

307E

Mini Hydraulic Excavator



Engine

| | |
|-------------------------|--------------------|
| Engine Model | Cat® C2.6 DI Turbo |
| Net Power | 39.7 kW (53.1 hp) |
| Gross Power @ 2,000 rpm | 43 kW (57.6 hp) |

Weights

| | |
|------------------|---------|
| Operating Weight | 7100 kg |
|------------------|---------|

307E Features

Increased Performance

Lower fuel consumption and higher fuel efficiency keeps you working all day.

Smooth new intuitive flow sharing "High Definition Hydraulic" system provides the level of control demanded in any application.

Comfortable Cab

The new design provides a spacious cab with ergonomic low effort controls and a suspension seat that keeps you comfortable all day.

Stability

Conventional tail swing design with an extended counterweight provides excellent stability while maximizing lifting.

Maintenance

Superior serviceability with the counterweight positioned low at the back and two big side doors, making all the maintenance points extremely easy to touch from ground level.

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The Cat 307E Mini Hydraulic Excavator delivers superior performance and comfort while reducing your fuel consumption and operating costs. The large spacious cab provides a comfortable work area. Intuitive seat-mounted controls are easy to use for greater job accuracy and efficiency. The standard tail swing design incorporates a counterweight that extends further back on the machine. This provides leverage to create a stable work platform during lifting and digging. The 307E sets the standard for conventional tail swing excavators in the eight-ton size class.

Performance

Powerful digging combined with smooth control.



Hydraulics

Smooth responsive hydraulics give the level of control demanded by the customer in any application, from fine grading and dozing to backfilling.

Powerful bucket and stick digging forces combined with fast cycle times result in world class productivity and performance.

Maximum travel speed can be selected by an easily accessible foot switch on the cab floor allowing precise control by balancing travel speed with the torque needed for turning and traveling on inclines. Dozer blade float function enables easy ground leveling for landscaping and finish grade applications as well as more efficient job site clean-up.



Lift Capacity

The Cat E Series has industry leading lift capacity matched with outstanding stability. This provides the control required to meet the diverse and continually changing needs of the customer.

Steel Track

The standard 450 mm triple grouser steel tracks provide optimum stability when lifting over the side, in demolition and heavy duty applications.

Standard Dozer with Float Function

The dozer function is pilot controlled from inside the cab, providing smooth, proportional operation. The dozer float function is enabled by pushing the lever fully forward into the decent position. Site clean up and backfilling is easier as the operator does not have to adjust the blade height during travel.

New Travel Motor and Swing Motor

New swing motor delivers smoother and improved swing performance. New travel motor provides more reliable traveling performance.



Undercarriage
Excellent stability.



Operator Comfort

Simple, easy operation allows the operator to focus on production.



Operator Station

The operator environment provides the operator with a larger cab and more ingress and egress room. The clear flat floor space allows the operator plenty of leg room. An intuitive cab layout with ergonomic joysticks, standard spring suspension seat and clear display panel makes for ease of operation allowing the operator to focus on production. The cab also features the following:

- New console with larger, soft arm rest and easy to use machine function buttons
- New monitor with battery pressure indication function
- Auto idle feature for improved fuel savings and lower noise levels

100% Pilot Controls

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



Engine

Clean, quiet, efficient and powerful.



Powerful (Efficient DI Turbocharged) Engine and Load Sensing Hydraulics

The new Cat C2.6 39.7 kW (53.1 hp) engine is matched with a load sensing hydraulic system to provide excellent digging performance and smooth control. Low noise and vibration levels deliver comfortable operation.

Serviceability and Customer Support

Easy access and minimal maintenance requirements keep you working.





Excellent Service Access and “One Side Maintenance” Engine

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

The Cat C2.6 engine is with “one side maintenance” to offer superior maintenance convenience. 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.

S-O-SSM oil sampling valve allows easy sampling of the hydraulic fluid for preventative 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, dealer services and industry solutions, visit www.cat.com

307E Mini Hydraulic Excavator Specifications

Engine

| | |
|-------------------------|-------------------|
| Engine Model | Cat C2.6 DI Turbo |
| Net Power | 39.7 kW (53.1 hp) |
| Gross Power @ 2,000 rpm | 43 kW (57.6 hp) |

- Meets U.S. EPA Tier 2 equivalent emission standards.
- Net power rating per ISO 9249 and SAE J1349.

Weights

| | |
|------------------|---------|
| Operating Weight | 7100 kg |
|------------------|---------|

Engine Dimensions

| | |
|--------------|----------------------|
| Bore | 87 mm |
| Stroke | 110 mm |
| Displacement | 2615 cm ³ |

Swing System

| | |
|---------------------|------------------------|
| Machine Swing Speed | 10.8 min ⁻¹ |
|---------------------|------------------------|

- Centralized lubrication.
- Automatic swing brake, spring applied hydraulic release.

Hydraulic System

| | |
|----------------------------------|---------|
| Operating Pressure – Equipment | 28 MPa |
| Operating Pressure – Travel | 28 MPa |
| Operating Pressure – Swing | 24 MPa |
| Digging Force – Stick (standard) | 37.1 kN |
| Digging Force – Bucket | 50.6 kN |

Travel System

| | |
|-------------------------------|------------|
| Travel Speed – High | 5.1 km/h |
| Travel Speed – Low | 3.2 km/h |
| Maximum Traction Force | 56.9 kN |
| Gradeability (maximum) – High | 30 Degrees |

- Each track is driven by one independent two-speed motor.
- Drive modules are integrated into the roller frame for total protection.
- Straight line travel when tracking and operating the front linkage simultaneously.

Electrical System

Type

- 60-amp alternator.
- 12-volt, heavy-duty batteries.

Service Refill Capacities

| | |
|------------------|-------|
| Cooling System | 14 L |
| Engine Oil | 11 L |
| Fuel Tank | 125 L |
| Hydraulic Tank | 51 L |
| Hydraulic System | 78 L |

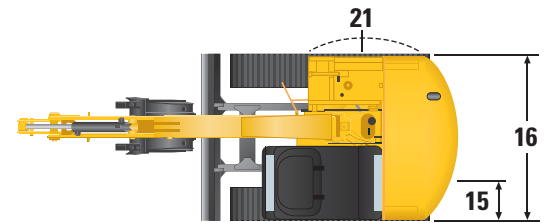
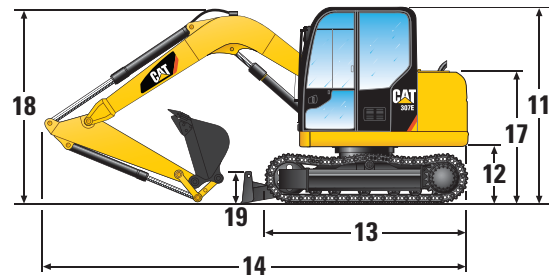
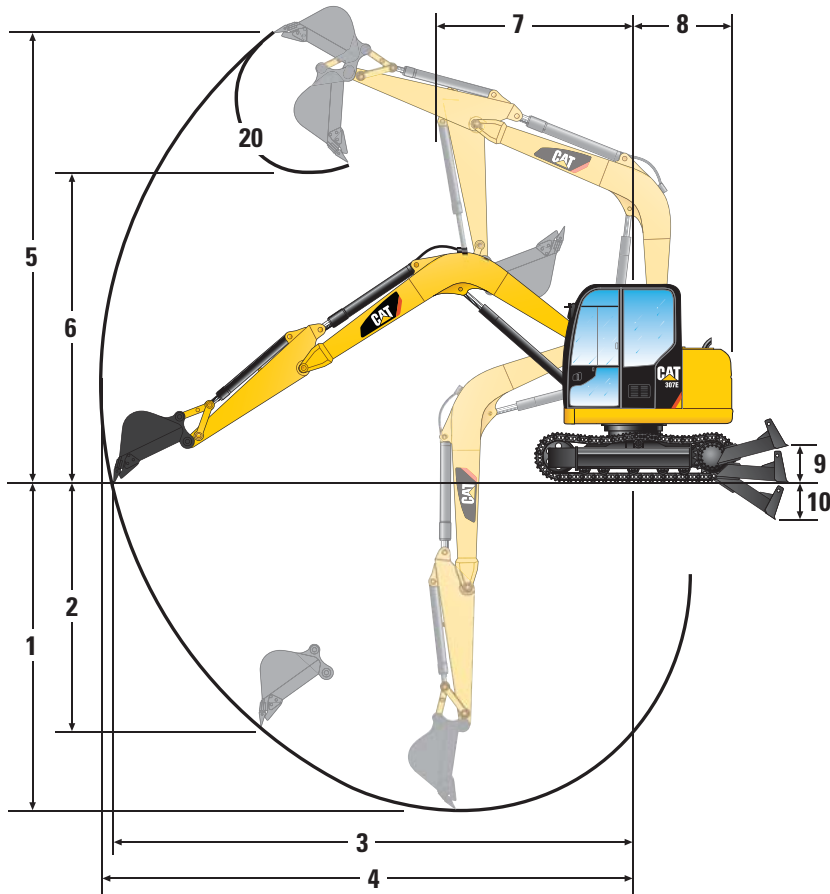
Sound Levels

| | |
|--------------|-----------|
| Exterior Cab | 101 dB(A) |
| Interior Cab | 80 dB(A) |

- Operator sound pressure levels measured per ISO 6396 (dynamic).

307E Mini Hydraulic Excavator Specifications

Dimensions



| | Standard Stick |
|---------------------------------|----------------|
| 1 Dig Depth | 4070 mm |
| 2 Vertical Wall | 3630 mm |
| 3 Maximum Reach at Ground Level | 6160 mm |
| 4 Maximum Reach | 6300 mm |
| 5 Maximum Dig Height | 7240 mm |
| 6 Maximum Dump Clearance | 5190 mm |
| 7 Boom in Reach | 1690 mm |
| 8 Tail Swing | 1750 mm |
| 9 Maximum Blade Height | 390 mm |
| 10 Maximum Blade Depth | 350 mm |
| 11 O/A Shipping Height | 2540 mm |

| | Standard Stick |
|-------------------------------------|----------------|
| 12 Swing Bearing Height | 770 mm |
| 13 O/A Undercarriage Length | 2760 mm |
| 14 O/A Shipping Length | 6080 mm |
| 15 Track Belt/Shoe Width | 450 mm |
| 16 O/A Track Width | 2300 mm |
| 17 Cab Height | 1790 mm |
| 18 Boom Height in Shipping Position | 2630 mm |
| 19 Blade Height | 445 mm |
| 20 Bucket Rotation | 180 degree |
| 21 Tail Swing Radius | 1750 mm |

Standard Equipment

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

OPERATOR STATION

- Cab fully glazed
- Interior light
- Windshield wiper and washer
- Air conditioning, heater and defroster
- Openable upper front windshield
- Removable lower front windshield
- Skylight
- Rear polycarbonate and right glass window
- Sliding door window, tempered glass
- Rear window, emergency exit
- Seat, suspension, fabric covered
- Armrest
- Seatbelt
- Cup holder
- Literature compartment
- Floor mat
- Mirrors
- AM/FM radio
- Monitoring system, gauges and indicators
- Neutral lever hydraulic lockout
- Joystick pilot operated controls
- Travel control pedals with hand levers
- Dial type accelerator
- Cat HD batteries, (cold weather start)
- Alternator 60-amp
- Warning horn
- 12-volt electric starting
- Work lights, cab-mounted
- Roll Over Protective Structure (ROPS)
- Light, boom-mounted

HYDRAULICS AND POWER TRAIN

- Cooling package, high ambient
- Extended life coolant –37° C
- Variable displacement load sense hydraulics
- Automatic swing parking brake
- Straight line travel
- Two speed travel
- Engine idle
- Boom lowering device (accumulator)
- Reverse swing damping valve
- Controls, auxiliary – auxiliary hydraulic lines from main auxiliary valve to boom foot plus auxiliary control pedal, auxiliary hydraulic lines from boom foot to stick, stop valves

UNDERCARRIAGE, BLADE AND TRACK

- Steel tracks, 450 mm
- Grease lubricated track seals
- Idler end track guiding guards
- Dozer blade with float function
- Blade, weld on cutting edge 2300 mm

OTHER

- Cat “One Key” system
- Fuel cap, lockable
- Heavy duty stick
- Counterweight
- Toolbox
- Bucket
- Travel alarm
- Manufacturing film – plate for year of manufacture for export machines

Optional Equipment

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

OPERATOR STATION

- Cab front guard
- Cab top guard

OTHER

- Engine oil eco-drain valve
- Water jacket

WORK TOOLS

- Quick Couplers
 - Mechanical
- Thumbs
 - Hydraulic
 - Full Rotation
 - Stiff Link
- Auger
- Hammer
- Shear
- Compactor

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

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