	9588 Nm (978 kgf-m)	9231 Nm (941 kgf-m)
@ 1500 min ⁻¹ (rpm)	@ 1500 min ⁻¹ (rpm)	@ 1500 min ⁻¹ (rpm)	@ 1500 min ⁻¹ (rpm)
60 L (3,661 cu. in.)	60 L (3,661 cu. in.)	57.2 L (3,491 cu. in.)	57.2 L (3,491 cu. in.)
159 mm x 190 mm (6.3 in. x 7.5 in.)	159 mm x 190 mm (6.3 in. x 7.5 in.)	170 mm x 210 mm (6.7 in. x 8.3)	170 mm x 210 mm (6.7 in. x 8.3)
24 V electric motor	24 V electric motor	24 V electric motor	24 V electric motor
4 x 12 V, 4 x 185 AH	4 x 12 V, 4 x 185 AH	4 x 12 V, 4 x 185 AH	4 x 12 V, 4 x 185 AH
	Cummins OSKTAGO-CE 4 cycle Water-cooled, 16-cylinder, turbocharged and aftercooled, direct-injection chamber-type diesel engine U.S. EPA Tier 4 Final 1450 kW (1,944 hp) @ 1800 min ⁻¹ (rpm) 8364 Nm (853 kgf-m) @ 1500 min ⁻¹ (rpm) 60 L (3,661 cu. in.) 159 mm x 190 mm (6.3 in. x 7.5 in.) 24 V electric motor	Cummins QSKTA60-CE 4 cycle 4 cycle Water-cooled, I6-cylinder, turbocharged and aftercooled, direct-injection chamber-type diesel engine U.S. EPA Tier 4 Final I450 kW (I,944 hp) I800 min ⁻¹ (rpm) I800 min ⁻¹ (rpm) I800 min ⁻¹ (rpm) I500 min ⁻¹ (rpm) I59 mm x I90 mm (6.3 in. x 7.5 in.) Cummins QSKTA60-CE 4 cycle Water-cooled, I6-cylinder, turbocharged and aftercooled, direct-injection chamber-type diesel engine U.S. EPA Tier 4 Final Fuel consumption optimized I450 kW (I,944 hp) I450 kW (I,944 hp) I60 L (3,661 cu. in.) I69 mm x I90 mm (6.3 in. x 7.5 in.) I59 mm x I90 mm (6.3 in. x 7.5 in.) I59 mm x I90 mm (6.3 in. x 7.5 in.)	Cummins QSKTA60-CE Cummins QSKTA60-CE MTU 12V 4000 C35 4 cycle 4 cycle 4 cycle Water-cooled, 16-cylinder, Water-cooled, 16-cylinder, Water-cooled, 12-cylinder, turbocharged and aftercooled, turbocharged and aftercooled, turbocharged and aftercooled, direct-injection chamber-type direct-injection chamber-type direct-injection chamber-type direct-injection chamber-type diesel diesel engine engine, Miller cycle, Cooled EGR U.S. EPA Tier 4 Final Fuel consumption optimized I450 kW (1,944 hp) I500 kW (1,944 hp) © 1800 min ⁻¹ (rpm) © 1800 min ⁻¹ (rpm) 8364 Nm (853 kgf-m) 9588 Nm (978 kgf-m) © 1500 min ⁻¹ (rpm) © 1500 min ⁻¹ (rpm) 60 L (3,661 cu. in.) 57.2 L (3,491 cu. in.) 159 mm x 190 mm (6.3 in. x 7.5 in.) 159 mm x 190 mm (6.3 in. x 7.5 in.) 170 mm x 210 mm (6.7 in. x 8.3) 24 V electric motor 24 V electric motor 24 V electric motor

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)

Four tandem-axial piston pump groups (eight pumps in total), supply a four-valve hydraulic system enabling both independent and combinedoperations 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

Hydraulic drive cooling-fan system for radiator

Forced-lubrication and forced-cooling pump drive system

Regeneration circuit for boom down

Main Pumps

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

Maximum oil flow 8 x 500 L/min (8 x I32 gal./min.)

Pilot Pump

Gear pump

110 L/min (29 gal./min.) Maximum oil flow

Relief Valve Settings

29.4 MPa (300 kgf/cm2) (4,264 psi) Implement circuit Travel circuit 29.4 MPa (300 kgf/cm2) (4,264 psi) Swing circuit 29.4 MPa (300 kgf/cm2) (4,264 psi) Pilot circuit 4.0 MPa (41 kgf/cm2) (580 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	360 mm (14.2 in.)	260 mm (10.2 in.)
Arm	2	300 mm (II.8 in.)	220 mm (8.7 in.)
Bucket	2	250 mm (9.8 in.)	180 mm (7.1 in.)
Cylinder Dimensions (Loading Shovel)			
	Quantity	Bore	Rod Diameter
Boom	2	360 mm (14.2 in.)	260 mm (10.2 in.)
Arm	1	300 mm (II.8 in.)	220 mm (8.7 in.)
Bucket	2	280 mm (II in.)	200 mm (7.9 in.)
Dump	2	225 mm (8.9 in.)	130 mm (5.1 in.)
Level	1	360 mm (14.2 in.)	260 mm (I0.2 in.)
Hydraulic Filters			
All hydraulic circuits have high-quality hydraulic filters	for protection against oil	contamination and longe	r life of hydraulic components. Filters are centralized for convenient maintenance.
	Quantity		
Full-flow filter	5	10 μm	
High-pressure strainer (in main and swing pump line)	8	120 μ m	
Drain filter (for all plunger-type pumps and motors)	1	10 μm	

 $5 \, \mu m$

 $10 \mu m$

Pilot filter Controls

Two Implement Levers

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

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

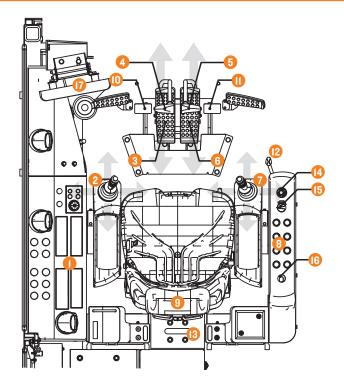
Two Travel Levers with Pedals

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

- I Left Console
- 2 Left Control Lever/Horn Switch

Bypass filter (in oil cooler by-pass line)

- 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)
- II 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

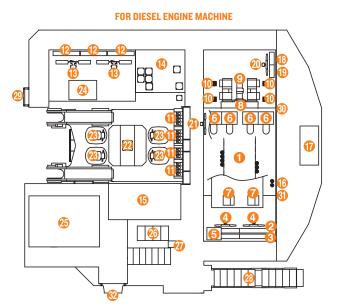


DIESEL ENGINE CONTROLS

Upperstructure

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. ISO-met stairs and handrails. Sidewalks and stairs are provided with skid-resistant plates. 1 Diesel Engine 2 Engine Radiator x2 3 LTA Radiator x2 4 Radiator Fan Motor x4 5 Reserve Tank (Coolant) 6 Air Filter (Outer / Inner) x4 7 Muffler x2 8 Pump Drive Unit 9 Hydraulic Pump x10 10 High Pressure Strainer x8 [Control Valve x4 12 Hydraulic Oil Cooler x3 13 Hydraulic Oil Cooler Fan Motor x2 14 Hydraulic Tank 15 Fuel Tank 16 Fuel Filter DEF Tank (Only for Cummins Tier4F) 17 18 Pump Transmission Oil Cooler 19 **Fuel Cooler** Pump Transmission Oil & Fuel Cooler Fan Motor 20 Engine Room Ventilation Fan Motor 21 22 Center Joint Swing Device x4 23 24 Lubricator 25 Cab Battery x4 26 Isolation Switch Box 27 Folding Stairs 28 29 Engine-Pump Bulkhead 30 31 Engine-Radiator Bulkhead 32 Emergency Escape Chute

EX3600-7



DECK MACHINERY
FOR DIESEL ENGINE MACHINE

Swing Device

Four high-torque, axial-piston motors with two-stage planetary gear bathed in oil. Swing circle with dirt seals is a heavy-duty, triple-row cylindrical roller 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.

3.2 min-1 (rpm) Swing speed

Operator's Cab

The sturdy cab, with the top guard conforming to OPG Level II (ISO), helps protect the operator from falling objects. I800-mm (5 ft. II in.) width, 2I50-mm (7 ft. I in.) height, roomy 7.5-m3 (9.8 cu. yd.) cab with tinted-glass windows features all-around visibility. Air-suspension type, fully adjustable reclining seat with armrests; movable with or without front and swing control levers by slide. Instruments and control panel are within easy reach of the operator. Three air conditioner system.

Noise level 72 dB(A) in the cab at maximum engine speed under no-load condition

Eye-level height 6760 mm (22 ft. 2 in.)

Undercarriage

Tracks

Shovel-type undercarriage. Dual-flanged-type bolt linkage for side frame and X-form center 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 N, gas accumulator and relief valve. Track adjuster provided with protection device against abnormal tension. Travel motion alarm device.

Shovel-Type Undercarriage

Triple grouser track shoes of induction-hardened cast steel

Shoe width 1270 mm (50 in.)

Number of Rollers and Shoes (each side)

3 Upper rollers Lower rollers 8 Track shoes 38

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.

Low: 0-1.7 km/h (0-1.1 mph) Travel speeds

High: 0-2.2 km/h (0-1.4 mph)

Maximum traction force 1760 kN/179 500 kgf (395,730 lbf.)

Gradeability 58% (30°) maximum

Weights and Ground Pressure

Loading Shovel

Equipped with 22-m3 (28.8 cu. yd.) (ISO heaped) bottom-dump bucket. Ground pressures are based on ISO I6754.

Cummins Engine Shoe Tyne

Shoe Type	Shoe Width	Emmission Certification	Operating Weight	Ground Pressure
Triple Grousers	1270 mm (50 in.)	FC0	365 000 kg (804,687 lb.)	191 kPa (1.95 kgf/cm²) (27.7 psi)
ilipie di ouseis	1270 11111 (30 111.)	T4F	369 000 kg (813,506 lb.)	193 kPa (1.97 kgf/cm²) (28 psi)
MTU Engine				
Shoe Type	Shoe Width		Operating Weight	Ground Pressure
Triple Grousers	1270 mm (50 in.)	FC0	366 000 kg (806,892 lb.)	192 kPa (1.96 kgf/cm²) (27.8 psi)
Tiple diousers	1270 11111 (30 111.)	T4F	366 000 kg (806.892 lb.)	192 kPa (1.96 kgf/cm²) (27.8 psi)

Backhoe

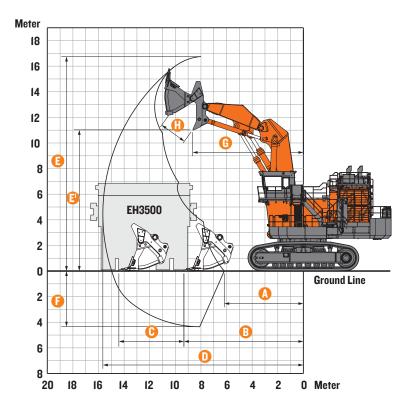
Equipped with 9.6-m (3I ft. 6 in.) BE boom, 4.5-m (14 ft. 9 in.) BE arm., and 22-m3 (28.8 cu. yd.) (ISO heaped) bucket. Ground pressures are based on ISO 16754.

Cummins Engine

Shoe Type	Shoe Width	Emmission Certification	Operating Weight	Ground Pressure
Triple Grousers	1270 mm (50 in.)	FC0	366 000 kg (806,892 lb.)	192 kPa (1.96 kgf/cm²) (27.8 psi)
Triple Grousers	1270 11111 (30 111.)	T4F	370 000 kg (815,710 lb.)	194 kPa (1.98 kgf/cm²) (28.1 psi)
MTU Engine				
Shoe Type	Shoe Width	Emmission Certification	Operating Weight	Ground Pressure
T: 1. 0		FC0	367 000 kg (809,097 lb.)	192 kPa (1.96 kgf/cm²) (27.8 psi)
Triple Grousers	1270 mm (50 in.)	T4F	367 000 kg (809,097 lb.)	192 kPa (1.96 kgf/cm²) (27.8 psi)
Service Refill Capabili	ties	Cummins Engine	MTU Engine	
Fuel tank		7450 L (1,968 gal.)	7450 L (1,968 gal.)	
Engine coolant (T4F/	FCO)	611 L (161 gal.)/ 593 L (156 gal.)	708 L (187 gal.)/ 678 L (179 gal.)	
Engine oil pan		360 L (95 gal.)	290 L (76 gal.)	
Pump transmission d	evice	62 L (16 gal.)	62 L (16 gal.)	
Swing device		4 x 75 L (4 x 20 gal.)	4 x 75 L (4 x 20 gal.)	
Travel device		2 x 220 L (2 x 58 gal.)	2 x 220 L (2 x 58 gal.)	
Hydraulic system		4000 L (I,057 gal.)	4000 L (I,057 gal.)	
Hydraulic oil tank		1900 L (502 gal.)	1900 L (502 gal.)	
Grease tank		500 L (132 gal.)	500 L (132 gal.)	
DEF tank (only Tier 4	final specification)	475 L (125 gal.)		

Loading Shovel Attachment

EX3600-7



Working Range

Boom and arm are of all-welded, low-stress, high-tensile strength steel full-box section design. Efficient, automatic level crowding achieved by one-lever control as the parallel link mechanism keeps the bucket digging angle constant, and level cylinder circuit maintains the bucket height constant (Auto-Leveling Crowd Mechanism). Auto-lubrication system for all pins is standard.

Bu	cket Capacity (ISO 7456 heaped 2:1)	22 m³ (28.8 cu. yd.)
Α	Min digging distance	6180 mm (20 ft. 3 in.)
В	Min level crowding distance	9440 mm (31 ft.)
C	Level crowding distance	5060 mm (16 ft. 7 in.)
D	Max digging reach	15 660 mm (51 ft. 5 in.)
Ε	Max cutting height	16 750 mm (54 ft. II in.)
E	Max dumping height	10 990 mm (36 ft. I in.)
F	Max digging depth	4350 mm (I4 ft. 3 in.)
G	Working radius at max dumping height	8640 mm (28 ft. 4 in.)
Н	Max bucket opening width	1950 mm (6 ft. 5 in.)
	Bucket digging force	1030 kN / 97 000 kgf (213,848 lbf.)

Bucket

Arm crowding force

Boom and arm are of all-welded, low-stress, high-tensile strength steel full-box section design. Bottom dump type general purpose bucket.

1190 kN / 155 000 kgf (341,717 lbf.)

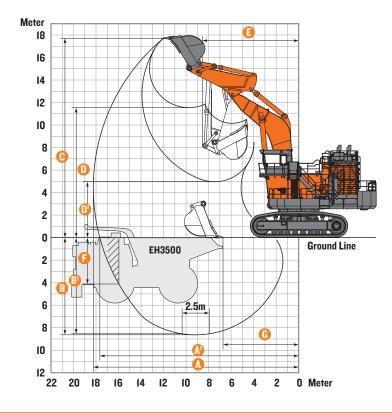
 Capacity (ISO heaped 2:I)
 Width
 Number of Teeth
 Weight
 Type
 Materials density

 22-m³ (28.8 cu. yd.)
 4200 mm (I3 ft. 9 in.)
 5
 29 300 kg (64,595 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.

Bucket Passes	Bucket Passes to Dump Trucks												
	Truck	Nominal Payload	Bucket Capacity				Passes	s to Fill					
				1	2	3	4	5	6	7	8		
Shovel	EH3500AC-3	I8I tonnes (200 tons)	22-m³ (28.8 cu. yd.) Bucket										
Shovel	EH4000AC-3	221 tonnes (243.6 tons)	22-m³ (28.8 cu. yd.) Bucket										



Working Range

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

BE	-boom length		9.6-m (31 ft. 6 in.)		
BE	-arm length		4.5-m (14 ft. 9 in.)		
Bu	cket Capacity (ISO 7451 heaped 1:1)		22 m³ (28.8 cu. yd.)		
Α	Max digging reach	18 240 mm (59 ft. 10 in.)			
A' Max digging reach (on ground) 17 660 mm (57 ft. II in.)					
В	Max digging depth		8630 mm (28 ft. 4 in.)		
Bi	Max digging depth (2.5 m level)		8540 mm (28 ft.)		
C	Max cutting height		17 710 mm (58 ft. 1 in.)		
D	Max dumping height		II 540 mm (37 ft. 10 in.)		
Dı	Min dumping height		4960 mm (16 ft. 3 in.)		
Ε	Min swing radius		8540 mm (28 ft.)		
F	Max vertical wall		4I20 mm (I3 ft. 6 in.)		
G	Min level crowding distance		6710 mm (22 ft.)		
	Bucket digging force*	ISO	1050 kN / 107 000 kgf (235,895 lbf.)		
	Arm crowding force*	ISO	951 kN / 97 000 kgf (213,848 lbf.)		

*This is the calculated value at the loading point (Cutting Edge) conforming to ISO.

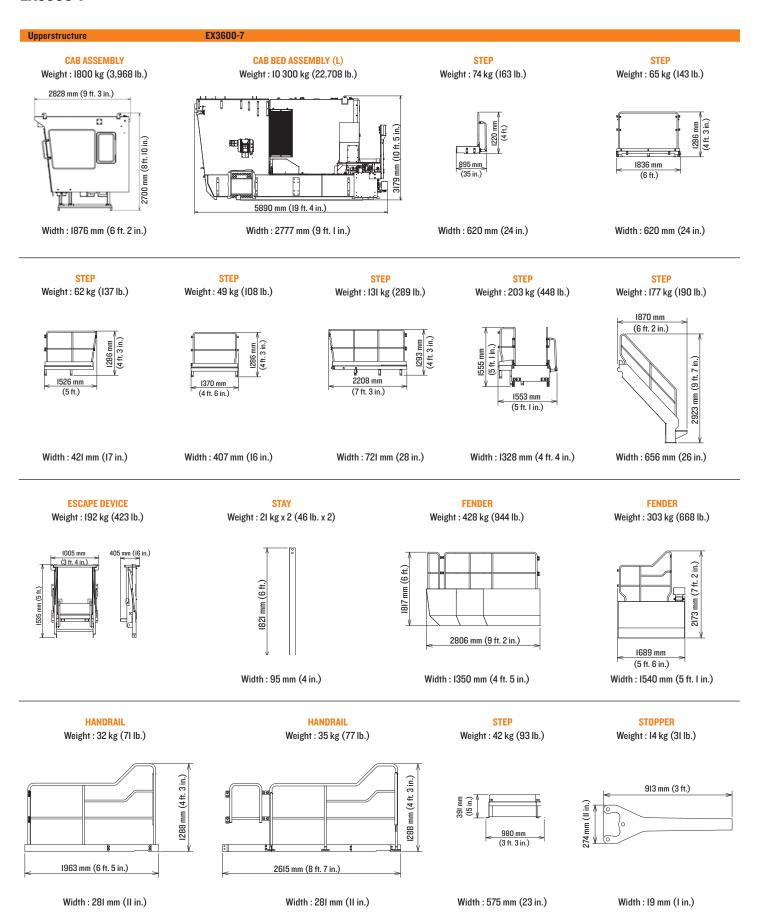
Bucket

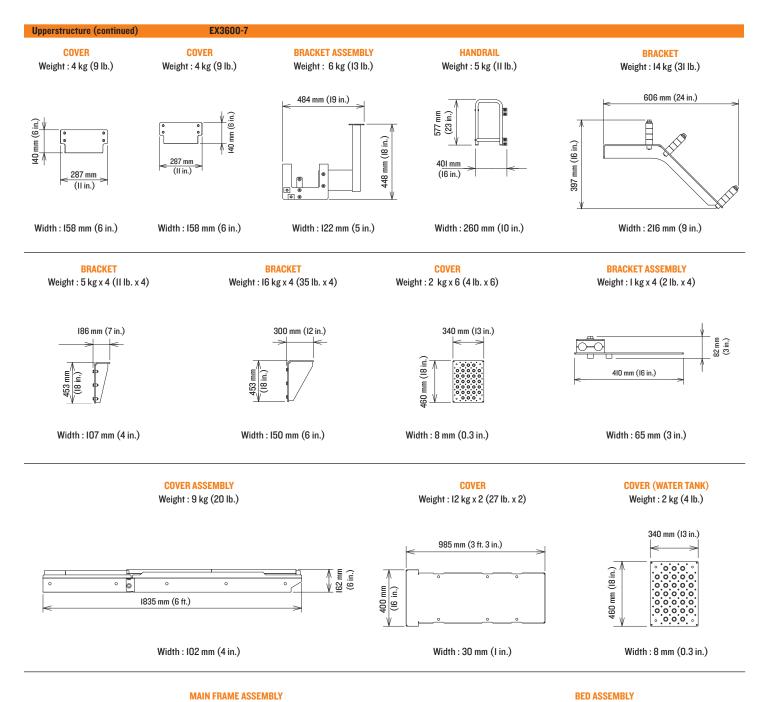
Boom and arm are of all-welded, low-stress, full-box section design. Bucket of all-welded, high-strength steel structure. Bucket/arm and arm/boom joint pins are floating type.

 $Replaceable\ thrust\ plates\ are\ provided\ with\ bucket/arm\ joint\ part.\ Auto-lubrication\ system\ for\ all\ pins\ is\ standard.$

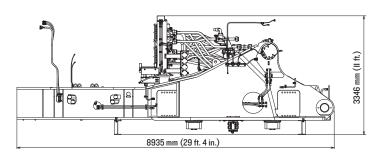
Capacity (SAE heaped I:I)Width (without side cutters)Number of TeethWeightTypeMaterials density22-m³ (28.8 cu. yd.)3790 mm (12 ft. 5 in.)618 400 kg (40,565 lb.)General purpose1800 kg/m³ (3,034 lb./cu. yd.) or lessNote: These buckets do not include any type of wear protection for sides, bottom, and inside the bucket. Please consult your local Hitachi dealer for a proper wear protection system for your application.

Duonot i doooo	to Dump Trucks Truck	Nominal Payload	Bucket Capacity				Passes	s to Fill			
				1	2	3	4	5	6	7	8
Backhoe	EH3500AC-3	181 tonnes (200 tons)	22-m³ (28.8 cu. yd.) Bucket								
Backhoe	EH4000AC-3	221 tonnes (243.6 tons)	22-m³ (28.8 cu. yd.) Bucket								

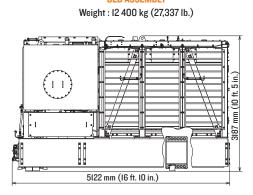




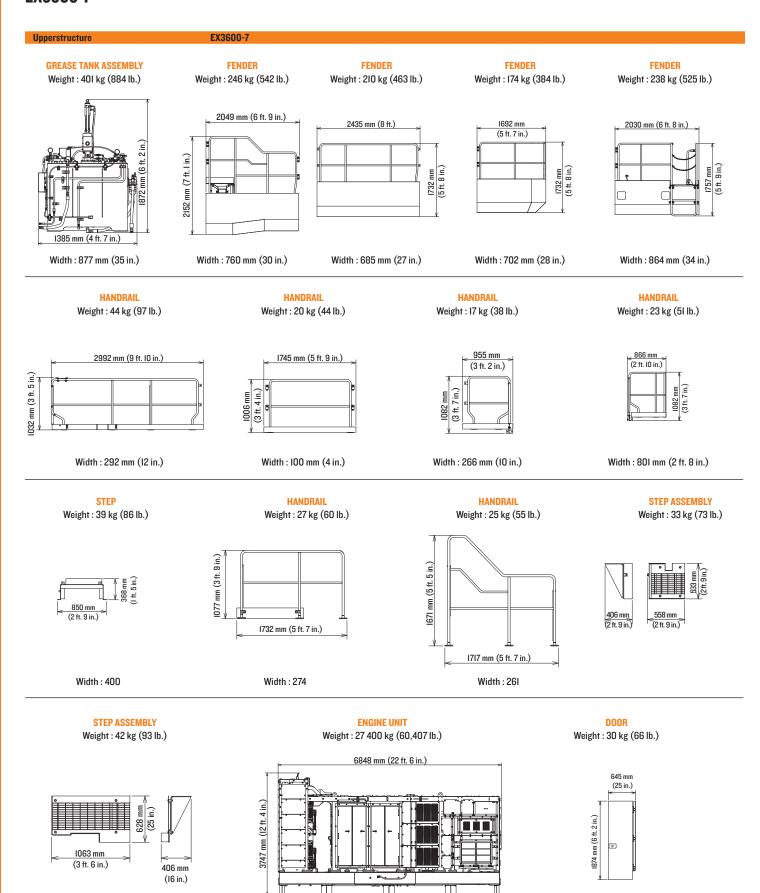




Width: 3540 mm (II ft. 7 in.)

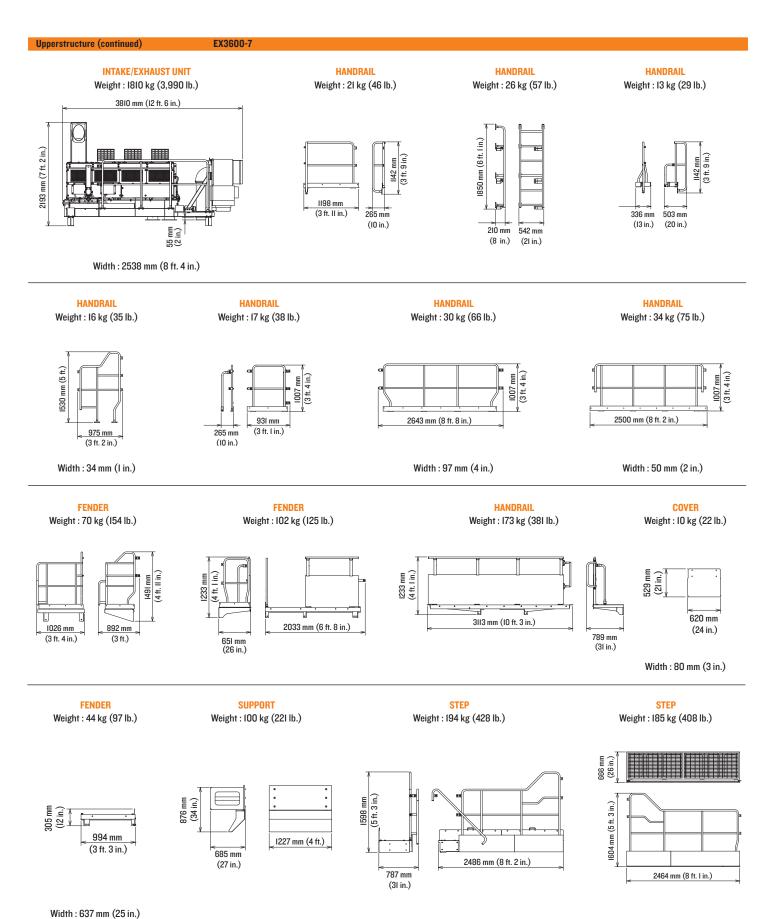


Width: 2222 mm (7 ft. 3 in.)



Width: 2744 mm (9 ft.)

Width: 74 mm (3 in.)

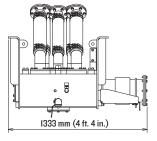


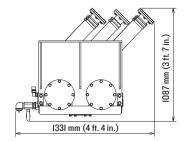
Upperstructure

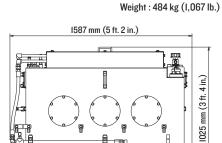
EX3600-7

SUCTION MANIFOLD

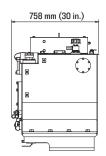
Weight: 422 kg (930 lb.)





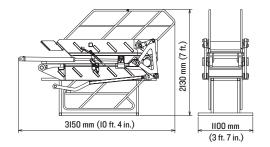


UREA TANK



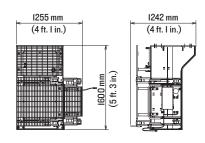
STEP ASSEMBLY

Weight: 773 kg (1,704 lb.)





Weight: 837 kg (1,845 lb.)



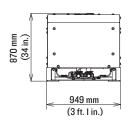
HANDRAIL

Weight: 24 kg (53 lb.)



WATER TANK

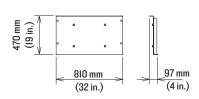
Weight: 299 kg (659 lb.)





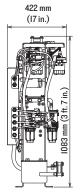
STEP

Weight: 15 kg (33 lb.)



UREA PUMP

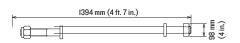
Weight : 34 kg (75 lb.)



Width: 402 mm (16 in.)

BOLT ASSEMBLY

Weight: 31 kg x 8 (68 lb. x 8)



Width: 100 mm (4 in.)

STOPPER

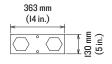
Weight: 5 kg x 2 (II lb. x 2)



Width: 32 mm (I in.)

STOPPER

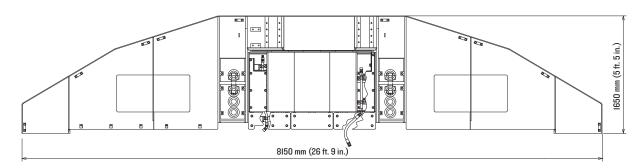
Weight: 9 kg x 2 (20 lb. x 2)

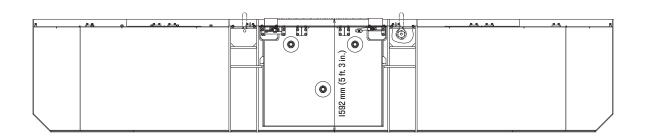


Width: 32 mm (I in.)

COUNTERWEIGHT

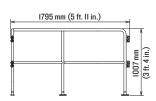
Weight: 39 800 kg (87,744 lb.)





HANDRAIL

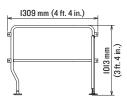
Weight : 21 kg (46 lb.)



Width: 1330 mm (4 ft. 4 in.)

HANDRAIL

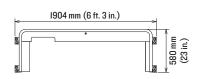
Weight: 15 kg (33 lb.)



Width: 333 mm (13 in.)

HANDRAIL

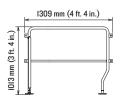
Weight : 23 kg (51 lb.)



Width: 64 mm (3 in.)

HANDRAIL

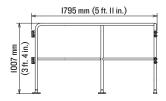
Weight : 15 kg (33 lb.)



Width: 333 mm (13 in.)

HANDRAIL

Weight : 21 kg (46 lb.)

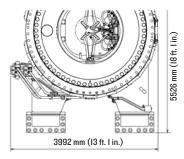


Width: 1330 mm (4 ft. 4 in.)

Upperstructure

TRACK FRAME

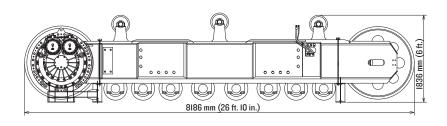
Weight: 32 300 kg (71,209 lb.)



Width: 1780 mm (5 ft. 10 in.)

SIDE FRAME

Weight: 28 600 kg x 2 (63,052 lb. x 2)



Width: 2315 mm (7 ft. 7 in.)

COVER

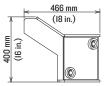
Weight: 29 kg (64 lb.)

466 mm (18 in.) 400 mm (16 in.)

Width: 205 mm (8 in.)

COVER

Weight: 29 kg (64 lb.)



Width: 205 mm (8 in.)

Weight: 12 kg x 2 (26 lb. x 2)



Width: 189 mm (7 in.)

LINK ASSEMBLY

Weight: 5100 kg (11,244 lb.)

LINK ASSEMBLY

Weight: 4600 kg (10,141 lb.)



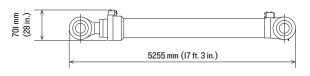
330 mm (13 in.) 4639 mm (15 ft. 3 in.)

Width: 1270 mm (4 ft. 2 in.)

Width: 1270 mm (4 ft. 2 in.)

BOOM CYLINDERS

Weight: 4500 kg x 2 (9,921 lb. x 2)



Width: 560 mm (22 in.)

7940 mm (26 ft. I in.) 2632 mm (8 ft. 8 in.)

Weight: 27 040 kg (59,613 lb.)

Width: 2570 mm (8 ft. 5 in.)

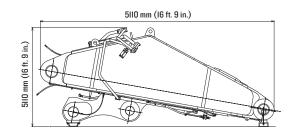
ARM CYLINDER

Weight: 2720 kg (5,997 lb.)



Width: 592 mm (23 in.)

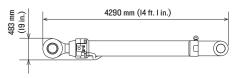
Weight: 13,340 kg (29,410 lb.)



Width: 2895 mm (9 ft. 6 in.)

BUCKET CYLINDERS

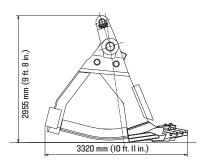
Weight: 2 420 kg x 2



Width: 873 mm (34 in.)

REAR BUCKET

Weight: 14 600 kg (32,188 lb.)



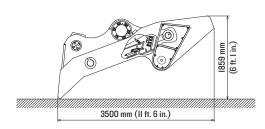
Weight: 14 700 kg (32,408 lb.)

FRONT BUCKET

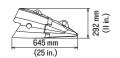
Width: 4278 mm (14 ft.)



Weight: 96 kg x 5 (212 lb. x 5)



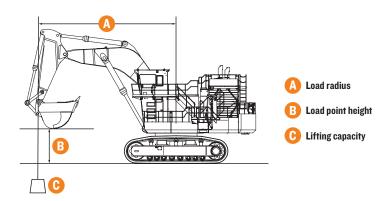
Width: 4162 mm (13 ft. 8 in.)



Width: 321 mm (13 in.)

EX3600-7 BE	0.0 (0)	20.01	10.0 (0	06: 10: \	10.0 (0		140 (4	F 6: 44: \	15.0 (4	0 (1 0 1)	10.0 /				00 kg (1,000 lb
Load Point Height	,			,		9 ft. 4 in.)	14.0 m (45 ft. 11 in.)		15.0 m (49 ft. 3 in.)		16.0 m (52 ft. 6 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	Over Front	Over Side	meters (feet)
EX3600-7 BE with 9.6-	m (31 ft. 6 i	n.) boom, 4	4.5-m (14 fi	t. 9 in.) arn	n, 22.0-m ³	(28.8 cu. y	d.) bucket	(SAE) and	1270-mm	(50 in.) sh	oes				
10 (10 (: 0 :)					*25.3	*25.3							*10.2	*10.2	16.0
13 m (42 ft. 8 in.)					(*55.8)	(*55.8)							(*22.5)	(*22.5)	(52 ft. 6 in
10 (001 11)					*27.3	*27.3							*9.8	*9.8	16.5
12 m (39 ft. 4 in.)					(*60.2)	(*60.2)							(*21.6)	(*21.6)	(54 ft. 2 in
10 (00 (: 10 :)					*27.8	*27.8	*23.7	*23.7					*9.4	*9.4	17.3
10 m (32 ft. 10 in.)					(*61.3)	(*61.3)	(*52.2)	(*52.2)					(*20.7)	(*20.7)	(56 ft. 9 in
0 (00 (: 0:)					*28.6	*28.6	*28.7	*28.7	*21.9	*21.9			*9.5	*9.5	17.7
8 m (26 ft. 3 in.)					(*63.1)	(*63.1)	(*63.3)	(*63.3)	(*48.3)	(*48.3)			(*20.9)	(*20.9)	(58 ft. I in
0 (10 (10 1)			*37.7	*37.7	*35.4	*35.4	*33.0	*33.0	*29.0	*29.0			*10.1	*10.1	17.8
6 m (19 ft. 8 in.)			(*83.1)	(*83.1)	(*78.0)	(*78.0)	(*72.8)	(*72.8)	(*63.9)	(*63.9)			(*22.3)	(*22.3)	(58 ft. 5 in
4 (10 (- 1 -)			*74.0	*74.0	*52.8	*52.8	*40.4	*40.4	*34.5	*34.5	*22.5	*22.5	*11.3	*11.3	17.6
4 m (13 ft. 1 in.)			(*163.1)	(*163.1)	(*116.4)	(*116.4)	(*89.1)	(*89.1)	(*76.I)	(*76.1)	(*49.6)	(*49.6)	(*24.9)	(*24.9)	(57 ft. 9 in
0 (0 (: 7:)			*76.7	*76.7	*57.5	*57.5	*44.3	*44.3	*38.8	*38.8	*25.3	*25.3	*13.2	*13.2	17.1
2 m (6 ft. 7 in.)			(*169.1)	(*169.1)	(*126.8)	(*126.8)	(*97.7)	(*97.7)	(*85.5)	(*85.5)	(*55.8)	(*55.8)	(*29.1)	(*29.1)	(56 ft. 1 in.
a (a)			*73.9	*73.9	*55.9	*55.9	*42.2	*42.2	*36.0	*36.0			*13.8	*13.8	16.2
0 (Ground)			(*162.9)	(*162.9)	(*123.2)	(*123.2)	(*93.0)	(*93.0)	(*79.4)	(*79.4)			(*30.4)	(*30.4)	(53 ft. 2 in
. (*65.8	*65.8	*50.3	*50.3	*36.6	*36.6	*29.1	*29.1					
-2 m (-6 ft. 7 in.)			(*145.1)	(*145.1)	(*110.9)	(*110.9)	(*80.7)	(*80.7)	(*64.2)	(*64.2)					
4 (10 (11)	*61.0	*61.0	*52.2	*52.2	*39.6	*39.6	*24.6	*24.6							
-4 m (-13 ft. 1 in.)	(*134.4)	(*134.4)	(*115.1)	(*115.1)	(*87.3)	(*87.3)	(*54.2)	(*54.2)							
F (10 (: F:)	*49.2	*49.2	*42.9	*42.9	*31.5	*31.5									
-5 m (-16 ft. 5 in.)	(*108.5)	(*108.5)	(*94.6)	(*94.6)	(*69.4)	(*69.4)									

*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.



Key: ● Standard ▲ Optional or special kit

3600 Engine Auto-idle system Cartridge-type engine oil filter Cartridge-type fuel filter Emergency engine stop system Engine room cooling fan Fan guard Heavy-duty type air cleaner with dust ejector Hydraulic drive cooling-fan system Isolation-mounted engine Pre-lubrication system Radiator reserve tank • Water filter

140 A alternator Hydraulic System

- Bypass filter
- Control valve with main relief valve
- Drain filter
- E-P control system
- Forced-lubrication and forced-cooling pumpdrive
- FPS (Fuel-saving Pump System)
- Full-flow filter
- High-pressure strainer
- Hydraulic drive cooling-fan system
- OHS (Optimum Hydraulic System)
- Pilot filter
- . Regeneration circuit for boom down function
- Suction filter

Undercarriage

- Grease-less center joint
- Hydraulic track adjuster with No gas accumulator with relief valve
- Travel motion alarm device
- Travel parking brake
- Swing circle excess grease scraper
- Swing circle lubrication piping protection
- 1270 mm (50 in.) triple grouser shoes

Upperstructure

- Cab riser pressurizer
- **Dual** isolator switch
- Electronic cylinder stroke control system
- Emergency escape device
- Folding stairs with wide steps
- Hydraulic drive grease gun with hose reel
- Lockable machine covers
- Swing parking brake
- 40 300 kg (88,846 lb.) counterweight (Inc. bolt etc.)

- Adjustable reclining seat with air suspension
- Air conditioner* with defroster
- Air horn with electric compressor
- Auto-tuning AM-FM radio with digital clock
- **Evacuation hammer**
- Floor mat
- Fluid-filled elastic mounts

Cab (continued)

- Footrest
- Front windshield washer
- Hot & cool-box
- Laminated glass windshield (Front)
- OPG top guard level II (ISO 10262)
- Parallel-link-type intermittent windshield wiper
- Pilot control shut-off lever
- Rearview mirror
- Reinforced/tinted (Green color) glass side and rear windows
- Roll screens
- Seat belt
- Storage spaces
- Trainer's seat
- 4 color monitor cameras; 2 front and 2 rear

Monitor Systems

Meters

- Ambient temperature
- Clock
- DEF gauge (only for Cummins Tier4F)
- Engine coolant temperature gauge
- Engine oil pressure gauge
- Engine oil temperature gauge
- Fuel gauge
- Grease gauge
- Hour meter
- Hydraulic oil temperature gauge
- Inclinometer
- **Tachometer**
- Travel mode
 - Warning indicators (red)
- Alternator
- Engine stop
- Coolant overheat
- Hydraulic oil level
- **Auto lubrication**
- 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 •
- Fast-filling
- Fuel temperature • Engine warning
- Hydraulic oil overheat
- Stairway position
- Electrical equipment box
- Pump contamination
- Air cleaner restriction **Alarm buzzers**
- Overheat
- Engine coolant pressure

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

Fast-Filling System

- Fast-filling system for fuel, hydraulic oil coolant, swing device oil, pump transmission oil, engine oil, and grease (Couplers not included). DEF (only for Cummins Tier4F)
- Fast-filling couplers (Wiggins)

Data Logging System

- Data-Logging Unit (DLU) continuously records the performance of the engine and the hydraulic system; data can be downloaded by PC. And for Fleet management system (Provided by Wenco etc.) connection**
- WIU (Wireless Interface Unit)
- Communication system (Alternative)** GPRS communication system Satellite data transmitting system

Lights

- 2 entrance halogen light
- 10 working LED light
- 8 maintenance halogen light

Miscellaneous

- Auto-lubrication system (Lincoln) for
- front-attachment pins, swing bearing
- Recirculation air filter for air conditioner
- . Stairs and handrails (Meeting ISO)
- Stop valve for transport and reassembly Ventilation air filter for air conditioner
- 12 V power terminal board

Optional Equipment

- **Aerial Angle**
- Cold weather package
- Standard tool kit
- Travel motor guard
- Travel transmission guard
- Center track frame cover Additional fuel filter (PARKER FBO-I4)
- Front cab guard

*Contains fluorinated greenhouse gases, Refrigerant type: HFC-I34a, GWP: I430, Amount: 2.85 kg, CO2e: 4.08 ton.

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

See your Hitachi dealer for further information.

HITACHI