

302.7D

Mini Hydraulic Excavator



Engine

Net Power	15.2 kW	20.7 hp
Gross Power	17.9 kW	24.3 hp

Weight

Transport weight	2670 kg	5,890 lb
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Compact Dimensions

Reduced damage – Operator confidence – Increased productivity



Compact Radius

Configured without the additional counterweight the 302.7D CR is a true zero tail swing machine with the upper body staying within the width of the undercarriage during rotation. This enables the operator to work within confined areas and concentrate on the work being performed without having to worry about the back of the machine.



Transport Weight

The 302.7D CR is designed with a transport weight below 2.7 tonnes (6,000 lb) with cab fitted.

This allows lower trailer transportation costs using a standard passenger vehicle (subject to national restrictions).



Additional Counterweight

An optional additional weight increases the machines lifting capability with only a small addition to the overhang.

An optional additional counterweight increases the machines lifting capacity with only a small addition to the overhang.

(This counterweight is fitted as standard for North America and Australia)

Performance and Durability

Powerful hydraulics – Robust construction – Work tool ready

Auxiliary Hydraulics as Standard Fit

Machine is 'ready to work.' Hammer and two way lines complete with quick disconnect fittings are standard. Connections are located close to the tool to reduce hose lengths and any potential damage.

Additional lines options are available to further increase machine versatility.

Stick and bucket cylinder hoses are protected by routing them through the boom.

100% Pilot Controls

Delivers excellent machine control and lifetime 'as new' performance eliminating the need for linkage and cable maintenance.

Automatic Swing Lock

Safe transportation of the machine is aided by the Cat automatic swing lock which locks the machines upper body in place when the control console is raised or the engine is stopped.

Thumb Ready Stick (North American Builds)

Machine is configured with brackets and relief valves for simple and cost effective mounting of a hydraulic thumb.

Dozer Float

Ground levelling and finishing applications are fast and easier with the dozer float function engaged making site clean-up much more efficient.



User Friendly Operation

Comfortable productivity



Cab Comfort

The Cat® 302.7D CR gives the operator a large comfortable space in which to work. The ergonomic control layout, travel pedals and adjustable wrist rests are engineered to minimize operator fatigue and increase productivity.

Simultaneous Operation

Both machine upper body swing and boom offset can be controlled simultaneously for faster machine positioning and object handling.

Adjustable Flow Control

Machines configured with proportional auxiliary hydraulics include adjustable hydraulic flow control for even greater tool control. Especially useful with tools such as angling buckets.



Split Front Window

The lower front window section slides into the upper section frame. Both sections are then raised and stored in the roof using a gas assisted mechanism.

This allows the operator to position the front window to suit their visibility and ventilation requirements with easy storage.



Serviceability/Maintenance

Easy access for both maintenance and daily inspection



Pivot Bushing

Steel bushings are fitted on all front linkage pivot points including the swing casting, boom, stick and bucket. Designed for long life and easy replacement.



Maintenance Access

Removable covers in the cab and at the rear of the machine provide easy access to hydraulic system components.



Side Mounted Engine

All daily service points are easily accessed through the large side cover. The engine position also reduces heat and noise transfer into the operator station (cab).

Customer Support

Low operating costs with excellent services and options



Customer Support

Product supported through the Cat dealer and worldwide parts network aimed at minimizing downtime.

- Finance options
- Warranty options
- Maintenance contracts

Help and advice in product and option selection to maximize efficiency and operating profitability



Work Tools

A range of tools is available to take advantage of the machines versatility. All tools are matched to the machine to optimize performance and deliver excellent value through high productivity and long life.



Engine

Engine Model	Yanmar 3TNV76
Rated Net Power (ISO 9249)	15.2 kW 20.7 hp
Gross Power	17.9 kW 24.3 hp
Displacement	1115 cm ³ 68 in ³

Weight

Transport Weight with Cab	2670 kg 5,886 lb
Transport Weight with Canopy	2577 kg 5,681 lb

Travel System

Travel Speed	2.1 km/h/ 1.30 mph/ 3.8 km/h 2.36 mph
Gradeability	30°/58%

Service Refill Capacities

Fuel Tank Capacity	35.2 L 9.3 gal
Hydraulic Tank Capacity	26.5 L 7 gal

Blade

Width	1570 mm 61.9 in
Height	290 mm 11.4 in
Dig Depth	419 mm 16.5 in
Lift Height	380 mm 15 in

Hydraulic System

Pump Flow @ 2,500 rpm	89.4 L/min	23.6 gal
Operating Pressure – Equipment	225 bar	3,263 psi
Operating Pressure – Travel	225 bar	3,263 psi
Operating Pressure – Swing	206 bar	2,987 psi
Auxiliary Circuits		
Primary	52.2 L/min at 225 bar (13.8 gal/min at 3,263 psi)	
Secondary	30.8 L/min at 206 bar (8.1 gal/min at 2,988 psi)	
Maximum Bucket Force	22.5 kN	5,058 lbf
Maximum Stick Force Standard/Long	15.4 kN/ 13.6 kN	3,462 lbf/ 3,057 lbf

Lift Capacity at Ground Level

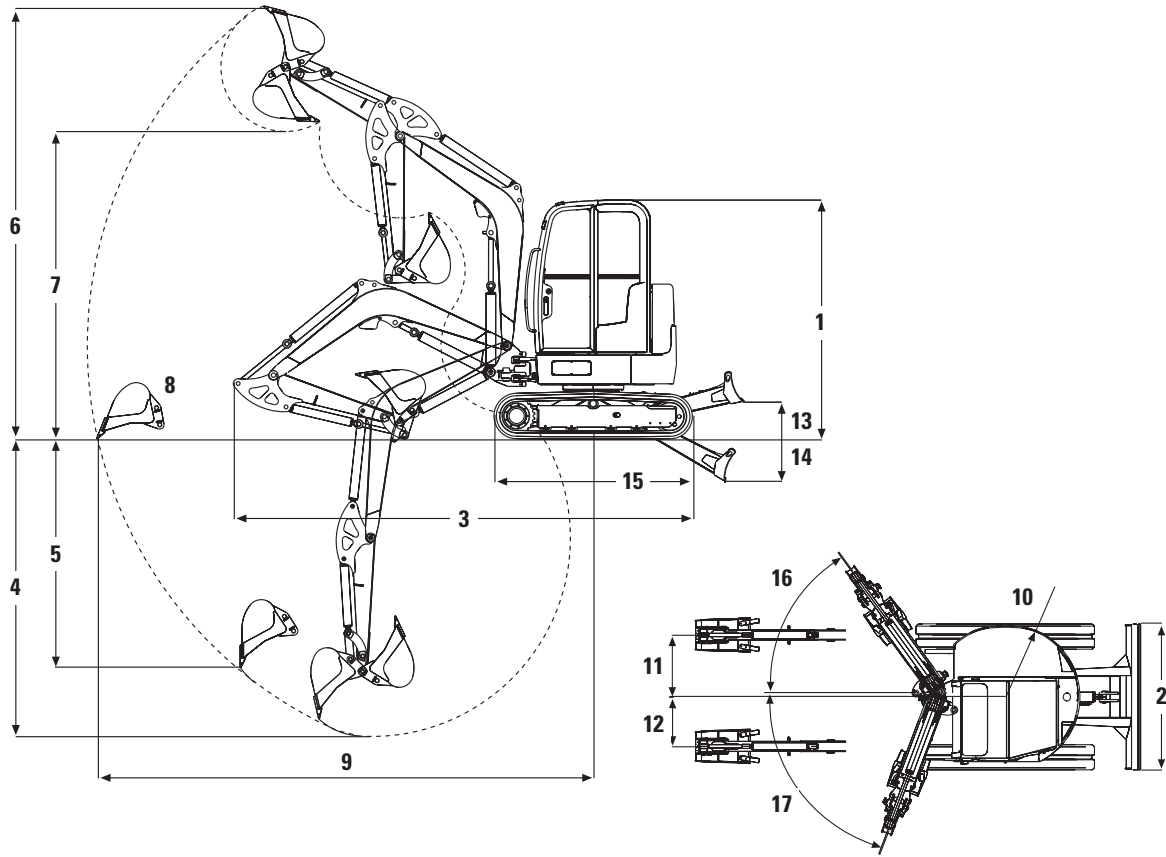
Lift Point Radius	2.5 m (98.43 in)				3.0 m (118.11 in)				3.5 m (137.80 in)				Maximum			
	Front		Side		Front		Side		Front		Side		Front		Side	
	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
Standard Stick	965*	2,127	560	1,235	730*	1,609	435	959	585*	1,290	355	783	510*	1,124	320	705
Long Stick and Optional Counterweight	955*	2,105	623	1,373	720*	1,587	483	1,065	580*	1,279	394	869	470*	1,036	332	732

* The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart.

302.7D Specifications

Dimensions

All dimensions are approximate



1	Height	2408 mm	7 ft 11 in
2	Width	1570 mm	5 ft 2 in
3	Transport length (arm lowered)	4255 mm	14 ft 0 in
4	Maximum digging depth	2544/2744 mm	8 ft 4 in/9 ft 0 in
5	Maximum vertical dig depth	1962/2152 mm	6 ft 5 in/7 ft 1 in
6	Maximum dig height	4170/4300 mm	13 ft 8 in/14 ft 1 in
7	Maximum dump height	2840/2970 mm	9 ft 4 in/9 ft 8 in
8	Maximum reach	4613/4805 mm	15 ft 1 in/15 ft 10 in
9	Maximum reach at ground level	4481/4681	14 ft 8 in/15 ft 5 in
10	Tail swing radius	760 mm	30 in
11	Track width	764 mm	30 in
12	Minimum front linkage swing radius	533 mm	21 in
13	Maximum dozer lift height	380 mm	15 in
14	Maximum dozer dig depth	419 mm	16 in
15	Length of undercarriage	2006 mm	79 in
16	Boom swing angle (Right)		50°
17	Boom swing angle (Left)		75°

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

300 mm rubber track	Working light mounted to boom	Suspension seat, vinyl covered
1-way and 2-way (combined function) auxiliary hydraulic lines	Canopy with Tip Over Protection (TOPS) ISO 12117	Travel pedals
Dozer blade with float function	Retractable seat belt	Maintenance free battery
		Hydraulic oil cooler

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

Cab, radio ready with FOPS ISO 10262 (Level 1), Tip Over Protection (TOPS) ISO 12117, heater/defroster, interior light and windscreen wiper/washer	Front screen guard for cab and canopy	Thumb ready stick (Standard in North America)
Suspension seat, fabric covered	Ecology drain for hydraulic tank	Custom color paint
Boom check valve	Bio Oil	Joystick mounted proportional auxiliary control
Mirror pack	Ecology drain for engine oil	
Mechanical quick coupler	Rotating beacon	
	Additional hydraulic circuit diverted from bucket cylinder	
	Auto idle (Standard in North America)	

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