

ZAXIS | DASH-5 UTILITY-CLASS EXCAVATORS

ZX250LC-5

140 kW (188 hp)

ZX250LC



HITACHI

Engine		ZX250LC-5	
Manufacturer and Model	Isuzu 4HK1ZXSA-01		
Non-Road Emissions Standards	EPA Interim Tier 4/EU Stage IIIB		
Net Rated Power (ISO 9249)	140 kW (188 hp) at 2,100 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-driven, high-efficiency, low-noise, suction-type fan			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.3 km/h (2.1 mph)		
High	5.5 km/h (3.4 mph)		
Drawbar Pull	22 650 kg (49,935 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps			
2 variable-displacement pumps			
Maximum Rated Flow	224 L/m (59.2 gpm) x 2		
Pilot Pump			
One gear			
Maximum Rated Flow	34 L/m (8.9 gpm)		
Pressure Setting	3900 kPa (566 psi)		
System Operating Pressure			
Implement Circuits	34 300 kPa (4,975 psi)		
Travel Circuits	35 000 kPa (5,076 psi)		
Swing Circuits	33 300 kPa (4,830 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)	124 mm (4.9 in.)	89 mm (3.5 in.)	1389 mm (54.7 in.)
Arm (1)	140 mm (5.5 in.)	99 mm (3.9 in.)	1610 mm (63.4 in.)
Bucket (1)	130 mm (5.1 in.)	89 mm (3.5 in.)	1074 mm (42.3 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	1,400 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	9		
Shoes, Triple Semi-Grousers (each side)	51		
Track			
Adjustment	Hydraulic		
Guides	2 per side		
Chain	Sealed and lubricated		
Ground Pressure			
800-mm (32 in.) Triple Semi-Grouser Shoes	36.2 kPa (5.25 psi)		
Swing Mechanism			
Swing Speed	13.5 rpm		
Swing Torque	74 376 Nm (54,857 lb.-ft.)		

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Serviceability

Refill Capacities

Fuel Tank	500L (132 gal.)
Cooling System	27L (7.1 gal.)
Engine Oil with Filter	26L (6.9 gal.)
Hydraulic Tank	147.6L (39 gal.)
Hydraulic System	240L (63 gal.)
Swing Drive	7L (7.5 qt.)
Gearbox	
Propel (each)	6.2L (6.5 qt.)
Pump Drive	1.1L (1.2 qt.)

Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 1.06-m³ (1.38 cu. yd.), 1065-mm (42 in.), 997-kg (2,197 lb.) bucket; 3.61-m (11 ft. 10 in.) arm; 5112-kg (11,270 lb.) counterweight; and 800-mm (32 in.) triple semi-grouser shoes

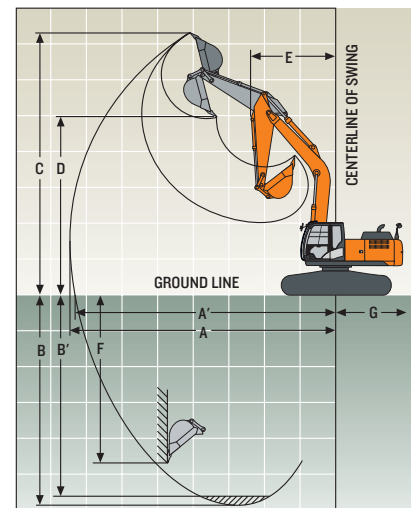
Operating Weight 24 720 kg (54,498 lb.)

Optional Components

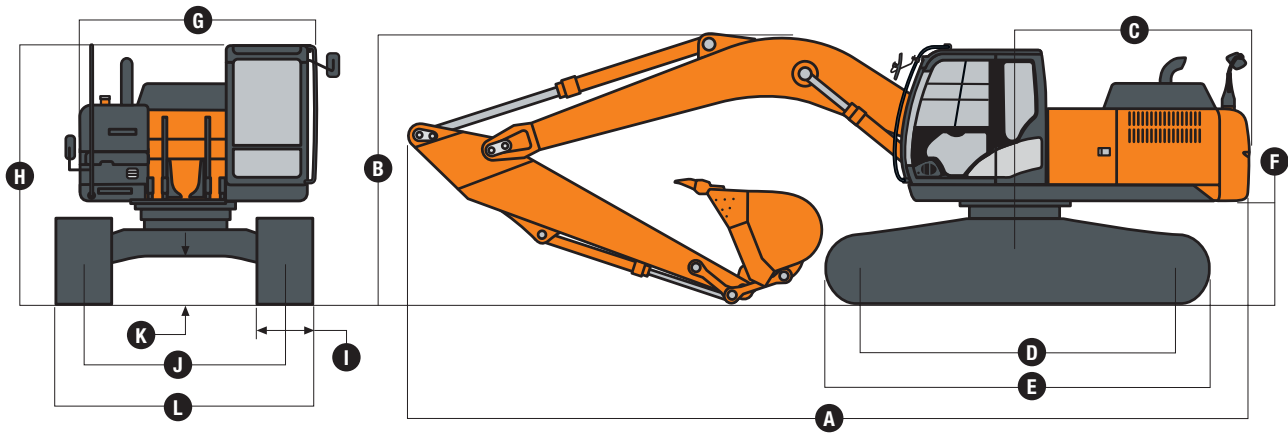
Undercarriage w/ Triple Semi-Grouser Shoes	
800 mm (32 in.)	8752 kg (19,294 lb.)
One-Piece Boom (with arm cylinder)	2210 kg (4,872 lb.)
Arm with Bucket Cylinder and Linkage	
2.96 m (9 ft. 9 in.)	1296 kg (2,858 lb.)
3.61 m (11 ft. 10 in.)	1396 kg (3,078 lb.)
Boom Lift Cylinders (2) Total Weight	434 kg (958 lb.)
1.06 m ³ (1.38 cu. yd.), 1065 mm (42 in.)	
Heavy-Duty Bucket	997 kg (2,197 lb.)
Counterweight, Standard	5112 kg (11,270 lb.)

Operating Dimensions

Arm Length	2.96 m (9 ft. 9 in.)	3.61 m (11 ft. 10 in.)
Arm Digging Force		
SAE	129.1 kN (29,021 lb.)	112.2 kN (25,220 lb.)
ISO	131 kN (29,450 lb.)	114 kN (25,628 lb.)
Bucket Digging Force		
SAE	175.9 kN (39,552 lb.)	175.9 kN (39,552 lb.)
ISO	189 kN (42,489 lb.)	189 kN (42,489 lb.)
A Maximum Reach	10.29 m (33 ft. 9 in.)	10.91 m (35 ft. 10 in.)
A' Maximum Reach at Ground Level	10.11 m (33 ft. 2 in.)	10.75 m (35 ft. 3 in.)
B Maximum Digging Depth	6.96 m (22 ft. 10 in.)	7.61 m (25 ft.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	6.75 m (22 ft. 2 in.)	7.44 m (24 ft. 5 in.)
C Maximum Cutting Height	10.16 m (33 ft. 4 in.)	10.56 m (34 ft. 8 in.)
D Maximum Dumping Height	7.20 m (23 ft. 7 in.)	7.58 m (24 ft. 10 in.)
E Minimum Swing Radius	3.44 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)
F Maximum Vertical Wall	6.03 m (19 ft. 9 in.)	6.74 m (22 ft. 1 in.)
G Tail-Swing Radius	3.14 m (10 ft. 4 in.)	3.14 m (10 ft. 4 in.)



Machine Dimensions	ZX250LC-5	
A Overall Length	2.96 m (9 ft. 9 in.)	10.35 m (34 ft.)
	3.61 m (11 ft. 10 in.)	10.41 m (34 ft. 2 in.)
B Overall Height	2.96 m (9 ft. 9 in.)	3.07 m (10 ft. 1 in.)
	3.61 m (11 ft. 10 in.)	3.14 m (10 ft. 4 in.)
C Rear-End Length/Swing Radius		3.14 m (10 ft. 4 in.)
D Distance Between Idler/Sprocket Centerline		3.84 m (12 ft. 7 in.)
E Undercarriage Length		4.64 m (15 ft. 3 in.)
F Counterweight Clearance		1.09 m (3 ft. 7 in.)
G Upperstructure Width		2.89 m (9 ft. 6 in.)
H Cab Height		3.01 m (9 ft. 11 in.)
I Track Width w/ Triple Semi-Grouser Shoes	700 mm (28 in.)	800 mm (32 in.)
J Gauge Width		2.59 m (8 ft. 6 in.)
K Ground Clearance		0.46 m (18 in.)
L Overall Width w/ Triple Semi-Grouser Shoes	700 mm (28 in.)	3.29 m (10 ft. 10 in.)
	800 mm (32 in.)	3.39 m (11 ft. 3 in.)



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Lift Charts

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 871-kg (1,920 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).

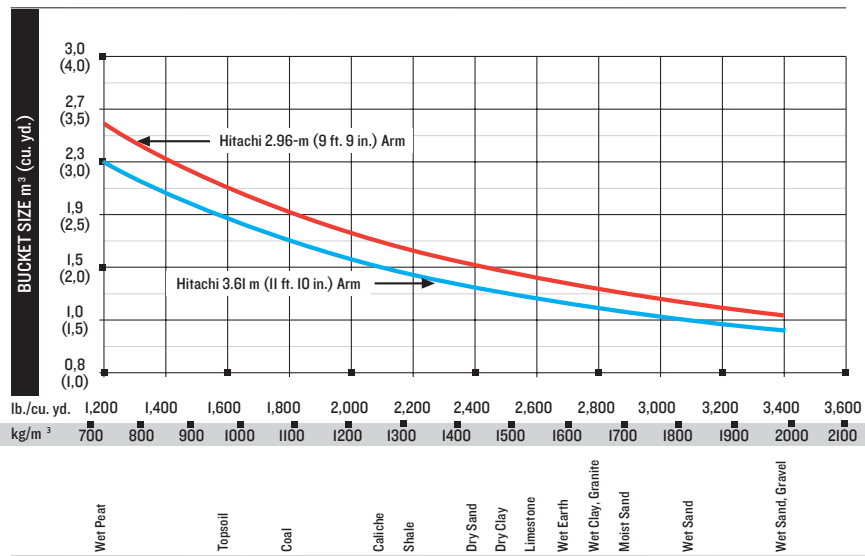
Lead Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2.96-m (9 ft. 9 in.) arm and 700-mm (28 in.) shoes												
6.0 m (20 ft.)							5126	5126				
							(11,207)	(11,207)				
4.5 m (15 ft.)					7138	7138	5939	5939	5358	4155		
					(15,343)	(15,343)	(12,881)	(12,881)	(11,712)	(8,903)		
3.0 m (10 ft.)					9529	9253	7053	5839	5900	4012		
					(20,456)	(19,947)	(15,254)	(12,571)	(12,831)	(8,610)		
1.5 m (5 ft.)					11 578	8596	8135	5515	6109	3852		
					(24,945)	(18,513)	(17,591)	(11,872)	(13,128)	(8,276)		
Ground Line					12 543	8277	8576	5295	5973	3728		
					(27,129)	(17,798)	(18,423)	(11,393)	(12,839)	(8,013)		
-1.5 m (-5 ft.)			8446	8446	12 551	8201	8471	5203	5919	3679		
			(19,259)	(19,259)	(27,188)	(17,622)	(18,196)	(11,192)	(12,733)	(7,916)		
-3.0 m (-10 ft.)	9964	9964	14 599	14 599	11 732	8282	8509	5237				
	(22,420)	(22,420)	(33,304)	(33,304)	(25,372)	(17,803)	(18,290)	(11,275)				
-4.5 m (-15 ft.)			13 748	13 748	9758	8530						
			(29,522)	(29,522)	(20,866)	(18,366)						
With 3.61-m (11 ft. 10 in.) arm and 700-mm (28 in.) shoes												
6.0 m (20 ft.)							4380	4380	4073	4073		
							(9,584)	(9,584)	(8,643)	(8,643)		
4.5 m (15 ft.)							5228	5228	4823	4236		
							(11,347)	(11,347)	(10,535)	(9,080)		
3.0 m (10 ft.)					8377	8377	6404	5954	5440	4066	3825	2875
					(17,995)	(17,995)	(13,856)	(12,814)	(11,830)	(8,728)	(7,436)	(6,140)
1.5 m (5 ft.)					10 707	8785	7613	5589	6104	3877	4493	2792
					(23,066)	(18,917)	(16,465)	(12,027)	(13,196)	(8,327)	(8,810)	(5,971)
Ground Line			4492	4492	12 136	8327	8537	5314	5970	3720	4417	2721
			(10,371)	(10,371)	(26,233)	(17,907)	(18,478)	(11,431)	(12,828)	(7,992)	(8,130)	(5,829)
-1.5 m (-5 ft.)	4381	4381	7698	7698	12 576	8149	8438	5167	5872	3631		
	(9,836)	(9,836)	(17,525)	(17,525)	(27,229)	(17,510)	(18,120)	(11,111)	(12,622)	(7,804)		
-3.0 m (-10 ft.)	8049	8049	12 146	12 146	12 165	8158	8413	5145	5876	3635		
	(18,103)	(18,103)	(27,656)	(27,656)	(26,317)	(17,531)	(18,073)	(11,070)	(12,649)	(7,828)		
-4.5 m (-15 ft.)	12 636	12 636	15 638	15 638	10 774	8328	7773	5263				
	(28,581)	(28,581)	(33,670)	(33,670)	(23,160)	(17,916)	(16,579)	(11,351)				
With 2.96-m (9 ft. 9 in.) arm and 800-mm (32 in.) shoes												
6.0 m (20 ft.)							5126	5126				
							(11,207)	(11,207)				
4.5 m (15 ft.)					7138	7138	5939	5939	5358	4203		
					(15,343)	(15,343)	(12,881)	(12,881)	(11,712)	(9,007)		
3.0 m (10 ft.)					9529	9347	7053	5902	5900	4059		
					(20,456)	(20,149)	(15,254)	(12,708)	(12,831)	(8,714)		
1.5 m (5 ft.)					11 578	8690	8135	5578	6182	3900		
					(24,945)	(18,716)	(17,591)	(12,009)	(13,286)	(8,380)		
Ground Line					12 543	8371	8676	5358	6046	3776		
					(27,129)	(18,001)	(18,639)	(11,530)	(12,998)	(8,116)		
-1.5 m (-5 ft.)			8446	8446	12 551	8295	8571	5266	5993	3727		
			(19,259)	(19,259)	(27,188)	(17,825)	(18,413)	(11,329)	(12,891)	(8,019)		
-3.0 m (-10 ft.)	9964	9964	14 599	14 599	11 732	8376	8588	5300				
	(22,420)	(22,420)	(33,304)	(33,304)	(25,372)	(18,005)	(18,506)	(11,412)				
-4.5 m (-15 ft.)			13 748	13 748	9758	8624						
			(29,522)	(29,522)	(20,866)	(18,568)						
With 3.61-m (11 ft. 10 in.) arm and 800-mm (32 in.) shoes												
6.0 m (20 ft.)							4380	4380	4073	4073		
							(9,584)	(9,584)	(8,643)	(8,643)		
4.5 m (15 ft.)							5228	5228	4823	4284		
							(11,347)	(11,347)	(10,535)	(9,184)		
3.0 m (10 ft.)					8377	8377	6404	6018	5440	4114	3825	2914
					(17,995)	(17,995)	(13,856)	(12,951)	(11,830)	(8,831)	(7,436)	(6,223)
1.5 m (5 ft.)					10 707	8879	7613	5652	6104	3925	4503	2830
					(23,066)	(19,119)	(16,465)	(12,164)	(13,251)	(8,431)	(8,810)	(6,055)
Ground Line			4492	4492	12 136	8421	8537	5378	6043	3768	4438	2759
			(10,371)	(10,371)	(26,233)	(18,109)	(18,478)	(11,568)	(12,986)	(8,095)	(8,130)	(5,912)
-1.5 m (-5 ft.)	4381	4381	7698	7698	12 576	8243	8538	5230	5945	3679		
	(9,836)	(9,836)	(17,525)	(17,525)	(27,229)	(17,712)	(18,336)	(11,248)	(12,780)	(7,907)		
-3.0 m (-10 ft.)	8049	8049	12 146	12 146	12 165	8252	8513	5209	5950	3683		
	(18,103)	(18,103)	(27,656)	(27,656)	(26,317)	(17,734)	(18,290)	(11,207)	(12,807)	(7,932)		
-4.5 m (-15 ft.)	12 636	12 636	15 638	15 638	10 774	8422	7773	5327				
	(25,581)	(25,581)	(33,670)	(33,670)	(23,160)	(18,118)	(16,579)	(11,488)				

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 2.96 m (9 ft. 9 in.)		Arm Dig Force 3.61 m (11 ft. 10 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	1067	42	1.06	1.4	997	2,197	176.0	39,558	129.1	29,021	112.2	25,220	1435	56.5	5
Heavy Duty	1219	48	1.22	1.6	1071	2,361	176.0	39,558	129.1	29,021	112.2	25,220	1435	56.5	6
Heavy Duty	1372	54	1.39	1.8	1138	2,509	176.0	39,558	129.1	29,021	112.2	25,220	1435	56.5	6
Heavy Duty High Capacity	610	24	0.70	0.9	801	1,767	167.4	37,636	124.7	28,044	108.9	24,477	1588	62.5	3
Heavy Duty High Capacity	760	30	0.92	1.2	913	2,012	167.4	37,636	124.7	28,044	108.9	24,477	1588	62.5	4
Heavy Duty High Capacity	914	36	1.13	1.5	968	2,135	167.4	37,636	124.7	28,044	108.9	24,477	1588	62.5	4
Heavy Duty High Capacity	1065	42	1.34	1.7	1035	2,281	167.4	37,636	124.7	28,044	108.9	24,477	1588	62.5	5
Heavy Duty High Capacity	1220	48	1.55	2.0	1137	2,507	167.4	37,636	124.7	28,044	108.9	24,477	1588	62.5	6
Ditching	1525	60	3.00	3.9	709	1,563	211.4	47,534	136.6	30,705	117.8	26,485	1194	47.0	0

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.

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ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special

Engine
● Auto-idle system
● 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
● High-efficiency, low-noise fan
● Glow-plug start aid
● 500-hour engine-oil-change interval
● 70% (35 deg.) off-level capability
● Severe-duty fuel filter
▲ Chrome exhaust stack
▲ Engine coolant heater
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
▲ Auxiliary hydraulic lines
▲ Auxiliary pilot and electric controls
▲ Hydraulic filter restriction indicator kit
▲ Load-lowering control / Anti-drift 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, 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 screen
● 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, 2.96 m (9 ft. 9 in.)
▲ Arm, 3.61 m (11 ft. 10 in.)
▲ Attachment quick-couplers
▲ Boom cylinder with plumbing to mainframe less boom and arm
▲ Buckets: Heavy duty / Heavy-duty high capacity / Side cutters and teeth
▲ "D" channel guard
▲ Material clamps
▲ Super-long fronts
Operator's Station
● 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)

Operator's Station (continued)
● Mode selectors (illuminated): Power modes (3) / Travel modes (2 with automatic shift) / Work mode (1)
● 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 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
● Blade-type multi-fused circuits
● Positive-terminal battery covers
● ZLink™ wireless communication system (available in specific countries; see your dealer for details)
▲ Rearview camera
▲ Cab extension wiring harness
Lights
● Work lights: Halogen / One mounted on boom / One mounted on frame
▲ 2 lights mounted on cab / One 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 2000-m (6,560 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 unit with 1065-mm (42 in.) bucket, 800-mm (32 in.) triple semi-grouser shoes, full fuel tank, 79-kg (175 lb.) operator, and 5112-kg (11,270 lb.) counterweight.

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