

27D

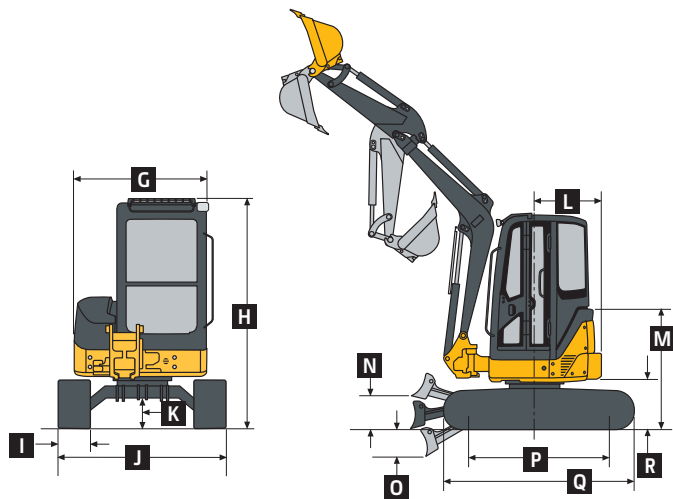
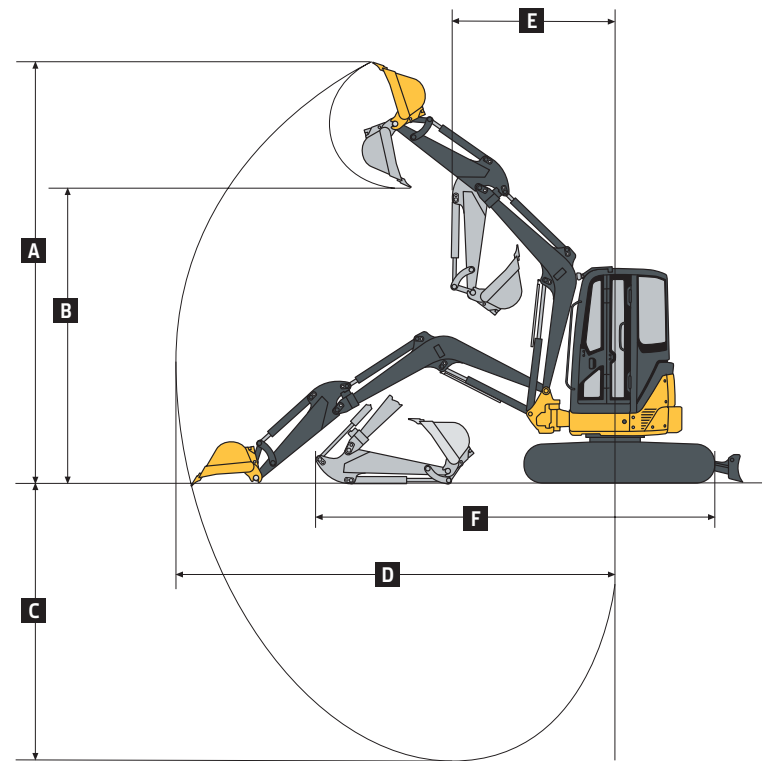


Engine		27D			
Manufacturer and Model	Yanmar 3TNV88				
Non-Road Emission Standard	EPA Interim Tier 4/EU Stage IIIB				
Displacement	1.6 L (100 cu. in.)				
Net Power (ISO 9249)	19.7 kW (26.4 hp) at 2,200 rpm				
Powertrain					
Each track independently driven by hydrostatic axial-piston motor connected to 2-stage planetary gear-reduction box					
Travel Speed (maximum)					
Low	2.6 km/h (1.6 mph)				
High	4.5 km/h (2.8 mph)				
Swing Speed	9.1 rpm				
Swing Brake	Spring applied, hydraulically released, automatic				
Hydraulics					
Open center with 2 variable-displacement pumps and 1 fixed-gear pump					
Pump Flow					
Piston	2 x 31.0 L/m (2 x 8.2 gpm)				
Gear	16.7 L/m (4.4 gpm)				
Auxiliary Flow	52.6 L/m (13.9 gpm)				
Controls	Hydraulic pilot-operated for boom, arm, bucket, swing, boom swing, blade, and travel				
Electrical					
Alternator Rating	40 amp				
Work Lights	2 halogen: 1 mounted on operator's station and 1 mounted on boom				
Undercarriage					
2-speed axial-piston propel motors					
Tracks, Rubber	300 mm (12 in.)				
Ground Pressure					
	<i>1.17-m (3 ft. 10 in.) Standard Arm, Canopy, and Standard Counterweight</i>	<i>1.17-m (3 ft. 10 in.) Standard Arm, Cab, and Standard Counterweight</i>	<i>1.47-m (4 ft. 10 in.) Long Arm, Canopy, and Extra Counterweight</i>	<i>1.47-m (4 ft. 10 in.) Long Arm, Cab, and Extra Counterweight</i>	
With Rubber Track	28.0 kPa (4.06 psi)	30.0 kPa (4.35 psi)	30.9 kPa (4.49 psi)	34.6 kPa (5.02 psi)	
Upperstructure					
Independent Swing Boom	<i>1.17-m (3 ft. 10 in.) Standard Arm, Canopy, and Standard Counterweight</i>	<i>1.17-m (3 ft. 10 in.) Standard Arm, Cab, and Standard Counterweight</i>	<i>1.47-m (4 ft. 10 in.) Long Arm, Canopy, and Extra Counterweight</i>	<i>1.47-m (4 ft. 10 in.) Long Arm, Cab, and Extra Counterweight</i>	
Left	72 deg.	62 deg.	72 deg.	62 deg.	
Right	62 deg.	62 deg.	62 deg.	62 deg.	
Counterweight					
Standard	292 kg (644 lb.)				
Additional	190 kg (420 lb.)				
Serviceability					
Refill Capacities					
Fuel Tank	40 L (10.6 gal.)				
Cooling System	5.0 L (5.3 qt.)				
Engine Oil with Filter	7.2 L (7.6 qt.)				
Hydraulic Tank	32 L (8.5 gal.)				
Operating Weights					
	<i>1.17-m (3 ft. 10 in.) Standard Arm, Canopy, and Standard Counterweight</i>	<i>1.17-m (3 ft. 10 in.) Standard Arm, Cab, and Standard Counterweight</i>	<i>1.47-m (4 ft. 10 in.) Long Arm, Canopy, and Extra Counterweight</i>	<i>1.47-m (4 ft. 10 in.) Long Arm, Cab, and Extra Counterweight</i>	
With Full Fuel Tank and 79-kg (175 lb.) Operator	2887 kg (6,358 lb.)	3055 kg (6,730 lb.)	3060 kg (6,739 lb.)	3228 kg (7,111 lb.)	



Operating Dimensions		27D			
		1.17-m (3 ft. 10 in.) Standard Arm, Canopy, and Standard Counterweight	1.17-m (3 ft. 10 in.) Standard Arm, Cab, and Standard Counterweight	1.47-m (4 ft. 10 in.) Long Arm, Canopy, and Extra Counterweight	1.47-m (4 ft. 10 in.) Long Arm, Cab, and Extra Counterweight
A	Maximum Digging Height	4.45 m (14 ft. 7 in.)	4.28 m (14 ft. 1 in.)	4.55 m (14 ft. 11 in.)	4.35 m (14 ft. 3 in.)
B	Maximum Dumping Height	3.19 m (10 ft. 6 in.)	3.03 m (9 ft. 11 in.)	3.30 m (10 ft. 10 in.)	3.12 m (10 ft. 3 in.)
C	Maximum Digging Depth	2.59 m (8 ft. 6 in.)	2.59 m (8 ft. 6 in.)	2.89 m (9 ft. 6 in.)	2.89 m (9 ft. 6 in.)
D	Maximum Digging Reach	4.67 m (15 ft. 4 in.)	4.67 m (15 ft. 4 in.)	4.92 m (16 ft. 2 in.)	4.92 m (16 ft. 2 in.)
E	Minimum Front Swing Radius	1.96 m (6 ft. 5 in.)	2.05 m (6 ft. 9 in.)	2.04 m (6 ft. 8 in.)	2.10 m (6 ft. 11 in.)
F	Transport Length	4.20 m (13 ft. 9 in.)	4.28 m (14 ft. 1 in.)	4.20 m (13 ft. 9 in.)	4.28 m (14 ft. 1 in.)
Breakout Force					
	Bucket	22.2 kN (4,994 lb.)	22.2 kN (4,994 lb.)	22.2 kN (4,994 lb.)	22.2 kN (4,994 lb.)
	Arm	15.2 kN (3,410 lb.)	15.2 kN (3,410 lb.)	13.2 kN (2,970 lb.)	13.2 kN (2,970 lb.)

Machine Dimensions		
	Blade Width	1.55 m (5 ft. 1 in.)
	Blade Height	360 mm (14.2 in.)
G	Upperstructure Width	1.55 m (5 ft. 1 in.)
H	Overall Height	
	Canopy	2.46 m (8 ft. 1 in.)
	Cab	2.50 m (8 ft. 2 in.)
I	Track Width	305 mm (12 in.)
J	Undercarriage Width	1.55 m (5 ft. 1 in.)
K	Ground Clearance	320 mm (12.6 in.)
L	Tail Swing Radius	
	Standard Arm	775 mm (31 in.)
	Long Arm with Extra Counterweight	870 mm (34 in.)
M	Engine Cover Height	1.42 m (4 ft. 8 in.)
N	Maximum Blade Lift Above Ground	360 mm (14 in.)
O	Maximum Blade Drop Below Ground	315 mm (12 in.)
P	Sprocket Center To Idler Center	1.49 m (4 ft. 11 in.)
Q	Track Length	1.95 m (6 ft. 5 in.)
R	Counterweight Clearance	550 mm (22 in.)



Lift Capacities		27D			
Ground Level at 3.05-m (10 ft.) Radius		1.17-m (3 ft. 10 in.) Standard Arm, Canopy, and Standard Counterweight	1.17-m (3 ft. 10 in.) Standard Arm, Cab, and Standard Counterweight	1.47-m (4 ft. 10 in.) Long Arm, Canopy, and Extra Counterweight	1.47-m (4 ft. 10 in.) Long Arm, Cab, and Extra Counterweight
	Over Front, Blade Down (limited by hydraulics), with Rubber or Steel Track	1160 kg (2,554 lb.)	1160 kg (2,554 lb.)	1114 kg (2,453 lb.)	1114 kg (2,453 lb.)
	Over Side				
	With Rubber Track	410 kg (902 lb.)	440 kg (970 lb.)	490 kg (1,079 lb.)	521 kg (1,147 lb.)
	With Steel Track	427 kg (941 lb.)	458 kg (1,009 lb.)	508 kg (1,119 lb.)	538 kg (1,186 lb.)