

HITACHI



## ZAXIS 27U-2

- Engine Net Power: 26.4 hp (19.7 kW)
- Operating Weight: 6,393 lb. (2900 kg)
- Backhoe Bucket: 1.5–4.4 ft<sup>3</sup> (0.04–1.2 m<sup>3</sup>)

# ZAXIS 27U-2 SPECIFICATIONS

## Engine

Make .....	Yanmar
Model .....	3TNV88
Fuel .....	diesel
Cooling .....	liquid
Displacement .....	100 cu. in. (1.642 L)
Net power (ISO9249) .....	26.4 hp (19.7 kW) @ 2,200 rpm

## Performance

	Canopy Standard arm 3 ft. 10 in. (1170 mm), canopy, and standard counterweight	Long arm 4 ft. 10 in. (1470 mm), canopy, and extra counterweight	Cabin Standard arm 3 ft. 10 in. (1170 mm), cab, and standard counterweight	Long arm 4 ft. 10 in. (1470 mm), cab, and extra counterweight
Operating weight .....	6,393 lb. (2900 kg)	6,839 lb. (3102 kg)	6,695 lb. (3037 kg)	7,075 lb. (3209 kg)
<b>Maximum travel speed</b>				
Low .....	1.6 mph (2.6 km/h)			
High .....	2.8 mph (4.5 km/h)			
Hydraulic pumps .....	3 total			
Type .....	2 piston and 1 gear			
<b>Maximum rated flow</b>				
Piston .....	2 x 8.2 gpm (2 x 35.2 L/min.)			
Gear .....	4.4 gpm (17.6 L/min.)			
Auxiliary flow .....	13.9 gpm (52.8 L/min.)			
Fuel tank capacity .....	10.5 gal. (40 L)			
Hydraulic tank capacity .....	9.2 gal. (35 L)			
Ground pressure (with rubber track) .....	26.9 kPa (3.90 psi)	29.7 kPa (4.31 psi)	27.1 kPa (3.93 psi)	31.2 kPa (4.53 psi)

## Lift Capacities

	Canopy Standard arm 3 ft. 10 in. (1170 mm), canopy, and standard counterweight	Long arm 4 ft. 10 in. (1470 mm), canopy, and extra counterweight	Cabin Standard arm 3 ft. 10 in. (1170 mm), cab, and standard counterweight	Long arm 4 ft. 10 in. (1470 mm), cab, and extra counterweight
Ground level at 10-ft. (3.05 m) radius				
Over front, blade down .....	2,554 lb. (1158.5 kg)*	2,453 lb. (1112.7 kg)*	2,554 lb. (1158.5 kg)*	2,453 lb. (1112.7 kg)*
Over side .....	902 lb. (409 kg)	1,079 lb. (489.4 kg)	970 lb. (440 kg)	1,147 lb. (520.3 kg)

\*Limited by hydraulics.

## Drive

Each track is independently driven by a hydrostatic axial-piston motor connected to a two-stage planetary gear reduction box.

## Swing System

	Canopy Standard arm 3 ft. 10 in. (1170 mm), canopy, and standard counterweight	Long arm 4 ft. 10 in. (1470 mm), canopy, and extra counterweight	Cabin Standard arm 3 ft. 10 in. (1170 mm), cab, and standard counterweight	Long arm 4 ft. 10 in. (1470 mm), cab, and extra counterweight
Swing speed .....	9.1 rpm	9.1 rpm	9.1 rpm	9.1 rpm
<b>Boom swing</b>				
Left .....	72 degrees	72 degrees	62 degrees	62 degrees
Right .....	62 degrees	62 degrees	62 degrees	62 degrees

## Blade

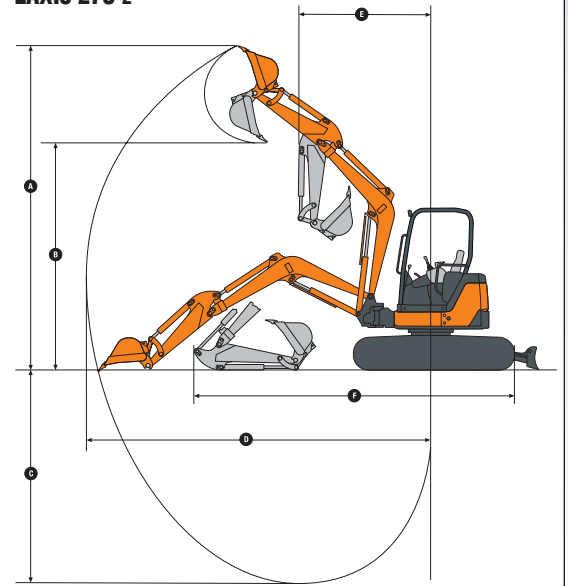
Blade width .....	5 ft. 1 in. (1550 mm)
Blade height .....	12.8 in. (325 mm)

## Working Ranges

	Canopy Standard arm 3 ft. 10 in. (1170 mm)	*Long arm 4 ft. 10 in. (1470 mm)	Cabin Standard arm 3 ft. 10 in. (1170 mm)	*Long arm 4 ft. 10 in. (1470 mm)
A Max. digging height .....	14 ft. 8 in. (4460 mm)	15 ft. 0 in. (4570 mm)	14 ft. 1 in. (4290 mm)	14 ft. 3 in. (4350 mm)
B Max. dumping height .....	10 ft. 6 in. (3210 mm)	10 ft. 11 in. (3320 mm)	10 ft. 0 in. (3040 mm)	10 ft. 3 in. (3120 mm)
C Max. digging depth .....	8 ft. 7 in. (2620 mm)	9 ft. 7 in. (2920 mm)	8 ft. 7 in. (2620 mm)	9 ft. 7 in. (2920 mm)
D Max. digging reach .....	15 ft. 4 in. (4670 mm)	16 ft. 2 in. (4920 mm)	15 ft. 4 in. (4670 mm)	16 ft. 2 in. (4920 mm)
E Min. front swing radius .....	6 ft. 5 in. (1950 mm)	6 ft. 8 in. (2030 mm)	6 ft. 9 in. (2050 mm)	6 ft. 10 in. (2090 mm)
F Transport length.....	13 ft. 9.4 in. (4200 mm)	14 ft. 0.4 in. (4280 mm)	13 ft. 9.4 in. (4200 mm)	14 ft. 0.4 in. (4280 mm)
Bucket breakout force.....	4,994 lb. (22.2 kN)	4,994 lb. (22.2 kN)	4,994 lb. (22.2 kN)	4,994 lb. (22.2 kN)
Arm breakout force.....	3,410 lb. (15.2 kN)	2,970 lb. (13.2 kN)	3,410 lb. (15.2 kN)	2,970 lb. (13.2 kN)

\*Extra counterweight

### ZAXIS 27U-2

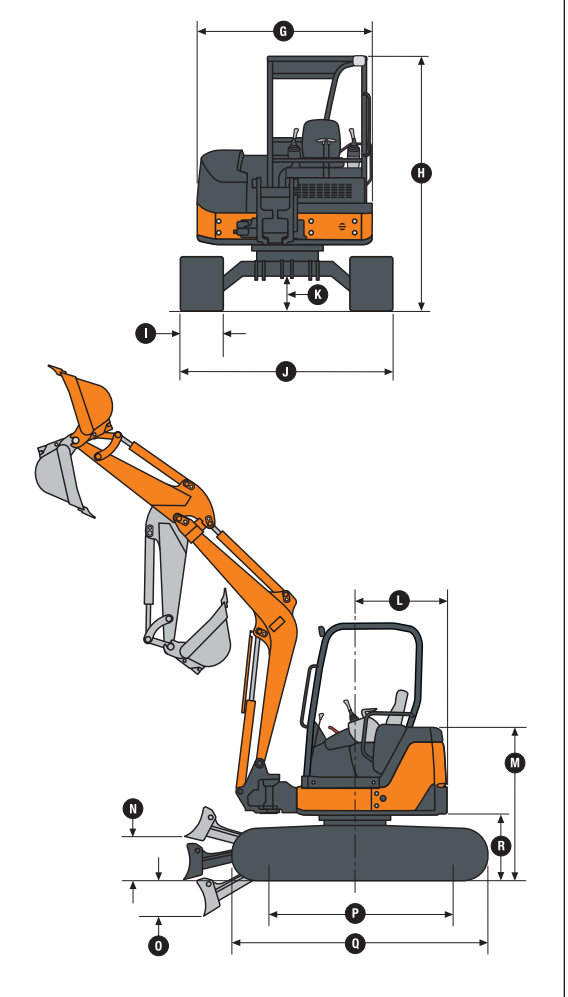


## Dimensions

	Canopy Standard arm 3 ft. 10 in. (1170 mm)	*Long arm 4 ft. 10 in. (1470 mm)	Cabin Standard arm 3 ft. 10 in. (1170 mm)	*Long arm 4 ft. 10 in. (1470 mm)
G Upperstructure width .....	5 ft. 1 in. (1550 mm)	5 ft. 1 in. (1550 mm)	5 ft. 1 in. (1550 mm)	5 ft. 1 in. (1550 mm)
H Overall height .....	8 ft. 1 in. (2460 mm)	8 ft. 1 in. (2460 mm)	8 ft. 2 in. (2500 mm)	8 ft. 2 in. (2500 mm)
I Track width .....	12 in. (300 mm)	12 in. (300 mm)	12 in. (300 mm)	12 in. (300 mm)
J Undercarriage width.....	5 ft. 1 in. (1550 mm)	5 ft. 1 in. (1550 mm)	5 ft. 1 in. (1550 mm)	5 ft. 1 in. (1550 mm)
K Ground clearance.....	1 ft. 0.6 in. (320 mm)	1 ft. 0.6 in. (320 mm)	1 ft. 0.6 in. (320 mm)	1 ft. 0.6 in. (320 mm)
L Tail swing radius .....	2 ft. 7 in. (775 mm)	2 ft. 10 in. (870 mm)	2 ft. 7 in. (775 mm)	2 ft. 10 in. (870 mm)
M Engine cover height .....	4 ft. 8 in. (1420 mm)	4 ft. 8 in. (1420 mm)	4 ft. 8 in. (1420 mm)	4 ft. 8 in. (1420 mm)
N Maximum blade lift .....	1 ft. 2 in. (360 mm)	1 ft. 2 in. (360 mm)	1 ft. 2 in. (360 mm)	1 ft. 2 in. (360 mm)
above ground	(360 mm)	(360 mm)	(360 mm)	(360 mm)
O Maximum blade drop .....	1 ft. 0.4 in. (315 mm)	1 ft. 0.4 in. (315 mm)	1 ft. 0.4 in. (315 mm)	1 ft. 0.4 in. (315 mm)
below ground	(315 mm)	(315 mm)	(315 mm)	(315 mm)
P Sprocket center .....	4 ft. 11 in. (1490 mm)	4 ft. 11 in. (1490 mm)	4 ft. 11 in. (1490 mm)	4 ft. 11 in. (1490 mm)
to idler center	(1490 mm)	(1490 mm)	(1490 mm)	(1490 mm)
Q Track length.....	6 ft. 5 in. (1950 mm)	6 ft. 5 in. (1950 mm)	6 ft. 5 in. (1950 mm)	6 ft. 5 in. (1950 mm)
R Counterweight clearance .....	1 ft. 10 in. (560 mm)	1 ft. 10 in. (560 mm)	1 ft. 10 in. (560 mm)	1 ft. 10 in. (560 mm)

\*Extra counterweight

### ZAXIS 27U-2



## Equipment

Key ● Standard Equipment ▲ Optional or Special Equipment

### Engine

- Certified to Tier-2
- Engine coolant to -34°F (-37°C)
- Engine preheater
- Fan guard
- Fuel/water separator
- Full-flow oil filter
- Isolation mounted
- Key start switch with electric fuel shutoff
- Single dry-type air filter
- Under-hood muffler

### Hydraulic System

- Auxiliary function foot control
- Auxiliary hydraulic lines with quick-couplers to end of boom
- Auxiliary return-flow selector valve
- Axial-piston swing motor
- Boom-swing foot control
- Excavator-to-backhoe control pattern change valve
- Open center with two variable-displacement pumps and one fixed-gear pump
- Hydraulic pilot-operated controls for boom, arm, bucket, swing, boom swing, blade, travel, and auxiliary functions
- Wet-disc swing brake

### Undercarriage

- Planetary final drive
- Propel motor shield
- Rubber track, 12-in. (300 mm)
- Two-speed axial-piston propel motors

- ▲ Steel track, 12-in. (300 mm) with triple semi-grousers
- ▲ Rubber crawler pad, 12-in. (300 mm)

### Upperstructure

- 360-degree rotation
- Counterweight, 644 lb. (292 kg)
- Hinged service-access doors
- One-piece airtight floor
- Independent-swing boom (72-degree left, 62-degree right – canopy)
- Independent-swing boom (62-degree left, 62-degree right – cab)
- Toolbox (canopy)
- ROPS/TOPS/FOPS (canopy)
- Vandal protection for service doors, seat under cover, and monitor panel
- Zero-tail-swing configuration

### Front Attachments

- Arm, 3-ft. 10-in. (1170 mm)
- ▲ Long arm, 4-ft. 10-in. (1470 mm), includes additional 412-lb. (187 kg) counterweight
- Articulation hose shield
- Backfill blade, 5-ft. 1-in. (1550 mm)
- Boom, 6-ft. 10.5-in. (2100 mm)
- Mechanical quick-coupler
- ▲ Augers: Planetary / Chain drive / Bits / Bit adapters
- ▲ Clamp
- ▲ Hammers: Points / Tools
- ▲ Quick-coupler buckets: Bucket teeth / Ditching / Heavy-duty

### Operator's Station

- Horn
- Hourmeter
- Instrumentation lights
- Monitor system: Preheat indicator / Engine oil pressure indicator / Alternator voltage indicator / Fuel gauge and fuel level indicator / Engine coolant temperature gauge and engine coolant temperature indicator / Hour meter / Work lights indicator
- Motion alarm with cancel switch
- Propel levers and foldable pedals
- Two travel speeds with automatic shifting
- Seat belt, 2-in. (51 mm), retractable
- Vinyl seat with fore/aft adjustment
- ▲ Suspension seat
- ▲ ROPS/TOPS/FOPS cab with air conditioning, heater, and cloth suspension seat
- ▲ Front screen
- ▲ Rear secondary exit kit

### Electrical

- 12-volt accessory outlet
- Alternator, 40 amp
- Low-maintenance battery
- Blade-type multi-fused circuits
- Positive-terminal battery covers

### Lights

- Work lights: Halogen / One mounted on operator's station / One mounted on boom
- Work lights switch

## Control Owning and Operating Costs

Customer Personal Service (CPS) is part of Hitachi's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

**Fluid analysis program** – tells you what's going on inside all of your machine's major components so you'll know if there's a problem before you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

**Preventive Maintenance (PM) agreements** – give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

**Extended coverage** – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage expenses. Whether you work in a severe-service setting, or you just want to spread the risk

of doing business, this is a great way to custom-fit coverage to your operation. An extended coverage contract also travels well because it's backed by the company and is honored by all Hitachi dealers.

**Customer Support Advisors (CSAs)** – the CSA program lends a personal quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for your business and take the burden of machine maintenance off your shoulders.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at test conditions per ISO9249, using No. 2-D fuel at 35 API gravity. No derating is required up to 10,000-ft. (3050 m) altitude. Gross power is without cooling fan.

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 canopy units with standard arm; full fuel tank; and 175-lb. (79 kg) operator: 27U-2 unit with 18-in. (457 mm), 2.33-cu.-ft. (0.07 m<sup>3</sup>) bucket; 12-in. (300 mm) rubber track; and 644-lb. (292 kg) counterweight. Lift capacities shown are for base machine above with mechanical quick-coupler, less bucket.

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