



## ZAXIS 27U-3

- Engine Rated Power: 26.4 hp (19.7 kW)
- Operating Weight: 6,358 lb. (2887 kg)
- Backhoe Bucket: 1.3–4.4 cu. ft. (0.04–1.2 m<sup>3</sup>)

## Engine

Manufacturer and Model .....	Yanmar 3TNV88
Non-Road Emission Standards .....	certified to EPA interim Tier-4 emissions
Displacement .....	100 cu. in. (1.6 L)
Net Power (ISO9249).....	26.4 hp (19.7 kW) @ 2,200 rpm

## Powertrain

Each track independently driven by hydrostatic axial-piston motor connected to two-stage planetary gear-reduction box	
Travel Speed (maximum)	
Low .....	1.6 mph (2.6 km/h)
High .....	2.8 mph (4.5 km/h)
Swing Speed.....	9.1 rpm
Swing Brake .....	spring applied, hydraulically released, automatic

## Hydraulics

Open center with two variable-displacement pumps and one fixed-gear pump	
Pump Flow	
Piston .....	2 x 8.2 gpm (2 x 31 L/m)
Gear .....	4.4 gpm (16.7 L/m)
Auxiliary Flow.....	13.9 gpm (52.6 L/m)
Controls .....	hydraulic pilot-operated for boom, arm, bucket, swing, boom swing, blade, travel, and auxiliary functions

## Electrical

Alternator Rating .....	40 amp
Work Lights.....	two halogen: one mounted on operator's station and one mounted on boom

## Undercarriage

Two-speed axial-piston propel motors					
Tracks, Rubber.....	12 in. (300 mm)				
	<i>3-ft. 10-in. (1.17 m)</i>	<i>3-ft. 10-in. (1.17 m)</i>	<i>4-ft. 10-in. (1.47 m)</i>	<i>4-ft. 10-in. (1.47 m)</i>	
	<i>Standard Arm, Canopy, and</i>	<i>Standard Arm, Cab, and</i>	<i>Long Arm, Canopy, and</i>	<i>Long Arm, Cab, and</i>	
	<i>Standard Counterweight</i>	<i>Standard Counterweight</i>	<i>Extra Counterweight</i>	<i>Extra Counterweight</i>	
Ground Pressure with Rubber Track.....	4.06 psi (28 kPa)	4.35 psi (30 kPa)	4.49 psi (30.9 kPa)	5.02 psi (34.6 kPa)	

## Upperstructure

	<i>3-ft. 10-in. (1.17 m)</i>	<i>3-ft. 10-in. (1.17 m)</i>	<i>4-ft. 10-in. (1.47 m)</i>	<i>4-ft. 10-in. (1.47 m)</i>
	<i>Standard Arm, Canopy, and</i>	<i>Standard Arm, Cab, and</i>	<i>Long Arm, Canopy, and</i>	<i>Long Arm, Cab, and</i>
	<i>Standard Counterweight</i>	<i>Standard Counterweight</i>	<i>Extra Counterweight</i>	<i>Extra Counterweight</i>
Independent Swing Boom				
Left.....	72 deg.	62 deg.	72 deg.	62 deg.
Right .....	62 deg.	62 deg.	62 deg.	62 deg.
Counterweight				
Standard.....	644 lb. (292 kg)			
Additional .....	420 lb. (190 kg)			

## Serviceability

Refill Capacities	
Fuel Tank .....	10.6 gal. (40 L)
Cooling System.....	5.3 qt. (5 L)
Engine Oil with Filter .....	7.6 qt. (7.2 L)
Hydraulic Tank .....	8.5 gal. (32 L)

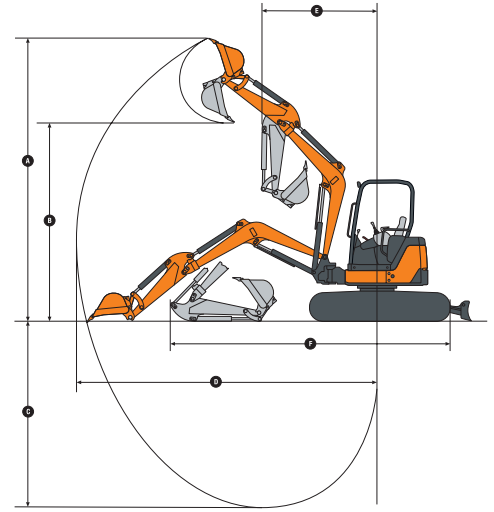
## Operating Weights

	<i>3-ft. 10-in. (1.17 m)</i>	<i>3-ft. 10-in. (1.17 m)</i>	<i>4-ft. 10-in. (1.47 m)</i>	<i>4-ft. 10-in. (1.47 m)</i>
	<i>Standard Arm, Canopy, and</i>	<i>Standard Arm, Cab, and</i>	<i>Long Arm, Canopy, and</i>	<i>Long Arm, Cab, and</i>
	<i>Standard Counterweight</i>	<i>Standard Counterweight</i>	<i>Extra Counterweight</i>	<i>Extra Counterweight</i>
With Full Fuel Tank and 175-lb. (79 kg) Operator.....	6,358 lb. (2887 kg)	6,730 lb. (3055 kg)	6,739 lb. (3060 kg)	7,111 lb. (3228 kg)

## Operating Dimensions

	3-ft. 10-in. (1.17 m) Standard Arm, Canopy, and Standard Counterweight	3-ft. 10-in. (1.17 m) Standard Arm, Cab, and Standard Counterweight	4-ft. 10-in. (1.47 m) Long Arm, Canopy, and Extra Counterweight	4-ft. 10-in. (1.47 m) Long Arm, Cab, and Extra Counterweight
<b>A</b> Maximum Digging Height .....	14 ft. 7 in. (4.45 m)	14 ft. 1 in. (4.28 m)	14 ft. 11 in. (4.55 m)	14 ft. 3 in. (4.35 m)
<b>B</b> Maximum Dumping Height .....	10 ft. 6 in. (3.19 m)	9 ft. 11 in. (3.03 m)	10 ft. 10 in. (3.30 m)	10 ft. 3 in. (3.12 m)
<b>C</b> Maximum Digging Depth .....	8 ft. 6 in. (2.59 m)	8 ft. 6 in. (2.59 m)	9 ft. 6 in. (2.89 m)	9 ft. 6 in. (2.89 m)
<b>D</b> Maximum Digging Reach .....	15 ft. 4 in. (4.67 m)	15 ft. 4 in. (4.67 m)	16 ft. 2 in. (4.92 m)	16 ft. 2 in. (4.92 m)
<b>E</b> Minimum Front Swing Radius .....	6 ft. 5 in. (1.96 m)	6 ft. 9 in. (2.05 m)	6 ft. 8 in. (2.04 m)	6 ft. 11 in. (2.10 m)
<b>F</b> Transport Length .....	13 ft. 9 in. (4.20 m)	14 ft. 1 in. (4.28 m)	13 ft. 9 in. (4.20 m)	14 ft. 1 in. (4.28 m)
Breakout Force				
Bucket .....	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 .....	3,410 lb. (15.2 kN)	3,410 lb. (15.2 kN)	2,970 lb. (13.2 kN)	2,970 lb. (13.2 kN)

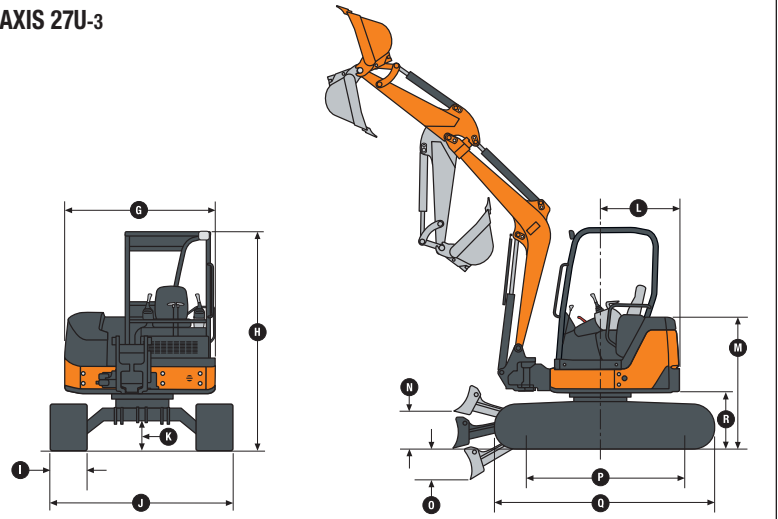
ZAXIS 27U-3



## Machine Dimensions

Blade	
Width .....	5 ft. 1 in. (1.55 m)
Height .....	14.2 in. (360 mm)
<b>G</b> Upperstructure Width .....	5 ft. 1 in. (1.55 m)
<b>H</b> Overall Height	
Canopy .....	8 ft. 1 in. (2.46 m)
Cab .....	8 ft. 2 in. (2.50 m)
<b>I</b> Track Width .....	12 in. (300 mm)
<b>J</b> Undercarriage Width .....	5 ft. 1 in. (1.55 m)
<b>K</b> Ground Clearance .....	12.6 in. (320 mm)
<b>L</b> Tail Swing Radius	
Standard Arm .....	31 in. (775 mm)
Long Arm and Extra Counterweight .....	34 in. (870 mm)
<b>M</b> Engine Cover Height .....	4 ft. 8 in. (1.42 m)
<b>N</b> Maximum Blade Lift Above Ground .....	14 in. (360 mm)
<b>O</b> Maximum Blade Drop Below Ground .....	12 in. (315 mm)
<b>P</b> Sprocket Center To Idler Center .....	4 ft. 11 in. (1.49 m)
<b>Q</b> Track Length .....	6 ft. 5 in. (1.95 m)
<b>R</b> Counterweight Clearance .....	22 in. (550 mm)

ZAXIS 27U-3



## Lift Capacities

	3-ft. 10-in. (1.17 m) Standard Arm, Canopy, and Standard Counterweight	3-ft. 10-in. (1.17 m) Standard Arm, Cab, and Standard Counterweight	4-ft. 10-in. (1.47 m) Long Arm, Canopy, and Extra Counterweight	4-ft. 10-in. (1.47 m) Long Arm, Cab, and Extra Counterweight
Ground Level at 10-ft. (3.05 m) Radius Over Front, Blade Down (limited by hydraulics), with Rubber or Steel Track .....	2,554 lb. (1160 kg)	2,554 lb. (1160 kg)	2,453 lb. (1114 kg)	2,453 lb. (1114 kg)
Over Side				
With Rubber Track .....	902 lb. (410 kg)	970 lb. (440 kg)	1,079 lb. (490 kg)	1,147 lb. (521 kg)
With Steel Track .....	941 lb. (427 kg)	1,009 lb. (458 kg)	1,119 lb. (508 kg)	1,186 lb. (538 kg)

## Equipment

Key ● Standard Equipment ▲ Optional or Special Equipment

### Engine

- Certified to EPA interim Tier-4 emissions
- Engine coolant to -34 deg. F (-37 deg. 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 right-hand pilot-lever 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
- Two-speed axial-piston propel motors
- Rubber track, 12 in. (300 mm)
- ▲ Steel track, 12 in. (300 mm) with triple semi-grousers
- ▲ Rubber crawler pad, 12 in. (300 mm)
- 360-degree rotation

### Upperstructure

- Counterweight, 644 lb. (292 kg)
- Hinged service-access doors
- One-piece airtight floor
- Toolbox (canopy)
- ROPS/TOPS/FOPS (canopy)
- Vandal protection for service doors, fuel cap, and toolbox
- Zero-tail-swing configuration

### Front Attachments

- Arm, 3 ft. 10 in. (1.17 m)
- ▲ Long arm, 4 ft. 10 in. (1.47 m), includes additional 412-lb. (187 kg) counterweight
- Articulation hose shield
- Backfill blade, 5 ft. 1 in. (1.55 m)
- Boom, 6 ft. 10.5 in. (2.10 m)
- 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
- Hour meter
- Instrumentation lights
- Monitor system: Preheat indicator / Engine oil pressure indicator with alarm / Alternator voltage indicator / Fuel gauge and low-fuel-level indicator / Engine coolant temperature gauge and engine coolant temperature indicator with alarm / Hour meter / Work lights indicator
- Motion alarm with cancel switch

### Operator's Station (continued)

- Work lights switch
- Propel levers and foldable pedals
- Two travel speeds with automatic shifting
- Seat belt, 2 in. (51 mm), retractable
- ▲ Seat belt, 3 in. (76 mm), retractable
- Vinyl seat with fore/aft adjustment
- ▲ Suspension seat
- ▲ ROPS/TOPS/FOPS cab with air conditioning and heater
- ▲ 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
- ▲ ZXLink™ wireless communication system

### Lights

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

## 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 warranty 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. Choose from engine, powertrain, powertrain with hydraulics, or full-machine two-year/2,000-hour or three-year/3,000-hour

coverage. An extended coverage contract travels well because it's backed by Hitachi and honored at all Hitachi Commercial Worksite Products dealers. What's more, extended coverage is fully transferable at no extra charge, so it adds value at trade-in.

**Customer Support Advisors (CSAs)** – Hitachi believes 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. No derating is required up to 6,600-ft. (2000 m) altitude. This machine is not equipped with spark-arrestor mufflers. Usage in forestry applications is not recommended.

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 arms; full fuel tanks; and 175-lb. (79 kg) operators; ZX27U-3 unit with 18-in. (457 mm), 2.3-cu.-ft. (0.7 m<sup>3</sup>) bucket, 12-in. (305 mm) rubber track, and 644-lb. (292 kg) counterweight. Lift capacities shown are for base machine above with mechanical quick-coupler, less bucket.