

ULTRASHORT-CLASS EXCAVATORS

ZAXIS

# DASH-5

ZX75US-5  
ZX85USB-5



HITACHI



## BY NOT BUILDING EVERYTHING, WE COMPROMISE ON NOTHING.

### EXCAVATOR EXPERTS.

Unlike other manufacturers, we don't build every kind of earthmoving equipment. Instead, we specialize in excavators. The result? Highly efficient, reliable and durable machines.

The ZX75US-5 and ZX85USB-5 are a perfect fit for light residential work and projects in congested areas. These reduced-tail-swing models feature productivity-boosting advantages, like a fuel-efficient Yanmar diesel engine that meets EPA Final Tier 4 (FT4)/EU Stage IV emission standards. And they deliver all the power, smoothness and ease of operation you've come to expect from our larger Hitachi excavators – in an easy-to-manuever package. When you choose the ZX75US-5 and ZX85USB-5, you get...

### PERFECTLY PACKAGED PRODUCTION.



# SPECIALISTS





ZX75US-5/ZX85USB-5

ZAXIS | DASH-5 ULTRASHORT-CLASS EXCAVATORS

# PRODUCTIVITY







# MORE WORK DONE WITH LESS EFFORT.

## FASTER DIGGING, HIGHER PRODUCTIVITY.

Like all of our excavators, the ZX75US-5 and ZX85USB-5 deliver the same multifunction capability and smooth responsiveness operators expect from Hitachi. The advanced hydraulic system 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.

Two work modes provide fuel-efficient performance. Economy (ECO) maximizes fuel efficiency while delivering an enhanced level of productivity. Power (PWR) delivers a balance of power and speed, plus fuel economy for normal operation. With the versatile ZX75US-5 and ZX85USB-5, you can...

## WORK ANYWHERE, ANYTIME.

■ Short-throw, low-effort controls, unmatched metering and smooth multifunction operation provide finesse and precision when they're needed.

■ Although not a replacement for a grading tractor, the standard backfill blade allows these excavators to fill in quite capably.

■ Generous flow, arm force and swing torque help speed cycles and keep you productive and on schedule.

■ Choose from a variety of track widths, rubber or steel pads, arm lengths, buckets and other options to maximize productivity.

## MORE COMFORT, MORE OPTIONS.

### PERFECT COMBINATION OF COMMAND AND CONVENIENCE.

It's true. A comfortable operator is more productive. And the ZX75US-5 and ZX85USB-5 cabs are designed for comfort. Spacious cabs isolate noise and vibration and provide plenty of legroom. Wide doors allow easy access. Front, side and overhead glass plus mirrors provide all-around visibility. With these excavators, operators will be...

### COMFORTABLE GETTING MORE DONE.



■ Multi-language LCD monitor and rotary dial provide access to a wealth of info and functions. Just dial and tap to check diagnostic codes, monitor maintenance intervals, set cab temperature and more.



■ Ergonomically correct short-throw pilot levers provide smooth, precise fingertip control with less movement or effort.



■ Standard left hand boom/frame light, plus optional right hand boom/frame light and cab/boom lights provide illumination to extend your working day beyond daylight hours.



# COMFORT

■ Low-effort joysticks, a highly efficient HVAC system, and plenty of storage space maximize comfort and convenience.

■ A comfortable, mechanical suspension fabric-covered highback seat provides plenty of travel, sliding together or independent of the joystick console.

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





# DURABILITY

■ Yanmar EPA Final Tier 4/EU Stage IV engines deliver fuel-efficient and reliable performance.

■ The addition of a diesel particulate filter (DPF) and a diesel oxidation catalyst (DOC) reduce particulate matter and NOx. DPF cleaning happens automatically without impacting machine productivity.

■ Auto-idle automatically reduces engine speed when hydraulics aren't in use. Auto-shutdown further preserves fuel.





# MORE ENDURANCE, MORE UPTIME.

## BUILT TO LAST.

Tough jobs are no match for the ZX75US-5 and ZX85USB-5. They are protected by a heavy-duty undercarriage and durable D-channel side frames. Additional strength comes from welded bulkheads within the boom that resist torsional stress, tungsten-carbide-coated surfaces and oil-impregnated bushings. Grease intervals are extended to 500 hours for the arm-and-boom joint, and 100 hours for the bucket joint. Add it all up, and these excavators deliver...

## DURABILITY YOU CAN COUNT ON.



■ Box-section track frames, thick-plate single-sheet mainframe, and superior ground clearance and industry-exclusive double-seal swing bearing deliver rock-solid durability.



■ With large idlers, rollers, and struted links, the sealed and lubricated undercarriage delivers long, reliable performance.



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



## MORE UPTIME, WITH LESS EXPENSE.

### MAINTENANCE MADE EASIER.

The ZX75US-5 and ZX85USB-5 are as easy to maintain as they are to operate. Grouped service points, at-a-glance gauges and centralized lube banks make servicing quick and convenient. Extended service intervals help maximize uptime. Scheduled maintenance is easy to track using the in-cab diagnostic monitor. It's clear that these models help you...

### REDUCE COSTS, INCREASE UPTIME.



■ Left rear compartment houses the battery, engine air filter, fresh-air cab filter and side-by-side coolers.



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



■ Vertical spin-on fuel- and engine-oil filters are positioned in the right rear compartment for simplified ground-level servicing.







# MAINTENANCE

- Easy-to-check sight gauges and fluid reservoirs, quick-change remote-mounted vertical filters, and extended engine and hydraulic oil service intervals minimize downtime for periodic maintenance.

- Oil-impregnated bushings enhance durability and extend lube intervals to 500 hours for the arm-and-boom joint, and 100 hours for the bucket joint.

- Wider service doors and easy-access service points make quick work of daily and periodic maintenance.



<b>Engine</b>	<b>ZX75US-5</b>		
Manufacturer and Model	Yanmar 4TNV98C		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Net Power (ISO 9249)	42.4 kW (56.9 hp) @ 2,000 rpm		
Cylinders	4		
Displacement	3.3 L (202 cu. in.)		
Aspiration	Natural		
Off-Level Capacity	70% (35 deg.)		
<b>Cooling</b>	Variable-speed fan; viscous clutch		
<b>Powertrain</b>	2-speed propel with automatic shift		
<b>Maximum Travel Speed</b>			
Low	3.1 km/h (1.9 mph)		
High	5.0 km/h (3.1 mph)		
Drawbar Pull	6650 kgf (14,661 lb.)		
<b>Hydraulics</b>	Open Center, Load Sensing		
<b>Main Pumps</b>	3 variable-displacement axial-piston pumps		
Maximum Pump Flow	2 x 72 + 56 L/m (2 x 19 + 15 gpm)		
<b>Pilot Pump</b>	1 gear		
Maximum Rated Flow	20 L/m (5.3 gpm)		
System Relief Pressure	3900 kPa (566 psi)		
<b>System Operating Pressure</b>			
Implement Circuits	26 000 kPa (3,771 psi)		
Travel Circuits	31 400 kPa (4,554 psi)		
Swing Circuits	25 200 kPa (3,655 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 (I)</b>	115 mm (4.5 in.)	65 mm (2.6 in.)	885 mm (34.8 in.)
<b>Arm (I)</b>	95 mm (3.7 in.)	60 mm (2.4 in.)	900 mm (35.4 in.)
<b>Bucket (I)</b>	85 mm (3.3 in.)	55 mm (2.2 in.)	730 mm (28.7 in.)
<b>Electrical</b>	Batteries 2 x 12 volt		
Battery Capacity	2 x 450 CCA		
Alternator Rating	50 amp		
Work Lights	2 halogen (1 mounted on boom and 1 on frame)		

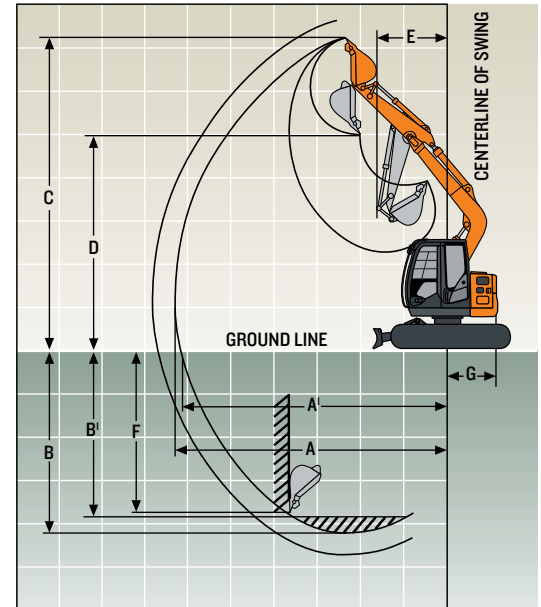


# ZX75US-5

Undercarriage		ZX75US-5
<b>Rollers (each side)</b>		
Carrier		1
Track		5
Shoes (each side)		40
<b>Track</b>		
Adjustment		Hydraulic
Chain		Sealed and lubricated
<b>Swing Mechanism</b>		
Swing Speed		10.5 rpm
Swing Torque		16 600 Nm (12,244 lb.-ft.)
<b>Ground Pressure</b>		
450-mm (18 in.) Rubber Crawler Pads		39 kPa (5.6 psi)
450-mm (18 in.) Continuous Rubber Belt		39 kPa (5.6 psi)
450-mm (18 in.) Triple Semi-Grouser Shoes		38 kPa (5.4 psi)
600-mm (24 in.) Triple Semi-Grouser Shoes		27 kPa (3.9 psi)
<b>Serviceability</b>		
<b>Refill Capacities</b>		
Fuel Tank		135 L (35.7 gal.)
Cooling System		9.7 L (2.6 gal.)
Engine Oil with Filter		12.3 L (3.2 gal.)
Hydraulic Tank		56 L (15 gal.)
Hydraulic System		103 L (27 gal.)
Propel Gearbox (each)		1.2 L (1.3 qt.)
<b>Operating Weights</b>		
With 0.31-m <sup>3</sup> (0.41 cu. yd.), 762-mm (30 in.), 313-kg (691 lb.) Bucket; 2.12-m (6 ft. 11 in.) Arm; 1305-kg (2,877 lb.) Counterweight; 2470-mm (8 ft. 1 in.) Blade; Full Fuel Tank; and 75-kg (165 lb.) Operator		
450-mm (18 in.) Rubber Crawler Pads		8143 kg (17,952 lb.)
450-mm (18 in.) Triple Semi-Grouser Shoes		7882 kg (17,377 lb.)
600-mm (24 in.) Triple Semi-Grouser Shoes		8265 kg (18,221 lb.)
450-mm (18 in.) Continuous Rubber Belt		7898 kg (17,412 lb.)
<b>Optional Components</b>		
Undercarriage (with the following)		
450-mm (18 in.) Rubber Crawler Pads		2903 kg (6,400 lb.)
450-mm (18 in.) Continuous Rubber Belt		2867 kg (6,321 lb.)
450-mm (18 in.) Triple Semi-Grouser Shoes		2851 kg (6,285 lb.)
600-mm (24 in.) Triple Semi-Grouser Shoes		3025 kg (6,669 lb.)
I-Piece Boom (with arm cylinder)		497 kg (1,096 lb.)
Arm with Bucket Cylinder and Linkage		
1.62 m (5 ft. 4 in.)		238 kg (525 lb.)
2.12 m (6 ft. 11 in.)		276 kg (608 lb.)
Boom Lift Cylinders (2), Total Weight		178 kg (392 lb.)
Counterweight, Standard		1305 kg (2,877 lb.)

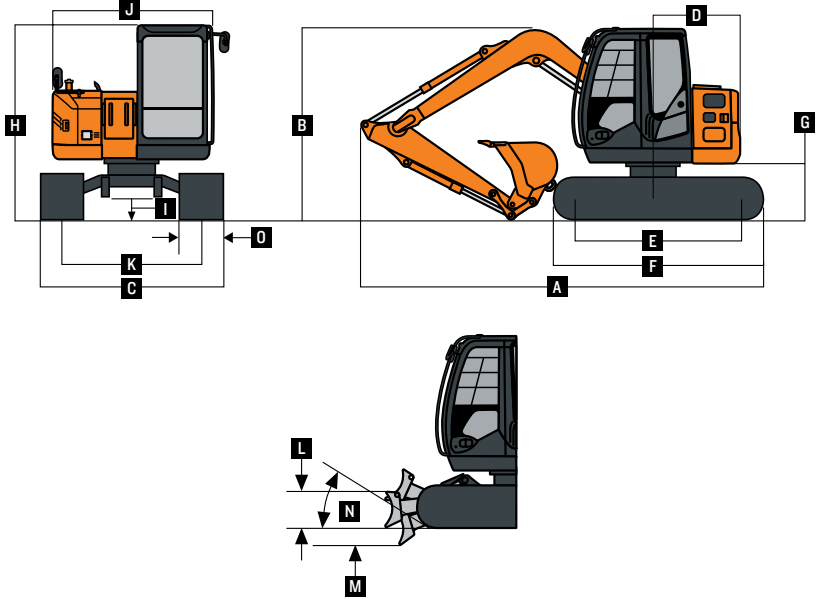


Operating Dimensions	ZX75US-5	
	Arm Length	Arm Length
Arm Digging Force (ISO)	1.62 m (5 ft. 4 in.)	2.12 m (6 ft. 11 in.)
Bucket Digging Force (ISO)	35.5 kN (7,981 lb.)	30.7 kN (6,902 lb.)
<b>A</b> Maximum Reach	6.43 m (21 ft. 1 in.)	6.92 m (22 ft. 8 in.)
<b>A'</b> Maximum Reach at Ground Level	6.26 m (20 ft. 6 in.)	6.76 m (22 ft. 2 in.)
<b>B</b> Maximum Digging Depth	4.11 m (13 ft. 6 in.)	4.61 m (15 ft. 1 in.)
<b>B'</b> Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	3.75 m (12 ft. 4 in.)	4.32 m (14 ft. 2 in.)
<b>C</b> Maximum Cutting Height	7.21 m (23 ft. 8 in.)	7.61 m (25 ft. 0 in.)
<b>D</b> Maximum Dumping Height	5.12 m (16 ft. 10 in.)	5.51 m (18 ft. 1 in.)
<b>E</b> Minimum Swing Radius	1.81 m (5 ft. 11 in.)	2.17 m (7 ft. 1 in.)
<b>F</b> Maximum Vertical Wall	3.67 m (12 ft. 0 in.)	4.22 m (13 ft. 10 in.)
<b>G</b> Tail Swing Radius	1.29 m (4 ft. 3 in.)	1.29 m (4 ft. 3 in.)



# ZX75US-5

Machine Dimensions		ZX75US-5	
		Arm Length	Arm Length
<b>A</b> Overall Length		1.62 m (5 ft. 4 in.)	2.12 m (6 ft. 11 in.)
<b>B</b> Overall Height		6.30 m (20 ft. 8 in.)	6.37 m (20 ft. 11 in.)
<b>C</b> Undercarriage Width			
With 450-mm (18 in.) Shoes		2.32 m (7 ft. 7 in.)	
With 600-mm (24 in.) Shoes		2.47 m (8 ft. 1 in.)	
<b>D</b> Rear-End Length/Swing Radius		1.29 m (4 ft. 3 in.)	
<b>E</b> Distance Between Idler/Sprocket Centerline		2.29 m (7 ft. 6 in.)	
<b>F</b> Undercarriage Length		2.92 m (9 ft. 7 in.)	
<b>G</b> Counterweight Clearance		0.73 m (29 in.)	
<b>H</b> Cab Height		2.69 m (8 ft. 10 in.)	
<b>I</b> Ground Clearance		360 mm (14 in.)	
<b>J</b> Upperstructure Width		2.32 m (7 ft. 7 in.)	
<b>K</b> Gauge Width		1.87 m (6 ft. 2 in.)	
<b>L</b> Blade Lift Height		360 mm (14 in.)	
Blade Height		480 mm (19 in.)	
Blade Width			
With 450-mm (18 in.) Shoes		2320 mm (7 ft. 7 in.)	
With 600-mm (24 in.) Shoes		2470 mm (8 ft. 1 in.)	
<b>M</b> Blade Cut Below Grade		300 mm (12 in.)	
<b>N</b> Blade Lift Angle		27 deg.	
<b>O</b> Track Width			
With 450-mm (18 in.) Shoes		0.45 m (18 in.)	
With 600-mm (24 in.) Shoes		0.60 m (24 in.)	





### Lift Capacities ZX75US-5

**Boldface type** indicates hydraulically limited capacities; **lightface type** indicates stability-limited capacities, in kg (lb.). Ratings are at bucket lift hook, using standard counterweight, situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine. All lift capacities are based on ISO 10567.

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 3.72-m (12 ft. 8 in.) boom, 1.62-m (5 ft. 4 in.) arm, 0.28-m <sup>3</sup> (0.37 cu. yd.) bucket, 450-mm (18 in.) rubber pads, and 2320-mm (7 ft. 9 in.) blade								
4.5 m (15 ft.)			<b>1616</b> (3,562)	<b>1616</b> (3,562)				
3.0 m (10 ft.)			<b>2223</b> (4,901)	<b>2223</b> (4,901)	<b>1829</b> (4,032)	<b>1605</b> (3,539)		
1.5 m (5 ft.)			<b>3192</b> (7,038)	<b>2752</b> (6,067)	<b>2121</b> (4,675)	<b>1538</b> (3,390)		
Ground Line			<b>3615</b> (7,969)	<b>2635</b> (5,810)	<b>2327</b> (5,131)	<b>1486</b> (3,275)		
-1.5 m (-5 ft.)	<b>4476</b> (9,867)	<b>4476</b> (9,867)	<b>3402</b> (7,500)	<b>2634</b> (5,807)				
With 3.72-m (12 ft. 8 in.) boom, 2.12-m (6 ft. 11 in.) arm, 0.28-m <sup>3</sup> (0.37 cu. yd.) bucket, 450-mm (18 in.) rubber pads, and 2320-mm (7 ft. 9 in.) blade								
4.5 m (15 ft.)					<b>1475</b> (3,252)	<b>1475</b> (3,252)		
3.0 m (10 ft.)			<b>1834</b> (4,043)	<b>1834</b> (4,043)	<b>1613</b> (3,557)	<b>1613</b> (3,557)		
1.5 m (5 ft.)			<b>2864</b> (6,313)	<b>2797</b> (6,167)	<b>1958</b> (4,317)	<b>1541</b> (3,397)		
Ground Line			<b>3508</b> (7,734)	<b>2629</b> (5,797)	<b>2248</b> (4,956)	<b>1472</b> (3,246)		
-1.5 m (-5 ft.)	<b>3544</b> (7,813)	<b>3544</b> (7,813)	<b>3514</b> (7,746)	<b>2594</b> (5,718)	<b>2252</b> (4,964)	<b>1451</b> (3,199)		
-3.0 m (-10 ft.)	<b>5020</b> (11,068)	<b>5020</b> (11,068)	<b>2742</b> (6,044)	<b>2663</b> (5,870)				
With 3.72-m (12 ft. 8 in.) boom, 1.62-m (5 ft. 4 in.) arm, 0.28-m <sup>3</sup> (0.37 cu. yd.) bucket, 600-mm (24 in.) shoes, and 2470-mm (8 ft. 1 in.) blade								
4.5 m (15 ft.)			<b>1616</b> (3,562)	<b>1616</b> (3,562)				
3.0 m (10 ft.)			<b>2223</b> (4,901)	<b>2223</b> (4,901)	<b>1829</b> (4,032)	<b>1630</b> (3,594)		
1.5 m (5 ft.)			<b>3192</b> (7,038)	<b>2796</b> (6,164)	<b>2121</b> (4,675)	<b>1563</b> (3,446)		
Ground Line			<b>3615</b> (7,969)	<b>2679</b> (5,906)	<b>2327</b> (5,131)	<b>1510</b> (3,330)		
-1.5 m (-5 ft.)	<b>4476</b> (9,867)	<b>4476</b> (9,867)	<b>3402</b> (7,500)	<b>2678</b> (5,903)				
With 3.72-m (12 ft. 8 in.) boom, 2.12-m (6 ft. 11 in.) arm, 0.28-m <sup>3</sup> (0.37 cu. yd.) bucket, 600-mm (24 in.) shoes, and 2470-mm (8 ft. 1 in.) blade								
4.5 m (15 ft.)					<b>1475</b> (3,252)	<b>1475</b> (3,252)		
3.0 m (10 ft.)			<b>1834</b> (4,043)	<b>1834</b> (4,043)	<b>1613</b> (3,557)	<b>1613</b> (3,557)		
1.5 m (5 ft.)			<b>2864</b> (6,313)	<b>2841</b> (6,263)	<b>1958</b> (4,317)	<b>1566</b> (3,452)		
Ground Line			<b>3508</b> (7,734)	<b>2673</b> (5,893)	<b>2248</b> (4,956)	<b>1497</b> (3,301)		
-1.5 m (-5 ft.)	<b>3544</b> (7,813)	<b>3544</b> (7,813)	<b>3514</b> (7,746)	<b>2637</b> (5,814)	<b>2252</b> (4,964)	<b>1476</b> (3,254)		
-3.0 m (-10 ft.)	<b>5020</b> (11,068)	<b>5020</b> (11,068)	<b>2742</b> (6,044)	<b>2707</b> (5,967)				
With 3.72-m (12 ft. 8 in.) boom, 1.62-m (5 ft. 4 in.) arm, 0.28-m <sup>3</sup> (0.37 cu. yd.) bucket, 450-mm (18 in.) continuous rubber belt, and 2470-mm (8 ft. 1 in.) blade								
3.0 m (10 ft.)			<b>2241</b> (4,940)	<b>2241</b> (4,940)				
1.5 m (5 ft.)			<b>3207</b> (7,070)	<b>2608</b> (5,750)				
Ground Line			<b>3620</b> (7,980)	<b>2499</b> (5,510)	<b>2327</b> (5,130)	<b>1415</b> (3,120)		
-1.5 m (-5 ft.)	<b>4527</b> (9,980)	<b>4527</b> (9,980)	<b>3393</b> (7,480)	<b>2499</b> (5,510)				

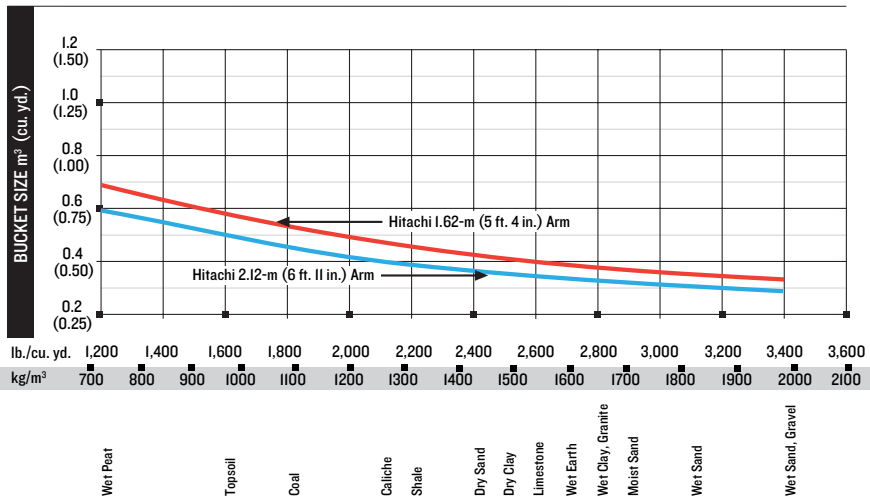
# ZX75US-5

## Buckets ZX75US-5

A full line of buckets is offered to meet a wide variety of applications. Replaceable cutting edges are available through Hitachi Parts. Optional side cutters add 150 mm (6 in.) to bucket widths.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force (ISO)		Arm Dig Force (ISO) 1.62 m (5 ft. 4 in.)		Arm Dig Force (ISO) 2.12 m (6 ft. 11 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m <sup>3</sup>	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	610	24	0.24	0.31	268	591	44	9,892	34	7,545	29	6,524	883	34.76	5
	762	30	0.31	0.41	313	691	44	9,892	34	7,545	29	6,524	883	34.76	6
Ditching	914	36	0.39	0.51	358	790	44	9,892	34	7,545	29	6,524	883	34.76	7
	1219	48	0.49	0.64	330	727	64	14,344	40	8,911	33	7,473	907	35.69	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.



<b>Engine</b>	<b>ZX85USB-5</b>		
Manufacturer and Model	Yanmar 4TNV98C-WHBW		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Net Power (ISO 9249)	42.4 kW (56.9 hp) @ 2,000 rpm		
Cylinders	4		
Displacement	3.3 L (202 cu. in.)		
Aspiration	Natural		
Off-Level Capacity	70% (35 deg.)		
<b>Cooling</b>	Variable-speed fan; viscous clutch		
<b>Powertrain</b>	2-speed propel with automatic shift		
<b>Maximum Travel Speed</b>			
Low	3.1 km/h (1.9 mph)		
High	5.0 km/h (3.1 mph)		
Drawbar Pull	6650 kgf (14,661 lb.)		
<b>Hydraulics</b>	Open Center, Load Sensing		
<b>Main Pumps</b>	3 variable-displacement axial-piston pumps		
Maximum Pump Flow	2 x 72 + 56 L/m (2 x 19 + 15 gpm)		
<b>Pilot Pump</b>	1 gear		
Maximum Rated Flow	20 L/m (5.3 gpm)		
System Relief Pressure	3900 kPa (566 psi)		
<b>System Operating Pressure</b>			
Implement Circuits	26 000 kPa (3,771 psi)		
Travel Circuits	31 400 kPa (4,554 psi)		
Swing Circuits	25 000 kPa (3,626 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 (I)</b>	115 mm (4.5 in.)	65 mm (2.6 in.)	885 mm (34.8 in.)
<b>Arm (I)</b>	95 mm (3.7 in.)	60 mm (2.4 in.)	900 mm (35.4 in.)
<b>Bucket (I)</b>	85 mm (3.3 in.)	55 mm (2.2 in.)	730 mm (28.7 in.)
<b>Electrical</b>	Batteries 2 x 12 volt		
Battery Capacity	2 x 450 CCA		
Alternator Rating	50 amp		
Work Lights	2 halogen (1 mounted on boom and 1 on frame)		

# ZX85USB-5

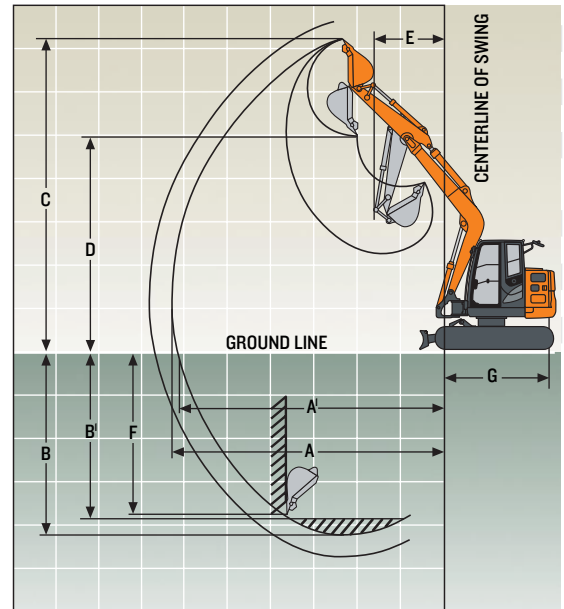
<b>Undercarriage</b>		<b>ZX85USB-5</b>
<b>Rollers (each side)</b>		
Carrier		1
Track		5
Shoes (each side)		40
<b>Track</b>		
Adjustment		Hydraulic
Chain		Sealed and lubricated
<b>Swing Mechanism</b>		
Swing Speed		10.5 rpm
Swing Torque		16 600 Nm (12,244 lb.-ft.)
<b>Boom Swing</b>		
Left		60 deg.
Right		60 deg.
<b>Ground Pressure</b>		
450-mm (18 in.) Rubber Crawler Pads		41.5 kPa (6.0 psi)
450-mm (18 in.) Continuous Rubber Belt		41.4 kPa (6.0 psi)
450-mm (18 in.) Triple Semi-Grouser Shoes		41.3 kPa (6.0 psi)
600-mm (24 in.) Triple Semi-Grouser Shoes		31.7 kPa (4.6 psi)
<b>Serviceability</b>		
<b>Refill Capacities</b>		
Fuel Tank		120 L (31.7 gal.)
Cooling System		9.7 L (2.6 gal.)
Engine Oil with Filter		12.3 L (3.2 gal.)
Hydraulic Tank		56 L (15 gal.)
Hydraulic System		103 L (27 gal.)
Propel Gearbox (each)		1.2 L (1.3 qt.)
<b>Operating Weights</b>		
With 0.31-m <sup>3</sup> (0.41 cu. yd.), 762-mm (30 in.), 313-kg (691 lb.) Bucket; 2.12-m (6 ft. 11 in.) Arm; 1408-kg (3,104 lb.) Counterweight; Full Fuel Tank; and 75-kg (165 lb.) Operator		
2220-mm (7 ft. 3 in.) Blade and 450-mm (18 in.) Rubber Crawler Pads		8729 kg (19,244 lb.)
2220-mm (7 ft. 3 in.) Blade and 450-mm (18 in.) Triple Semi-Grouser Shoes		8677 kg (19,130 lb.)
2470-mm (8 ft. 1 in.) Blade and 600-mm (24 in.) Triple Semi-Grouser Shoes		8874 kg (19,564 lb.)
2220-mm (7 ft. 3 in.) Blade and 450-mm (18 in.) Continuous Rubber Belt		8701 kg (19,182 lb.)
<b>Optional Components</b>		
Undercarriage (with the following)		
450-mm (18 in.) Rubber Crawler Pads		2871 kg (6,329 lb.)
450-mm (18 in.) Continuous Rubber Belt		2843 kg (6,268 lb.)
450-mm (18 in.) Triple Semi-Grouser Shoes		2819 kg (6,215 lb.)
600-mm (24 in.) Triple Semi-Grouser Shoes		2970 kg (6,548 lb.)
I-Piece Boom (with arm cylinder)		491 kg (1,082 lb.)
Arm with Bucket Cylinder and Linkage		
1.62 m (5 ft. 4 in.)		237 kg (522 lb.)
2.12 m (6 ft. 11 in.)		275 kg (606 lb.)
Boom Lift Cylinders		
0.49-m <sup>3</sup> (0.64 cu. yd.), 1219-mm (48 in.)		89 kg (196 lb.)
Ditching Bucket		330 kg (728 lb.)
Counterweight (standard)		1408 kg (3,104 lb.)



### Operating Dimensions

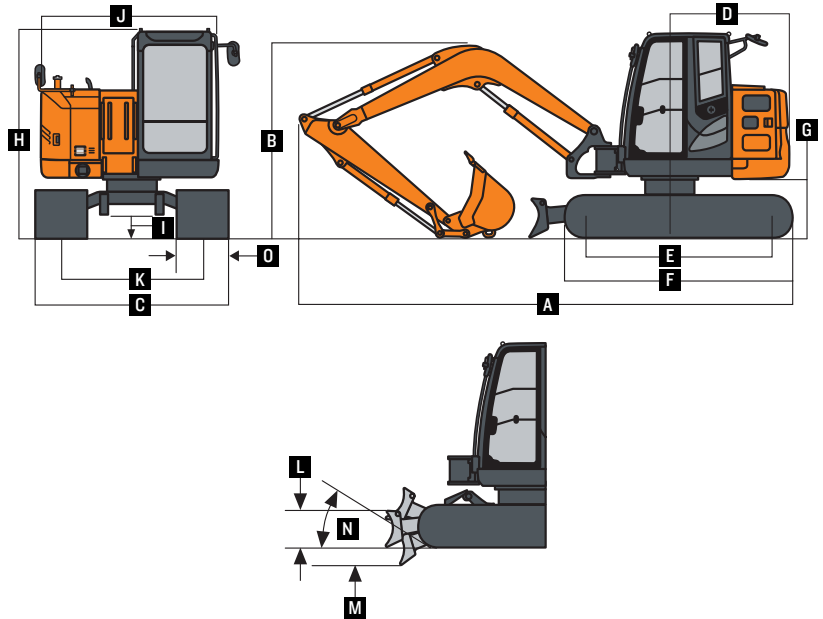
### ZX85USB-5

	Arm Length 1.62 m (5 ft. 4 in.)	Arm Length 2.12 m (6 ft. 11 in.)
Arm Digging Force (ISO)	35.5 kN (7,981 lb.)	30.7 kN (6,902 lb.)
Bucket Digging Force (ISO)	46.6 kN (10,476 lb.)	46.6 kN (10,476 lb.)
<b>A</b> Maximum Reach	7.21 m (23 ft. 8 in.)	7.70 m (25 ft. 3 in.)
<b>A'</b> Maximum Reach at Ground Level	7.05 m (23 ft. 2 in.)	7.55 m (24 ft. 9 in.)
<b>B</b> Maximum Digging Depth	3.99 m (13 ft. 1 in.)	4.51 m (14 ft. 10 in.)
<b>B'</b> Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	3.62 m (11 ft. 11 in.)	4.20 m (13 ft. 9 in.)
<b>C</b> Maximum Cutting Height	6.79 m (22 ft. 3 in.)	7.14 m (23 ft. 5 in.)
<b>D</b> Maximum Dumping Height	4.77 m (15 ft. 8 in.)	5.08 m (16 ft. 8 in.)
<b>E</b> Minimum Swing Radius	2.74 m (9 ft. 0 in.)	2.89 m (9 ft. 6 in.)
<b>F</b> Maximum Vertical Wall	3.47 m (11 ft. 5 in.)	4.05 m (13 ft. 3 in.)
<b>G</b> Tail Swing Radius	1.49 m (4 ft. 11 in.)	1.49 m (4 ft. 11 in.)



# ZX85USB-5

Machine Dimensions		ZX85USB-5	
		Arm Length	Arm Length
<b>A</b> Overall Length		1.62 m (5 ft. 4 in.)	2.12 m (6 ft. 11 in.)
<b>B</b> Overall Height		6.64 m (21 ft. 9 in.)	6.82 m (22 ft. 5 in.)
	With 450-mm (18 in.) Rubber Crawler Pads	2.61 m (8 ft. 7 in.)	
	With Steel Shoes	2.53 m (8 ft. 4 in.)	
<b>C</b> Undercarriage Width			
	With 450-mm (18 in.) Shoes	2.20 m (7 ft. 3 in.)	
	With 600-mm (24 in.) Shoes	2.35 m (7 ft. 9 in.)	
<b>D</b> Rear-End Length/Swing Radius		1.49 m (4 ft. 11 in.)	
<b>E</b> Distance Between Idler/Sprocket Centerline		2.29 m (7 ft. 6 in.)	
<b>F</b> Undercarriage Length		2.92 m (9 ft. 7 in.)	
<b>G</b> Counterweight Clearance		0.72 m (28 in.)	
<b>H</b> Cab Height		2.53 m (8 ft. 4 in.)	
<b>I</b> Ground Clearance		360 mm (14 in.)	
<b>J</b> Upperstructure Width		2.32 m (7 ft. 7 in.)	
<b>K</b> Gauge Width		1.75 m (5 ft. 9 in.)	
<b>L</b> Blade Lift Height		340 mm (13 in.)	
	Blade Height	460 mm (18 in.)	
	Blade Width		
	With 450-mm (18 in.) Shoes	2200 mm (7 ft. 3 in.)	
	With 600-mm (24 in.) Shoes	2350 mm (7 ft. 9 in.)	
<b>M</b> Blade Cut Below Grade		320 mm (13 in.)	
<b>N</b> Blade Lift Angle		26 deg.	
<b>O</b> Track Width			
	With 450-mm (18 in.) Shoes	0.45 m (18 in.)	
	With 600-mm (24 in.) Shoes	0.60 m (24 in.)	





### Lift Capacities ZX85USB-5

**Boldface type** indicates hydraulically limited capacities; **lightface type** indicates stability-limited capacities, in kg (lb.). Ratings are at bucket lift hook, using standard counterweight, situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine. All lift capacities are based on ISO 10567.

Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<b>With 3.67-m (12 ft. 2 in.) boom, 1.62-m (5 ft. 4 in.) arm, 0.28-m<sup>3</sup> (0.37 cu. yd.) bucket, 450-mm (18 in.) rubber pads, and 2200-mm (7 ft. 3 in.) blade</b>								
3.0 m (10 ft.)			<b>3432</b> (7,567)	2887 (6,365)	<b>2312</b> (5,096)	1580 (3,484)		
1.5 m (5 ft.)					<b>2619</b> (6,215)	1481 (3,265)	<b>2078</b> (4,582)	992 (2,188)
Ground Line			2434 (5,367)	2434 (5,367)	3047 (6,717)	1416 (3,121)		
-1.5 m (-5 ft.)			4279 (9,433)	2503 (5,516)	2711 (5,976)	1410 (3,109)		
<b>With 3.67-m (12 ft. 2 in.) boom, 2.12-m (6 ft. 11 in.) arm, 0.28-m<sup>3</sup> (0.37 cu. yd.) bucket, 450-mm (18 in.) rubber pads, and 2200-mm (7 ft. 3 in.) blade</b>								
4.5 m (15 ft.)					1735 (3,825)	1656 (3,651)		
3.0 m (10 ft.)					<b>2044</b> (4,506)	1597 (3,521)	<b>1809</b> (3,988)	1022 (2,253)
1.5 m (5 ft.)					<b>2619</b> (5,773)	1488 (3,280)	<b>1968</b> (4,339)	986 (2,174)
Ground Line			2577 (5,682)	2445 (5,391)	2992 (6,597)	1403 (3,092)	<b>2069</b> (4,561)	952 (2,098)
-1.5 m (-5 ft.)	<b>2683</b> (5,914)	<b>2683</b> (5,914)	4770 (10,516)	2448 (5,397)	2868 (6,322)	1377 (3,036)		
-3.0 m (-10 ft.)			3130 (7,012)	3130 (5,560)				
<b>With 3.67-m (12 ft. 2 in.) boom, 1.62-m (5 ft. 4 in.) arm, 0.28-m<sup>3</sup> (0.37 cu. yd.) bucket, 600-mm (24 in.) shoes, and 2470-mm (8 ft. 1 in.) blade</b>								
3.0 m (10 ft.)			<b>3432</b> (7,567)	2927 (6,453)	<b>2312</b> (5,096)	1603 (3,535)		
1.5 m (5 ft.)					<b>2619</b> (6,215)	1505 (3,317)	<b>2078</b> (4,582)	1009 (2,224)
Ground Line			2434 (5,367)	2434 (5,367)	3047 (6,717)	1439 (3,172)		
-1.5 m (-5 ft.)	<b>2683</b> (5,914)	<b>2683</b> (5,914)	4770 (10,516)	2488 (5,485)	2868 (6,322)	1433 (3,160)		
-3.0 m (-10 ft.)			3130 (7,012)	3130 (5,647)				
<b>With 3.67-m (12 ft. 2 in.) boom, 2.12-m (6 ft. 11 in.) arm, less bucket, 450-mm (18 in.) continuous rubber belt, and 2200-mm (7 ft. 3 in.) blade</b>								
4.5 m (15 ft.)					1728 (3,810)	1579 (3,480)		
3.0 m (10 ft.)					<b>2050</b> (4,520)	1520 (3,350)	<b>1805</b> (3,980)	971 (2,140)
1.5 m (5 ft.)					<b>2626</b> (5,790)	1411 (3,110)	<b>1969</b> (4,340)	934 (2,060)
Ground Line			2595 (5,720)	2309 (5,090)	2994 (6,600)	1329 (2,930)	<b>2068</b> (4,560)	903 (1,990)
-1.5 m (-5 ft.)	<b>2708</b> (5,970)	<b>2708</b> (5,970)	4758 (10,490)	2309 (5,090)	2862 (6,310)	1306 (2,880)		
-3.0 m (-10 ft.)			3139 (6,920)	2386 (5,260)				

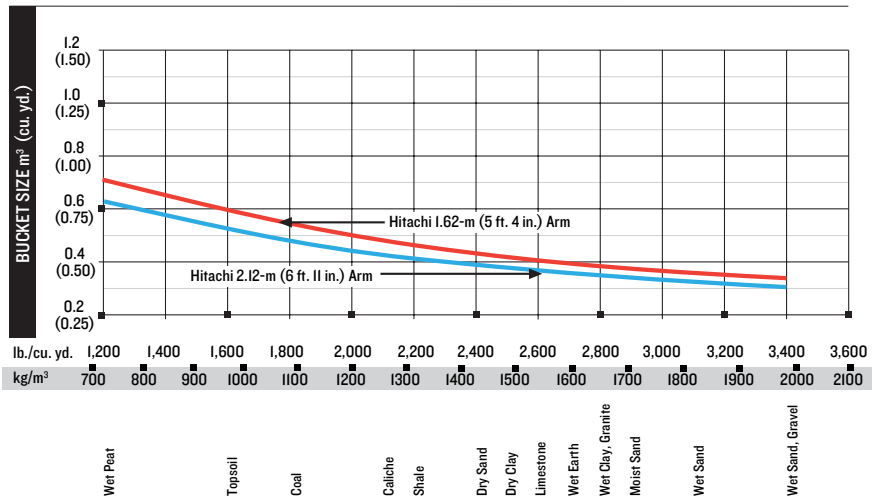
# ZX85USB-5

## Buckets ZX85USB-5

A full line of buckets is offered to meet a wide variety of applications. Replaceable cutting edges are available through Hitachi Parts. Optional side cutters add 150 mm (6 in.) to bucket widths.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force (ISO)		Arm Dig Force (ISO) 1.62 m (5 ft. 4 in.)		Arm Dig Force (ISO) 2.12 m (6 ft. 11 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m <sup>3</sup>	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	610	24	0.31	0.40	287	633	54	12,061	38	8,491	32	7,162	1087	42.80	5
	762	30	0.41	0.53	333	735	54	12,061	38	8,491	32	7,162	1087	42.80	6
Ditching	914	36	0.50	0.66	380	837	54	12,061	38	8,491	32	7,162	1087	42.80	7
	1219	48	0.49	0.64	330	727	64	14,344	40	8,911	33	7,473	907	35.69	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.



# SPECS

## ADDITIONAL EQUIPMENT

Key: ● Standard ▲ Optional or special kit

75	85	Engine
●	●	Auto-idle system
●	●	Batteries (2 – 12 volt)
●	●	Coolant recovery tank
●	●	Single-element 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
●	●	Radiator and oil cooler with dust-protective net
●	●	Glow-plug start aid
●	●	500-hour engine oil-change interval
●	●	70% (35 deg.) off-level capacity
●	●	Isolation mounted
Hydraulic System		
●	●	Reduced-drift valve for boom down, arm in
●	●	Auxiliary hydraulic valve section
●	●	Spring-applied, hydraulically released automatic swing brake
●	●	5,000-hour hydraulic-oil-change interval
▲	▲	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
●	●	2-speed propel with automatic shift
●	●	Upper carrier roller (1)
●	●	Sealed and lubricated track chain
●	●	Undercarriage with blade
▲	▲	Triple semi-grouser shoes, 450 mm (18 in.)
▲	▲	Triple semi-grouser shoes, 600 mm (24 in.)
▲	▲	Rubber crawler pads, 450 mm (18 in.)
▲	▲	Rubber belt, continuous, 450 mm (18 in.)

75	85	Upperstructure
●	●	Counterweight, 1305 kg (2,877 lb.)
●	●	Counterweight, 1408 kg (3,104 lb.)
●	●	Right- and left-hand mirrors
●	●	Vandal locks with ignition key: Cab door / Engine hood / Fuel cap / Service doors
●	●	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, 1.62 m (5 ft. 4 in.)
▲	▲	Arm, 2.12 m (6 ft. 11 in.)
▲	▲	Attachment quick-couplers
▲	▲	Buckets: Ditching / Heavy duty / Heavy-duty high capacity / Side cutters and teeth
Operator's Station		
●	●	Meets ISO 12117-2 for ROPS
●	●	Adjustable independent control positions (seat-to-pedals)
●	●	AM/FM radio
●	●	Auto climate control/air conditioner with heater and pressurizer
●	●	Built-in operator's manual storage compartment and manual
●	●	Cell-phone power outlet, 12 volt, 60 watt, 5 amp
●	●	Coat hook
●	●	Deluxe cloth suspension seat with 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)

75	85	Operator's Station (continued)
●	●	Mode selectors (illuminated): Power modes (2) / 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)
●	●	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
●	●	Transparent tinted overhead window
●	●	Hot/cold beverage compartment
▲	▲	Seat belt, 76 mm (3 in.), non-retractable
▲	▲	Protection screens for cab front, rear and side
▲	▲	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)
Lights		
●	●	Work lights: Halogen / 1 mounted on boom / 1 mounted on frame

See your Hitachi dealer for further information.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with standard equipment; 0.31-m<sup>3</sup> (0.41 cu. yd.), 762-mm (30 in.), 313-kg (691 lb.) bucket; 450-mm (18 in.) rubber crawler pad shoes; 2.12-m (6 ft. 11 in.) arm; full fuel tank; and 75-kg (165 lb.) operators; a ZX75US-5 with 1305-kg (2,877 lb.) counterweight and a ZX85USB-5 with a 1408-kg (3,104 lb.) counterweight.

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