

PRODUCTION-CLASS EXCAVATORS

ZAXIS

# DASH-6

ZX470LC-6



HITACHI

Courtesy of MachineMarket

# **PROVEN PERFORMANCE PASSED DOWN.**

## **PRODUCTIVITY-BOOSTING ADVANTAGES.**

At Hitachi, efficiency, reliability and durability are in our genes – built into our large mining excavators and passed down to our line of construction excavators. So you get maximum performance, no matter which Hitachi excavator you're running. And our production-class excavators, like the ZX470LC-6, prove it.

The ZX470LC-6 is purpose-built with productivity-boosting advantages. This workhorse features a fuel-efficient EPA Final Tier 4 (FT4)/EU Stage IV Isuzu engine that meets rigid emission standards – no diesel particulate filter needed. Generous swing torque, digging force and lift capacity. Standard upperstructure handrails for added safety and accessibility. Easy-to-operate controls for smooth and responsive hydraulics. Highly efficient cooling system. And simplified maintenance with features like a battery disconnect switch and engine and hydraulic oil sample ports. Add it all up, and the ZX470LC-6 gives you...

## **A COMPETITIVE EDGE.**



# PERFORMANCE



# PRODUCTIVITY





# READY TO TACKLE YOUR TOUGHEST JOBS.

## PRODUCTIVITY ON A HIGHER LEVEL.

The ZX470LC-6 takes productivity to a higher level. Our HIOS III hydraulic system perfectly 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.

The ZX470LC-6 provides efficient power with three work modes to fit the task. High Productivity (H/P) delivers more power and faster hydraulic response. Power (PWR) delivers a balance of power and speed, plus fuel economy for normal operation. Economy (ECO) maximizes fuel efficiency while delivering an enhanced level of productivity.

Need extra stability or lift capacity? Choose from a wide variety of track widths, arm lengths, boom lengths and bucket sizes.

With the ZX470LC-6, you get...

## MORE DONE, MORE EFFICIENTLY.

- 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.

- An added coolant expansion tank provides make-up fluid when needed and improves cooling system efficiency, keeping the engine at peak performance.

# MORE COMFORT MEANS MORE PRODUCTIVITY.

## COMFORTABLE AND SAFE CAB.

It's true – a more comfortable operator is more productive and efficient. And the ZX470LC-6 cab keeps operators focused on the job. Silicone-filled cab mounts provide isolation from noise and vibration. A refined, multifunction LCD monitor employs a rotary control for easy access to a wealth of performance and convenience functions and features. Operators will also appreciate the wide entryway, fully adjustable high-back sculpted seat, lots of storage and generous legroom. Unsurpassed visibility, ergonomically placed low-effort joysticks, a highly efficient HVAC system, plus other features contribute to...

## COMFORTABLE PRODUCTIVITY.



■ 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.



■ Get unobstructed all-around visibility thanks to a new hood design paired with a wide expanse of front, side, and overhead glass and mirrors.



■ Cab-mounted lights, two boom-mounted lights and a rearview camera provide excellent job site visibility, regardless of when or where you work.

# COMFORT



■ The ZX470LC-6 is standard equipped with five years of ZXLINK™ Ultimate, which gives you 24/7 online access to machine locations, health, utilization, fuel consumption and other valuable information.

■ 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 heated, air suspension high-back seat.

# EFFICIENT



■ Step positioning on the track frame and walkway on the upperstructure allow for easy access around the machine while maintaining appropriate points of contact.

■ 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 battery box on the right side of the machine, is easily accessible and extends battery life.

■ The FT4 engine solution does not require a diesel particulate filter (DPF), saving service time and lowering operating costs. Fluid consumption (fuel and diesel exhaust fluid [DEF]) is equal or reduced compared to ZX470LC-5 (Interim Tier 4/EU Stage IIIB) consumption.



# SIMPLIFIED MAINTENANCE. MORE UPTIME.

## LOWER OPERATING COSTS.

The ZX470LC-6 is equipped with time-saving and productivity-boosting advantages — from grouped service points to at-a-glance gauges. You get convenient machine access with steps, handrails and walkways. Extended service intervals minimize daily operating costs. Scheduled maintenance is easy to track using ZXLink™ and the in-cab diagnostic monitor. The ZX470LC-6 works hard for you and is...

## EASY TO MAINTAIN.



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



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



■ Easily installed spin-on main fuel filters help prevent contamination when servicing. Two additional water separators help extend fuel filter life.



■ A reversing fan back-blows cooler cores to reduce debris buildup and increase uptime.

# DURABILITY BUILT-IN, DOWNTIME TOSSED OUT.

## TACKLE TOUGH JOBS.

Toughness is built into the ZX470LC-6 with a heavy-duty undercarriage and durable D-channel mainframe. Added strength comes from welded bulkheads within the boom that resist torsional stress.

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 the ZX470LC-6 gives 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 DPF.

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

- Swing-out coolers, protected behind heavy-duty hinged doors, are easy to access and clean.

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

- Engine and hydraulic oil sample ports allow for quick and convenient, proactive maintenance checks, which keep you running longer.





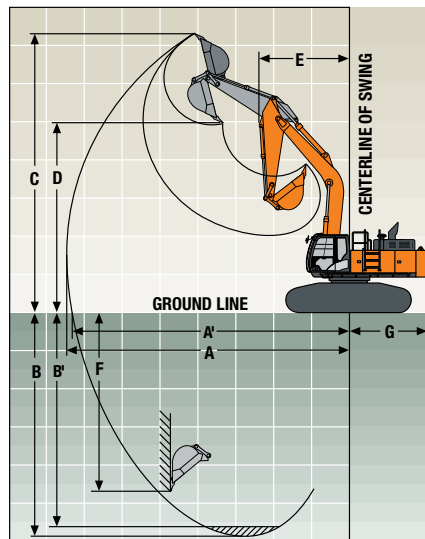
# DURABILITY

<b>Engine</b>	<b>ZX470LC-6</b>		
Manufacturer and Model	Isuzu 6UZI		
Non-Road Emission Standards	EPA Final Tier 4 / EU Stage IV		
Net Rated Power (ISO 9249)	270 kW (362 hp) @ 2,000 rpm		
Cylinders	6		
Displacement	9.84 L (600 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	Turbocharged, air-to-air charge-air cooler		
<b>Cooling</b>	Cool-on-demand, hydraulic-driven, suction-type fan with remote-mounted drive		
<b>Powertrain</b>	2-speed propel with AutoShift		
<b>Maximum Travel Speed</b>			
Low	3.9 km/h (2.4 mph)		
High	5.5 km/h (3.4 mph)		
Drawbar Pull	33 537 kg (73,937 lb.)		
<b>Hydraulics</b>	Open center, load sensing		
<b>Main Pumps</b>	2 variable-displacement pumps		
Maximum Rated Flow	400 L/m (106 gpm) x 2		
<b>System Operating Pressure</b>			
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)		
<b>Controls</b>	Pilot levers, short-stroke, low-effort hydraulic pilot controls with shutoff lever		
<b>Cylinders</b>	Heat treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins		
	<b>Bore</b>	<b>Rod Diameter</b>	<b>Stroke</b>
<b>Boom (2)</b>	170 mm (6.7 in.)	115 mm (4.5 in.)	1590 mm (62.6 in.)
<b>Arm (1)</b>	190 mm (7.5 in.)	130 mm (5.1 in.)	1940 mm (76.4 in.)
<b>Bucket (1)</b>	170 mm (6.7 in.)	120 mm (4.7 in.)	1325 mm (52.2 in.)
<b>Electrical</b>	Number of Batteries (12 volt) 2		
Battery Capacity	500 CCA		
Alternator Rating	100 amp		
Work Lights	5 halogen (1 mounted on frame, 2 mounted on boom, and 2 mounted on top of cab)		
<b>Undercarriage</b>	Rollers (each side)		
Carrier	3		
Track	9		
Shoes, Triple Semi-Grousers (each side)	53		
<b>Track</b>	Adjustment Hydraulic		
Guides	Front and center		
Chain	Sealed and lubricated		
Planetary Final Drives with Axial Piston Motors			

# ZX470LC-6

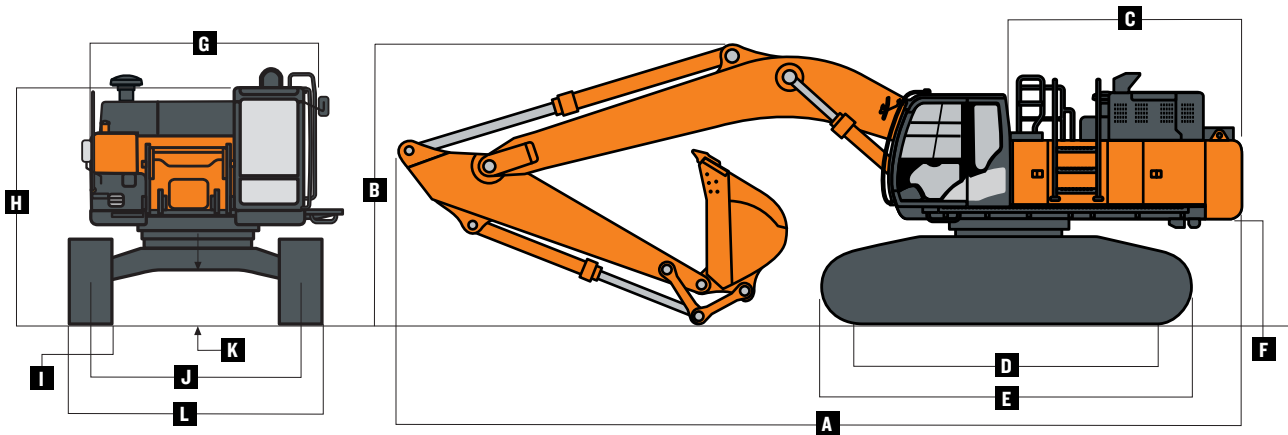
<b>Ground Pressure</b>		<b>ZX470LC-6</b>
750-mm (30 in.) Triple Semi-Grouser Shoes		72.1 kPa (10.5 psi)
900-mm (36 in.) Triple Semi-Grouser Shoes		60.1 kPa (8.7 psi)
<b>Swing Mechanism</b>		
Swing Speed		9.5 rpm
Swing Torque		148 000 Nm (109,159 lb.-ft.)
<b>Serviceability</b>		
<b>Refill Capacities</b>		
Fuel Tank		675 L (178 gal.)
Diesel Exhaust Fluid (DEF) Tank		95 L (25.1 gal.)
Cooling System		62.3 L (16.5 gal.)
Engine Oil with Filter		41 L (11 gal.)
Hydraulic Tank		310 L (82 gal.)
Hydraulic System		510 L (135 gal.)
<b>Gearbox</b>		
Swing (each)		6.5 L (6.9 qt.)
Travel (each)		11 L (11.6 qt.)
<b>Operating Weights</b>		
With full fuel tank; 79-kg (175 lb.) operator; 2.34-m <sup>3</sup> (3.06 cu. yd.), 1370-mm (54 in.), 2031-kg (4,478 lb.) bucket; 3.9-m (12 ft. 10 in.) arm; 8400-kg (18,519 lb.) counterweight with removal device; and 900-mm (36 in.) triple semi-grouser shoes		
SAE Operating Weight		50 260 kg (110,804 lb.)
<b>Optional Components</b>		
<b>Undercarriage w/ Triple Semi-Grouser Shoes</b>		
750 mm (30 in.)		18 298 kg (40,340 lb.)
900 mm (36 in.)		18 978 kg (41,839 lb.)
<b>One-Piece Boom (w/ arm cylinder)</b>		
7-m (23 ft.)		4499 kg (9,919 lb.)
<b>Mass Excavating Boom</b>		
6.3-m (20 ft. 7 in.)		4544 kg (10,018 lb.)
<b>Arm with Bucket Cylinder and Linkage</b>		
2.9 m (9 ft. 6 in.)		2534 kg (5,587 lb.)
3.4 m (11 ft. 2 in.)		2539 kg (5,598 lb.)
3.9 m (12 ft. 10 in.)		2640 kg (5,820 lb.)
4.9 m (16 ft. 1 in.)		2320 kg (5,115 lb.)
Boom-Lift Cylinders (2), Total Weight		840 kg (1,853 lb.)

Operating Dimensions	ZX470LC-6				
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.)
<b>A</b> Maximum Reach	11.40 m (37 ft. 5 in.)	10.86 m (35 ft. 8 in.)	12.06 m (39 ft. 7 in.)	12.49 m (41 ft.)	13.34 m (43 ft. 9 in.)
<b>A'</b> Maximum Reach at Ground Level	11.17 m (36 ft. 8 in.)	10.61 m (34 ft. 10 in.)	11.84 m (38 ft. 10 in.)	12.28 m (40 ft. 3 in.)	13.14 m (43 ft. 1 in.)
<b>B</b> Maximum Digging Depth	7.28 m (23 ft. 11 in.)	6.23 m (20 ft. 5 in.)	7.77 m (25 ft. 6 in.)	8.27 m (27 ft. 2 in.)	9.11 m (29 ft. 11 in.)
<b>B'</b> Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	7.08 m (23 ft. 3 in.)	6.08 m (19 ft. 11 in.)	7.63 m (25 ft.)	8.14 m (26 ft. 8 in.)	9.0 m (29 ft. 6 in.)
<b>C</b> Maximum Cutting Height	10.25 m (33 ft. 8 in.)	10.88 m (35 ft. 8 in.)	11.06 m (36 ft. 3 in.)	11.16 m (36 ft. 7 in.)	11.73 m (38 ft. 6 in.)
<b>D</b> Maximum Dumping Height	7.03 m (23 ft. 1 in.)	7.33 m (24 ft. 1 in.)	7.65 m (25 ft. 1 in.)	7.77 m (25 ft. 6 in.)	8.67 m (28 ft. 5 in.)
<b>E</b> Minimum Swing Radius	5.02 m (16 ft. 6 in.)	3.93 m (12 ft. 11 in.)	4.84 m (15 ft. 11 in.)	4.81 m (15 ft. 9 in.)	4.85 m (15 ft. 11 in.)
<b>F</b> Maximum Vertical Wall	5.27 m (17 ft. 3 in.)	5.02 m (16 ft. 6 in.)	6.59 m (21 ft. 7 in.)	6.98 m (22 ft. 11 in.)	8.42 m (27 ft. 7 in.)
<b>G</b> Tail Swing Radius	3.67 m (12 ft.)	3.67 m (12 ft.)	3.67 m (12 ft.)	3.67 m (12 ft.)	3.67 m (12 ft.)



# ZX470LC-6

Machine Dimensions	ZX470LC-6
<b>A</b> 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.)	12.0 m (39 ft. 4 in.)
2.9 m (9 ft. 6 in.) with 6.3-m (20 ft. 7 in.) Boom	11.32 m (37 ft. 2 in.)
<b>B</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	3.74 m (12 ft. 3 in.)
<b>C</b> Rear-End Length/Swing Radius	3.67 m (12 ft.)
<b>D</b> Distance Between Idler/Sprocket Centerline	4.47 m (14 ft. 8 in.)
<b>E</b> Undercarriage Length	5.47 m (17 ft. 11 in.)
<b>F</b> Counterweight Clearance	1.36 m (4 ft. 6 in.)
<b>G</b> Upperstructure Width	3.48 m (11 ft. 5 in.)
<b>H</b> Cab Height	3.33 m (10 ft. 11 in.)
<b>I</b> Track Width w/ Triple Semi-Grouser Shoes	750 mm (30 in.) / 900 mm (36 in.)
<b>J</b> Gauge Width	
Operating Position	2.89 m (9 ft. 6 in.)
Transport Position	2.39 m (7 ft. 10 in.)
<b>K</b> Ground Clearance	0.74 m (29 in.)
<b>L</b> 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-6

**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 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.

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.)		9.0 m (30 ft.)		10.5 m (35 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	Over Front	Over Side
With 3.9-m (12 ft. 10 in.) arm, 7.0-m (23 ft.) boom, 1.9-m <sup>3</sup> (2.5 cu. yd.) bucket and 750-mm (30 in.) triple semi-grouser shoes														
7.5 m (25 ft.)											<b>6350</b>	<b>6350</b>		
6.0 m (20 ft.)									<b>10 300</b>	<b>10 300</b>	<b>9530</b>	7440		
									<b>(22,410)</b>	<b>(22,370)</b>	<b>(19,670)</b>	(15,900)		
4.5 m (15 ft.)							<b>13 640</b>	<b>13 640</b>	<b>11 410</b>	9960	<b>10 080</b>	7220		
							<b>(29,430)</b>	<b>(29,430)</b>	<b>(24,740)</b>	<b>(21,430)</b>	<b>(21,940)</b>	(15,490)		
3.0 m (10 ft.)					22 520	21 220	<b>15 940</b>	13 520	<b>12 670</b>	9460	<b>10 750</b>	6940	<b>6160</b>	5200
					<b>(48,350)</b>	(45,760)	<b>(34,390)</b>	(29,130)	<b>(27,430)</b>	(20,360)	<b>(23,350)</b>	(14,900)		
1.5 m (5 ft.)					18 450	<b>18 450</b>	<b>17 800</b>	12 720	<b>13 780</b>	9000	<b>11 350</b>	6680	<b>6690</b>	5080
					<b>(44,110)</b>	(42,600)	<b>(38,470)</b>	(27,400)	<b>(29,820)</b>	(19,360)	<b>(24,380)</b>	(14,340)		
Ground Line					18 470	<b>18 470</b>	<b>18 780</b>	12 210	<b>14 460</b>	8660	<b>11 120</b>	6470		
					<b>(42,920)</b>	(41,210)	<b>(40,650)</b>	(26,280)	<b>(31,300)</b>	(18,630)	<b>(23,910)</b>	(13,900)		
-1.5 m (-5 ft.)			<b>11 930</b>	<b>11 930</b>	23 290	19 040	<b>18 770</b>	11 980	<b>14 520</b>	8480	<b>11 010</b>	6370		
			<b>(26,990)</b>	<b>(26,990)</b>	<b>(53,590)</b>	(40,870)	<b>(40,650)</b>	(25,770)	<b>(31,410)</b>	(18,230)	<b>(23,670)</b>	(13,690)		
-3.0 m (-10 ft.)	<b>14 070</b>	<b>14 070</b>	<b>18 590</b>	<b>18 590</b>	23 450	19 160	<b>17 740</b>	11 970	<b>13 750</b>	8460	<b>10 530</b>	6410		
	<b>(31,520)</b>	<b>(31,520)</b>	<b>(42,050)</b>	<b>(42,050)</b>	<b>(50,810)</b>	(41,140)	<b>(38,340)</b>	(25,760)	<b>(29,620)</b>	(18,200)				
-4.5 m (-15 ft.)			<b>26 700</b>	<b>26 700</b>	20 090	19 520	<b>15 400</b>	12 180	<b>11 620</b>	8640				
			<b>(57,600)</b>	<b>(57,600)</b>	<b>(43,280)</b>	(41,940)	<b>(33,050)</b>	(26,220)	<b>(24,590)</b>	(18,640)				
-6.0 m (-20 ft.)					14 470	<b>14 470</b>	<b>10 680</b>	<b>10 680</b>						
					<b>(30,450)</b>	<b>(30,450)</b>	<b>(21,930)</b>	<b>(21,930)</b>						



# ZX470LC-6

## Lift Charts ZX470LC-6

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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.)		9.0 m (30 ft.)		10.5 m (35 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	Over Front	Over Side
With 2.9-m (9 ft. 6 in.) arm, 7.0-m (23 ft.) boom, 2.3-m <sup>3</sup> (3.0 cu. yd.) bucket and 900-mm (36 in.) triple semi-grouser shoes														
6.0 m (20 ft.)							<b>13 260</b>	<b>13 260</b>	<b>11 450</b>	10 090				
							(28,560)	(28,560)	(24,910)	(21,660)				
4.5 m (15 ft.)					<b>21 100</b>	<b>21 100</b>	<b>15 270</b>	14 040	<b>12 440</b>	9720	<b>10 830</b>	7000		
					(44,910)	(44,910)	(32,750)	(30,070)	(26,860)	(20,800)	(23,590)	(14,970)		
3.0 m (10 ft.)							<b>17 260</b>	13 150	<b>13 500</b>	9280	<b>11 310</b>	6810		
							(37,080)	(28,180)	(29,090)	(19,840)	(24,520)	(14,550)		
1.5 m (5 ft.)							<b>18 540</b>	12 480	<b>14 300</b>	8910	<b>11 350</b>	6620		
							(39,980)	(26,790)	(30,810)	(19,010)	(24,300)	(14,130)		
Ground Line					<b>18 040</b>	<b>18 040</b>	<b>18 810</b>	12 150	<b>14 570</b>	8660	<b>11 210</b>	6490		
					(42,030)	(41,240)	(40,680)	(26,070)	(31,400)	(18,490)	(24,020)	(13,870)		
-1.5 m (-5 ft.)		<b>14 410</b>	<b>14 410</b>	<b>23 410</b>	19 250	<b>18 100</b>	12 090	<b>14 110</b>	8590					
		(32,620)	(32,620)	(51,050)	(41,460)	(39,140)	(25,910)	(30,340)	(18,340)					
-3.0 m (-10 ft.)		<b>25 090</b>	<b>25 090</b>	<b>20 680</b>	19 560	<b>16 290</b>	12 250	<b>12 510</b>	8710					
		(54,980)	(54,980)	(44,930)	(42,090)	(35,050)	(26,230)	(26,600)	(18,620)					
-4.5 m (-15 ft.)					<b>16 300</b>	<b>16 300</b>	<b>12 690</b>	12 670						
					(34,880)	(34,880)	(26,720)	(26,720)						
With 3.4-m (11 ft. 2 in.) arm, 7.0-m (23 ft.) boom, 2.1-m <sup>3</sup> (2.7 cu. yd.) bucket and 900-mm (36 in.) triple semi-grouser shoes														
7.5 m (25 ft.)									<b>10 340</b>	<b>10 340</b>				
									(22,650)	(22,650)				
6.0 m (20 ft.)									<b>10 990</b>	10 390	<b>9760</b>	7420		
									(23,910)	(22,330)	(18,910)	(15,850)		
4.5 m (15 ft.)					<b>19 590</b>	<b>19 590</b>	<b>14 580</b>	14 400	<b>12 040</b>	9980	<b>10 580</b>	7260		
					(41,940)	(41,940)	(31,450)	(31,040)	(26,110)	(21,460)	(23,040)	(15,560)		
3.0 m (10 ft.)					<b>21 700</b>	21 010	<b>16 770</b>	13 520	<b>13 220</b>	9510	<b>11 160</b>	7010		
					(51,720)	(45,320)	(36,170)	(29,140)	(28,610)	(20,470)	(24,240)	(15,050)		
1.5 m (5 ft.)					<b>13 630</b>	<b>13 630</b>	<b>18 390</b>	12 820	<b>14 190</b>	9100	<b>11 510</b>	6780		
					(32,940)	(32,940)	(39,730)	(27,620)	(30,710)	(19,590)	(24,740)	(14,570)		
Ground Line					<b>16 690</b>	<b>16 690</b>	<b>19 040</b>	12 410	<b>14 680</b>	8820	<b>11 330</b>	6620		
					(38,950)	(38,950)	(41,220)	(26,720)	(31,780)	(18,980)	(24,360)	(14,220)		
-1.5 m (-5 ft.)		<b>11 830</b>	<b>11 830</b>	<b>23 690</b>	19 530	<b>18 680</b>	12 270	<b>14 490</b>	8690	<b>11 270</b>	6560			
		(26,860)	(26,860)	(53,970)	(41,920)	(40,460)	(26,390)	(31,340)	(18,700)	(24,250)	(14,120)			
-3.0 m (-10 ft.)		<b>20 250</b>	<b>20 250</b>	<b>22 440</b>	19 730	<b>17 260</b>	12 330	<b>13 350</b>	8730					
		(45,890)	(45,890)	(48,650)	(42,360)	(37,280)	(26,520)	(28,700)	(18,800)					
-4.5 m (-15 ft.)		<b>23 560</b>	<b>23 560</b>	<b>18 530</b>	<b>18 530</b>	<b>14 340</b>	12 600	<b>10 290</b>	9010					
		(50,800)	(50,800)	(39,860)	(39,860)	(30,650)	(27,140)							

### Lift Charts ZX470LC-6

**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 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.

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.)		9.0 m (30 ft.)		10.5 m (35 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	Over Front	Over Side	
With 3.9-m (12 ft. 10 in.) arm, 7.0-m (23 ft.) boom, 1.9-m <sup>3</sup> (2.5 cu. yd.) bucket and 900-mm (36 in.) triple semi-grouser shoes															
7.5 m (25 ft.)											<b>6350</b>	<b>6350</b>			
6.0 m (20 ft.)									<b>10 300</b>	<b>10 300</b>	<b>9530</b>	7540			
									<b>(22,410)</b>	<b>(22,410)</b>	<b>(19,670)</b>	(16,130)			
4.5 m (15 ft.)								<b>13 640</b>	<b>13 640</b>	<b>11 410</b>	<b>10 090</b>	<b>10 080</b>	7330		
								<b>(29,430)</b>	<b>(29,430)</b>	<b>(24,740)</b>	(21,710)	<b>(21,940)</b>	(15,710)		
3.0 m (10 ft.)					<b>22 520</b>	21 480	<b>15 940</b>	13 690	<b>12 670</b>	9590	<b>10 750</b>	7050	<b>6160</b>	5290	
					<b>(48,350)</b>	(46,330)	<b>(34,390)</b>	(29,510)	<b>(27,430)</b>	(20,640)	<b>(23,350)</b>	(15,130)			
1.5 m (5 ft.)					<b>18 450</b>	<b>18 450</b>	<b>17 800</b>	12 900	<b>13 780</b>	9130	<b>11 360</b>	6780	<b>6690</b>	5170	
					<b>(44,110)</b>	(43,160)	<b>(38,470)</b>	(27,780)	<b>(29,820)</b>	(19,650)	<b>(24,640)</b>	(14,560)			
Ground Line					<b>18 470</b>	<b>18 470</b>	<b>18 780</b>	12 390	<b>14 460</b>	8790	<b>11 300</b>	6580			
					<b>(42,920)</b>	(41,770)	<b>(40,650)</b>	(26,660)	<b>(31,300)</b>	(18,910)	<b>(24,280)</b>	(14,130)			
-1.5 m (-5 ft.)			<b>11 930</b>	<b>11 930</b>	<b>23 290</b>	19 300	<b>18 770</b>	12 150	<b>14 520</b>	8610	<b>11 180</b>	6470			
			<b>(26,990)</b>	<b>(26,990)</b>	<b>(53,590)</b>	(41,430)	<b>(40,650)</b>	(26,140)	<b>(31,410)</b>	(18,510)	<b>(24,040)</b>	(13,910)			
-3.0 m (-10 ft.)	<b>14 070</b>	<b>14 070</b>	<b>18 590</b>	<b>18 590</b>	<b>23 450</b>	19 420	<b>17 740</b>	12 150	<b>13 750</b>	8590	<b>10 530</b>	6510			
	<b>(31,520)</b>	<b>(31,520)</b>	<b>(42,050)</b>	<b>(42,050)</b>	<b>(50,810)</b>	(41,700)	<b>(38,340)</b>	(26,130)	<b>(29,620)</b>	(18,480)					
-4.5 m (-15 ft.)			<b>26 700</b>	<b>26 700</b>	<b>20 090</b>	19 780	<b>15 400</b>	12 350	<b>11 620</b>	8770					
			<b>(57,600)</b>	<b>(57,600)</b>	<b>(43,280)</b>	(42,510)	<b>(33,050)</b>	(26,600)	<b>(24,590)</b>	(18,920)					
-4.5 m (-15 ft.)					<b>14 470</b>	<b>14 470</b>	<b>10 680</b>	<b>10 680</b>							
					<b>(30,450)</b>	<b>(30,450)</b>	<b>(21,930)</b>	<b>(21,930)</b>							
With 4.9-m (16 ft. 1 in.) arm, 7.0-m (23 ft.) boom, 1.4-m <sup>3</sup> (1.8 cu. yd.) bucket and 900-mm (36 in.) triple semi-grouser shoes															
4.5 m (15 ft.)									<b>10 670</b>	<b>10 670</b>	<b>9690</b>	8140			
									<b>(23,180)</b>	<b>(23,180)</b>					
3.0 m (10 ft.)					<b>19 780</b>	<b>19 780</b>	<b>14 760</b>	<b>14 760</b>	<b>12 130</b>	10 500	<b>10 540</b>	7820			
					<b>(42,530)</b>	<b>(42,530)</b>	<b>(31,890)</b>	<b>(31,890)</b>	<b>(26,310)</b>	(22,610)	<b>(22,920)</b>	(16,820)			
1.5 m (5 ft.)					<b>24 060</b>	21 610	<b>17 130</b>	13 950	<b>13 530</b>	9970	<b>11 380</b>	7500	9570	5820	
					<b>(51,890)</b>	(46,540)	<b>(37,040)</b>	(30,080)	<b>(29,330)</b>	(21,470)	<b>(24,710)</b>	(16,140)			
Ground Line			<b>7330</b>	<b>7330</b>	<b>21 020</b>	20 500	<b>18 790</b>	13 260	<b>14 610</b>	9530	<b>11 960</b>	7230	9400	5660	
			<b>(16,700)</b>	<b>(16,700)</b>	<b>(48,940)</b>	(44,090)	<b>(40,670)</b>	(28,560)	<b>(31,660)</b>	(20,530)	<b>(25,730)</b>	(15,560)			
-1.5 m (-5 ft.)	<b>6910</b>	<b>6910</b>	<b>10 850</b>	<b>10 850</b>	<b>22 090</b>	20 000	<b>19 510</b>	12 850	<b>15 160</b>	9240	<b>11 760</b>	7040	9300	5570	
	<b>(15,440)</b>	<b>(15,440)</b>	<b>(24,550)</b>	<b>(24,550)</b>	<b>(50,830)</b>	(42,970)	<b>(42,260)</b>	(27,660)	<b>(32,830)</b>	(19,900)	<b>(25,290)</b>	(15,160)			
-3.0 m (-10 ft.)	<b>11 090</b>	<b>11 090</b>	<b>15 440</b>	<b>15 440</b>	<b>25 950</b>	19 880	<b>19 250</b>	12 680	<b>15 020</b>	9100	<b>11 670</b>	6960			
	<b>(24,840)</b>	<b>(24,840)</b>	<b>(34,920)</b>	<b>(34,920)</b>	<b>(56,210)</b>	(42,710)	<b>(41,670)</b>	(27,290)	<b>(32,470)</b>	(19,610)	<b>(25,120)</b>	(15,000)			
-4.5 m (-15 ft.)	<b>15 890</b>	<b>15 890</b>	<b>21 400</b>	<b>21 400</b>	<b>23 700</b>	20 030	<b>17 910</b>	12 720	<b>13 950</b>	9130	<b>10 790</b>	7030			
	<b>(35,710)</b>	<b>(35,710)</b>	<b>(48,560)</b>	<b>(48,560)</b>	<b>(51,190)</b>	(43,060)	<b>(38,620)</b>	(27,390)	<b>(29,990)</b>	(19,680)	<b>(22,850)</b>	(15,180)			
-6.0 m (-20 ft.)			<b>27 000</b>	<b>27 000</b>	<b>19 750</b>	<b>19 750</b>	<b>15 050</b>	12 970	<b>11 290</b>	9360					
			<b>(57,750)</b>	<b>(57,750)</b>	<b>(42,260)</b>	<b>(42,260)</b>	<b>(32,060)</b>	(27,990)	<b>(23,630)</b>	(20,240)					
With 2.9-m (9 ft. 6 in.) ME-arm, 6.3-m (20 ft. 8 in.) ME-boom, 2.5-m <sup>3</sup> (3.3 cu. yd.) bucket and 900-mm (36 in.) triple semi-grouser shoes															
7.5 m (25 ft.)							<b>12 480</b>	<b>12 480</b>							
							<b>(27,350)</b>	<b>(27,350)</b>							
6.0 m (20 ft.)							<b>13 440</b>	<b>13 440</b>	<b>12 060</b>	10 060					
							<b>(29,190)</b>	<b>(29,190)</b>	<b>(24,660)</b>	(21,530)					
4.5 m (15 ft.)					<b>19 860</b>	<b>19 860</b>	<b>15 220</b>	14 420	<b>12 810</b>	9820					
					<b>(42,650)</b>	<b>(42,650)</b>	<b>(32,910)</b>	(31,040)	<b>(27,860)</b>	(21,080)					
3.0 m (10 ft.)					<b>24 020</b>	21 400	<b>17 200</b>	13 630	<b>13 780</b>	9460					
					<b>(51,680)</b>	(46,170)	<b>(37,160)</b>	(29,350)	<b>(29,880)</b>	(20,340)					
1.5 m (5 ft.)					<b>26 230</b>	20 130	<b>18 660</b>	12 950	<b>14 550</b>	9120					
					<b>(56,710)</b>	(43,340)	<b>(40,370)</b>	(27,890)	<b>(31,510)</b>	(19,600)					
Ground Line					<b>26 140</b>	19 690	<b>19 120</b>	12 560	<b>14 750</b>	8890					
					<b>(56,720)</b>	(42,310)	<b>(41,420)</b>	(27,020)	<b>(31,910)</b>	(19,120)					
-1.5 m (-5 ft.)			<b>22 400</b>	<b>22 400</b>	<b>24 450</b>	19 720	<b>18 360</b>	12 450	<b>13 960</b>	8840					
			<b>(50,640)</b>	<b>(50,640)</b>	<b>(53,060)</b>	(42,360)	<b>(39,720)</b>	(26,790)	<b>(30,010)</b>	(19,020)					
-3.0 m (-10 ft.)			<b>27 190</b>	<b>27 190</b>	<b>21 060</b>	20 070	<b>15 940</b>	12 630							
			<b>(59,020)</b>	<b>(59,020)</b>	<b>(45,540)</b>	(43,130)	<b>(34,230)</b>	(27,190)							

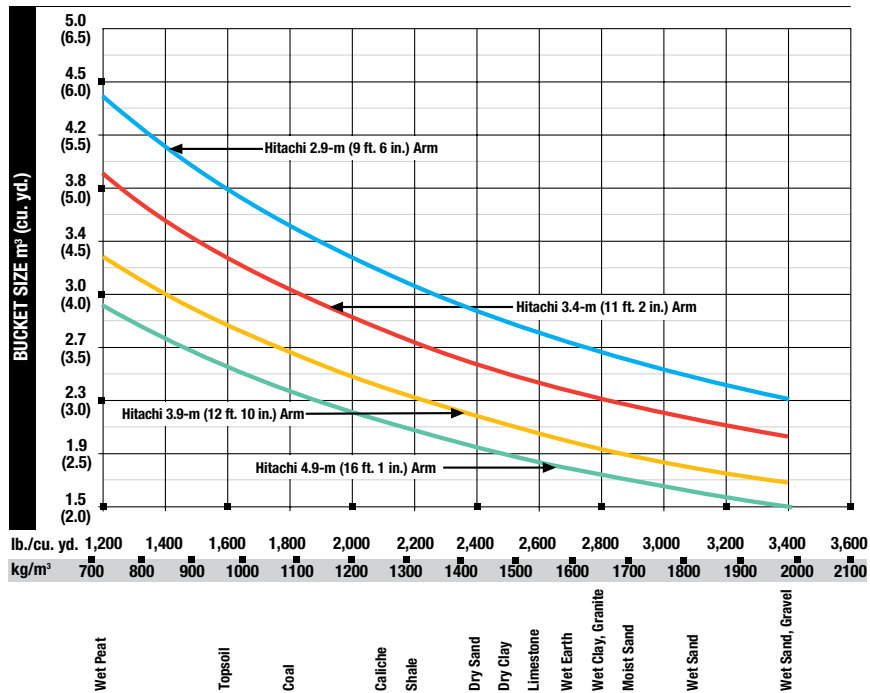
# ZX470LC-6

## Buckets ZX470LC-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 <sup>3</sup>	cu. yd.	kg	lb.
General Purpose	1372	54	1.76	2.3	1006	2,217
	1067	42	1.41	1.8	1418	3,127
Heavy-Duty	1219	48	1.64	2.1	1507	3,323
	1372	54	1.87	2.4	1624	3,581
Truck Loading	1524	60	2.09	2.7	1712	3,774
	1676	66	2.30	3.0	1737	3,828
	1829	72	2.52	3.3	1844	4,065
	1829	72	3.20	4.2	1970	4,344
Heavy-Duty High Capacity	1219	48	2.06	2.7	1802	3,973
	1372	54	2.34	3.1	2033	4,482
	1524	60	2.62	3.4	2329	5,136
	1676	66	2.91	3.8	2271	5,007
	1829	72	3.20	4.2	2663	5,870

### 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.

# SPECS

## ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special kit

### 470 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)
- Automatic belt-tension device
- Fuel filter with water separator
- Full-flow oil filter
- Turbocharger with charge air cooler
- Cool-on-demand hydraulic-driven fan
- 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
- 4,000-hour hydraulic-oil-change interval
- ▲ Auxiliary hydraulic lines
- ▲ Auxiliary pilot and electric controls
- ▲ Hydraulic-filter-restriction indicator kit
- ▲ 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.)

### 470 Upperstructure

- Right-hand, left-hand 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
- Service handrails
- ▲ 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, 3.4 m (11 ft. 2 in.)
- ▲ Arm, 3.9 m (12 ft. 10 in.)
- ▲ Arm, 4.9 m (16 ft. 1 in.)
- ▲ 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
- 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)

### 470 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, 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
- 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
- ▲ Protection screens for cab front
- ▲ Seat belt, 76 mm (3 in.), non-retractable
- ▲ Window vandal-protection covers

### Electrical

- 100-amp alternator
- Blade-type multi-fused circuits
- Positive-terminal battery covers
- Battery disconnect switch
- 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, 8400-kg (18,519 lb.) counterweight with removal device, full fuel tank and 79-kg (175 lb.) operator.

# HITACHI

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