

301.7D CR

Mini Hydraulic Excavator



Engine

Gross Power (ISO 14396)	17.9 kW	24.3 hp
Rated Net Power @ 2,200 rpm (ISO 9249)	13.2 kW	17.7 hp

Weights

Transport Weight with Canopy	1610 kg	3,550 lb
Operating Weight with Canopy	1690 kg	3,726 lb

**High
performance
in a compact
radius design
for greater
versatility and
controllability.**



Contents

Compact Radius	4
Versatility.....	6
Operator Station.....	8
Engine and Service Access	10
Specifications.....	12
Standard Equipment.....	14
Optional Equipment.....	15



The new Cat® 301.7D CR gives you a blend of power, control and stability to make your working day easier and more productive.

Compact Radius

Productivity in confined areas with zero tail swing



The zero tail swing Cat 301.7D CR can work comfortably in confined work areas with the machine upper frame able to slew within its track width. This compact radius design also allows you to concentrate on the work being performed without having to worry about damage to the back of the machine or site.

Extending Undercarriage

Fitted with an extending undercarriage and fold out dozer blade as standard, the machine can gain access into most areas when fully retracted to 990 mm (3 ft 3 in), and once extended to its full 1300 mm (4 ft 3 in) working width the undercarriage affords excellent stability for even greater digging and loading performance.



Versatility

Flexibility built in for a variety of jobs



Hammer Lines as Standard

Hammer and two-way auxiliary hydraulic lines with quick disconnects allow the operation of a hydraulic hammer and of a bi-directional tool such as an auger. The optional second hydraulic function is operated by a proportional roller on the left-hand joystick. This option includes a switch that allows the operator to vary the auxiliary hydraulic flow to suit each individual work tool.



The 'ready to work' quick disconnect connections are equipped with an accumulator as standard to help make releasing and changing of tools a quick and easy task. Located close to the work tool, they reduce hose lengths and minimize potential damage.



Additional Counterweight

An optional additional weight increases the machine's lifting capability with only a small addition to the overhang. This is an ideal option when heavy hydraulic mechanical tools are being used.

1) Auxiliary flow adjust 2) Front linkage 3) Counterweight

Dig Depth/Reach

The choice of two stick lengths allows you to configure your machine to deliver either high stick force or greater reach. Dig depths are set to give good trenching for utility pipe work and cables.



Sturdy hoisting points on the canopy roof enable the easy, safe and rapid relocation of the machine between sites or for loading of the machine onto a trailer.



A range of work tools is available including buckets, hammer and auger to take advantage of the machines versatility. All these tools are matched to optimize machine performance and deliver excellent value through productivity and long life.



Operator Station

Simple, easy operation allows the operator to focus on production



Controls

- Ergonomically laid out operator station with pilot operated joystick and foot pedal. All functions are pilot controlled to deliver excellent control and eliminate the need for maintenance of cables and linkages.
- The adjustable suspension seat provides a comfortable operating position and lifts to provide additional engine access.
- Retractable seat belts ensure that they are kept in good condition and ready to wear for your safety and comfort.
- Safety Lock Out – All machine controls are disabled by raising the control pod for safe and controlled machine starting.
- The optional rear weather panel gives protection from wind and rain on the operator's back while working.

A roof panel allows the operator to see the bucket at height giving better and safer loading operations with less operator effort.



Adjustable wrist rests reduce fatigue by positioning to best suit your preferred operating position.



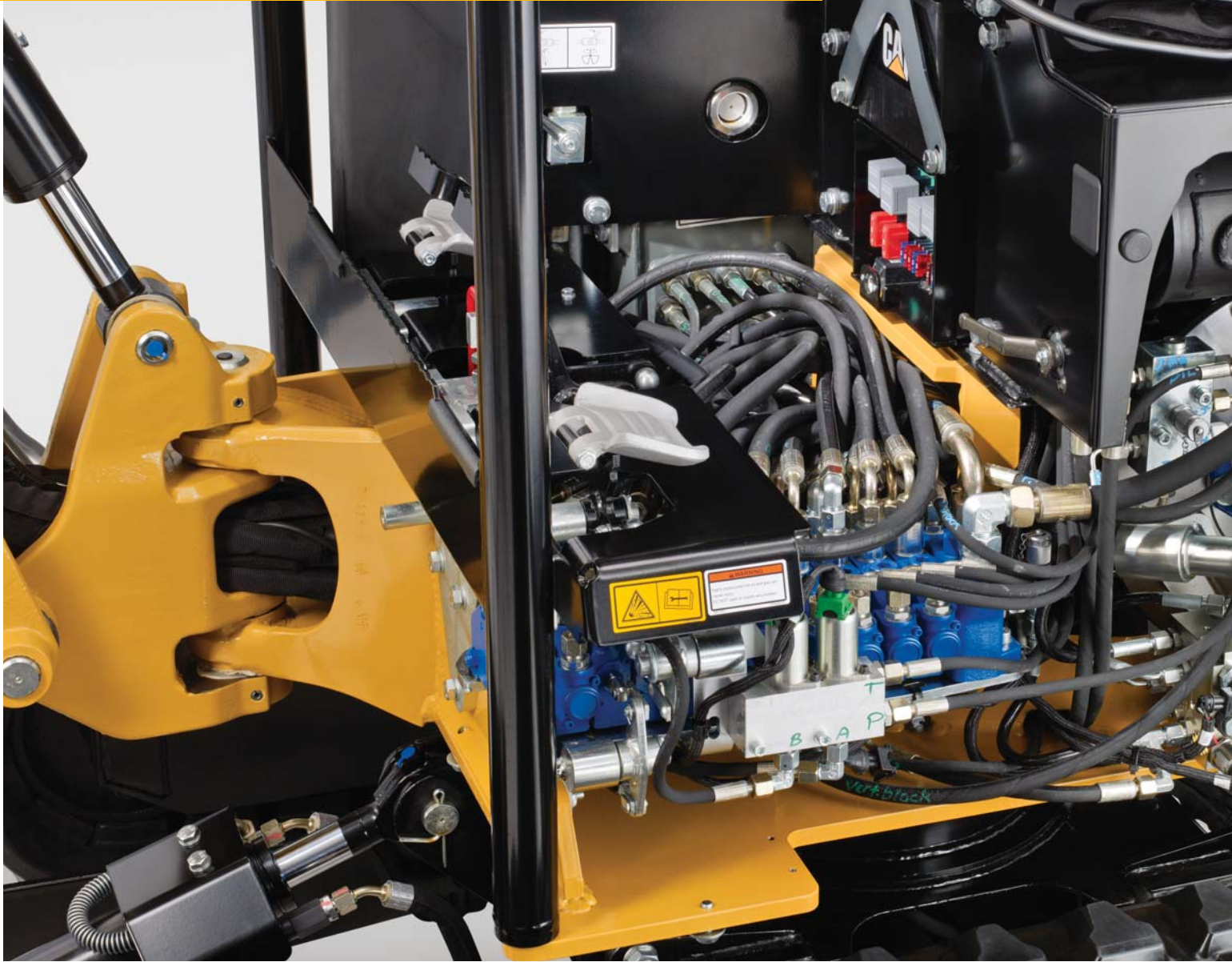
Travel foot bars are provided as standard to make moving around site easy and effortless. Ideal for traveling over longer distances or when you wish to operate the front linkage at the same time.



1) Roof guard and lights 2) Instrumentation
3) Travel pedals

Engine and Service Access

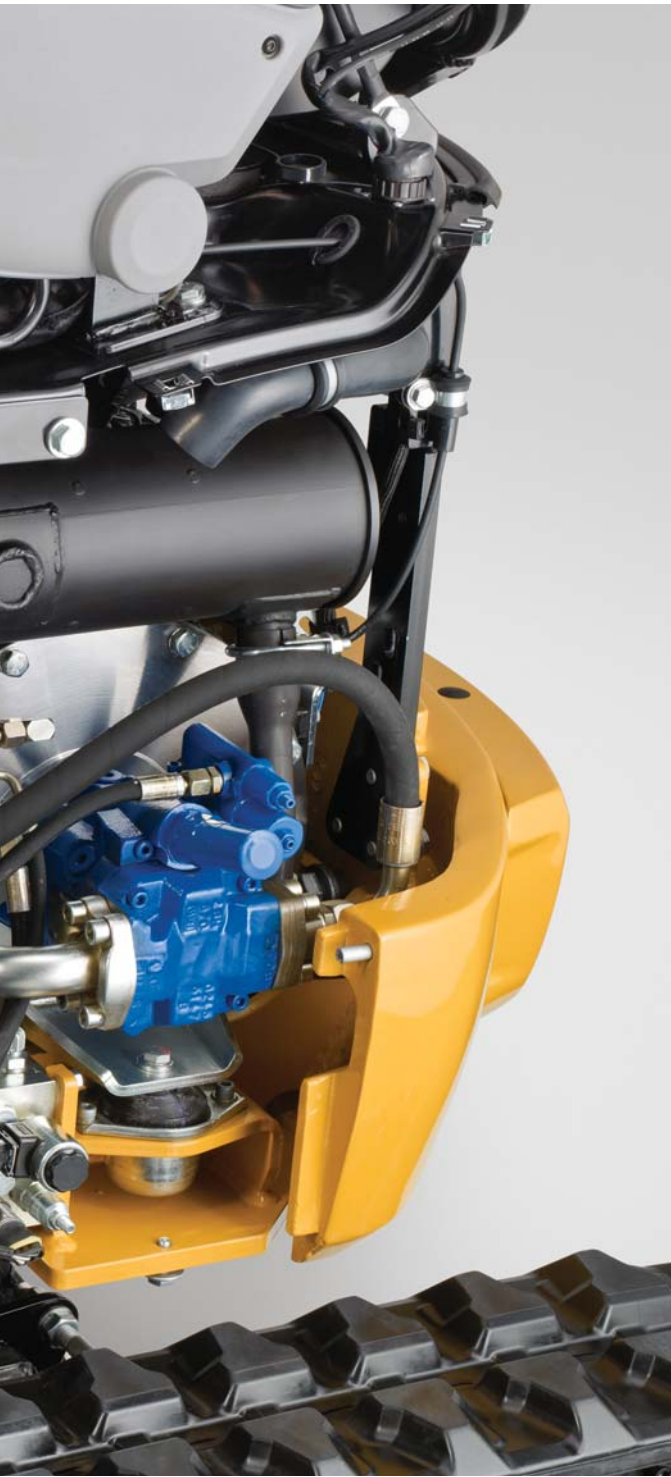
Powerful engine with load sensing hydraulics and minimal maintenance



Customer Support – Unmatched Support Makes the Difference

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Financing packages are flexible to meet your needs.
- Unmatched parts availability keeps you working.
- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production.
- For more information on Cat products, dealers services and industry solutions, visit www.cat.com.



Powerful Engine and Load Sensing Hydraulics

The 17.7 kW (24 hp) engine is matched with a load sensing hydraulic system and variable displacement pump to provide excellent digging performance and smooth control. No stall under load and power when needed make the 301.7D CR very productive for such a compact package.

Excellent Service Access

Daily checks and regular service points including fuel and hydraulic oil fill are easily reached via the large steel rear door and removable side panels. The main hydraulic valve and lines are also easily reached through a removable floor plate and side panels.

The machine has durable steel body panels all around, offering good resistance to impact damage and helping to maintain the machine's appearance and value.



301.7D CR Mini Hydraulic Excavator Specifications

Engine

Engine Model	Yanmar 3TNV76	
Rated Net Power @ 2,200 rpm (ISO 9249)	13.2 kW	17.7 hp
Gross Power (ISO 14396)	17.9 kW	24.3 hp
Displacement	1116 cm ³	40 in ³

Weights

Transport Weight with Canopy	1610 kg	3,550 lb
Operating Weight with Canopy	1690 kg	3,726 lb

- Weight includes standard stick, rubber tracks, bucket, operator and full fuel.

Travel System

Travel Speed	2.8 km/h- 5.6 km/h	1.74 mph- 3.48 mph
Gradeability	30%/58%	

Service Refill Capacities

Fuel Tank Capacity	19 L	5.0 gal
Hydraulic Tank Capacity	20 L	5.3 gal

Operating Specifications

Stick Length – Standard	940 mm	37.1 in
Stick Length – Long	1100 mm	43.2 in
Counterweight	50 kg	110 lb

Blade

Width	990 mm/ 1300 mm	3 ft 3 in/ 4 ft 3 in
Height	230 mm	9 in
Dig Depth	390 mm	15 in
Lift Height	271 mm	11 in

Hydraulic System

Pump Flow @ 2,200 rpm	23.8 + 23.8 + 19.0 + 39.6 L/min	6.29 + 6.29 + 5.0 + 10.5 gal/min
Operating Pressure – Equipment	240 bar	3,481 psi
Operating Pressure – Travel	240 bar	3,481 psi
Operating Pressure – Swing	180 bar	2,610 psi
Auxiliary Circuits		
Primary and Secondary Auxiliary Circuits		
Maximum Flow	35 L/min	9 gal/min
Maximum Pressure	230 bar	3,335 psi
Maximum Bucket Force	14.2 kN	3,190 lbf
Maximum Stick Force – Standard Stick	8.4 kN	1,890 lbf
Maximum Stick Force – Long Stick	7.3 kN	4,640 lbf

Lift Capacity at Ground Level – Undercarriage Extended

Lift Point Radius	2 m (6'7")				2.5 m (8'2")				3 m (9'10")				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/Extended Undercarriage/Blade Down	*916	*2,020	376	830	*653	*1,440	271	598	*493	*1,087	208	456	*404	*890	179	395
Long Stick/Extended Undercarriage/Blade Down	*929	*2,048	373	822	*655	*1,444	269	593	*497	*1,096	206	454	*380	*838	165	364

Machine fitted with standard dozer blade and standard counterweight.

The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lift capacity or 75% of tipping capacity.

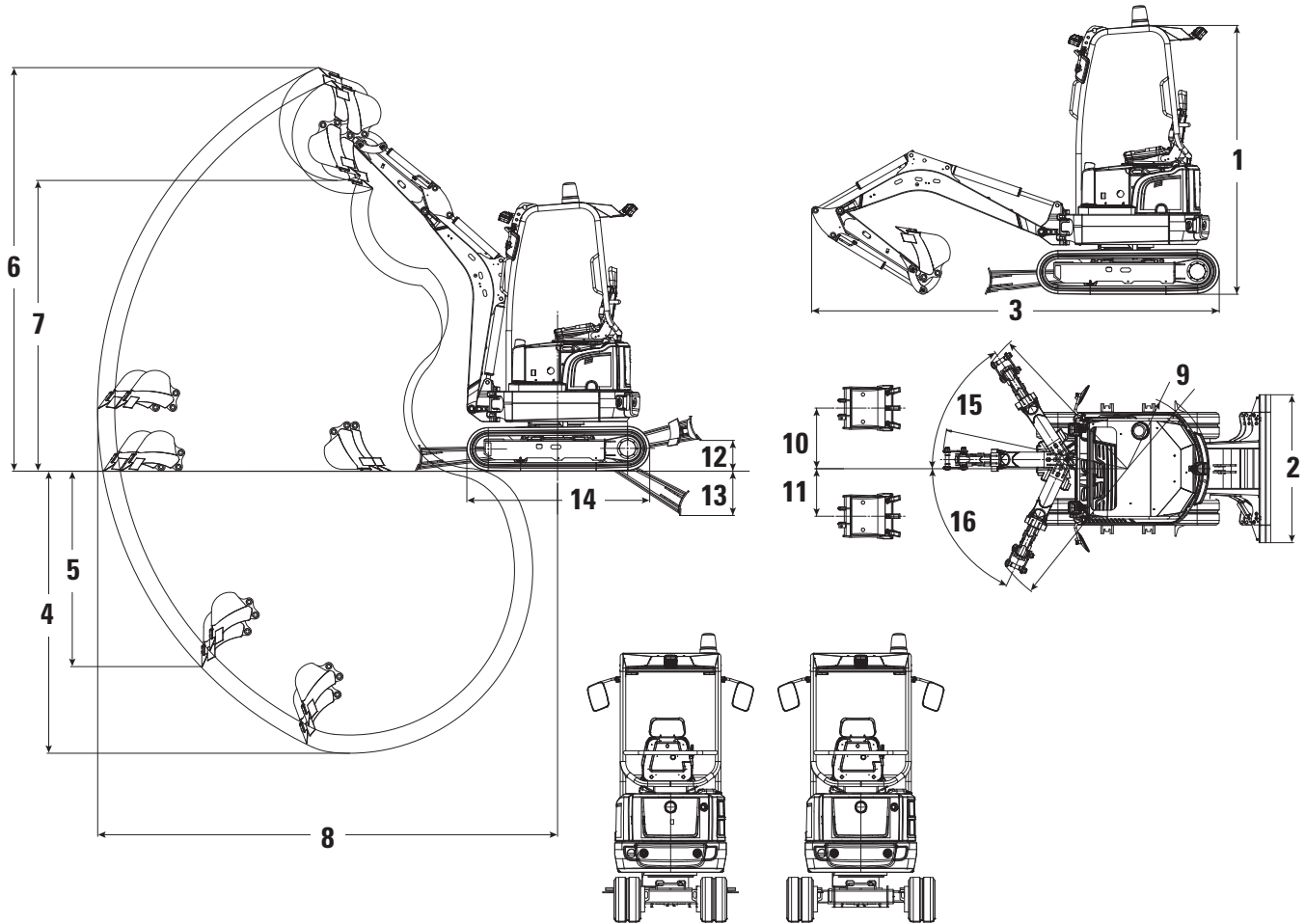
The excavator bucket weight is not included on this chart.

*Loads are hydraulic limited.

301.7D CR Mini Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate.



Standard Stick

Long Stick

	Standard Stick		Long Stick	
1 Height	2362 mm	7'9"	2362 mm	7'9"
2 Width	730 mm	2'5"	730 mm	2'5"
Undercarriage Width – Retracted	990 mm	3'3"	990 mm	3'3"
Undercarriage Width – Extended	1300 mm	4'3"	1300 mm	4'3"
3 Transport length (Arm lowered)	3584 mm	11'9"	3584 mm	11'9"
4 Maximum digging depth	2321 mm	7'7"	2481 mm	8'2"
5 Maximum vertical dig depth	1578 mm	5'2"	1718 mm	5'8"
6 Maximum dig height	3434 mm	11'3"	3548 mm	11'8"
7 Maximum dump height	2441 mm	8'0"	2555 mm	8'5"
8 Maximum reach at ground level	3842 mm	12'7"	3995 mm	13'1"
9 Tail swing radius	660 mm/722 mm	2'1"/2'4"	660 mm/722 mm	2'1"/2'4"
10 Maximum boom offset (RH)	533 mm	1'9"	533 mm	1'9"
11 Maximum boom offset (LH)	418 mm	1'5"	418 mm	1'5"
12 Maximum dozer lift height	271 mm	11"	271 mm	11"
13 Maximum dozer dig depth	390 mm	1'3"	390 mm	1'3"
14 Length of undercarriage (Extending)	1607 mm	5'3"	1607 mm	5'3"
15 Boom swing angle (RH)		57°		57°
16 Boom swing angle (LH)		65°		65°

301.7D CR Standard Equipment

Standard Equipment

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

- 230 mm rubber track
- Canopy – ROPS and TOPS protection
- Dozer blade
- Extending undercarriage
- Hammer/2 way lines
- Hydraulic oil cooler
- Maintenance free battery
- Retractable seat belt
- Standard stick
- Suspension seat, vinyl covered
- Travel steering bars
- Working light mounted to boom

Optional Equipment

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

- 2nd auxiliary lines with flow adjust
- Boom stick or dozer blade check valve
- Front and rear lights
- Long stick
- Mirror pack
- Operator rear weather cover
- Suspension seat, fabric covered
- Top cab guard to ISO 10262 (Level 1)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

© 2014 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ7072-02 (06-2014)
Replaces AEHQ7072-01

