

ZAXIS | DASH-5 ULTRASHORT-CLASS EXCAVATORS

ZX245LC-5

119 kW (159 hp)

ZX245LC



HITACHI

Courtesy of Machine.Market

Engine		ZX245LC-5	
Manufacturer and Model		Isuzu 4HKI	
Non-Road Emissions Standard		EPA Interim Tier 4/EU Stage IIIB	
Net Rated Power (ISO 9249)		119 kW (159 hp) @ 2,000 rpm	
Cylinders		4	
Displacement		5.2L (317 cu. in.)	
Off Level Capacity		70% (35 deg.)	
Aspiration		Turbocharged, air-to-air charge-air cooler	
Cooling			
Direct-drive suction-type fan			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low		3.5 km/h (2.2 mph)	
High		5.5 km/h (3.4 mph)	
Drawbar Pull		20 700 kg (45,636 lb.)	
Hydraulics			
Open center, load sensing			
Main Pumps		3 variable-displacement axial-piston pumps	
Maximum Rated Flow		212 x 2 + 189 L/m (56 x 2 + 50 gpm)	
Pilot Pump		One gear	
Maximum Rated Flow		30 L/m (7.9 gpm)	
Pressure Setting		3999 kPa (580 psi)	
System Operating Pressure			
Implement Circuits		34 336 kPa (4,980 psi)	
Travel Circuits		35 000 kPa (5,076 psi)	
Swing Circuits		32 600 kPa (4,728 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.)	1330 mm (52.36 in.)
Arm (1)	135 mm (5.31 in.)	95 mm (3.74 in.)	1475 mm (58.07 in.)
Bucket (1)	115 mm (4.53 in.)	80 mm (3.15 in.)	1060 mm (41.73 in.)
Electrical			
Number of Batteries (12 volt)		2	
Battery Capacity		65I CCA	
Alternator Rating		50 amp	
Work Lights		2 halogen (1 mounted on boom, 1 on frame)	
Undercarriage			
Rollers (each side)			
Carrier Rollers		2	
Track Rollers		8	
Shoes, Triple Semi-Grousers		49	
Track			
Adjustment		Hydraulic	
Guides		Center	
Chain		Sealed and lubricated	
Ground Pressure			
600-mm (24 in.) Triple Semi-Grouser Shoes		51 kPa (7.40 psi)	
700-mm (28 in.) Triple Semi-Grouser Shoes		45 kPa (6.53 psi)	
800-mm (32 in.) Triple Semi-Grouser Shoes		40 kPa (5.80 psi)	
Swing Mechanism			
Swing Speed		11.8 rpm	
Swing Torque		68 000 Nm (50,000 lb.-ft.)	

Serviceability

Refill Capacities

Fuel Tank	380L (100 gal.)
Cooling System	25L (26.4 qt.)
Engine Oil with Filter	23L (24 qt.)
Hydraulic Tank	130L (34.3 gal.)
Hydraulic System	240L (63.4 gal.)
Swing Gearbox	6.2L (6.6 qt.)
Propel Gearbox (each)	6.8L (7.2 qt.)
Pump Drive Gearbox	1.6L (1.7 qt.)

Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 1067-mm (42 in.), 0.8-m³ (1.04 cu. yd.), 649-kg (1,430 lb.) heavy-duty bucket; 2.91-m (9 ft. 7 in.) arm; 7480-kg (16,490 lb.) counterweight; and 800-mm (32 in.) triple semi-grouser shoes.

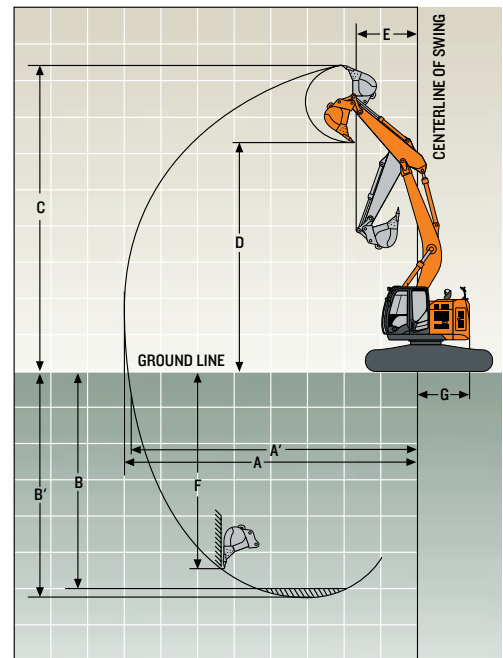
Operating Weight 25 500 kg (56,167 lb.)

Optional Components

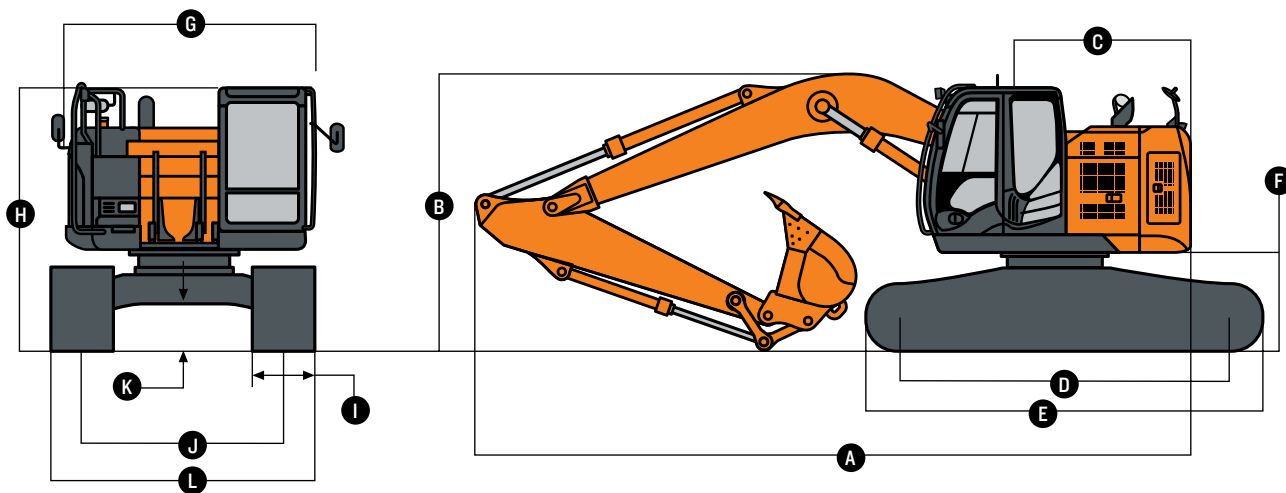
Undercarriage w/ Triple Semi-Grouser Shoes	
600 mm (24 in.)	7490 kg (16,498 lb.)
700 mm (28 in.)	7900 kg (17,401 lb.)
800 mm (32 in.)	8170 kg (17,996 lb.)
One-Piece Boom (with arm cylinder)	1674 kg (3,687 lb.)
Arm with Bucket Cylinder and Linkage	
2.42 m (7 ft. 11 in.)	765 kg (1,685 lb.)
2.91 m (9 ft. 7 in.)	815 kg (1,795 lb.)
Boom Lift Cylinders (2) Total Weight	340 kg (749 lb.)
1067-mm (42 in.), 0.8-m ³ (1.04 cu. yd.) Bucket	649 kg (1,430 lb.)
Counterweight, Standard	7480 kg (16,490 lb.)

Operating Dimensions

Arm Length	2.42 m (7 ft. 11 in.)	2.91 m (9 ft. 7 in.)
Arm Digging Force		
SAE	133 kN (29,901 lb.)	110 kN (24,730 lb.)
ISO	140 kN (31,475 lb.)	114 kN (25,629 lb.)
Bucket Digging Force		
SAE	141 kN (31,700 lb.)	141 kN (31,700 lb.)
ISO	158 kN (35,522 lb.)	158 kN (35,522 lb.)
A Maximum Reach	9.62 m (31 ft. 7 in.)	10.11 m (33 ft. 2 in.)
A' Maximum Reach at Ground Level	9.40 m (30 ft. 10 in.)	9.90 m (32 ft. 6 in.)
B Maximum Digging Depth	6.12 m (20 ft. 1 in.)	6.62 m (21 ft. 9 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	5.87 m (19 ft. 3 in.)	6.41 m (21 ft.)
C Maximum Cutting Height	10.79 m (35 ft. 5 in.)	11.22 m (36 ft. 10 in.)
D Maximum Dumping Height	7.86 m (25 ft. 9 in.)	8.92 m (29 ft. 3 in.)
E Minimum Swing Radius	2.72 m (8 ft. 11 in.)	2.38 m (7 ft. 10 in.)
F Maximum Vertical Wall	5.19 m (17 ft.)	5.81 m (19 ft. 1 in.)
G Tail-Swing Radius	1.68 m (5 ft. 6 in.)	1.68 m (5 ft. 6 in.)



Machine Dimensions	ZX245LC-5
A Overall Length	
2.42-m (7 ft. 11 in.) arm	9.27 m (30 ft. 5 in.)
2.91-m (9 ft. 7 in.) arm	9.11 m (29 ft. 11 in.)
B Overall Height	
2.42-m (7 ft. 11 in.) arm	3.23 m (10 ft. 7 in.)
2.91-m (9 ft. 7 in.) arm	2.98 m (9 ft. 9 in.)
C Rear-End Length/Swing Radius	1.68 m (5 ft. 6 in.)
D Distance Between Idler/ Sprocket Centerline	3.66 m (12 ft.)
E Undercarriage Length	4.46 m (14 ft. 8 in.)
F Counterweight Clearance	990 mm (3 ft. 3 in.)
G Upperstructure Width	2.97 m (9 ft. 9 in.)
H Cab Height	2.99 m (9 ft. 10 in.)
I Track Width w/ Triple Semi-Grouser Shoes	600 mm (24 in.) 700 mm (28 in.) 800 mm (32 in.)
J Gauge Width	2.39 m (7 ft. 10 in.)
K Ground Clearance	450 mm (17.72 in.)
L Overall Width w/ Triple Semi-Grouser Shoes	
600 mm (24 in.)	2.99 m (9 ft. 10 in.)
700 mm (28 in.)	3.09 m (10 ft. 2 in.)
800 mm (32 in.)	3.19 m (10 ft. 6 in.)



Lift Capacities

Boldface type indicates hydraulically limited capacity; **lightface type** indicates stability-limited capacities, in kg (lb.). All lift capacities are based on ISO 10567 (with power boost). Machine equipped with 666-kg (1,468 lb.) bucket and standard counterweight; and situated on firm, level, 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.

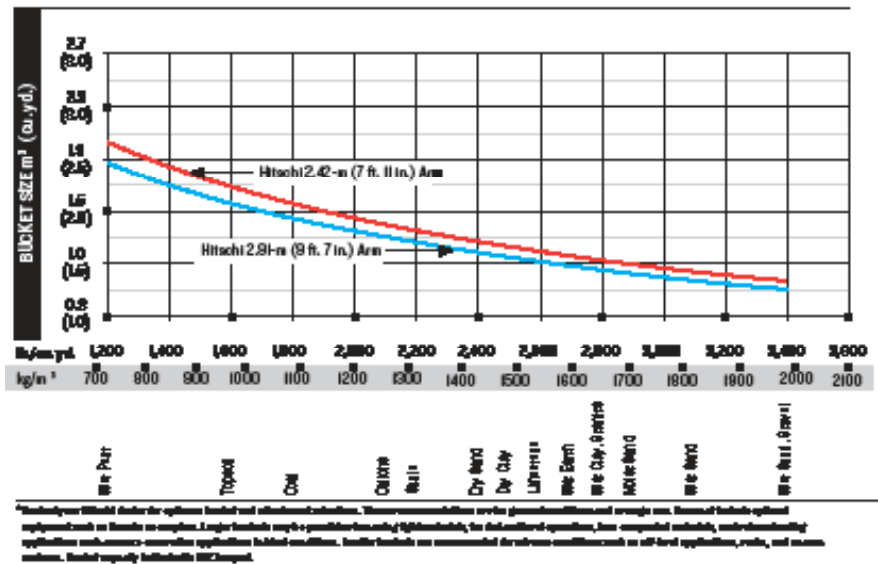
Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2.42-m (7 ft. 11 in.) arm and 800-mm (32 in.) triple semi-grouser shoes										
6.0 m (20 ft.)					5856 (12,697)	5856 (12,697)	5314 (11,632)	4854 (10,426)		
4.5 m (15 ft.)					7356 (15,809)	7356 (15,809)	5896 (12,791)	4675 (10,063)	5235 (11,470)	3180 (6,815)
3.0 m (10 ft.)					9325 (20,020)	6879 (14,848)	6729 (14,555)	4430 (9,544)	5284 (11,359)	3082 (6,620)
1.5 m (5 ft.)					10 619 (22,909)	6462 (13,927)	7356 (15,823)	4213 (9,076)	5171 (11,122)	2979 (6,404)
Ground Line					10 770 (23,330)	6315 (13,588)	7213 (15,512)	4087 (8,800)	5101 (10,980)	2915 (6,275)
-1.5 m (-5 ft.)		9357 (21,373)	9357 (21,373)		10 088 (21,863)	6325 (13,603)	7187 (15,456)	4063 (8,751)		
-3.0 m (-10 ft.)		11 515 (24,935)	11 515 (24,935)		8532 (18,385)	6452 (13,887)	6113 (12,971)	4160 (8,983)		
-4.5 m (-15 ft.)					5093	5093				
With 2.91-m (9 ft. 7 in.) arm and 600-mm (24 in.) triple semi-grouser shoes										
6.0 m (20 ft.)					5131 (11,138)	5131 (11,138)	4817 (10,538)	4785 (10,278)	3943	3164
4.5 m (15 ft.)		9366 (19,787)	9366 (19,787)		6612 (14,220)	6612 (14,220)	5457 (11,841)	4597 (9,892)	4882 (10,672)	3107 (6,662)
3.0 m (10 ft.)					8647 (18,571)	6831 (14,735)	6363 (13,763)	4341 (9,348)	5138 (11,041)	2991 (6,422)
1.5 m (5 ft.)					10 250 (22,097)	6343 (13,669)	7165 (15,408)	4100 (8,828)	5006 (10,764)	2871 (6,168)
Ground Line		3940 (9,135)	3940 (9,135)		10 787 (23,339)	6115 (13,156)	6986 (15,018)	3941 (8,483)	4911 (10,565)	2785 (5,987)
-1.5 m (-5 ft.)	5334 (11,946)	5334 (11,946)	8390 (19,088)	8390 (19,088)	10 409 (22,542)	6072 (13,056)	6921 (14,879)	3884 (8,360)	4888 (10,525)	2763 (5,950)
-3.0 m (-10 ft.)	9750 (21,925)	9750 (21,925)	12 970 (28,063)	12 453 (26,661)	9180 (19,807)	6156 (13,244)	6655 (14,263)	3933 (8,476)		
-4.5 m (-15 ft.)			9184 (19,510)	9184 (19,510)	6591 (13,865)	6393 (13,787)				
With 2.91-m (9 ft. 7 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)					5131 (11,138)	5131 (11,138)	4817 (10,538)	4817 (10,413)	3943	3212
4.5 m (15 ft.)		9366 (19,787)	9366 (19,787)		6612 (14,220)	6612 (14,220)	5457 (11,841)	4660 (10,028)	4882 (10,672)	3154 (6,765)
3.0 m (10 ft.)					8647 (18,571)	6923 (14,933)	6363 (13,763)	4404 (9,484)	5211 (11,201)	3038 (6,525)
1.5 m (5 ft.)					10 250 (22,097)	6435 (13,867)	7190 (15,548)	4162 (8,963)	5080 (10,923)	2918 (6,271)
Ground Line		3940 (9,135)	3940 (9,135)		10 787 (23,339)	6207 (13,355)	7086 (15,235)	4004 (8,618)	4985 (10,724)	2832 (6,090)
-1.5 m (-5 ft.)	5334 (11,946)	5334 (11,946)	8390 (19,088)	8390 (19,088)	10 409 (22,542)	6164 (13,255)	7022 (15,095)	3947 (8,495)	4961 (10,684)	2810 (6,053)
-3.0 m (-10 ft.)	9750 (21,925)	9750 (21,925)	12 970 (28,063)	12 625 (27,030)	9180 (19,807)	6248 (13,442)	6655 (14,263)	3996 (8,612)		
-4.5 m (-15 ft.)			9184 (19,510)	9184 (19,510)	6591 (13,865)	6485 (13,865)				
With 2.91-m (9 ft. 7 in.) arm and 800-mm (32 in.) triple semi-grouser shoes										
6.0 m (20 ft.)					5131 (11,138)	5131 (11,138)	4817 (10,538)	4817 (10,538)	3943	3270
4.5 m (15 ft.)		9366 (19,787)	9366 (19,787)		6612 (14,220)	6612 (14,220)	5457 (11,841)	4736 (10,192)	4882 (10,672)	3212 (6891)
3.0 m (10 ft.)					8647 (18,571)	7035 (15,174)	6363 (13,763)	4480 (9648)	5275 (11,399)	3096 (6,650)
1.5 m (5 ft.)					10 250 (22,097)	6547 (14,108)	7190 (15,548)	4239 (9,128)	5172 (11,121)	2976 (6,397)
Ground Line		3940 (9,135)	3940 (9,135)		10 787 (23,339)	6319 (13,596)	7211 (15,504)	4080 (8,783)	5077 (10,922)	2890 (6,215)
-1.5 m (-5 ft.)	5334 (11,946)	5334 (11,946)	8390 (19,088)	8390 (19,088)	10 409 (22,542)	6276 (13,496)	7147 (15,365)	4023 (8,660)	5053 (10,882)	2868 (6,178)
-3.0 m (-10 ft.)	9750 (21,925)	9750 (21,925)	12 970 (28,063)	12 834 (27,479)	9180 (19,807)	6360 (13,683)	6655 (14,263)	4072 (8,777)		
-4.5 m (-15 ft.)			9750 (19,510)	9184 (19,510)	12 970 (13,865)	6591 (13,865)	9180		6655	

Buckets

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		Bucket Dig Force		Arm Dig Force 2.42 m (7 ft. 11 in.)		Arm Dig Force 2.91 m (9 ft. 7 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	915	36	0.69	0.90	708	1,559	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	5
Heavy Duty	1065	42	0.83	1.09	786	1,731	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	5
Heavy Duty	1220	48	0.99	1.29	872	1,921	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	6
Heavy Duty High Capacity	610	24	0.43	0.56	646	1,424	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.0	4
Heavy Duty High Capacity	760	30	0.58	0.76	723	1,593	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.0	4
Heavy Duty High Capacity	915	36	0.74	0.97	809	1,782	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.0	5
Heavy Duty High Capacity	1065	42	0.91	1.19	886	1,951	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.0	5

Bucket Selection Guide*



ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special

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)
● 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
● Programmable auto shutdown
▲ Engine-oil-sampling valve
▲ Severe-duty fuel filter
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.)

Upperstructure
● Right-hand, left-hand, and counterweight mirrors
● Vandal locks with ignition key: Cab door / Service doors / Toolbox
● Debris screening
● Remote-mounted engine oil and fuel filters
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, 2.42 m (7 ft. 11 in.)
▲ Arm, 2.91 m (9 ft. 7 in.)
▲ Attachment quick-couplers
▲ Boom cylinder with plumbing to mainframe less boom and arm
▲ Buckets: Ditching / Heavy duty / Heavy-duty high capacity / 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): 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)

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, 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 pilot 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
● Blade-type multi-fused circuits
● Positive-terminal battery covers
● ZXLink™ wireless communication system (available in specific countries; see your dealer for details)
▲ Rearview camera
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 a unit with 1067-mm (42 in.), 0.8-m³ (1.04 cu. yd.), 649-kg (1,430 lb.) heavy-duty bucket; 2.91-m (9 ft. 7 in.) arm; 7480-kg (16,490 lb.) counterweight; 800-mm (32 in.) triple semi-grouser shoes; full fuel tank; and 79-kg (175-lb.) operator.

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