

ZAXIS-2 series

HITACHI

ZAXIS  
10U



## HYDRAULIC EXCAVATOR

- Model Code : ZX10U<sub>2</sub>
- Engine Rated Power : 9.5 kW (12.9 PS)
- Operating Weight : 1 110 kg
- Backhoe Bucket : 0.019 m<sup>3</sup>

Versatile excavator with adjustable width for efficient use in various applications—smooth movement in confined spaces, as well as powerful operation in open areas

■ **Minimum Width: 910 mm**

■ **Powerful Engine**

■ **Rear end Swing Radius: 830 mm**



**Compact Body with Short Rear end**  
The compact short rear end design allows efficient operation even in confined spaces.

**Adjustable Foot Crawler and Blade**  
The unit can extend up to 1 000 mm during jobs, thanks to the adjustable foot crawler.



**Folding Roll Bar (Rigid type)**  
The folding roll bar makes the unit more compact for greater ease in transporting.

\* TOPS: Tip-Over Protection Structure (for preventing injury in tipping accidents)



### Powerful Operation



**Two Travel Speeds Provided**  
Two different travel speeds are available: high (4.0 km/h) and low (2.0 km/h)—making transport of the machine through the jobsite more efficient and smooth. A new tread pattern is adopted for the rubber shoe and operating vibration suppressed.

- Travel speeds: High 0 to 4.0 km/h  
Low 0 to 2.0 km/h

\* The values here apply when the rubber shoe is installed.



**Outside Flange Type Low Roller**  
Riding comfort is enhanced due to the increased horizontal stability.



**Powerful, Large Exhaust Capacity Three-Cylinder Engine**  
Packing substantial power for tough excavating jobs.

- Engine rated power: 9.5 kW
- Total piston displacement: 854 mL (cc)
- Bucket digging force: 11.8 kN



**Hydraulic Pilot Control Levers**  
Hydraulic pilot operation levers provide smooth control and easy operation.

### Comprehensive Safety Features



**Lock Lever Allows Lock/Neutral Engine Starting**

A lock lever lets you shut off not only Front & Swing but also traveling operation. A neutral engine start feature is also provided, allowing engine start only when the lock lever is at the lock position.



**Easy-Access Ignition Switch, Easy-View Monitor**

Simple, easy-to-understand status indicators.



**Folding Roll Bar (Rotary Type) (Optional)**

A rotary roll bar having the same width as main body is available as an optional.

## Wealth of convenient design features

- Folding/Retractable Seat Mount
- Fuel Tank Capacity of 16 Litres
- Neutral Engine Start Feature



### Simple, Time-Saving Maintenance



**Folding/Retractable Seat**  
Since the seat can be folded up, it can be used immediately after rainy weather, without the need for cleaning.



**Huge Capacity Fuel Tank with Wide Inlet**  
Thanks to the high-capacity fuel tank, operating time between refueling has been extended.

- Fuel tank capacity: 16 L



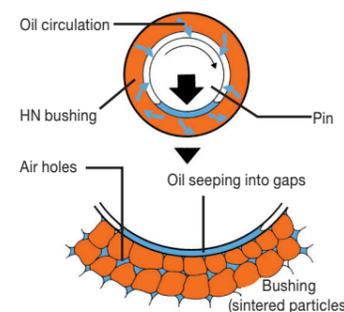
**Wide-Opening Cover**  
The machine cover opens wide for easy maintenance and cleaning of the radiator.

### Rugged Construction and High Durability Throughout



**Main Frame Protects The Body from Shocks**  
Single-unit counterweighted main frame effectively protects the body from unexpected shocks.

#### Movement Principle of HN Bush



Oil is shown seeping in this photograph, for purposes of illustration.

#### HN Bushing

Reliable, job-proven HN bushings are used at all pin joints at the front and the blade. The lubrication intervals have been extended to 500 hours, contributing to reduced scraping and grinding of the pins and bushings.

### ENGINE

Model .....	Yanmar 3TNV70
Type .....	Water-cooled, 4-cycle, 3-cylinder swirl combustion chamber injection type diesel engine
Rated power	
ISO 9249, net.....	9.5 kW (12.9 PS) at 2 100 min <sup>-1</sup> (rpm)
Maximum torque .....	50.5 N·m (5.1 kgf·m) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement ..	0.854 L
Bore and stroke .....	70 mm x 74 mm
Batteries .....	1 x 12 V/36 Ah

### HYDRAULIC SYSTEM

The proven 2-pump system has been improved to make combined operations and fine control easier and smoother.

Main pumps .....	2 gear pumps
Maximum oil flow .....	2 x 10.6 L/min
Pilot pump .....	1 gear pump
Maximum oil flow .....	5.3 L/min

### Relief Valve Settings

Main pumps circuit .....	17.7 MPa (181 kgf/cm <sup>2</sup> )
Pilot circuit .....	3.9 MPa (40 kgf/cm <sup>2</sup> )

### Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom raise and arm roll-in circuits to absorb shocks at stroke ends.

### Dimensions

	Quantity	Bore	Rod diameter	Stroke
Boom	1	55 mm	30 mm	355 mm
Arm	1	50 mm	30 mm	356 mm
Bucket	1	50 mm	25 mm	282 mm
Boom swing	1	50 mm	25 mm	260 mm
Blade	1	50 mm	25 mm	87 mm

### CONTROLS

Boom, arm, bucket, and swing are hydraulic pilot system. Travel, boom swing, blade, variable leg and reserve are mechanical.

### SWING MECHANISM

High-torque, orbit motor. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion are immersed in lubricant..

Swing speed .....	8.5 min <sup>-1</sup> (8.5 rpm)
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### UNDERCARRIAGE

#### Tracks

Tractor-type undercarriage. Welded track frame using carefully selected materials. Side frame extended by span cylinder.

#### Numbers of Rollers on Each Side

Lower rollers .....	3
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#### Travel Device

Each track driven by a high-torque, 2-speed axial piston motor through planetary reduction gear, allowing counter-rotation of the tracks.

Travel speeds .....	High : 0 to 4.0 km/h
(with rubber shoes)	Low : 0 to 2.0 km/h

Gradeability .....	58 % (30 degrees) continuous
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### WEIGHTS AND GROUND PRESSURE

Equipped with 0.81 m arm and 0.019 m<sup>3</sup> (ISO 7451 capacity) bucket.

	Operating weight	Ground pressure
180 mm rubber shoes	1 110 kg	24 kPa (0.25 kgf/cm <sup>2</sup> )

### SERVICE REFILL CAPACITIES

Fuel tank .....	16.0 L
Engine coolant .....	3.3 L
Engine oil .....	2.8 L
Travel device (each side) .....	0.33 L
Hydraulic system .....	18.0 L
Hydraulic oil tank (Reference oil level).....	12.0 L

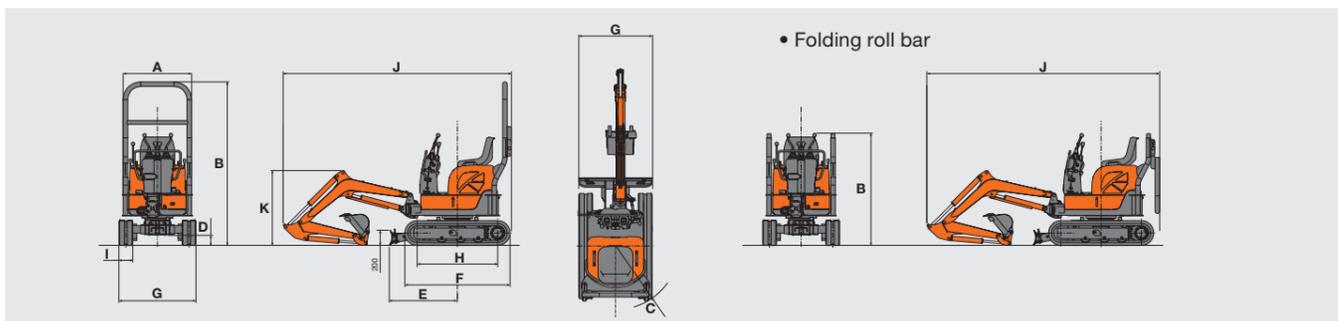
### BACKHOE ATTACHMENTS

#### BUCKETS

Capacity	Width		No. of teeth	Weight	Front Attachment	
	Without side cutters	With side cutters			0.81 m arm	0.96 m arm
ISO 7451						
0.016 m <sup>3</sup>	300 mm	320 mm	3	15.0 kg	A	A
0.019 m <sup>3</sup>	350 mm	370 mm	3	16.2 kg	A	B
0.021 m <sup>3</sup>	380 mm	400 mm	3	16.9 kg	B	B
Arm crowd force					5.9 kN (610 kgf)	5.5 kN (570 kgf)
Bucket digging force					11.7 kN (1 200 kgf)	11.7 kN (1 200 kgf)

A: General digging    B: Light-duty digging

## DIMENSIONS



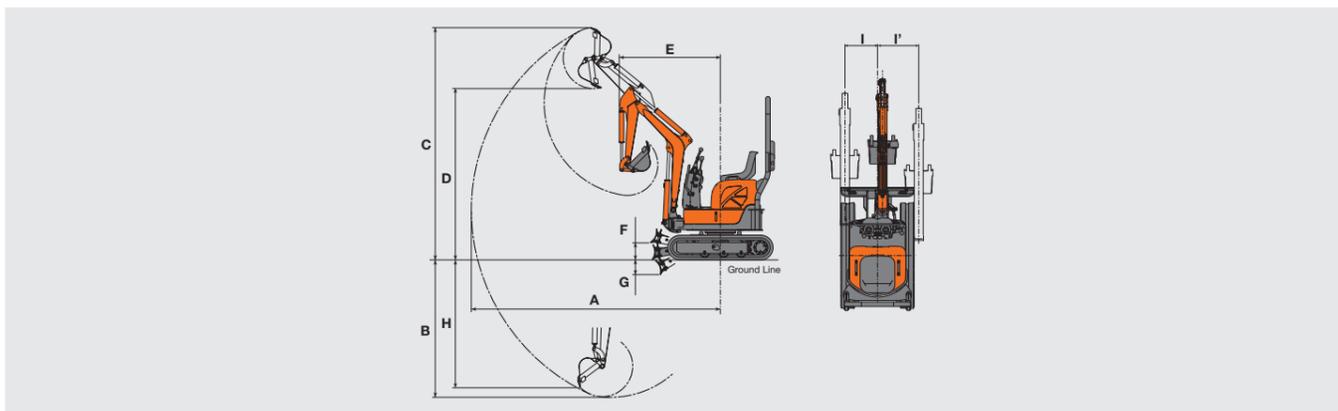
Note:  
The illustration shows the ZX10U-2 equipped with 0.81 m arm and 180 mm rubber shoes.  
The canopy and cabin conform to ROPS (ISO 3471) and FOPS (ISO 10262, Level 1) requirements.

Unit: mm

	ZX10U-2
A Overall width	910
B Overall height (Folding roll bar)	2 150 (1 450)
C Rear-end swing radius (with Roll bar)	830
D Min. ground clearance	130
E Horizontal distance of blade installation	885
F Undercarriage length	1 360
G Undercarriage width (Extend / Retract)	1 000 / 760
H Distance between tumblers	1 040
I Track shoe width	180
J Max. transport length (Folding roll bar)	2 970 (3 030)
K Overall height of boom	970

Sizes shown in parentheses apply when the crawler and blade are contracted.

## WORKING RANGES



Note:  
The illustration shows the ZX10U-2 equipped with 0.019 m<sup>3</sup> bucket, 0.81 m arm and 180 mm rubber shoes.

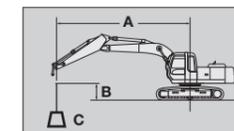
Unit: mm

	ZX10U-2
A Max. digging reach	3 220
B Max. digging depth	1 780
C Max. cutting height	3 010
D Max. dumping height	2 220
E Min. swing radius (At max. boom left swing)	1 310 (1 100)
F Blade bottom highest position above ground	220
G Blade bottom lowest position above ground	190
H Max. vertical wall	1 670
I / I' Offset distance (Max. boom-swing angle)	420 (55)/535 (65)

Sizes shown in parentheses apply when the crawler and blade are contracted.

## Metric measure

- Notes: 1. Ratings are based on ISO 10567.  
2. Lifting capacity of the ZAXIS Series does not exceed 75 % of tipping load with the machine on firm, level ground or 87 % full hydraulic capacity.  
3. The load point is the centre-line of the bucket pivot mounting pin on the arm.  
4. \*Indicates load limited by hydraulic capacity.  
5. 0 m = Ground.



A: Load radius  
B: Load point height  
C: Lifting capacity

### ZX10U-2 ROLL BAR VERSION, BLADE ABOVE GROUND

Unit : 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		meter		
		☺	☹	☺	☹			
Arm 0.81 m Rubber shoes 180 m	1.0 m			0.25	0.21	0.15	0.13	2.80
	0 (Ground)			0.24	0.20	0.15	0.13	2.73
	-1.0 m	*0.73	0.61	0.24	0.20	0.23	0.19	2.10

### ZX10U-2 ROLL BAR VERSION, BLADE ON GROUND

Unit : 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		meter		
		☺	☹	☺	☹			
Arm 0.81 m Rubber shoes 180 m	1.0 m			*0.28	0.21	0.34	0.13	2.80
	0 (Ground)			*0.38	0.20	0.35	0.13	2.73
	-1.0 m	*0.73	0.61	*0.27	0.20	0.54	0.19	2.10

### ZX10U-2 ROLL BAR VERSION, BLADE ABOVE GROUND, LONG ARM

Unit : 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		meter		
		☺	☹	☺	☹			
Arm 0.96 m Rubber shoes 180 m	1.0 m			*0.25	0.18	0.14	0.10	2.93
	0 (Ground)			0.23	0.16	0.14	0.10	2.86
	-1.0 m	0.77	0.50	0.23	0.16	0.20	0.14	2.27

### ZX10U-2 ROLL BAR VERSION, BLADE ON GROUND, LONG ARM

Unit : 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		meter		
		☺	☹	☺	☹			
Arm 0.96 m Rubber shoes 180 m	1.0 m			*0.26	0.18	0.31	0.10	2.93
	0 (Ground)			*0.37	0.16	0.32	0.10	2.86
	-1.0 m	*0.86	0.50	*0.31	0.16	0.47	0.14	2.27

## STANDARD EQUIPMENT

### ENGINE

- Neutral engine start system

### HYDRAULIC SYSTEM

- Hydraulic pilot type control levers
- Pilot control shut-off levers
- Two-speed travel system
- Piping for attachments

### UNDERCARRIAGE

- 180 mm rubber shoes
- Blade

### OPERATOR'S ROOM

- TOPS roll bar (rigid type)
- Seat belt
- 12 V outlet
- Work light

### FRONT ATTACHMENTS

- HN bushing
- 1.46 m boom
- 0.81 m arm
- Auxiliary hydraulic circuit piping

## OPTIONAL EQUIPMENT

### OPERATOR'S ROOM

- NS (New Standard) key
- TOPS roll bar (Rotary Type)

### FRONT ATTACHMENTS

- 0.96 m arm
- Backhoe buckets

\*Equipment may vary by country, so please consult your Hitachi dealer for details.

These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in colour and features.

Before use, read and understand the Operator's Manual for proper operation.

