308E CR SB
Mini Hydraulic Excavator with Swing Boom

Engine
- Engine Model: Cat® C3.3B
- Net Power (ISO 9249): 48.5 kW (65 hp)

Weights
- Operating Weight with Cab: 8333 kg (18,371 lb)

Operating Specifications
- Maximum Dig Depth: 4150 mm (13'7'')
High performance in a compact radius and swing boom design for greater versatility and controllability.
The Cat® 308E CR SB Mini Hydraulic Excavator delivers high performance with the versatility of a swing boom front linkage in a durable Compact Radius design to help you work in the tightest applications. With the new COMPASS display panel and redesigned operator environment, the 308E CR SB is more productive, versatile, and cost effective.
Compact Radius

Great machine versatility in tight spaces with enhanced operator comfort.

Compact Radius

The compact radius design gives greater machine versatility and the capability to work within confined areas. The radius of the upper body stays within 280 mm (11 in) of the undercarriage providing flexibility for different work site applications with a reduced risk of damage and less stress for the operator.

This allows the operator to concentrate on the work being done without having to worry about damaging the back of the machine or other job site obstacles.
Operator Station

The redesigned 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 air suspension, heated seat and the COMPASS display panel makes for ease of operation and helps to facilitate a reduction in operator fatigue.

All hydraulic functions are fully pilot operated, lowering owning and operating costs and resulting in less downtime.
The brand new COMPASS control panel on the Cat® E Series mini hydraulic excavators was specifically designed by Caterpillar for compact excavators. It adds several new features to the machines increasing the amount of customer value. All of the following features are now standard on all five of the new E Series models.

**Complete** – All of the control panel features are standard on all five of the new E Series models

**Operation** – Simple operation of the pattern changer, hydraulic quick coupler and fuel gauge visibility all at the push of a button

**Maintenance** – Maintenance intervals, diagnostics and work hours

**Performance** – Maintain optimum performance levels with Eco mode and adjustable work tool flow features

And

**Security** – Anti theft device with individual user and master passwords

**System** – Ergonomically designed control panel

**Passcode Protected Security System**

A standard anti-theft device now comes on every E Series compact excavator. A five digit alphanumeric password is required to start the machine when the anti-theft feature is enabled. There is a master password and up to five user passwords can be created by the owner if desired.

*Keep your machine safe on a busy job site by locking it when you are not around*

**Adjustable Auxiliary Work Tool Flow Control**

The E Series machines now have simple adjustability of the flow going down the boom and stick to the work tool. Both the standard main line and optional secondary auxiliary hydraulics can be adjusted on a scale of 1–15 through a few buttons on the control panel.

*Adjust the flow to your different tools with a simple push of a button*
UNLOCK the new features and experience the value of the exclusive COMPASS control panel on the new E Series compact excavators

**Economy Mode**
This feature allows your machine to be set in a more economical power setting with a simple push of a button. While operating in this mode, the machine will maintain excellent performance levels while saving fuel through a slightly lower engine setting.

*Save money with the new E Series compact excavators*

**Continuous Flow**
Once this feature is enabled through a button on the monitor, the new E Series machines can run in continuous flow mode. With the auxiliary hydraulics on the right hand joystick, just hold the roller switch at the desired flow rate and direction for 2.5 seconds and the machine will maintain that flow rate until it is turned off.

*Maintain hydraulic flow to your tools at any flow and in any direction with the simple push of a button*

**Pattern Changer**
Change the operating pattern between excavator and backhoe with a simple press of a button from the comfort of the cab.

*Exclusive push button pattern changer is safe and easy*

**Maintenance and Performance Information**
Easily keep track of various maintenance and performance parameters of your machine.

*Reset the maintenance intervals and ensure the machine is receiving proper care maximizing the life of the machine*
Performance and Controllability
Powerful digging combined with smooth responsive control.

High digging forces that provide power through even the most compacted ground, coupled with direct, smooth control through responsive hydraulics, ensure that the Cat 308E CR SB delivers the high productivity that customers demand.

Controllability
The new Cat 308E CR SB front linkage has been perfectly balanced with the hydraulics to deliver the high level of control required for fine grading and landscaping applications.

- Automatic two speed function improves job site maneuverability by balancing high speed travel requirements and control.
- Joystick mounted auxiliary control enhances machine controllability. The intuitive controls give fine modulation.
- Auxiliary lines including quick connectors are fitted as standard, meaning the Cat 308E CR SB comes ready to work.
- Optional boom lowering check valve includes integral overload warning device.

Lift Capacity
To meet the diverse needs of today’s customer, the 308 E CR SB has high level lift capacity and outstanding stability – all in a compact radius design to provide on site versatility to get the job done.
Depending on the customers application, the Cat 308E CR SB has three different track options to choose from, allowing the correct machine configuration to suit the job.

**Rubber Belt**
Provides the lowest ground disturbance of all track options with excellent traction in conditions that are soft underfoot. The standard track offering is 450 mm (17.7 in) width.

**Steel Track**
Good for demolition and heavy duty applications. A triple grouser track is available in two width options: 450 mm (17.7 in) and 600 mm (23.6 in).

**Steel Track with Rubber Pads**
The 450 mm (17.7 in) wide shoe has four holes to attach the rubber pads to the steel track shoes. This option prevents damage to paved road surfaces and minimizes noise and vibration during travel while providing maximum stability.

**Blade Widths**
The dozer blade is an important and useful tool for the Hydraulic Mini Excavator used for backfilling trenches, levelling, landscaping and site clean up. There are two blade width options available to accommodate the differences in track widths.

The blade comes standard with a replaceable weld-on dozer cutting edge constructed of hardened steel for longer life.

**Tie Down Points**
Large oval tie down points are located in two positions on the undercarriage for easy and safe machine tie down for transportation.
Engine and Serviceability
Superior power with easy access and minimal maintenance requirements keep you working.

Customer Support
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
Engine

Clean, quiet operation with superior power and fuel efficiency while meeting U.S. EPA Tier 4 Interim and EU Stage IIIA emission standards.

Convenient service features make maintenance easy, reducing your downtime:

- Lifting side hood allows access to air filter, main implement valve, 1-way/2-way auxiliary flow selector, accumulator, fuel filter and hydraulic tank. This eliminates the need to lift the cab when maintaining and servicing the machine.

- Swing open door provides access to major components and service points including engine oil check and fill, vertically mounted engine oil filter, starter motor and alternator.

- S-O-S™ oil sampling valve allows easy sampling of the hydraulic fluid for preventative maintenance.

- The 308E CR SB is Product Link ready and the Cat Product Link system simplifies equipment fleet tracking. Using satellite or cellular technology, the system automatically reports information such as location, machine hours, active and logged service codes and security alarms.
Work Tools
Matched to meet your application needs.

Wide Range of Work Tools
A wide range of Cat Work Tools have been designed specifically to get the best out of your machine and deliver excellent value through high productivity and long life.

Available work tools include:
- Buckets (heavy duty and heavy duty capacity)
- Tilting and Swing Ditch Cleaning Buckets
- Hydraulic Hammers
- Augers
- Vibratory Compactors
- Shears

To maximize performance and productivity, Cat mechanical and hydraulic quick couplers are compatible with all standard work tools, enabling the operator to simply release one work tool and pick up another.

One-way flow (hammer) and two-way flow (auger) auxiliary lines with quick connectors are fitted as standard. This allows the machine to adapt to a wide variety of applications without re-configuring the auxiliary lines. Versatility is further enhanced with the option of a second auxiliary supply (for a rotating grapple).
### Engine Specifications

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>Cat® C3.3B*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Net Power @ 2,400 rpm</td>
<td>48.5 kW  65 hp</td>
</tr>
<tr>
<td>ISO 9249/EEC 80/1269</td>
<td>48.5 kW  65 hp</td>
</tr>
<tr>
<td>Gross Power</td>
<td>49.7 kW  66.6 hp</td>
</tr>
<tr>
<td>ISO 14396</td>
<td>49.7 kW  66.6 hp</td>
</tr>
<tr>
<td>Bore</td>
<td>94 mm  3.7 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>120 mm  4.7 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>3.33 L  203.2 in³</td>
</tr>
</tbody>
</table>

* Meets U.S. EPA Tier 4 Interim and EU Stage IIIA emission standards.

### Weights

<table>
<thead>
<tr>
<th>Operating Weight with Cab</th>
<th>8333 kg  18,371 lb</th>
</tr>
</thead>
</table>

- Weight with rubber tracks, bucket, operator (75 kg/165 lb), full fuel and auxiliary lines.
- Weight varies depending on machine configuration.

### Swing System

<table>
<thead>
<tr>
<th>Machine Swing Speed</th>
<th>10 rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom Swing – Left</td>
<td>60°</td>
</tr>
<tr>
<td>Boom Swing – Right</td>
<td>50°</td>
</tr>
</tbody>
</table>

- Automatic swing break, spring applied, hydraulic release.

### Travel System

<table>
<thead>
<tr>
<th>Travel Speed</th>
<th>High</th>
<th>5.26 km/h  3.26 mph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>3.32 km/h  2.06 mph</td>
<td></td>
</tr>
</tbody>
</table>

| Maximum Traction Force | High Speed | 64.5 kN  14,500 lb |
|                       | Low Speed  | 37.4 kN  8,408 lb  |

- Gradeability (maximum) 30°

- Each track is driven by one independent 2-speed motor.
- Drive modules are integrated into the roller frame for total protection.
- Straight line travel when tracking and operating the front linkage simultaneously.

### Service Refill Capacities

<table>
<thead>
<tr>
<th>Fuel Tank</th>
<th>125 L  33 gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Oil</td>
<td>14 L  3.7 gal</td>
</tr>
<tr>
<td>Hydraulic Tank</td>
<td>82 L  21.7 gal</td>
</tr>
<tr>
<td>Hydraulic System</td>
<td>94 L  24.8 gal</td>
</tr>
</tbody>
</table>

### Hydraulic System

<table>
<thead>
<tr>
<th>Pump Flow at 2,000 rpm</th>
<th>150 L/min  39.6 gal/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Pressure – Equipment</td>
<td>28 000 kPa  4,061 psi</td>
</tr>
<tr>
<td>Operating Pressure – Travel</td>
<td>32 000 kPa  4,641 psi</td>
</tr>
<tr>
<td>Operating Pressure – Swing</td>
<td>24 000 kPa  3,481 psi</td>
</tr>
</tbody>
</table>

- Auxiliary Circuit – Primary (186 bar/2,734 psi) | 128 L/min  33.8 gal/min
- Auxiliary Circuit – Secondary (174 bar/2,524 psi) | 64 L/min  16.9 gal/min

- Digging Force = Stick (standard) | 40.1 kN  9,015 lb
- Digging Force = Stick (long) | 35.1 kN  7,891 lb
- Digging Force = Bucket | 60.2 kN  13,534 lb

- Load sensing hydraulics with variable displacement piston pump.

### Blade

<table>
<thead>
<tr>
<th>Width</th>
<th>2320 mm  91.3 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>450 mm  17.7 in</td>
</tr>
<tr>
<td>Dig Depth</td>
<td>360 mm  14.2 in</td>
</tr>
<tr>
<td>Lift Height</td>
<td>380 mm  15.0 in</td>
</tr>
</tbody>
</table>

- Load sensing hydraulics with variable displacement piston pump.
## Dimensions

<table>
<thead>
<tr>
<th>Standard Stick</th>
<th>Long Stick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4150 mm</td>
</tr>
<tr>
<td>2</td>
<td>2980 mm</td>
</tr>
<tr>
<td>3</td>
<td>6820 mm</td>
</tr>
<tr>
<td>4</td>
<td>7020 mm</td>
</tr>
<tr>
<td>5</td>
<td>6640 mm</td>
</tr>
<tr>
<td>6</td>
<td>4670 mm</td>
</tr>
<tr>
<td>7</td>
<td>2800 mm</td>
</tr>
<tr>
<td>8</td>
<td>1450 mm</td>
</tr>
<tr>
<td>9</td>
<td>420 mm</td>
</tr>
<tr>
<td>10</td>
<td>320 mm</td>
</tr>
</tbody>
</table>

### Lift Capacities at Ground Level*

<table>
<thead>
<tr>
<th>Lift Point Radius</th>
<th>4000 mm (13'1&quot;)</th>
<th>6050 mm (19'10&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>Side</td>
<td>Front</td>
</tr>
<tr>
<td>Blade Down</td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td></td>
<td>3650</td>
<td>8,046</td>
</tr>
<tr>
<td></td>
<td>1840</td>
<td>4,056</td>
</tr>
<tr>
<td>Blade Up</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>kg</td>
<td>lb</td>
</tr>
<tr>
<td></td>
<td>1880</td>
<td>4,144</td>
</tr>
<tr>
<td></td>
<td>820</td>
<td>1,808</td>
</tr>
</tbody>
</table>

* The above loads are consistent 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. Lifting capacities are for standard stick.
**Standard Equipment**

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

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable auxiliary flow control for work tools
- Adjustable wrist rests
- Air suspension, heated seat
- Alternator
- Anti-theft security system
- Automatic engine idle
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Cab mounted work light
- Cab, ROPS ISO 12117-2 with radio ready mounting, A/C, heater/defroster, interior light and windshield wiper/washer
- Coat hook
- COMPASS display panel
- Cup holder
- Control pattern changer (not available in Europe)
- Continuous flow
- Dozer blade with float function
- Economy mode setting for up to 20% fuel savings
- Floor mat
- Foot travel pedals
- Horn
- Hydraulic oil cooler
- Lifting bar on bucket linkage (standard equipment for all regions except Europe)
- Low maintenance linkage pin joints
- Maintenance free battery
- Steel track
- Rearview mirror
- Retractable seatbelt
- Standard stick
- “Thumb ready” sticks (standard equipment for all regions except Europe)
- Travel alarm (optional in Europe)

**Optional Equipment**

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

- AM/FM radio with auxiliary input (optional in Europe, standard for all other regions)
- Boom check valve (Europe only)
- Boom cylinder guard
- Boom mounted light
- Ecology drain valve for hydraulic tank
- Ecology drain valve for engine oil
- Extra counterweight for extreme lifting applications – 251 kg (553 lb)
- Hydraulic quick coupler lines
- Lifting bar on bucket linkage (optional in Europe, standard for all other regions)
- Long stick
- Mechanical quick coupler
- Secondary auxiliary hydraulic lines
- Rubber track and steel track with rubber pads
308E CR SB Mini Hydraulic Excavator with Swing Boom