UTILITY-CLASS EXCAVATORS

ZAXIS

DASH-6

ZX160LC-6
ZX180LC-6

HITACHI

POWERFUL PERFORMANCE. PASSED DOWN.

RELIABLE PRODUCTIVITY.

Built with the same toughness as our large mining excavators, Hitachi utility-class excavators bring efficiency, reliability and durability to your job sites.

The ZX160LC-6 and ZX180LC-6 feature a number of productivity-boosting advantages, like a fuel-efficient EPA Final Tier 4 (FT4)/EU Stage IV Isuzu engine that meets rigid emission standards. The best part? There's no diesel particulate filter (DPF) needed. You also get standard upperstructure handrails for added safety and accessibility. Easy-to-operate controls for smooth and responsive hydraulics. Programmable attachment modes. And simplified maintenance with features like a battery disconnect switch. With the ZX160LC-6 and ZX180LC-6, you get...

BIG BENEFITS.

PERFORMANCE

PRODUCTIVITY

MORE WORK DONE, MORE EFFICIENTLY.

PRODUCTIVE ADVANTAGES.

The ZXI60LC-6 and ZXI80LC-6 take productivity to a higher level with a HIOS III hydraulic system, which balances engine performance with hydraulic flow. The hydraulic boost system and enhanced boom recirculation generate aggressive boom and arm speed – returning the arm to dig faster, so you can move more dirt in a day.

These models provide fuel-efficient performance with three work modes. Economy (ECO) maximizes fuel efficiency while delivering an enhanced level of productivity. Power (PWR) delivers a balance of power and speed, plus fuel economy for normal operation. High Productivity (H/P) delivers more power and faster hydraulic response.

Need extra stability or lift capacity? Choose from a wide variety of track widths, arm lengths, bucket sizes and teeth, high-flow auxiliary hydraulic packages and other options.

With the ZXI60LC-6 and ZXI80LC-6, you get...

RELIABLE PERFORMANCE.

- The pressurized fuel system improves fuel injector operation, and the fuel recirculation system helps prevent fuel gelling in cold climates – so you can maintain maximum productivity.
- It's not always about brute force. Unmatched metering and smooth multifunction operation provide finesse and precision.
- Stay on schedule with generous swing torque, digging force and lift capacity.
- Muscle through tough digging by pressing the power-boost button.

MAXIMUM COMFORT. MAXIMUM PRODUCTIVITY.

COMFORTABLE CAB.

The ZX160LC-6 and ZX180LC-6 keep operators comfortable and focused on the job. Silicone-filled cab mounts provide isolation from noise and vibration. A refined, multifunction LCD monitor features a rotary control for easy access to performance and convenience functions and features. Operators will also appreciate the wide entryway, fully adjustable high-back sculpted seat, storage space and generous legroom. Unsurpassed visibility, ergonomically placed low-effort joysticks and a highly efficient HVAC system, plus other features keep operators...

SAFE AND EFFICIENT.

■ Multi-language LCD monitor and rotary dial provide easy access to machine info and functions. Turn and tap to select work modes, monitor maintenance intervals, check diagnostic codes and set cab temperature. Control oil flow and toggle between dig and thumb modes with a programmable thumb attachment mode.

■ Ergonomically correct short-throw pilot levers provide smooth, precise control with less effort. Pushbuttons in the right lever allow control of auxiliary hydraulic flow for attachments. Optional sliding switch provides proportional speed control, giving you full command from your fingertips.

■ Get unobstructed all-around visibility thanks to a wide expanse of front, side and overhead glass and mirrors, plus a standard rearview camera.

■ Optional cab and right-side boom lights provide extra illumination to extend your production.

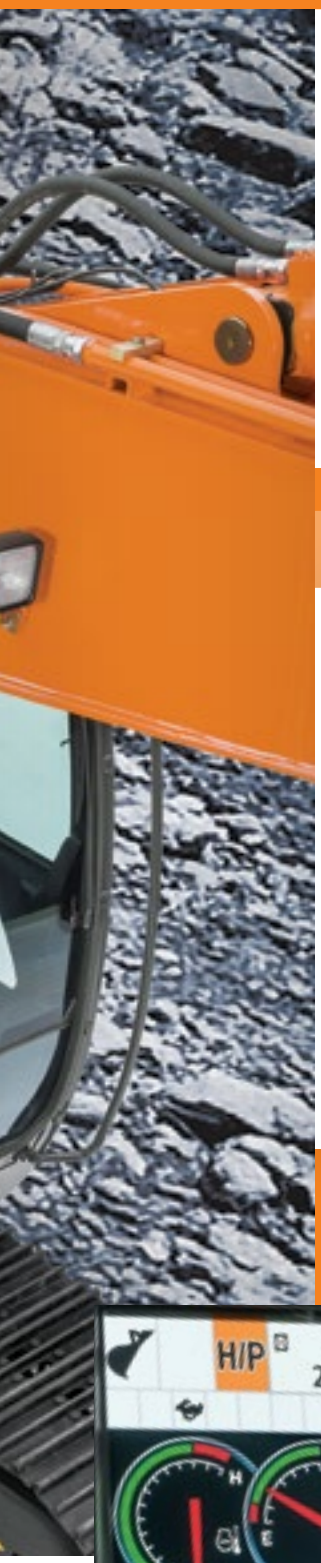
COMFORT

■ Automatic, high-velocity bi-level climate-control system with automotive-style adjustable louvers helps keep the glass clear, the cab comfortable and the operator productive.

■ Operators get maximum support from a sculpted mechanical suspension high-back seat. For even more comfort, opt for the air-suspension heated seat.

EFFICIENT

- Auto-idle, which reduces engine speed when hydraulics aren't in use, and auto-shutdown contribute to fuel efficiency.
- A battery disconnect switch, located in the rear door behind the cab, is easily accessible and extends battery life.
- The FT4 engine solution does not require a DPF, saving service time and lowering operating costs.



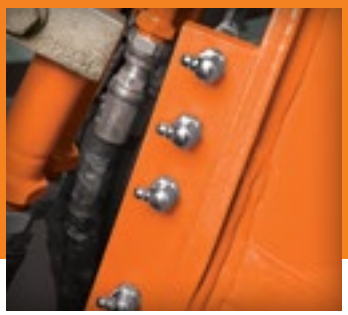
LESS SERVICING.
MORE UPTIME.

LOWER OPERATING COSTS.

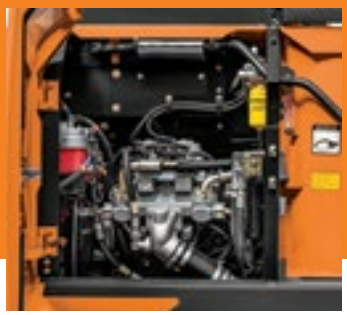
Maintenance is minimized with the ZX160LC-6 and ZX180LC-6 — from grouped service points to at-a-glance gauges. No diesel particulate filter (DPF) is needed with the FT4 engine solution. Convenient upperstructure handrails provide easy engine access. Extended service intervals help maximize uptime. Scheduled maintenance is easy to track using ZXLink™ and the in-cab diagnostic monitor. These models are built for...

EASY MAINTENANCE.

■ Easy-to-navigate LCD monitor tracks various fluid levels and issues scheduled maintenance alerts and diagnostic information.



■ Centralized lube banks place zerks within easy reach, making greasing less messy and time-consuming.



■ Engine oil, fuel and hydraulic pilot oil filters are all located on the same side at ground level for easy servicing.

■ Upperstructure handrails provide added safety when servicing the engine compartment, and a larger hood gives you better engine accessibility.

BUILT-IN STRENGTH FOR TOUGH JOBS.

HEAVY-DUTY DESIGN.

Tough jobs are no match for the ZX160LC-6 and ZX180LC-6. They're protected by a heavy-duty undercarriage and durable D-channel side frames. Added strength comes from welded bulkheads within the boom that resist torsional stress, tungsten-carbide thermal-coated arm surfaces and oil-impregnated bushings.

The boom, arm and mainframe are so tough, they're warranted for three years or 10,000 hours, whichever comes first. Add it all up, and these models give you...

DEPENDABLE DURABILITY.

■ Our FT4 field-proven technology is simple and efficient, employing cooled exhaust gas recirculation (EGR), a diesel oxidation catalyst (DOC) and selective catalytic reduction (SCR). An improved piston design allows particulate matter to be burned in cylinder, so there's no need for a diesel particulate filter (DPF).

■ Reinforced D-channel side frames provide maximum cab and component impact protection.

■ Tungsten-carbide-coated surfaces protect the critical bucket-to-arm joint.

■ Thick-plate single-sheet mainframe, box-section track frames and industry exclusive double-seal swing bearing deliver rock-solid durability.

DURABILITY

■ Dust screen prevents plugging, providing increased reliability.

■ With large idlers, rollers and strutted track links, the sealed and lubricated undercarriage is built for the long haul.

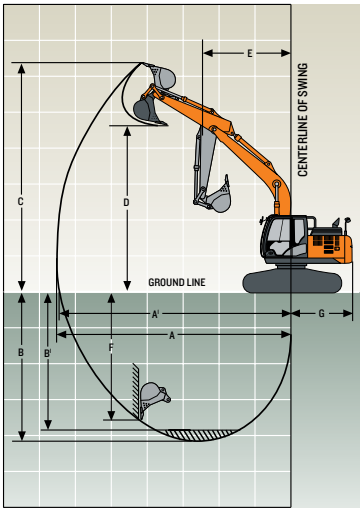
■ Oil-impregnated bushings enhance durability and extend lube intervals.

Engine	ZX160LC-6		
Manufacturer and Model	Isuzu 4JJ1		
Non-Road Emission Standards	EPA Final Tier 4/EU Stage IV		
Net Rated Power (ISO 9249)	86 kW (116 hp) @ 2,200 rpm		
Cylinders	4		
Displacement	3.0 L (182 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
Direct-driven, high-efficiency, suction-type fan			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.4 km/h (2.1 mph)		
High	5.3 km/h (3.3 mph)		
Drawbar Pull	17 250 kg (38,030 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps	2 variable-displacement axial-piston pumps		
Maximum Rated Flow	191 L/m (50 gpm) x 2		
Pilot Pump	One gear		
Maximum Rated Flow	33.6 L/m (8.9 gpm)		
Pressure Setting	3930 kPa (570 psi)		
System Operating Pressure			
Circuits			
Implement	34 336 kPa (4,980 psi)		
Travel	34 336 kPa (4,980 psi)		
Swing	34 336 kPa (4,980 psi)		
Power Boost	38 000 kPa (5,511 psi)		
Controls	Pilot levers, short-stroke, low-effort hydraulic pilot controls with shutoff lever		
Cylinders			
	Bore	**Rod Diameter**	**Stroke**
Boom (2)	110 mm (4.33 in.)	80 mm (3.15 in.)	1110 mm (43.70 in.)
Arm (1)	120 mm (4.72 in.)	90 mm (3.54 in.)	1365 mm (53.74 in.)
Bucket (1)	105 mm (4.13 in.)	75 mm (2.95 in.)	935 mm (36.81 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	890 CCA		
Alternator Rating	50 amp		
Work Lights	2 halogen (one mounted on boom, one on frame)		
Undercarriage			
Rollers (each side)			
Carrier Rollers	2		
Track Rollers	7		
Shoes (each side)	43		
Track			
Adjustment	Hydraulic		
Guides	Front and center		
Chain	Sealed and lubricated		
Ground Pressure			
600-mm (24 in.) Triple Semi-Grouser Shoes	41 kPa (5.95 psi)		
700-mm (28 in.) Triple Semi-Grouser Shoes	35 kPa (5.08 psi)		
Swing Mechanism			
Swing Speed	13.3 rpm		
Swing Torque	44 000 Nm (32,353 lb.-ft.)		

ZX160LC-6

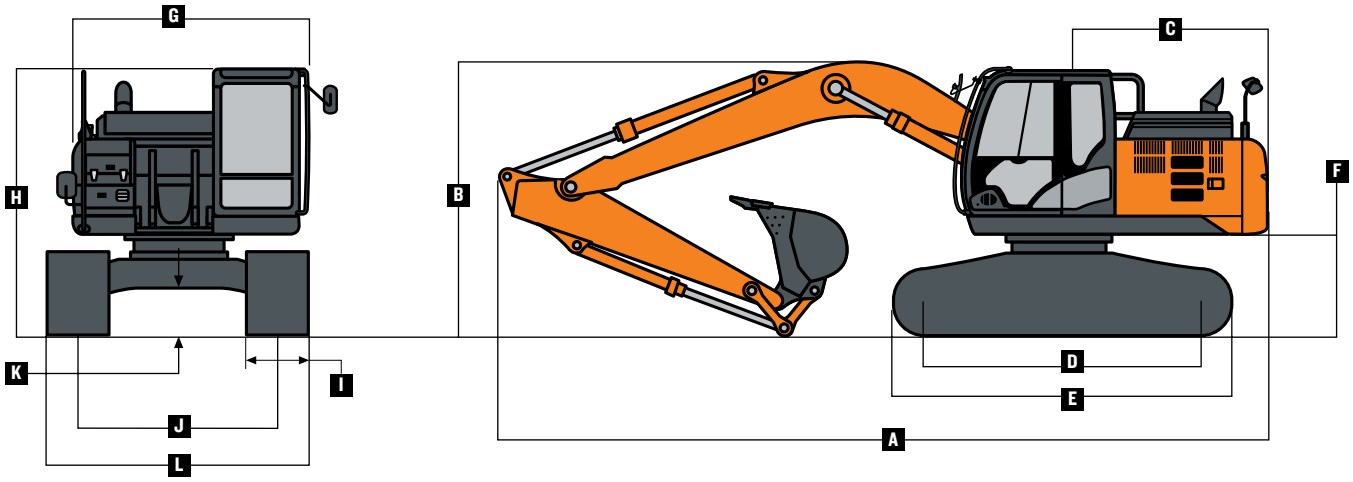
Serviceability	ZX160LC-6
Refill Capacities	
Fuel Tank	285 L (75.3 gal.)
Diesel Exhaust Fluid (DEF) Tank	35 L (37 qt.)
Cooling System	24 L (25.4 qt.)
Engine Oil with Filter	17 L (18 qt.)
Hydraulic Tank	125 L (33 gal.)
Hydraulic System	210 L (55.5 gal.)
Swing Gearbox	6.9 L (7.3 qt.)
Propel Gearbox (each)	6.8 L (7.2 qt.)
Pump Drive Gearbox	0.9 L (1 qt.)
Operating Weights	
With full fuel tank; 79-kg (175 lb.) operator; 528-kg (1,164 lb.) heavy-duty bucket; 3.10-m (10 ft. 2 in.) arm; 3210-kg (7,055 lb.) counterweight; and 700-m (28 in.) triple semi-grouser shoes	
Operating Weight	17 418 kg (38,366 lb.)
Optional Components	
Undercarriage w/ Triple Semi-Grouser Shoes	
600 mm (24 in.)	6316 kg (13,912 lb.)
700 mm (28 in.)	6530 kg (14,383 lb.)
One-Piece Boom (with arm cylinder)	1300 kg (2,863 lb.)
Arm with Bucket Cylinder and Linkage	
2.60 m (8 ft. 6 in.)	788 kg (1,736 lb.)
3.10 m (10 ft. 2 in.)	874 kg (1,925 lb.)
Boom Lift Cylinders (2), Total Weight	306 kg (674 lb.)

Operating Dimensions			
Arm Length		**2.60 m (8 ft. 6 in.)**	**3.10 m (10 ft. 2 in.)**
	Arm Digging Force		
	SAE	88 kN (19,784 lb.)	78 kN (17,536 lb.)
	ISO	91 kN (20,459 lb.)	81 kN (18,210 lb.)
	Bucket Digging Force		
	SAE	99 kN (22,257 lb.)	99 kN (22,257 lb.)
	ISO	112 kN (25,180 lb.)	112 kN (25,180 lb.)
A	Maximum Reach	8.87 m (29 ft. 1 in.)	9.33 m (30 ft. 7 in.)
A'	Maximum Reach at Ground Level	8.7 m (28 ft. 7 in.)	9.16 m (30 ft. 1 in.)
B	Maximum Digging Depth	5.98 m (19 ft. 7 in.)	6.49 m (21 ft. 4 in.)
B'	Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	5.74 m (18 ft. 10 in.)	6.27 m (20 ft. 7 in.)
C	Maximum Cutting Height	8.88 m (29 ft. 2 in.)	9.13 m (29 ft. 11 in.)
D	Maximum Dumping Height	6.17 m (20 ft. 3 in.)	6.4 m (20 ft. 12 in.)
E	Minimum Swing Radius	2.91 m (9 ft. 7 in.)	2.92 m (9 ft. 7 in.)
F	Maximum Vertical Wall	5.16 m (16 ft. 11 in.)	5.69 m (18 ft. 8 in.)
G	Tail Swing Radius	5.16 m (16 ft. 11 in.)	5.69 m (18 ft. 8 in.)



ZX160LC-6

Machine Dimensions		ZX160LC-6
A	Overall Length w/ Arm	
	2.60 m (8 ft. 6 in.)	8.62 m (28 ft. 3 in.)
	3.10 m (10 ft. 2 in.)	8.65 m (28 ft. 5 in.)
B	Overall Height w/ Arm	
	2.60 m (8 ft. 6 in.)	2.87 m (9 ft. 5 in.)
	3.10 m (10 ft. 2 in.)	3.11 m (10 ft. 2 in.)
C	Rear-End Length/Swing Radius	2.55 m (8 ft. 4 in.)
D	Distance Between Idler/Sprocket Centerline	3.10 m (10 ft. 2 in.)
E	Undercarriage Length	3.92 m (12 ft. 10 in.)
F	Counterweight Clearance	1030 mm (3 ft. 5 in.)
G	Upperstructure Width	2.50 m (8 ft. 2 in.)
H	Cab Height	2.95 m (9 ft. 8 in.)
I	Track Width w/ Triple Semi-Grouser Shoes	600 mm (24 in.) 700 mm (28 in.)
J	Gauge Width	1.99 m (6 ft. 6 in.)
K	Ground Clearance	470 mm (19 in.)
L	Overall Width w/ Triple Semi-Grouser Shoes	
	600 mm (24 in.)	2.59 m (8 ft. 6 in.)
	700 mm (28 in.)	2.69 m (8 ft. 10 in.)



Lift Charts ZX160LC-6

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 528-kg (1,164 lb.) bucket; standard gauge; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
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
With 2.60-m (8 ft. 6 in.) arm and 600-mm (24 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2850**	**2850**		
4.5 m (15 ft.)					**4100** (**8,900**)	**4100** (**8,900**)	**3850** (**8,450**)	3100 (6,650)		
3.0 m (10 ft.)			**8400** (**17,900**)	**8400** (**17,900**)	**5450** (**11,700**)	4700 (10,150)	**4400** (**9,550**)	2950 (6,350)		
1.5 m (5 ft.)					**6800** (**14,700**)	4400 (9,450)	4550 (9,800)	2800 (6,050)		
Ground Line			**5800** (**13,450**)	**5800** (**13,450**)	7050 (15,100)	4200 (9,000)	4450 (9,550)	2700 (5,850)		
–1.5 m (–5 ft.)	**5300** (**11,850**)	**5300** (**11,850**)	**9950** (**22,800**)	7900 (17,000)	6950 (14,950)	4150 (8,900)	4400 (9,450)	2650 (5,750)		
–3.0 m (–10 ft.)	**9850** (**22,250**)	**9850** (**22,250**)	**10600** (**22,900**)	8050 (17,350)	7050 (15,100)	4200 (9,050)				
With 2.60-m (8 ft. 6 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2850**	**2850**		
4.5 m (15 ft.)					**4100** (**8,900**)	**4100** (**8,900**)	**3850** (**8,450**)	3150 (6,750)		
3.0 m (10 ft.)			**8400** (**17,900**)	**8400** (**17,900**)	**5450** (**11,700**)	4750 (10,250)	**4400** (**9,550**)	3000 (6,450)		
1.5 m (5 ft.)					**6800** (**14,700**)	4450 (9,550)	4600 (9,900)	2850 (6,150)		
Ground Line			**5800** (**13,450**)	**5800** (**13,450**)	7100 (15,250)	4250 (9,150)	4500 (9,650)	2750 (5,900)		
–1.5 m (–5 ft.)	**5300** (**11,850**)	**5300** (**11,850**)	**9950** (**22,800**)	8000 (17,200)	7050 (15,100)	4200 (9,000)	4450 (9,550)	2700 (5,850)		
–3.0 m (–10 ft.)	**9850** (**22,250**)	**9850** (**22,250**)	**10 600** (**22,900**)	8150 (17,550)	7100 (15,250)	4250 (9,150)				
With 3.10-m (10 ft. 2 in.) arm and 600-mm (24 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2950** (**6,150**)	**2950** (**6,150**)		
4.5 m (15 ft.)							**3400** (**7,500**)	3150 (6,750)		
3.0 m (10 ft.)			**6950** (**14,800**)	**6950** (**14,800**)	**4850** (**10,400**)	4800 (10,350)	**4000** (**8,750**)	3000 (6,450)	**2900** (**5,750**)	2000 (4,300)
1.5 m (5 ft.)			**7100** (**17,200**)	**7100** (**17,200**)	**6300** (**13,650**)	4450 (9,550)	4550 (9,850)	2850 (6,100)	3150 (6,800)	1950 (4,150)
Ground Line			**6400** (**14,750**)	**6400** (**14,750**)	7050 (15,100)	4200 (9,000)	4450 (9,500)	2700 (5,800)	3100 (6,700)	1850 (4,000)
–1.5 m (–5 ft.)	**4700** (**10,550**)	**4700** (**10,550**)	**9200** (**21,000**)	7800 (16,800)	6900 (14,850)	4100 (8,800)	4350 (9,350)	2650 (5,650)		
–3.0 m (–10 ft.)	**8250** (**18,600**)	**8250** (**18,600**)	**11 200** (**24,250**)	7900 (17,000)	6950 (14,900)	4100 (8,850)	4400 (9,450)	2650 (5,700)		
–4.5 m (–15 ft.)			**8950** (**19,100**)	8200 (17,600)	**5850** (**12,350**)	4250 (9,250)				
With 3.10-m (10 ft. 2 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2950** (**6,150**)	**2950** (**6,150**)		
4.5 m (15 ft.)							**3400** (**3,500**)	3150 (6,800)		
3.0 m (10 ft.)			**6950** (**14,800**)	**6950** (**14,800**)	**4850** (**10,400**)	**4850** (**10,400**)	**4000** (**8,750**)	3050 (6,500)	**2900** (**5,750**)	2050 (4,350)
1.5 m (5 ft.)			**7100** (**17,200**)	**7100** (**17,200**)	**6300** (**13,650**)	4500 (9,650)	4600 (9,900)	2850 (6,150)	3200 (6,900)	1950 (4,200)
Ground Line			**6400** (**14,750**)	**6400** (**14,750**)	7100 (15,250)	4250 (9,100)	4450 (9,600)	2750 (5,850)	3150 (6,750)	1900 (4,100)
–1.5 m (–5 ft.)	**4700** (**10,550**)	**4700** (**10,550**)	**9200** (**21,000**)	7900 (17,000)	7000 (15,000)	4150 (8,900)	4400 (9,450)	2650 (5,750)		
–3.0 m (–10 ft.)	**8250** (**18,600**)	**8250** (**18,600**)	**11 200** (**24,250**)	8000 (17,200)	7000 (15,050)	4150 (8,950)	4450 (9,550)	2700 (5,800)		
–4.5 m (–15 ft.)			**8950** (**19,100**)	8300 (17,850)	**5850** (**12,350**)	4300 (9,350)				

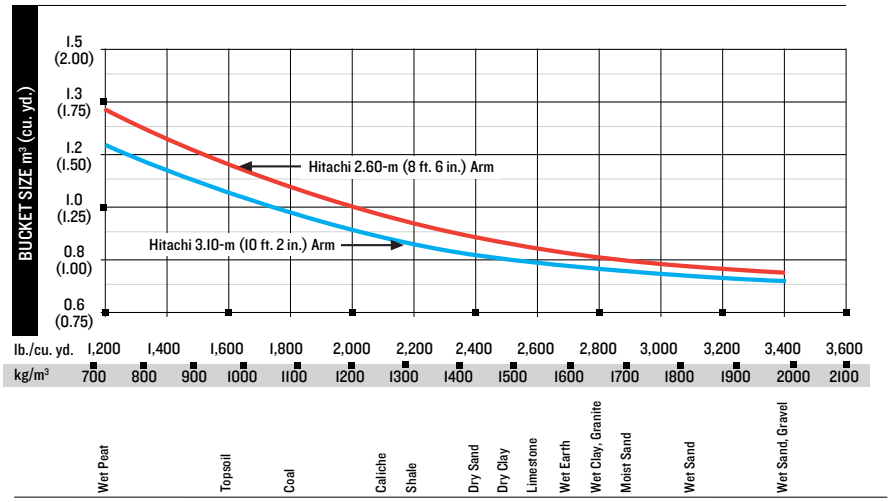
ZX160LC-6

Buckets ZX160LC-6

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through Hitachi parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight	
	mm	in.	m^3	cu. yd.	kg	lb.
Heavy-Duty	610	24	0.36	0.47	402	887
	760	30	0.49	0.64	458	1,010
	915	36	0.62	0.81	521	1,148
	1065	42	0.76	0.99	561	1,236
	1219	48	0.89	1.17	617	1,361

Bucket Selection Guide*

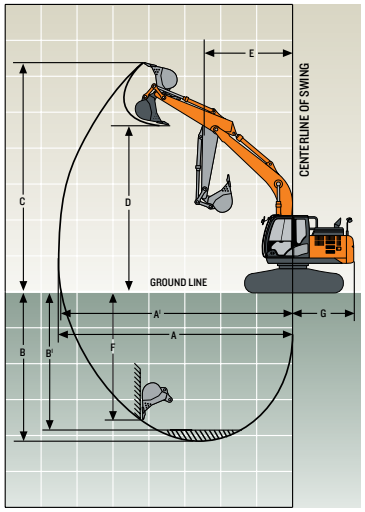


*Contact your Hitachi dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks and uneven surfaces. Bucket capacity indicated is SAE heaped.

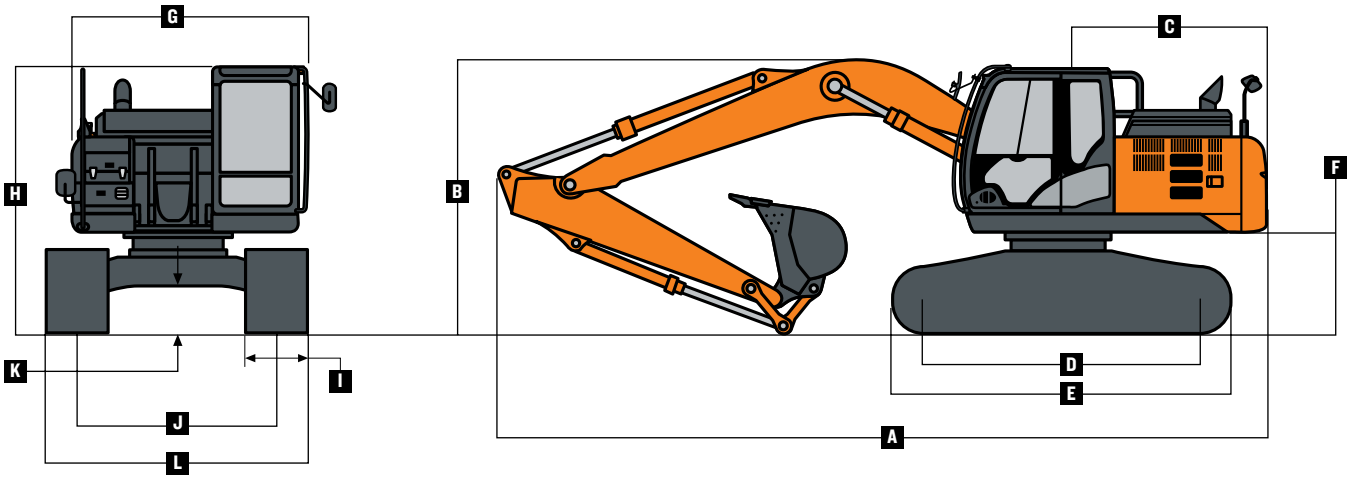
Engine	ZX180LC-5		
Manufacturer and Model	Isuzu 4JJ1		
Non-Road Emission Standards	EPA Final Tier 4/EU Stage IV		
Net Rated Power (ISO 9249)	86 kW (116 hp) @ 2,200 rpm		
Cylinders	4		
Displacement	3.0 L (182 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
Direct-driven, high-efficiency, suction-type fan			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.4 km/h (2.1 mph)		
High	5.3 km/h (3.3 mph)		
Drawbar Pull	17 250 kg (38,030 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps	2 variable-displacement axial-piston pumps		
Maximum Rated Flow	191 L/m (50 gpm) x 2		
Pilot Pump	One gear		
Maximum Rated Flow	33.6 L/m (8.9 gpm)		
Pressure Setting	3930 kPa (570 psi)		
System Operating Pressure			
Circuits			
Implement	34 336 kPa (4,980 psi)		
Travel	34 336 kPa (4,980 psi)		
Swing	34 336 kPa (4,980 psi)		
Power Boost	38 000 kPa (5,511 psi)		
Controls	Pilot levers, short-stroke, low-effort hydraulic pilot controls with shutoff lever		
Cylinders			
	Bore	**Rod Diameter**	**Stroke**
Boom (2)	120 mm (4.72 in.)	85 mm (3.35 in.)	1123 mm (44.21 in.)
Arm (1)	125 mm (4.92 in.)	90 mm (3.54 in.)	1371 mm (53.98 in.)
Bucket (1)	105 mm (4.13 in.)	75 mm (2.95 in.)	1060 mm (41.73 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	890 CCA		
Alternator Rating	50 amp		
Work Lights	2 halogen (one mounted on boom, one on frame)		
Undercarriage			
Rollers (each side)			
Carrier Rollers	2		
Track Rollers	7		
Shoes (each side)	46		
Track			
Adjustment	Hydraulic		
Guides	Center		
Chain	Sealed and lubricated		
Ground Pressure			
600-mm (24 in.) Triple Semi-Grouser Shoes	41 kPa (5.95 psi)		
700-mm (28 in.) Triple Semi-Grouser Shoes	36 kPa (5.22 psi)		
800-mm (32 in.) Triple Semi-Grouser Shoes	32 kPa (4.64 psi)		
Swing Mechanism			
Swing Speed	12.8 rpm		
Swing Torque	50 000 Nm (36,765 lb.-ft.)		

ZX180LC-6

Serviceability	ZX180LC-6	
Refill Capacities		
Fuel Tank	285 L (75.3 gal.)	
Diesel Exhaust Fluid (DEF) Tank	35 L (37 qt.)	
Cooling System	24 L (25.4 qt.)	
Engine Oil with Filter	17 L (18 qt.)	
Hydraulic Tank	125 L (33 gal.)	
Hydraulic System	220 L (58.1 gal.)	
Swing Gearbox	6.9 L (7.3 qt.)	
Propel Gearbox (each)	6.8 L (7.2 qt.)	
Pump Drive Gearbox	0.9 L (1 qt.)	
Operating Weights		
With full fuel tank; 79-kg (175 lb.) operator; 600-kg (1,323 lb.) heavy-duty bucket; 3.21-m (10 ft. 6 in.) arm; 3900-kg (8,598 lb.) counterweight; and 700-mm (28 in.) triple semi-grouser shoes		
Operating Weight	19 504 kg (42,960 lb.)	
Optional Components		
Undercarriage w/ Triple Semi-Grouser Shoes		
600 mm (24 in.)	6752 kg (14,873 lb.)	
700 mm (28 in.)	7143 kg (15,733 lb.)	
800 mm (32 in.)	7437 kg (16,381 lb.)	
One-Piece Boom (with arm cylinder)	1566 kg (3,449 lb.)	
Arm with Bucket Cylinder and Linkage		
2.71 m (8 ft. 10 in.)	881 kg (1,941 lb.)	
3.21 m (10 ft. 6 in.)	946 kg (2,084 lb.)	
Boom Lift Cylinders (2), Total Weight	326 kg (718 lb.)	
Operating Dimensions		
Arm Length	**2.71 m (8 ft. 10 in.)**	**3.21 m (10 ft. 6 in.)**
Arm Digging Force		
SAE	91 kN (20,459 lb.)	81 kN (18,210 lb.)
ISO	95 kN (21,358 lb.)	84 kN (18,885 lb.)
Bucket Digging Force		
SAE	112 kN (25,180 lb.)	112 kN (25,180 lb.)
ISO	127 kN (28,552 lb.)	127 kN (28,552 lb.)
A Maximum Reach	9.43 m (30 ft. 11 in.)	9.94 m (32 ft. 7 in.)
A' Maximum Reach at Ground Level	9.27 m (30 ft. 5 in.)	9.79 m (32 ft. 1 in.)
B Maximum Digging Depth	6.57 m (21 ft. 7 in.)	7.07 m (23 ft. 2 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	6.32 m (20 ft. 9 in.)	6.87 m (22 ft. 6 in.)
C Maximum Cutting Height	9.40 m (30 ft. 10 in.)	9.79 m (32 ft. 1 in.)
D Maximum Dumping Height	6.57 m (21 ft. 7 in.)	6.93 m (22 ft. 9 in.)
E Minimum Swing Radius	3.13 m (10 ft. 3 in.)	3.13 m (10 ft. 3 in.)
F Maximum Vertical Wall	5.55 m (18 ft. 3 in.)	6.28 m (20 ft. 7 in.)
G Tail Swing Radius	2.55 m (8 ft. 4 in.)	2.55 m (8 ft. 4 in.)



Machine Dimensions		ZX180LC-6
A	Overall Length w/ Arm	
	2.71 m (8 ft. 10 in.)	9.04 m (29 ft. 8 in.)
	3.21 m (10 ft. 6 in.)	9.04 m (29 ft. 8 in.)
B	Overall Height w/ Arm	
	2.71 m (8 ft. 10 in.)	3.08 m (10 ft. 1 in.)
	3.21 m (10 ft. 6 in.)	3.39 m (11 ft. 1 in.)
C	Rear-End Length/Swing Radius	2.55 m (8 ft. 4 in.)
D	Distance Between Idler/Sprocket Centerline	3.37 m (11 ft. 1 in.)
E	Undercarriage Length	4.17 m (13 ft. 8 in.)
F	Counterweight Clearance	1030 mm (3 ft. 5 in.)
G	Upperstructure Width	2.50 m (8 ft. 2 in.)
H	Cab Height	2.95 m (9 ft. 8 in.)
I	Track Width w/ Triple Semi-Grouser Shoes	600 mm (24 in.) 700 mm (28 in.) 800 mm (32 in.)
J	Gauge Width	2.20 m (7 ft. 3 in.)
K	Ground Clearance	450 mm (18 in.)
L	Overall Width w/ Triple Semi-Grouser Shoes	
	600 mm (24 in.)	2.80 m (9 ft. 2 in.)
	700 mm (28 in.)	2.90 m (9 ft. 6 in.)
	800 mm (32 in.)	3.00 m (9 ft. 10 in.)



ZX180LC-6

Lift Capacities ZX180LC-6

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket; standard gauge; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

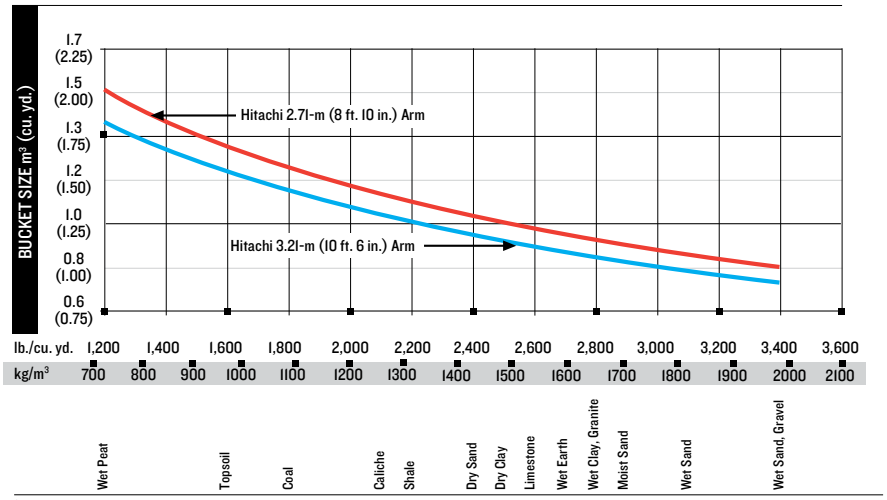
Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2.71-m (8 ft. 10 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**3950 (8,700)**	3900 (8,400)		
4.5 m (15 ft.)					**4800 (10,400)**	**4800 (10,400)**	**4350 (9,450)**	3800 (8,200)		
3.0 m (10 ft.)					**6500 (14,000)**	5750 (12,450)	**5100 (11,050)**	3650 (7,800)	4,000 (8,550)	2450 (5,300)
1.5 m (5 ft.)					**8150 (17,600)**	5350 (11,550)	5600 (12,050)	3450 (7,400)	3,900 (8,400)	2400 (5,100)
Ground Line			**4300 (10,050)**	**4300 (10,050)**	8750 (18,800)	5150 (11,050)	5450 (11,750)	3300 (7,100)	3,850 (8,250)	2300 (5,000)
–1.5 m (–5 ft.)	**4600 (10,500)**	**4600 (10,400)**	**8250 (18,800)**	**8250 (18,800)**	8700 (18,650)	5050 (10,900)	5400 (11,600)	3250 (7,000)		
–3.0 m (–10 ft.)	**8750 (19,850)**	**8750 (19,750)**	**12 750 (27,600)**	10 150 (21,750)	8700 (18,750)	5100 (11,000)	5450 (11,700)	3300 (7,100)		
–4.5 m (–15 ft.)			**10 100 (21,650)**	10 100 (21,650)	**6900 (14,500)**	5300 (11,500)				
With 3.21-m (10 ft. 6 in.) arm and 600-mm (24 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**3420 (7,550)**	**3420 (7,550)**		
4.5 m (15 ft.)							**3870 (8,450)**	3800 (8,160)	**3290 (6,700)**	2510 (5,370)
3.0 m (10 ft.)			**8920 (18,930)**	**8920 (18,930)**	**5810 (12,500)**	5790 (12,480)	**4680 (10,150)**	3610 (7,760)	3930 (8,440)	2430 (5,200)
1.5 m (5 ft.)					**7610 (16,410)**	5340 (11,510)	5540 (11,900)	3400 (7,310)	3820 (8,210)	2330 (4,990)
Ground Line			**4650 (10,760)**	**4650 (10,760)**	8620 (18,500)	5050 (10,870)	5350 (11,510)	3230 (6,960)	3730 (8,020)	2240 (4,820)
–1.5 m (–5 ft.)	**3930 (8,830)**	**3930 (8,830)**	**7390 (16,860)**	**7,390 (16,860)**	8480 (18,190)	4930 (10,600)	5260 (11,300)	3150 (6,770)	3690 (7,940)	2210 (4,740)
–3.0 m (–10 ft.)	**7200 (16,210)**	**7200 (16,210)**	**11 700 (26,760)**	9800 (21,010)	8500 (18,230)	4940 (10,640)	5260 (11,320)	3150 (6,790)		
–4.5 m (–15 ft.)	**11 630** (26,400)	**11 630 (26,400)**	**11 300 (24,250)**	10 080 (21,630)	**7670 (16,400)**	5090 (10,970)				
With 3.21-m (10 ft. 6 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**3420 (7,550)**	**3420 (7,550)**		
4.5 m (15 ft.)							**3870 (8,450)**	3870 (8,310)	**3290 (6,700)**	2560 (5,480)
3.0 m (10 ft.)			**8920 (18,930)**	**8920 (18,930)**	**5810 (12,500)**	**5810 (12,500)**	**4680 (10,150)**	3680 (7,910)	4010 (8,610)	2480 (5,320)
1.5 m (5 ft.)					**7610 (16,410)**	5440 (11,730)	**5580 (12,080)**	3470 (7,460)	3900 (8,380)	2380 (5,100)
Ground Line			**4650 (10,760)**	**4650 (10,760)**	8790 (18,850)	5150 (11,080)	5460 (11,740)	3300 (7,100)	3810 (8,190)	2300 (4,930)
–1.5 m (–5 ft.)	**3930 (8,830)**	**3930 (8,830)**	**7390 (16,860)**	**7390 (16,860)**	8650 (18,550)	5030 (10,820)	5370 (11,530)	3220 (6,920)	3770 (8,110)	2260 (4,850)
–3.0 m (–10 ft.)	**7200 (16,210)**	**7200 (16,210)**	11 700 (26,760)	9 980 (21,400)	8660 (18,580)	5040 (10,850)	5370 (11,550)	3220 (6,930)		
–4.5 m (–15 ft.)	**11 630 (26,400)**	**11 630 (26,400)**	11 300 (24,250)	10 260 (22,020)	**7670 (16,400)**	5190 (11,180)				
With 3.21-m (10 ft. 6 in.) arm and 800-mm (32 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**3420 (7,550)**	**3420 (7,550)**		
4.5 m (15 ft.)							**3870 (8,450)**	**3870** (8,420)	**3290 (6,700)**	2600 (5,570)
3.0 m (10 ft.)			**8920 (18,930)**	**8920 (18,930)**	**5810 (12,500)**	**5810 (12,500)**	**4680 (10,150)**	3730 (8,020)	4070 (8,740)	2520 (5,400)
1.5 m (5 ft.)					**7610 (16,410)**	5520 (11,890)	**5580 (12,080)**	3520 (7,570)	3960 (8,510)	2420 (5,190)
Ground Line			**4650 (10,760)**	**4650 (10,760)**	**8830 (19,090)**	5220 (11,240)	5540 (11,910)	3350 (7,210)	3870 (8,320)	2340 (5,010)
–1.5 m (–5 ft.)	**3930 (8,830)**	**3930 (8,830)**	**7390 (16,860)**	**7390 (16,860)**	8770 (18,810)	5100 (10,980)	5450 (11,710)	3270 (7,030)	3830 (8,240)	2300 (4,940)
–3.0 m (–10 ft.)	**7200 (16,210)**	**7200 (16,210)**	**11 700 (26,760)**	10 120 (21,690)	8790 (18,850)	5120 (11,010)	5450 (11,730)	3270 (7,040)		
–4.5 m (–15 ft.)	**11 630 (26,400)**	**11 630 (26,400)**	**11 300 (24,250)**	10 390 (22,310)	**7670 (16,400)**	5260 (11,340)				

Buckets ZX180LC-6

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through parts. Optional side cutters add 6 inches (150 mm) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight	
	mm	in.	m^3	cu. yd.	kg	lb.
Heavy-Duty	610	24	0.39	0.51	454	1,000
	760	30	0.54	0.71	500	1,102
	915	36	0.70	0.91	552	1,218
	1065	42	0.85	1.11	597	1,317
	1220	48	1.00	1.31	655	1,443

Bucket Selection Guide*



*Contact your Hitachi dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks and uneven surfaces. Bucket capacity indicated is SAE heaped.

ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special kit

ZX160	ZX180	Engine
●	●	Auto-idle system
●	●	Automatic belt-tension device
●	●	Batteries (2 – 12 volt)
●	●	Coolant recovery tank
●	●	Dual-element dry-type air filter
●	●	Electronic engine control
●	●	Enclosed fan guard (conforms to SAE J1308)
●	●	Engine coolant to –37 deg. C (–34 deg. F)
●	●	Programmable auto shutdown
●	●	Fuel filter with water separator
●	●	Full-flow oil filter
●	●	Turbocharger with charge air cooler
●	●	500-hour engine-oil-change interval
●	●	70% (35 deg.) off-level capability
▲	▲	Chrome exhaust stack
		Hydraulic System
●	●	Reduced-drift valve for boom down, arm in
●	●	Auxiliary hydraulic valve section
●	●	Spring-applied, hydraulically released automatic swing brake
●	●	Auxiliary hydraulic-flow adjustments through monitor
●	●	Auto power lift
●	●	5,000-hour hydraulic-oil-change interval
●	●	Hydraulic-oil-sampling valve
▲	▲	Auxiliary hydraulic lines
▲	▲	Auxiliary pilot and electric controls
▲	▲	Hydraulic filter restriction indicator kit
▲	▲	Load-lowering control device
▲	▲	Single-pedal propel control
▲	▲	Control pattern change valve
		Undercarriage
●	●	Planetary drive with axial-piston motors
●	●	Propel motor shields
●	●	Spring-applied, hydraulically released automatic propel brake
●	●	Track guides, front idler and center
●	●	2-speed propel with automatic shift
●	●	Upper carrier rollers (2)
●	●	Sealed and lubricated track chain
▲	▲	Triple semi-grouser shoes, 600 mm (24 in.)
▲	▲	Triple semi-grouser shoes, 700 mm (28 in.)
	▲	Triple semi-grouser shoes, 800 mm (32 in.)

ZX160	ZX180	Upperstructure
●	●	Right-hand and left-hand mirrors
●	●	Vandal locks with ignition key: Cab door / Service doors / Toolbox
●	●	Debris screen
●	●	Remote-mounted engine oil and fuel filters
●	●	Service handrails
		Front Attachments
●	●	Centralized lubrication system
●	●	Dirt seals on all bucket pins
●	●	Less boom and arm
●	●	Oil-impregnated bushings
●	●	Reinforced resin thrust plates
●	●	Tungsten carbide thermal coating on arm-to-bucket joint
▲		Arm, 2.60 m (8 ft. 6 in.)
	▲	Arm, 2.71 m (8 ft. 10 in.)
▲		Arm, 3.10 m (10 ft. 2 in.)
	▲	Arm, 3.21 m (10 ft. 6 in.)
▲	▲	Attachment quick-couplers
▲	▲	Boom cylinder with plumbing to mainframe less boom and arm
▲	▲	Buckets: Heavy duty / Side cutters and teeth
▲	▲	Material clamps
		Operator's Station
●	●	Meets ISO 12117-2 for ROPS
●	●	Adjustable independent-control positions (levers-to-seat, seat-to-pedals)
●	●	AM/FM radio
●	●	Auto climate control/air conditioner/heater/ pressurizer
●	●	Built-in Operator's Manual storage compartment and manual
●	●	Cell-phone power outlet, 12 volt, 60 watt, 5 amp
●	●	Coat hook
●	●	Deluxe suspension cloth seat with 100-mm (4 in.) adjustable armrests
●	●	Floor mat
●	●	Front windshield wiper with intermittent speeds
●	●	Gauges (illuminated): Diesel Exhaust Fluid (DEF) / Engine coolant / Fuel
●	●	Horn, electric
●	●	Hour meter, electric
●	●	Hydraulic shutoff lever, all controls
●	●	Hydraulic warm-up control
●	●	Interior light
●	●	Large cup holder
●	●	Machine Information Center (MIC)
●	●	Mode selectors (illuminated): Power modes (3) / Travel modes (2 with automatic shift) / Work mode (1)

ZX160	ZX180	Operator's Station (continued)
●	●	Multifunction, color LCD monitor with: Diagnostic capability / Multiple-language capabilities / Maintenance tracking / Clock / System monitoring with alarm features: Auto-idle indicator, engine-air-cleaner-restriction indicator light, engine check, engine-coolant-temperature indicator light with audible alarm, engine-oil-pressure indicator light with audible alarm, low-alternator-charge indicator light, low-fuel indicator light, low DEF indication with audible alarm, fault-code-alert indicator, fuel-rate display, wiper-mode indicator, work-lights-on indicator and work-mode indicator
●	●	Motion alarm with cancel switch (conforms to SAE J994)
●	●	Power-boost switch on right console lever
●	●	Auxiliary hydraulic control switches in right console lever
●	●	SAE 2-lever control pattern
●	●	Seat belt, 51 mm (2 in.), retractable
●	●	Tinted glass
●	●	Transparent tinted overhead hatch
●	●	Hot/cold beverage compartment
▲	▲	Air-suspension heated seat
▲	▲	Hydraulic oil filter restriction indicator light
▲	▲	Protection screens for cab front, rear and side
▲	▲	Seat belt, 76 mm (3 in.), non-retractable
▲	▲	Window vandal-protection covers
		Electrical
●	●	50-amp alternator
●	●	Battery disconnect switch
●	●	Blade-type multi-fused circuits
●	●	Positive-terminal battery covers
●	●	ZXLink™ wireless communication system (available in specific countries; see your dealer for details)
●	●	Rearview camera
▲	▲	Cab extension wiring harness
		Lights
●	●	Work lights: Halogen / 1 mounted on boom / 1 mounted on frame
▲	▲	2 lights mounted on cab / 1 mounted on right side of boom

See your Hitachi dealer for further information.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator and cooling fan, at test conditions specified per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with full fuel tanks and 79-kg (175 lb.) operators; a ZX160LC-6 unit with 528-kg (1,164 lb.) heavy-duty bucket; 3.10-m (10 ft. 2 in.) arm; 3210-kg (7,055 lb.) counterweight; and 700-mm (28-in.) triple semi-grouser shoes; and a ZX180LC-6 unit with 600-kg (1,323 lb.) heavy-duty bucket; 3.21-m (10 ft. 6 in.) arm; 3900-kg (8,598 lb.) counterweight; and 700-mm (28 in.) triple semi-grouser shoes.

HITACHI

HitachiConstruction.com

Digital only (17-10)

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