

# 301.7D

## Mini Hydraulic Excavator



### Engine

|                         |         |         |
|-------------------------|---------|---------|
| Gross Power (ISO 14396) | 17.9 kW | 24.3 hp |
| Net Power               | 13.2 kW | 17.7 hp |

### Weights

|   |         |          |
|---|---------|----------|
| Operating Weight with Canopy                                | 1610 kg | 3,550 lb |
| Operating Weight with Cab                                   | 1720 kg | 3,792 lb |
| Operating Weight with Canopy<br>and Extending Undercarriage | 1735 kg | 3,825 lb |
| Operating Weight with Cab<br>and Extending Undercarriage    | 1845 kg | 4,068 lb |

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



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

# Performance

Powerful digging combined with smooth control.



## Dig Force

The new 301.7D boasts high bucket and stick forces making it an impressive and productive excavator.

The choice of two stick lengths allows the customer to configure his machine to deliver even higher stick forces or reach.

## Stability

An extending undercarriage and fold out dozer blade allow the machine to be configured for optimum performance. Blade extensions are retained with the dozer making them easy to use and ensuring that they are not lost.



## Dozer Float

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

## Long Dozer Option

The optional longer dozer blade enables improved 'dig to blade' characteristics to give easier on site clean up.



## 100% Pilot Controls

Delivers excellent machine control and lifetime 'as new' performance eliminating the need for linkage and cable maintenance, lowering owning and operating costs and resulting in less downtime.



# Versatility

Flexibility built in for a variety of jobs.



## High Flexibility

Compact in size and with a transport weight under 2000 kg (4,500 lb), the 301.7D can be transported easily using a conventional trailer and pick up truck or transit van.

The sturdy hoisting eyelets on the cab roof enable the easy and rapid relocation of the machine between sites.

## 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.

## Work Tools

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

## Auxiliary Hydraulics as Standard Fit

Machine is 'ready to work'. Hammer and two way lines complete with quick disconnect fittings as standard. Connections are located close to the tool to reduce hose lengths and any potential damage. Additional line options are available to further increase machine versatility. Stick and bucket cylinder hoses are protected by routing them through the boom.

## Auxiliary Flow Control

Machines configured with proportional auxiliary hydraulics, include the ability to adjust the flow for even greater tool control. Especially useful with tools such as angling ditching buckets.



# Productive Comfort

Large operator environment and ergonomic control layout.

## Cab Comfort

The Cat 301.7D 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.

The layout is designed for easy cleaning, minimizing downtime between jobs.

There is a choice of cab with heater or canopy available. The canopy offering two sided access for even greater on site versatility.



## 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 in front window to suit their visibility and ventilation requirements with easy storage.

# Engine and Serviceability

Superior power with easy access and minimal maintenance requirements keep you working.

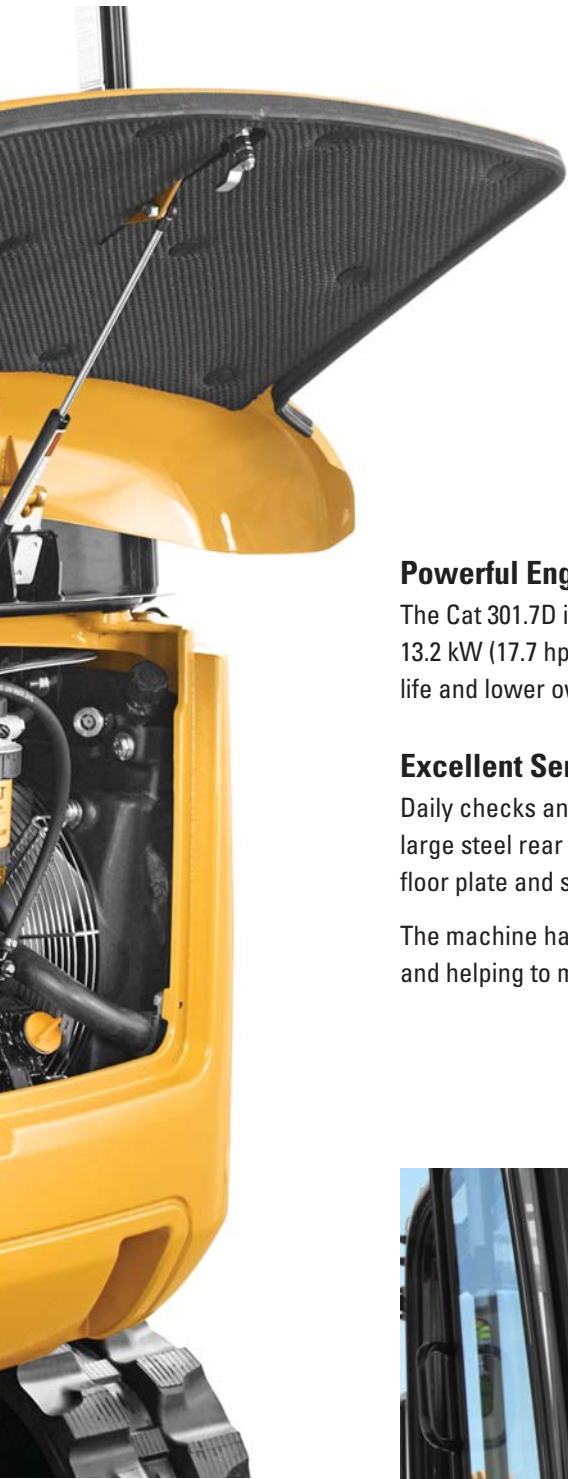


## Customer Support – Unmatched Support Makes the Difference

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, dealer services and industry solutions, visit [www.cat.com](http://www.cat.com)





### **Powerful Engine**

The Cat 301.7D is fitted with a 17.9 kW (24.3 hp) gross power engine that is installed at a much lower rated 13.2 kW (17.7 hp). This is designed to reduce engine wear, give cooler running temperatures, with longer life and lower owner and operating costs.

### **Excellent Service Access**

Daily checks and regular service points including fuel and hydraulic oil fill are easily reached via the large steel rear door. 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 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 <sup>3</sup> | 40 in <sup>3</sup> |

## Weights

|  |         |          |
|--|---------|----------|
| Operating Weight with Canopy                             | 1610 kg | 3,550 lb |
| Operating Weight with Cab                                | 1720 kg | 3,792 lb |
| Operating Weight with Canopy and Extending Undercarriage | 1735 kg | 3,825 lb |
| Operating Weight with Cab and Extending Undercarriage    | 1845 kg | 4,068 lb |

## Travel System

|              |                       |                       |
|--------------|-----------------------|-----------------------|
| Travel Speed | 2.8 km/h/<br>5.6 km/h | 1.74 mph/<br>3.48 mph |
| Gradeability | 30°/58%               |                       |

## Service Refill Capacities

|                         |      |         |
|-------------------------|------|---------|
| Fuel Tank Capacity      | 24 L | 6.3 gal |
| Hydraulic Tank Capacity | 21 L | 5.5 gal |

## Operating Specifications

|                         |         |         |
|-------------------------|---------|---------|
| Stick Length – Standard | 980 mm  | 39.6 in |
| Stick Length – Long     | 1180 mm | 46 in   |
| Machine Overhang        | 495 mm  | 19.5 in |

## Blade

|                              |        |         |
|------------------------------|--------|---------|
| Width                        | 990 mm | 39 in   |
| Height                       | 230 mm | 9 in    |
| Dig Depth – Standard Blade   | 317 mm | 12.5 in |
| Lift Height – Standard Blade | 197 mm | 8 in    |

## Hydraulic System

|                                      |                        |                             |
|--------------------------------------|------------------------|-----------------------------|
| Pump Flow @ 2,200 rpm                | 6.4 L/min              | 1.7 gal/min                 |
| Operating Pressure – Equipment       | 200 bar                | 2,900 psi                   |
| Operating Pressure – Travel          | 200 bar                | 2,900 psi                   |
| Operating Pressure – Swing           | 125 bar                | 1,813 psi                   |
| Auxiliary Circuits                   |                        |                             |
| Primary                              | 30 L/min<br>at 170 bar | 8 gal/min<br>at 2,465 psi   |
| Secondary                            | 17 L/min<br>at 200 bar | 4.5 gal/min<br>at 2,900 psi |
| Maximum Bucket Force                 | 18.8 kN                | 4,226 lbf                   |
| Maximum Stick Force – Standard Stick | 11.2 kN                | 2,518 lbf                   |
| Maximum Stick Force – Long Stick     | 9.8 kN                 | 2,203 lbf                   |

## Lift Capacity at Ground Level

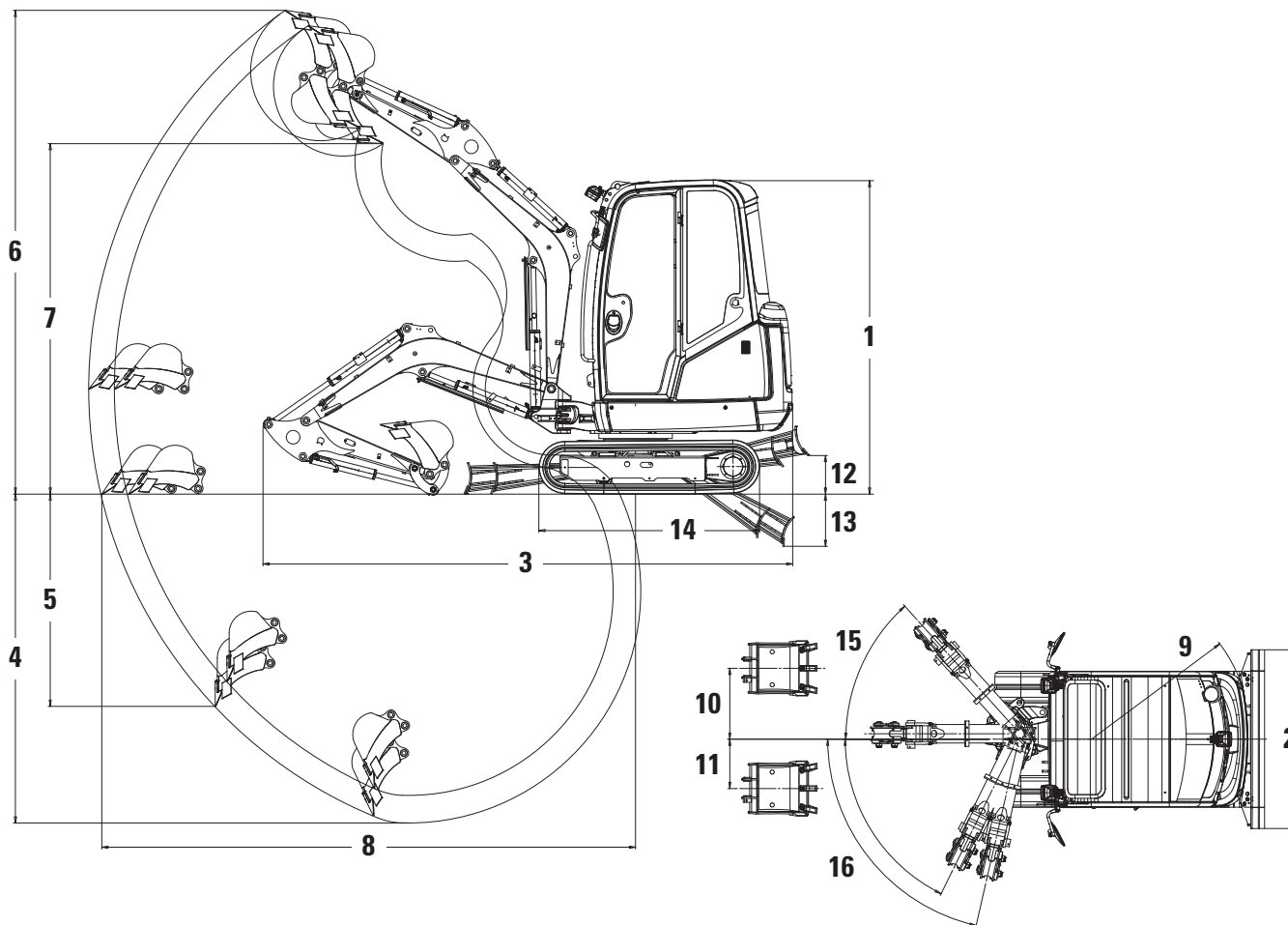
| Lift Point Radius                  | 2 m (6'7") |        |      |       | 2.5 m (8'2") |        |      |     | 3 m (9'10") |        |      |     | Maximum |      |      |     |
|------------------------------------|------------|--------|------|-------|--------------|--------|------|-----|-------------|--------|------|-----|---------|------|------|-----|
|                                    | Front      |        | Side |       | Front        |        | Side |     | Front       |        | Side |     | Front   |      | Side |     |
|                                    | kg         | lb     | kg   | lb    | kg           | lb     | kg   | lb  | kg          | lb     | kg   | lb  | kg      | lb   | kg   | lb  |
| Long Stick/<br>Fixed Undercarriage | 835*       | 1,840* | 580  | 1,279 | 605*         | 1,334* | 400  | 882 | 470*        | 1,036* | 325  | 717 | 440*    | 970* | 300  | 661 |

\*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.

# 301.7D Mini Hydraulic Excavator Specifications

## Dimensions

All dimensions are approximate.



|   | Standard Stick |       | Long Stick |       |
|---|----------------|-------|------------|-------|
| <b>1</b> Height                               | 2290 mm        | 7'5"  | 2290 mm    | 7'5"  |
| <b>2</b> Width                                | 990 mm         | 3'3"  | 990 mm     | 3'3"  |
| Undercarriage Width (Retracted)               | 990 mm         | 3'3"  | 990 mm     | 3'3"  |
| Undercarriage Width (Extended)                | 1300 mm        | 4'3"  | 1300 mm    | 4'3"  |
| <b>3</b> Transport Length (arm lowered)       | 3855 mm        | 12'8" | 3855 mm    | 12'8" |
| <b>4</b> Maximum Digging Depth                | 2200 mm        | 7'3"  | 2400 mm    | 7'11" |
| <b>5</b> Maximum Vertical Dig Depth           | 1430 mm        | 4'8"  | 1620 mm    | 5'4"  |
| <b>6</b> Maximum Dig Height                   | 3485 mm        | 11'5" | 3595 mm    | 11'9" |
| <b>7</b> Maximum Dump Height                  | 2500 mm        | 8'3"  | 2610 mm    | 8'7"  |
| <b>8</b> Maximum Reach at Ground Level        | 3700 mm        | 12'2" | 3895 mm    | 12'9" |
| <b>9</b> Tail Swing Radius                    | 1170 mm        | 3'10" | 1170 mm    | 3'10" |
| <b>10</b> Maximum Boom Offset (RH)            | 520 mm         | 1'8"  | 520 mm     | 1'8"  |
| <b>11</b> Maximum Boom Offset (LH)            | 360 mm         | 1'2"  | 360 mm     | 1'2"  |
| <b>12</b> Maximum Dozer Lift Height           | 200 mm         | 8"    | 200 mm     | 8"    |
| <b>13</b> Maximum Dozer Dig Depth             | 320 mm         | 1'0"  | 320 mm     | 1'0"  |
| <b>14</b> Length of Undercarriage (Fixed)     | 1445 mm        | 4'9"  | 1445 mm    | 4'9"  |
| <b>14</b> Length of Undercarriage (Extending) | 1600 mm        | 5'3"  | 1600 mm    | 5'3"  |
| <b>15</b> Boom Swing Angle (RH)               | 48°            |       | 48°        |       |
| <b>16</b> Boom Swing Angle (LH)               | 77°/64°        |       | 77°/64°    |       |

# 301.7D Standard Equipment

## Standard Equipment

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

- 230 mm (9 in) rubber track
- Automatic swing park brake
- Auxiliary quick disconnect couplers
- Canopy – ROPS and TOPS protection
- Dozer float
- Fixed undercarriage
- Hammer/two way auxiliary hydraulic lines
- Hydraulic oil cooler
- Maintenance free battery
- Retractable seat belt
- Standard length dozer blade
- Suspension seat, vinyl covered
- Travel pedals
- Working light mounted to boom

# 301.7D Optional Equipment

## Optional Equipment

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

- Additional hydraulic circuit diverted from bucket cylinder
- Auto engine idle
- Boom stick or dozer blade check valve
- Cab, radio ready – ROPS and TOPS protection
- Cab top guard to ISO 10262 (Level 1)
- Cab/canopy lights
- Extending undercarriage
- Joystick mounted proportional auxiliary control with flow control
- Long dozer blade
- Long stick
- Mirror pack
- Removable swing stop
- Second auxiliary lines
- Suspension seat, fabric covered







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