

ZAXIS | DASH-5 PRODUCTION-CLASS EXCAVATORS

ZX470LC-5

270 kW (367 hp)

ZX470LC



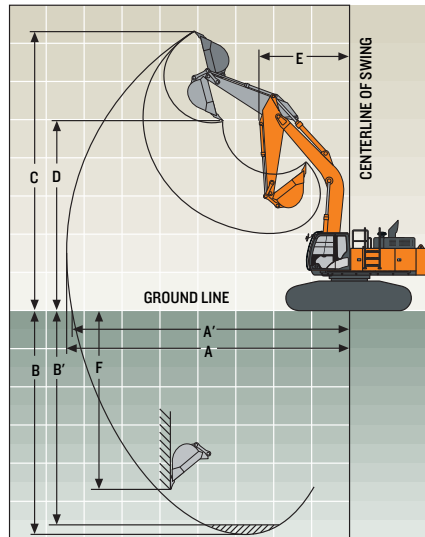
HITACHI

Engine		ZX470LC-5	
Manufacturer and Model	Isuzu 6UZI-iT4		
Non-Road Emissions Standards	EPA Interim Tier 4/EU Stage IIIB		
Net Rated Power (ISO 9249)	270 kW (367 hp) @ 2,000 rpm		
Cylinders	6		
Displacement	9.8L (600 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
Cooling			
Cool-on-demand hydraulic-driven, suction-type fan with remote-mounted drive			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.9 km/h (2.4 mph)		
High	5.5 km/h (3.4 mph)		
Drawbar Pull	37 219 kg (82,054 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps			
2 variable-displacement pumps			
Maximum Rated Flow	400 L/m (106 gpm) x 2		
Pilot Pump			
One gear			
Maximum Rated Flow	30 L/m (7.9 gpm)		
Pressure Setting	3900 kPa (566 psi)		
System Operating Pressure			
Circuits			
Implement	31 900 kPa (4,627 psi)		
Travel	35 300 kPa (5,120 psi)		
Swing	28 400 kPa (4,119 psi)		
Power Boost	35 300 kPa (5,120 psi)		
Controls			
Pilot levers, short-stroke, low-effort hydraulic pilot controls with shutoff lever			
Cylinders			
	Bore	Rod Diameter	Stroke
Boom (2)	170 mm (6.7 in.)	115 mm (4.5 in.)	1590 mm (62.6 in.)
Arm (1)	190 mm (7.5 in.)	130 mm (5.1 in.)	1940 mm (76.4 in.)
Bucket (1)	170 mm (6.7 in.)	120 mm (4.7 in.)	1325 mm (52.2 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	500 CCA		
Alternator Rating	50 amp		
Work Lights	5 halogen (1 mounted on frame, 2 mounted on boom, and 2 mounted on top of cab)		
Undercarriage			
Rollers (each side)			
Carrier	3		
Track	9		
Shoes, Triple Semi-Grousers (each side)	53		
Track			
Adjustment	Hydraulic		
Guides	Front and center		
Chain	Sealed and lubricated		

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Ground Pressure		ZX470LC-5
750-mm (30 in.) Triple Semi-Grouser Shoes		72.4 kPa (10.1 psi)
900-mm (36 in.) Triple Semi-Grouser Shoes		60.7 kPa (8.6 psi)
Swing Mechanism		
Swing Speed		9.5 rpm
Swing Torque		148 000 Nm (109,159 lb.-ft.)
Serviceability		
Refill Capacities		
Fuel Tank		725L (192 gal.)
Cooling System		52L (14 gal.)
Engine Oil with Filter		41L (11 gal.)
Hydraulic Tank		310L (82 gal.)
Hydraulic System		510L (135 gal.)
Gearbox		
Swing (each)		6.5L (1.7 qt.)
Travel (each)		11L (2.9 qt.)
Operating Weights		
With full fuel tank; 79-kg (175 lb.) operator; 2.34-m ³ (3.06 cu. yd.), 1370-mm (54 in.), 2031-kg (4,478 lb.) bucket; 3.9-m (12 ft. 10 in.) arm; 9111-kg (20,086 lb.) counterweight; and 900-mm (36 in.) triple semi-grouser shoes		
SAE Operating Weight		49 420 kg (108,952 lb.)
Optional Components		
Undercarriage w/ Triple Semi-Grouser Shoes		
750 mm (30 in.)		18 323 kg (40,395 lb.)
900 mm (36 in.)		19 003 kg (41,894 lb.)
7-m (23 ft.) One-Piece Boom (w/ arm cylinder)		4290 kg (9,458 lb.)
Arm with Bucket Cylinder and Linkage		
2.9 m (9 ft. 6 in.)		2400 kg (5,291 lb.)
2.9-m (9 ft. 6 in.) with 6.3-m (20 ft. 7 in.) w/ Mass-Excavating Boom		2400 kg (5,291 lb.)
3.4 m (11 ft. 2 in.)		2330 kg (5,137 lb.)
3.9 m (12 ft. 10 in.)		2640 kg (5,820 lb.)
4.9 m (16 ft. 1 in.)		1850 kg (4,079 lb.)
Boom-Lift Cylinders (2), Total Weight		
2.34-m ³ (3.06 cu. yd.), 1370-mm (54 in.)		840 kg (1,853 lb.)
Heavy-Duty High-Capacity Bucket		2031 kg (4,478 lb.)
Counterweight, Standard		9111 kg (20,086 lb.)

Operating Dimensions	ZX470LC-5				
Arm Length	2.9 m (9 ft. 6 in.)	2.9 m (9 ft. 6 in.) w/ 6.3-m (20 ft. 7 in.) Mass-Excavating Boom	3.4 m (11 ft. 2 in.)	3.9 m (12 ft. 10 in.)	4.9 m (16 ft. 1 in.)
Arm Digging Force					
SAE	252 kN (56,652 lb.)	249 kN (55,977 lb.)	215 kN (48,334 lb.)	196 kN (44,063 lb.)	175 kN (39,342 lb.)
ISO	259 kN (58,226 lb.)	256 kN (57,551 lb.)	222 kN (49,908 lb.)	201 kN (45,187 lb.)	177 kN (39,791 lb.)
Bucket Digging Force					
SAE	254 kN (57,101 lb.)	257 kN (57,776 lb.)	256 kN (57,551 lb.)	256 kN (57,551 lb.)	213 kN (47,884 lb.)
ISO	285 kN (64,071 lb.)	285 kN (64,071 lb.)	286 kN (64,295 lb.)	286 kN (64,295 lb.)	238 kN (53,505 lb.)
A Maximum Reach	11.40 m (37 ft. 5 in.)	10.87 m (35 ft. 8 in.)	12.07 m (39 ft. 7 in.)	12.50 m (41 ft.)	13.34 m (43 ft. 9 in.)
A' Maximum Reach at Ground Level	11.18 m (36 ft. 8 in.)	10.62 m (34 ft. 10 in.)	11.84 m (38 ft. 10 in.)	12.27 m (40 ft. 3 in.)	13.13 m (43 ft. 1 in.)
B Maximum Digging Depth	7.29 m (23 ft. 11 in.)	6.22 m (20 ft. 5 in.)	7.77 m (25 ft. 6 in.)	8.28 m (27 ft. 2 in.)	9.12 m (29 ft. 11 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	7.09 m (23 ft. 3 in.)	6.07 m (19 ft. 11 in.)	7.62 m (25 ft.)	8.13 m (26 ft. 8 in.)	8.99 m (29 ft. 6 in.)
C Maximum Cutting Height	10.26 m (33 ft. 8 in.)	10.87 m (35 ft. 8 in.)	11.05 m (36 ft. 3 in.)	11.15 m (36 ft. 7 in.)	11.73 m (38 ft. 6 in.)
D Maximum Dumping Height	7.04 m (23 ft. 1 in.)	7.34 m (24 ft. 1 in.)	7.65 m (25 ft. 1 in.)	7.77 m (25 ft. 6 in.)	8.66 m (28 ft. 5 in.)
E Minimum Swing Radius	5.03 m (16 ft. 6 in.)	3.94 m (12 ft. 11 in.)	4.83 m (15 ft. 10 in.)	4.80 m (15 ft. 9 in.)	4.85 m (15 ft. 11 in.)
F Maximum Vertical Wall	5.26 m (17 ft. 3 in.)	5.03 m (16 ft. 6 in.)	6.58 m (21 ft. 7 in.)	6.99 m (22 ft. 11 in.)	8.41 m (27 ft. 7 in.)

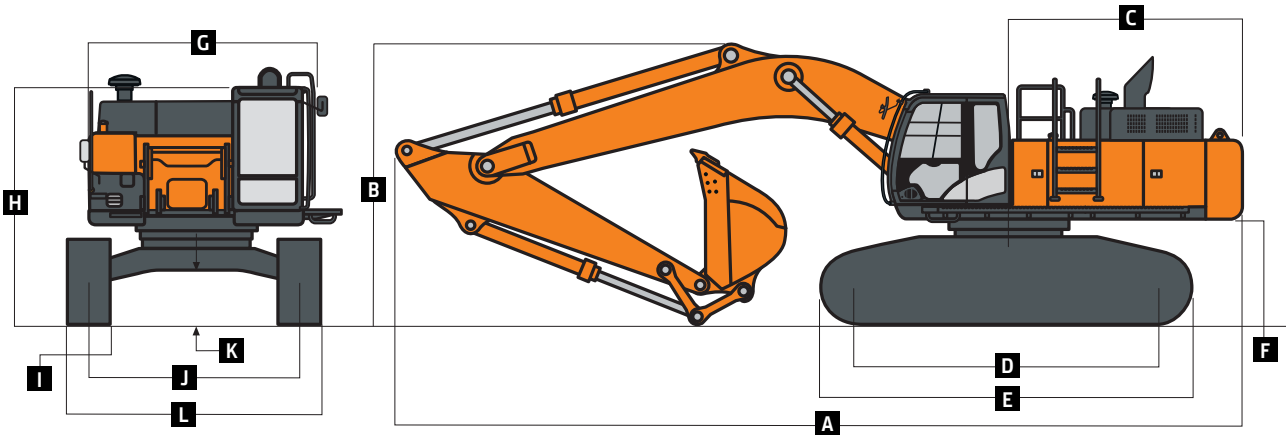


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Machine Dimensions

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A Overall Length w/ Arm	
2.9 m (9 ft. 6 in.)	12.10 m (39 ft. 8 in.)
3.4 m (11 ft. 2 in.)	12.01 m (39 ft. 5 in.)
3.9 m (12 ft. 10 in.)	12.01 m (39 ft. 5 in.)
4.9 m (16 ft. 1 in.)	12 m (39 ft. 4 in.)
2.9 m (9 ft. 6 in.) with 6.3-m (20 ft. 7 in.) Boom	11.33 m (37 ft. 2 in.)
B Overall Height w/ Arm	
2.9 m (9 ft. 6 in.)	3.60 m (11 ft. 10 in.)
3.4 m (11 ft. 2 in.)	3.48 m (11 ft. 5 in.)
3.9 m (12 ft. 10 in.)	3.50 m (11 ft. 6 in.)
4.9 m (16 ft. 1 in.)	4.55 m (14 ft. 11 in.)
2.9 m (9 ft. 6 in.) with 6.3-m (20 ft. 7 in.) Boom	4.55 m (14 ft. 11 in.)
C Rear-End Length/Swing Radius	3.66 m (12 ft.)
D Distance Between Idler/Sprocket Centerline	4.47 m (14 ft. 8 in.)
E Undercarriage Length	5.47 m (17 ft. 11 in.)
F Counterweight Clearance	1.36 m (4 ft. 6 in.)
G Upperstructure Width	3.48 m (11 ft. 5 in.)
H Cab Height	3.44 m (11 ft. 3 in.)
I Track Width w/ Triple Semi-Grouser Shoes	750 mm (30 in.) / 900 mm (36 in.)
J Gauge Width	
Operating Position	2.89 m (9 ft. 6 in.)
Transport Position	2.39 m (7 ft. 10 in.)
K Ground Clearance	0.74 m (29 in.)
L Overall Width w/ Triple Semi-Grouser Shoes	
750 mm (30 in.)	
Operating Position	3.64 m (11 ft. 11 in.)
Transport Position	3.14 m (10 ft. 4 in.)
900 mm (36 in.)	
Operating Position	3.79 m (12 ft. 5 in.)
Transport Position	3.29 m (10 ft. 10 in.)



Lift Charts

ZX470LC-5

Boldface type indicates hydraulically limited capacity; **lightface type** indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 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	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.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 2.3-m³ (3 cu. yd.) bucket, 2.9-m (9 ft. 6 in.) arm, 7-m (23 ft.) boom, and 750-mm (30 in.) triple semi-grouser shoes										
6.0 m (20 ft.)					13 260 (28,671)	13 260 (28,671)	11 449 (24,907)	9657 (20,721)		
4.5 m (15 ft.)			21 095 (45,104)	21 095 (45,104)	15 269 (32,927)	13 457 (29,013)	12 437 (26,956)	9284 (19,958)	10 828 (23,592)	6648 (14,212)
3.0 m (10 ft.)					17 260 (37,239)	12 566 (27,102)	13 499 (29,220)	8847 (19,033)	11 040 (23,690)	6456 (13,835)
1.5 m (5 ft.)					18 538 (40,090)	11 898 (25,647)	14 298 (30,949)	8468 (18,219)	10 830 (23,258)	6266 (13,443)
Ground Line			18 039 (42,241)	18 039 (39,198)	18 812 (40,753)	11 564 (24,892)	14 351 (30,842)	8226 (17,696)	10 694 (22,982)	6143 (13,193)
-1.5 m (-5 ft.)	14 413 (32,776)	14 413 (32,776)	23 409 (50,927)	18 367 (39,402)	18 099 (39,217)	11 502 (24,746)	14 111 (30,480)	8152 (17,541)		
-3.0 m (-10 ft.)	25 093 (54,805)	25 093 (54,805)	20 682 (44,876)	18 683 (40,123)	16 290 (35,176)	11 665 (25,108)	12 510 (26,739)	8270 (17,825)		
-4.5 m (-15 ft.)			16 295 (34,963)	16 295 (34,963)	12 694 (26,891)	12 083 (26,066)				
With 2.1-m³ (2.7 cu. yd.) bucket, 3.4-m (11 ft. 2 in.) arm, 7-m (23 ft.) boom, and 750-mm (30 in.) triple semi-grouser shoes										
7.5 m (25 ft.)							10 335 (22,646)	10 188 (21,816)		
6.0 m (20 ft.)							10 987 (23,912)	9955 (21,387)	9758 (18,914)	7069 (15,093)
4.5 m (15 ft.)			19 594 (41,944)	19 594 (41,944)	14 576 (31,447)	13 815 (29,774)	12 040 (26,107)	9539 (20,517)	10 575 (23,039)	6906 (14,803)
3.0 m (10 ft.)			21 702 (51,716)	20 126 (43,428)	16 767 (36,172)	12 932 (27,877)	13 215 (28,612)	9074 (19,527)	11 160 (24,158)	6662 (14,296)
1.5 m (5 ft.)			13 627 (32,937)	13 627 (32,937)	18 386 (39,733)	12 235 (26,354)	14 186 (30,708)	8666 (18,646)	10 994 (23,622)	6432 (13,810)
Ground Line			16 689 (38,952)	16 689 (38,952)	19 039 (41,217)	11 830 (25,456)	14 505 (31,172)	8384 (18,034)	10 812 (23,241)	6267 (13,464)
-1.5 m (-5 ft.)	11 830 (26,863)	11 830 (26,863)	23 687 (53,966)	18 649 (40,030)	18 681 (40,459)	11 682 (25,124)	14 359 (30,858)	8254 (17,756)	10 748 (23,126)	6209 (13,359)
-3.0 m (-10 ft.)	20 254 (45,888)	20 254 (45,888)	22 444 (48,647)	18 851 (40,469)	17 255 (37,283)	11 741 (25,257)	13 353 (28,699)	8291 (17,853)		
-4.5 m (-15 ft.)	23 556 (50,798)	23 556 (50,798)	18 530 (39,855)	18 530 (39,855)	14 342 (30,645)	12 014 (25,882)				
With 1.9-m³ (2.5 cu. yd.) bucket, 3.9-m (12 ft. 10 in.) arm, 7-m (23 ft.) boom, and 750-mm (30 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							10 295 (22,408)	10 103 (21,706)	9527 (19,672)	7189 (15,372)
4.5 m (15 ft.)					13 637 (29,432)	13 637 (29,432)	11 407 (24,737)	9657 (20,769)	10 076 (21,943)	6975 (14,955)
3.0 m (10 ft.)			22 517 (48,350)	20 602 (44,432)	15 939 (34,392)	13 107 (28,247)	12 669 (27,432)	9152 (19,692)	10 752 (23,352)	6698 (14,373)
1.5 m (5 ft.)			18 454 (44,111)	18 454 (41,263)	17 802 (38,465)	12 311 (26,515)	13 775 (29,821)	8692 (18,700)	11 004 (23,640)	6431 (13,806)
Ground Line			18 470 (42,923)	18 470 (39,880)	18 781 (40,645)	11 802 (25,396)	14 458 (31,124)	8354 (17,966)	10 777 (23,161)	6226 (13,371)
-1.5 m (-5 ft.)	11 929 (26,990)	11 929 (26,990)	23,287 (53,593)	18 419 (39,541)	18 772 (40,647)	11 569 (24,881)	14 276 (30,676)	8170 (17,569)	10 661 (22,924)	6121 (13,156)
-3.0 m (-10 ft.)	18 594 (42,054)	18 594 (42,054)	23 454 (50,813)	18 544 (39,811)	17 736 (38,341)	11 562 (24,869)	13 748 (29,622)	8150 (17,539)		
-4.5 m (-15 ft.)	26 695 (57,601)	26 695 (57,601)	20 089 (43,277)	18 903 (40,612)	15 402 (33,049)	11 766 (25,336)	11 616 (24,589)	8331 (17,976)		
-6.0 m (-20 ft.)			14 467 (30,449)	14 467 (30,449)	10 680 (21,930)	10 680 (21,930)				

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Lift Charts

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Load Point Height	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
With 1.4-m ³ (1.8 cu. yd.) bucket, 4.9-m (16 ft. 1 in.) arm, 7-m (23 ft.) boom, and 750-mm (30 in.) triple semi-grouser shoes										
4.5 m (15 ft.)							10 672	10 596		
							(23,183)	(22,810)		
3.0 m (10 ft.)			19 781	19 781	14 759	14 297	12 132	10 058	10 542	7471
			(42,525)	(42,525)	(31,891)	(30,818)	(26,307)	(21,660)	(22,923)	(16,061)
1.5 m (5 ft.)			24 055	20 733	17 131	13 370	13 534	9530	11 380	7154
			(51,893)	(44,650)	(37,044)	(28,814)	(29,333)	(20,524)	(24,711)	(15,385)
Ground Line	7330	7330	21 015	19 618	18 787	12 676	14 609	9097	11 444	6883
	(16,703)	(16,703)	(48,935)	(42,191)	(40,673)	(27,301)	(31,660)	(19,587)	(24,614)	(14,805)
-1.5 m (-5 ft.)	10 854	10 854	22 092	19 115	19 508	12 262	14 921	8805	11 236	6695
	(24,546)	(24,546)	(50,828)	(41,075)	(42,260)	(26,395)	(32,080)	(18,956)	(24,172)	(14,404)
-3.0 m (-10 ft.)	15 439	15 439	25 948	18 998	19 251	12 092	14 764	8667	11 146	6613
	(34,915)	(34,915)	(56,211)	(40,815)	(41,672)	(26,028)	(31,749)	(18,663)	(23,995)	(14,243)
-4.5 m (-15 ft.)	21 400	21 400	23 700	19 153	17 905	12 132	13 951	8690	10 786	6678
	(48,562)	(48,562)	(51,190)	(41,163)	(38,620)	(26,128)	(29,999)	(18,732)	(22,854)	(14,424)
-6.0 m (-20 ft.)	27 001	27 001	19 754	19 568	15 050	12 389	11 291	8921		
	(57,746)	(57,746)	(42,256)	(42,101)	(32,059)	(26,725)	(23,629)	(19,295)		
With 2.5-m ³ (3.3 cu. yd.) bucket, 2.9-m (9 ft. 6 in.) BE arm, 6.3-m (20 ft. 7 in.) BE boom, and 750-mm (30 in.) triple semi-grouser shoes										
7.5 m (25 ft.)					12 475	12 475				
					(27,346)	(27,346)				
6.0 m (20 ft.)					13 439	13 439	12 062	9625		
					(29,186)	(29,186)	(24,663)	(20,585)		
4.5 m (15 ft.)			19 862	19 862	15 216	13 838	12 812	9386		
			(42,654)	(42,654)	(32,909)	(29,780)	(27,855)	(20,137)		
3.0 m (10 ft.)			24 017	20 523	17 196	13 042	13 777	9026		
			(51,680)	(44,277)	(37,161)	(28,089)	(29,875)	(19,390)		
1.5 m (5 ft.)			26 227	19 251	18 661	12 368	14 546	8682		
			(56,710)	(41,443)	(40,370)	(26,629)	(31,508)	(18,659)		
Ground Line			26 141	18 810	19 124	11 973	14 627	8452		
			(56,721)	(40,420)	(41,415)	(25,761)	(31,423)	(18,170)		
-1.5 m (-5 ft.)	22 396	22 396	24 445	18 842	18 359	11 868	13 958	8397		
	(50,640)	(50,640)	(53,062)	(40,462)	(39,723)	(25,531)	(30,009)	(18,071)		
-3.0 m (-10 ft.)	27 189	27 189	21 063	19 194	15 942	12 043				
	(59,024)	(59,024)	(45,537)	(41,236)	(34,232)	(25,933)				
With 2.3-m ³ (3 cu. yd.) bucket, 2.9-m (9 ft. 6 in.) arm, 7-m (23 ft.) boom, and 900-mm (36 in.) triple semi-grouser shoes										
6.0 m (20 ft.)					13 260	13 260	11 449	9786		
					(28,563)	(28,563)	(24,907)	(20,997)		
4.5 m (15 ft.)			21 095	21 095	15 269	13 630	12 437	9413	10 828	6751
			(44,914)	(44,914)	(32,752)	(29,186)	(26,864)	(20,137)	(23,592)	(14,433)
3.0 m (10 ft.)					17 260	12 738	13 499	8976	11 213	6560
					(37,080)	(27,295)	(29,087)	(19,170)	(24,025)	(14,022)
1.5 m (5 ft.)					18 538	12 071	14 298	8597	11 003	6369
					(39,981)	(25,898)	(30,807)	(18,347)	(23,555)	(13,595)
Ground Line			18 039	18 039	18 812	11 736	14 573	8355	10 868	6246
			(42,034)	(39,907)	(40,680)	(25,181)	(31,155)	(17,827)	(23,270)	(13,337)
-1.5 m (-5 ft.)	14 413	14 413	23 409	18 627	18 099	11 675	14 111	8281		
	(32,616)	(32,616)	(51,053)	(40,120)	(39,135)	(25,025)	(30,339)	(17,670)		
-3.0 m (-10 ft.)	25 093	25 093	20 682	18 943	16 290	11 838	12 510	8399		
	(54,980)	(54,980)	(44,931)	(40,752)	(35,052)	(25,339)	(26,597)	(17,956)		
-4.5 m (-15 ft.)			16 295	16 295	12 694	12 256				
			(34,880)	(34,880)	(26,722)	(26,248)				

Lift Charts ZX470LC-5

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Load Point Height	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
With 2.7-m ³ (2.1 cu. yd.) bucket, 3.4-m (11 ft. 2 in.) arm, 7-m (23 ft.) boom, and 900-mm (36 in.) triple semi-grouser shoes										
7.5 m (25 ft.)							10 335	10 317		
							(22,646)	(22,095)		
6.0 m (20 ft.)							10 987	10 084	9758	7173
							(23,912)	(21,666)	(18,914)	(15,316)
4.5 m (15 ft.)			19 594	19 594	14 576	13 988	12 040	9668	10 575	7009
			(41,944)	(41,944)	(31,447)	(30,146)	(26,107)	(20,796)	(23,039)	(15,026)
3.0 m (10 ft.)			21 702	20 386	16 767	13 105	13 215	9204	11 160	6765
			(51,716)	(43,987)	(36,172)	(28,249)	(28,612)	(19,806)	(24,158)	(14,519)
1.5 m (5 ft.)			13 627	13 627	18 386	12 408	14 186	8795	11 168	6535
			(32,937)	(32,937)	(39,733)	(26,726)	(30,708)	(18,925)	(23,998)	(14,033)
Ground Line			16 689	16 689	19 039	12 002	14 680	8513	10 986	6370
			(38,952)	(38,952)	(41,217)	(25,828)	(31,653)	(18,313)	(23,616)	(13,687)
-1.5 m (-5 ft.)	11 830	11 830	23 687	18 909	18 681	11 854	14 494	8383	10 922	6312
	(26,863)	(26,863)	(53,966)	(40,589)	(40,459)	(25,496)	(31,335)	(18,035)	(23,501)	(13,582)
-3.0 m (-10 ft.)	20 254	20 254	22 444	19 111	17 255	11 913	13 353	8420		
	(45,888)	(45,888)	(48,647)	(41,028)	(37,283)	(25,629)	(28,699)	(18,132)		
-4.5 m (-15 ft.)	23 556	23 556	18 530	18 530	14 342	12 186				
	(50,798)	(50,798)	(39,855)	(39,855)	(30,645)	(26,255)				
With 1.9-m ³ (2.5 cu. yd.) bucket, 3.9-m (12 ft. 10 in.) arm, 7-m (23 ft.) boom, and 900-mm (36 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							10 295	10 232	9527	7292
							(22,408)	(21,985)	(19,672)	(15,595)
4.5 m (15 ft.)					13 637	13 637	11 407	9786	10 076	7078
					(29,432)	(29,432)	(24,737)	(21,048)	(21,943)	(15,178)
3.0 m (10 ft.)			22 517	20 862	15 939	13 279	12 669	9281	10 752	6801
			(48,350)	(44,991)	(34,392)	(28,619)	(27,432)	(19,971)	(23,352)	(14,596)
1.5 m (5 ft.)			18 454	18 454	17 802	12 483	13 775	8821	11 177	6534
			(44,111)	(41,822)	(38,465)	(26,887)	(29,821)	(18,979)	(24,016)	(14,030)
Ground Line			18 470	18 470	18 781	11 974	14 458	8483	10 951	6329
			(42,923)	(40,439)	(40,645)	(25,768)	(31,298)	(18,245)	(23,536)	(13,594)
-1.5 m (-5 ft.)	11 929	11 929	23 287	18 679	18 772	11 742	14 500	8299	10 835	6224
	(26,990)	(26,990)	(53,593)	(40,100)	(40,647)	(25,254)	(31,157)	(17,849)	(23,299)	(13,379)
-3.0 m (-10 ft.)	18 594	18 594	23 454	18 804	17 736	11 735	13 748	8279		
	(42,054)	(42,054)	(50,813)	(40,370)	(38,341)	(25,241)	(29,622)	(17,818)		
-4.5 m (-15 ft.)	26 695	26 695	20 089	19 163	15 402	11 939	11 616	8460		
	(57,601)	(57,601)	(43,277)	(41,171)	(33,049)	(25,708)	(24,589)	(18,255)		
-6.0 m (-20 ft.)			14 467	14 467	10 680	10 680				
			(30,449)	(30,449)	(21,930)	(21,930)				

DASH-5

Lift Charts ZX470LC-5

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 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	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
With 1.4-m ³ (1.8 cu. yd.) bucket, 4.9-m (16 ft. 1 in.) arm, 7-m (23 ft.) boom, and 900-mm (36 in.) triple semi-grouser shoes										
4.5 m (15 ft.)							10 672	10 672		
							(23,183)	(23,183)		
3.0 m (10 ft.)			19 781	19 781	14 759	14 469			10 542	7574
			(42,525)	(42,525)	(31,891)	(31,190)			(22,923)	(16,285)
1.5 m (5 ft.)			24 055	20 993	17 131	13 543			11 380	7257
			(51,893)	(45,209)	(37,044)	(29,186)			(24,711)	(15,608)
Ground Line	7330	7330	21 015	19 877	18 787	12 849			14 609	9226
	(16,703)	(16,703)	(48,935)	(42,750)	(40,673)	(27,674)			(31,660)	(19,866)
-1.5 m (-5 ft.)	10 854	10 854	22 092	19 375	19 508	12 434			15 144	8934
	(24,546)	(24,546)	(50,828)	(41,634)	(42,260)	(26,768)			(32,561)	(19,235)
-3.0 m (-10 ft.)	15 439	15 439	25 948	19 258	19 251	12 265			14 987	8796
	(34,915)	(34,915)	(56,211)	(41,374)	(41,672)	(26,401)			(32,231)	(18,942)
-4.5 m (-15 ft.)	15 885	15 885	21 400	21 400	23 700	19 413			17 905	12 305
	(48,562)	(48,562)	(51,190)	(41,722)	(38,620)	(26,501)			(29,989)	(19,011)
-6.0 m (-20 ft.)	27 001	27 001	19 754	19 754	15 050	12 562			11 291	9050
	(57,746)	(57,746)	(42,256)	(42,256)	(32,059)	(27,097)			(23,629)	(19,574)
With 2.5-m ³ (3.3 cu. yd.) bucket, 2.9-m (9 ft. 6 in.) BE arm, 6.3-m (20 ft. 7 in.) BE boom, and 900-mm (36 in.) triple semi-grouser shoes										
7.5 m (25 ft.)					12 475	12 475				
					(27,346)	(27,346)				
6.0 m (20 ft.)					13 439	13 439	12 062	9754		
					(29,186)	(29,186)	(24,663)	(20,864)		
4.5 m (15 ft.)			19 862	19 862	15 216	14 010			12 812	9515
			(42,654)	(42,654)	(32,909)	(30,152)			(27,855)	(20,416)
3.0 m (10 ft.)			24 017	20 783	17 196	13 215			13 777	9155
			(51,680)	(44,836)	(37,161)	(28,461)			(29,875)	(19,669)
1.5 m (5 ft.)			26 227	19 511	18 661	12 541			14 546	8811
			(56,710)	(42,002)	(40,370)	(27,001)			(31,508)	(18,938)
Ground Line			26 141	19 070	19 124	12 145			14 751	8581
			(56,721)	(40,979)	(41,415)	(26,134)			(31,904)	(18,449)
-1.5 m (-5 ft.)	22 396	22 396	24 445	19 101	18 359	12 040			13 958	8526
	(50,640)	(50,640)	(53,062)	(41,021)	(39,723)	(25,904)			(30,009)	(18,350)
-3.0 m (-10 ft.)	27 189	27 189	21 063	19 454	15 942	12 216				
	(59,024)	(59,024)	(45,537)	(41,795)	(34,232)	(26,305)				

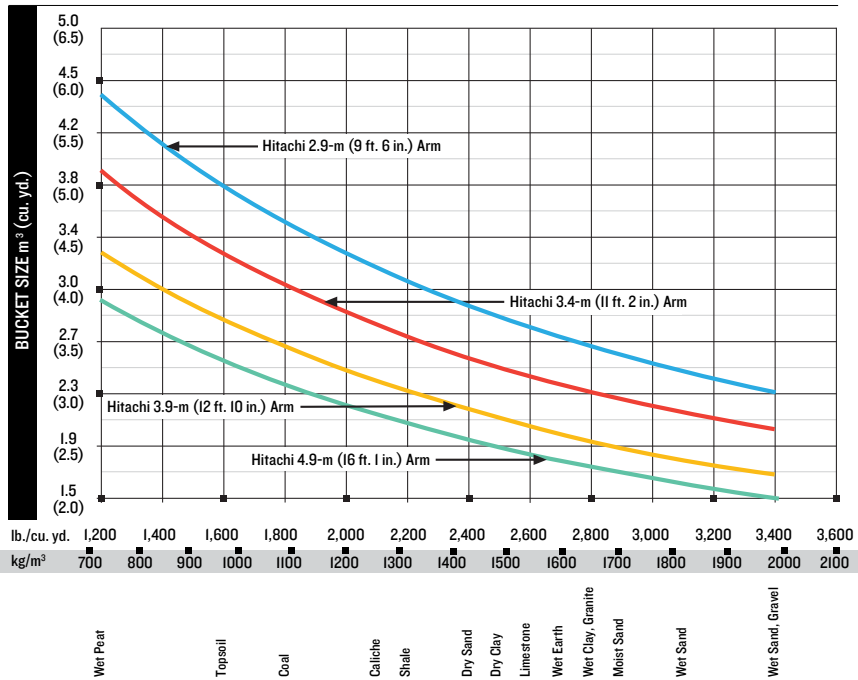
Buckets

ZX470LC-5

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 2.9 m (9 ft. 6 in.)		Arm Dig Force 3.4 m (11 ft. 2 in.)		Arm Dig Force 3.9 m (12 ft. 10 in.)		Arm Dig Force 4.9 m (16 ft. 1 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
General Purpose	1372	54	1.76	2.3	1006	2,217	281.8	63,355	258.5	58,113	222.4	69.5	202.2	45,447	179.7	40,392	1765	69.5	7
Heavy-Duty	1067	42	1.41	1.8	1418	3,127	273.9	61,576	258.8	58,177	220.2	49,511	200.4	45,042	178	40,086	1816	71.5	5
	1219	48	1.64	2.1	1507	3,323	273.9	61,576	258.8	58,177	220.2	49,511	200.4	45,042	178	40,086	1816	71.5	6
	1372	54	1.87	2.4	1624	3,581	273.9	61,576	258.8	58,177	220.2	49,511	200.4	45,042	178	40,086	1816	71.5	6
	1524	60	2.09	2.7	1712	3,774	273.9	61,576	258.8	58,177	220.2	49,511	200.4	45,042	178	40,086	1816	71.5	7
	1676	66	2.30	3.0	1737	3,828	273.9	61,576	258.8	58,177	220.2	49,511	200.4	45,042	178	40,086	1816	71.5	7
Truck Loading	1829	72	2.52	3.3	1844	4,065	273.9	61,576	258.8	58,177	220.2	49,511	200.4	45,042	178	40,086	1816	71.5	8
	1829	72	3.20	4.2	1970	4,344	264.6	59,480	255.3	57,399	217.6	48,911	198.1	44,543	177	39,707	1880	74.0	6
Heavy-Duty High Capacity	1219	48	2.06	2.7	1802	3,973	264.6	59,480	255.3	57,399	217.6	48,911	198.1	44,543	177	39,707	1880	74.0	5
	1372	54	2.34	3.1	2033	4,482	264.6	59,480	255.3	57,399	217.6	48,911	198.1	44,543	177	39,707	1880	74.0	5
	1524	60	2.62	3.4	2329	5,136	264.6	59,480	255.3	57,399	217.6	48,911	198.1	44,543	177	39,707	1880	74.0	6
	1676	66	2.91	3.8	2271	5,007	264.6	59,480	255.3	57,399	217.6	48,911	198.1	44,543	177	39,707	1880	74.0	6
	1829	72	3.20	4.2	2663	5,870	264.6	59,480	255.3	57,399	217.6	48,911	198.1	44,543	177	39,707	1880	74.0	7

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.

DASH-5

ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special

ZX470 Engine

- Auto-idle system
- Batteries (2 – 12 volt), 280-min. reserve capacity
- 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)
- Automatic belt-tension device
- Fuel filter with water separator
- Full-flow oil filter
- Turbocharger with charge air cooler
- Cool-on-demand hydraulic-driven fan
- Glow-plug start aid
- 500-hour engine-oil-change interval
- 70% (35 deg.) off-level capability
- Hydraulic fan reverser

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 (3)
- Sealed and lubricated track chain
- ▲ Triple semi-grouser shoes, 750 mm (30 in.)
- ▲ Triple semi-grouser shoes, 900 mm (36 in.)

ZX470 Upperstructure

- Right-hand, left-hand, and counterweight mirrors
- Vandal locks with ignition key: Cab door / Fuel cap / Service doors / Toolbox
- Debris screen in side panel
- Remote-mounted engine oil and fuel filters
- Service platform, left side
- ▲ Counterweight-removal system

Front Attachments

- Centralized lubrication system
- Dirt seals on all bucket pins
- No-boom-arm option
- ▲ Boom, 7 m (23 ft.)
- ▲ Boom, mass excavating, 6.3 m (20 ft. 7 in.)
- ▲ Arm, mass excavating, 2.9 m (9 ft. 6 in.)
- ▲ Arm, 2.9 m (9 ft. 6 in.)
- ▲ Arm, 3.4 m (11 ft. 2 in.)
- ▲ Arm, 3.9 m (12 ft. 10 in.)
- ▲ Arm, 4.9 m (16 ft. 1 in.)
- ▲ Boom cylinder with plumbing to mainframe for no-boom-arm option
- ▲ Buckets: Heavy duty / Heavy-duty high capacity / Side cutters and teeth

Operator's Station

- Adjustable independent-control positions (levers-to-seat, seat-to-pedals)
- AM/FM radio
- Auto climate control/air conditioner/heater/pressurizer, 5.9 kW (20,000 Btu/hr.)
- 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

ZX470 Operator's Station (continued)

- Large cup holder
 - Machine Information Center (MIC)
 - 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
 - Fluid-level switch and indicator light for engine coolant and engine oil
 - Motion alarm with cancel switch (conforms to SAE J994)
 - Power-boost switch on right console lever
 - Propel pedals and levers
 - SAE 2-lever control pattern
 - Seat belt, 51 mm (2 in.), retractable
 - Tinted glass
 - Transparent tinted overhead hatch
 - Hot/cold beverage compartment
 - ▲ Monitor system with alarm features: 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)
 - ▲ Cab extension wiring harness
- ### Lights
- Work lights: Halogen / 2 mounted on boom / 1 mounted on frame / 2 mounted on top of cab

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 a unit with 1370-mm (54 in.) bucket, 900-mm (36 in.) triple semi-grouser shoes, 9111-kg (20,086 lb.) counterweight, full fuel tank, and 79-kg (175 lb.) operator.

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