

VOLVO COMPACT EXCAVATOR

# EC15B XR, XT, XTV



**MORE CARE. BUILT IN.**



# SOLID AS A ROCK.

Today's jobs demand efficient productivity. You want reliable machines that are versatile, comfortable and safe. The Volvo EC15B delivers with consistent quality in a compact, yet powerful, design for increased profits. That's Volvo quality through and through.

## You're in control

The Volvo EC15B is also built for precision work. Utilizing the best technology available, the closed-centre load-sensing hydraulic system delivers precise control under any condition. Hydraulic speed relies only on the position of the control lever, regardless of the load or number of movements. This quality allows you to combine all machine movements for fine precision and more productive work.

## Make quick work of your jobs

The EC15B provides superior efficiency for fast cycle times that will save you both time and money. The exclusive quick coupling system lets you easily connect an attachment or bucket right from the cab for increased speed and efficiency.

## Small design, big production

The hydraulic offset of the boom reduces the overall excavator dimensions, helping you work in tight spaces and alongside walls. In addition, the wrap-around shape of the counterweight provides protection against rear impact.

## Heavy-duty construction

The EC15B features a double-yoke pivot that doubles the bearing surface on the chassis. There is also a long pin that distributes the stress, for reduced wear and longer life. The boom and dipper structures incorporate cast steel parts on heavily stressed areas. Sturdy steel plates protect all hydraulic connectors. For reduced operating costs, a hydraulic motor drives the crown gear directly, without a reduction gear, offering no wear or play. An optional anti-theft keypad locks the machine's starting and hydraulic function for added safety.

## Versatile performer

The EC15B excels at a wide range of versatile jobs. Dig into hard banks with the large bucket and 1,510 daN of breakout force. Reach new levels of productivity with the 1,750 mm monobloc boom and 900 mm dipper arm. The dozer blade is built strong from track edge to track edge. Dirt and debris fall away from the blade support for smooth and precise finishing work. Whatever the job, the Volvo EC15B helps you do it faster and easier.



- Variable width chassis fits the job.



- Two-speed travel for greater mobility.



- Quick coupler for fast, easy changes.



- Comfortable ergonomic armrests.
- Optimum load-sensing efficiency.
- Versatile, powerful performance.



# EVERYTHING YOU EXPECT FROM VOLVO.

Staying comfortable and safe is key to long-term productivity. In addition, it's imperative to have a machine that's easy to service. Volvo Compact Excavators deliver on all counts - providing you with a work environment designed to help you get the most out of every day.

## Feel the comfort

Quiet operation is key to operator comfort and environmental control. That's why the Volvo EC15B has a quiet, low emission engine with plenty of power. Superior soundproofing helps reduce operator fatigue. Short, responsive drive controls avoid excessive movements for easier operation. Gauges are in front of the operator to keep track of key functions. Well-positioned armrests make long shifts more comfortable while ensuring precision control.

## Breathing room

While the Volvo EC15B is compact, the cab is large and roomy for a more efficient work environment. The large, flat floor provides plenty of legroom and storage space. Even tall operators will feel at ease in the ergonomic cab. In addition, the hydraulic attachment control pedal folds away when not in use and can be positioned to the right for easy access and optimal operating space.

## All around safety

You'll have 360° of visibility for excellent jobsite command. The round, compact engine cover has improved rear visibility for better safety on narrow or congested sites. Non-slip steps and floor provide safe, easy entry and exit. The cab door opens wide and the console swings up and out of the way for a safer exit. There's a standard seatbelt for added safety and FOPS 1, ROPS and TOPS certified cabs and canopies for maximum protection.

## Maintain top performance

The EC15B is easy to maintain for maximum uptime. Unlike many other compact excavators, its unique tilting counterweight and wrap-around shape provide total engine access and optimum rear protection. The hydraulic oil cooler is mounted on a sliding support allowing better access to cleaning cooler fins. The fuel supply circuit has a transparent at-a-glance pre-filter and features a self-priming electric pump. When working in confined areas, the two consoles on the canopy version lift for access from the right or left. All boom supply hoses are loose fitted and connect on the outside of the machine for less wear and damage.



- Perfect accessibility of the hydraulics compartment.



- Spacious and comfortable cab.



- The EC15B and its accessories can be easily transported on a trailer.
- Easy access for maintenance and service.



- Large floor for comfort and storage.

# SPECIFICATIONS

## Engine

Water-cooled low emissions Mitsubishi L3E diesel engine.

<b>Displacement, total</b>	952 cc
<b>Gross power, rated</b>	14.0 kW (19.0 hp) at 2800 r/min
<b>Power, installed (ISO 9249)</b>	11.3 kW (15.5 hp) at 2200 r/min
<b>Maximum torque (ISO 9249)</b>	54 Nm at 1850 rpm
<b>Bore x stroke</b>	76 mm x 70 mm

## Electrical system

<b>Rated voltage</b>	12 V
<b>Battery capacity</b>	12 V - 45 Ah
<b>Alternator rating</b>	12 V - 40 A
<b>Starter motor output</b>	12 V - 1.6 kW

## Hydraulic system

Closed-centre Load-Sensing hydraulic system providing total independence of each movement.

<b>Control</b>	power-assisted hydraulic controls
----------------	-----------------------------------

Gear pump for all the equipment, travel and power-assistance circuits:

<b>Maximum delivery</b>	32 litres/min.
<b>Maximum operating pressure</b>	17 MPa (170 bars)

Double-acting hydraulic circuit for accessories:

<b>Maximum delivery</b>	32 litres/min.
<b>Maximum operating pressure</b>	17 MPa (170 bars)

Cushions:

<b>On the boom ram</b>	at the rod end
------------------------	----------------

## Bucket performance

<b>Breakout force</b>	1510 daN
<b>Tearout force</b>	960 daN

## Slewing system

Turntable slewing is provided by an Ortitrol hydraulic motor which drives directly (without a reduction gear) a ball internal crown wheel with remote lubrication:

<b>Slewing speed</b>	9 r/min
----------------------	---------

## Undercarriage

### EC15B XR/XT

<b>Track width</b>	230 mm
<b>Track tension</b>	by grease piston
<b>Blade height</b>	240 mm
<b>Width of the blade</b>	980 mm

### EC15B XTV

<b>Track width</b>	230 mm
<b>Track tension</b>	by grease piston
<b>Blade height</b>	240 mm
<b>Width of the blade</b>	980 mm and 1350 mm

## Drivetrain

### EC15B XR

Each track is driven by an Orbitrol hydraulic motor.

<b>Max. speed</b>	2.0 km/h
<b>Max. tractive force</b>	1260 daN

### EC15B XT/XTV

Each track is driven by an axial piston hydraulic motor equipped with two speeds and an epicyclic reduction gear.

<b>Max. speed (low/high speed)</b>	2.0 - 3.5 km/h
<b>Max. tractive force</b>	1440 daN

## Service fill capacities

<b>Fuel tank</b>	21 l
<b>Hydraulic system, total</b>	33 l
<b>Engine oil</b>	3.6 l
<b>Cooling system</b>	4.5 l

## Weight

	EC15B XR		EC15B XT	
	Rubber Tracks	Rubber Tracks	Steel Tracks	Steel Tracks
<b>Ground pressure</b>				
<b>Cab version</b>	0.30 kg/cm <sup>2</sup>	0.32 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>
<b>Canopy version</b>	0.28 kg/cm <sup>2</sup>	0.30 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>

	Rubber Tracks	Rubber Tracks	Steel Tracks
<b>Operating mass</b>			
<b>Cab version</b>	1603 kg	1663 kg	1713 kg
<b>Canopy version</b>	1479 kg	1539 kg	1589 kg

	Rubber Tracks	Rubber Tracks	Steel Tracks
<b>Transport mass</b>			
<b>Cab version</b>	-	1538 kg	1588 kg
<b>Canopy version</b>	-	1414 kg	1464 kg

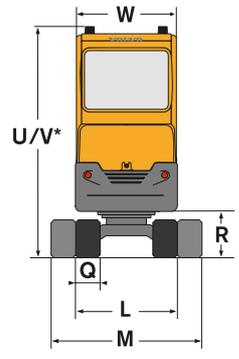
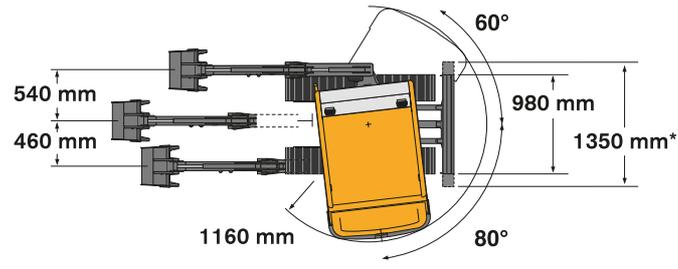
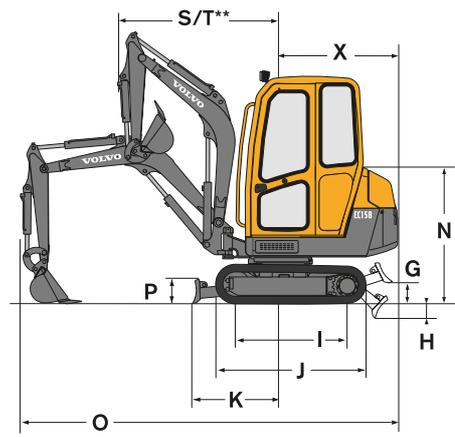
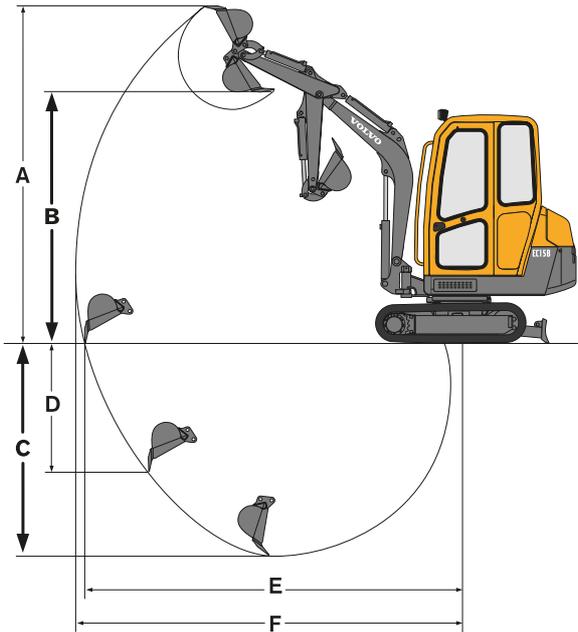
	EC15B XTV	
	Rubber Tracks	Steel Tracks
<b>Ground pressure</b>		
<b>Cab version</b>	0.34 kg/cm <sup>2</sup>	0.35 kg/cm <sup>2</sup>
<b>Canopy version</b>	0.32 kg/cm <sup>2</sup>	0.33 kg/cm <sup>2</sup>

	Rubber Tracks	Steel Tracks
<b>Operating mass</b>		
<b>Cab version</b>	1761 kg	1811 kg
<b>Canopy version</b>	1637 kg	1687 kg

	Rubber Tracks	Steel Tracks
<b>Transport mass</b>		
<b>Cab version</b>	1636 kg	1686 kg
<b>Canopy version</b>	1512 kg	1562 kg

## Noise levels

The EC15B conforms to the 2006 European Machine Directive Noise Level (2000/14/CE) of 93 dB(A) for this class of machine.



Buckets EC15B XR/XT/XTV	 Width	 Weight	 Capacity
Excavator bucket	250 mm	25 kg	19 l
	300 mm	28 kg	24 l
	350 mm	30 kg	28 l
	400 mm	32 kg	33 l
	450 mm	35 kg	38 l
	500 mm	37 kg	43 l
	-	40 kg	53 l
	850 mm	43 kg	52 l
Ditch bucket	1000 mm	47 kg	60 l

Dipper	A	B	C*	C	D	E	F
900 mm	3410	<b>2480</b>	<b>2200</b>	<b>2050</b>	1500	3570	3710
1150 mm	3550	<b>2620</b>	<b>2450</b>	<b>2300</b>	1740	3810	3940

\* Dig depth with blade down.

	G	H	I	J	K	L	M	N	O
EC15B XR	210	150	1045	1415	860	980	-	1345	3650
EC15B XT	210	150	1085	1415	860	980	-	1245	3650
EC15B XTV	221	175	1085	1470	860	980	1330	1225	3650

	P	Q	R	S	T	U	V	W	X
EC15B XR	240	230	450	1520	1230	-	2210	970	1120
EC15B XT	240	230	450	1520	1230	-	2210	970	1120
EC15B XTV	240	230	450	1520	1230	-	2210	970	1120

## STANDARD EQUIPMENT

### Engine

Dry-type air filter.  
Electric pre-heating device.  
Transparent diesel oil filter, pre-filter and sediment bowl.  
Oil sump sheet metal guard.  
Hand throttle.

### Electrical system

12 V - 45 Ah maintenance-free battery.  
Horn.  
12 V power socket for inspection lamp.

### Undercarriage

230 mm wide rubber tracks.  
Fixed or variable width undercarriage (EC15B XTV only).  
Dozer blade.  
Blade extensions with supports on the blade (variable width undercarriage) (EC15B XTV only).  
Towing and anchoring points.  
Remote lubrication of the slewing crown ring.

### Hydraulic system

Additional double-acting hydraulic control valve for an attachment circuit with folding control pedal and circuit for direct return of oil to the hydraulic tank.  
Attachment circuit piping (double-acting) as far as the bottom of the boom.  
Power-assisted control of the hydraulic offset of the boom by the left control lever.  
Control of forward movement by two levers.  
Hydraulic oil cooler.

### Cab (cab version)

Level 1 FOPS (Falling Objects Protective Structure).  
TOPS (Tip-Over Protective Structure).  
ROPS (Roll-Over Protective Structure).  
Vinyl-covered multi-adjustable sprung seat.  
Non-slip floor and grab handles for access to the driver's cab.  
Seatbelt.  
Cab mounted on rubber mountings.  
Two working lights.  
Two-speed heating and ventilation.  
Cab heat adjustment.  
Front window with opening system power-assisted by two gas rams.  
Sliding window (right).  
Door stops.  
Provision for a radio (location for a radio and two speakers, aerial and electric wiring already fitted).  
Interior lighting.  
Anti-corrosion protection of the cab.  
Windscreen wiper and washer (front).  
Emergency exit via the rear window.

### Canopy (Canopy version)

Level 1 FOPS (Falling Objects Protective Structure).  
TOPS (Tip-Over Protective Structure).  
ROPS (Roll-Over Protective Structure).  
Vinyl-covered all weather multiadjustable sprung seat.  
Non-slip floor and grab handle for access to the driver's cab.  
Seat belt.  
Working light on the canopy frame.

### Instrumentation and monitoring

Monitoring and warning light for : pre-heating, engine oil pressure, water temperature, battery charging, air filter restriction.

Fuel gauge.  
Hour meter.  
Shut down for automatic switching off engine in the event of overheating or drop in oil pressure.

### Working equipment

1750 mm long monobloc boom.  
900 mm dipper.  
140° hydraulic boom offset.  
Cushion on the boom ram.  
Handling equipment for loads inferior to 1000 kg (lifting hook on the bucket with load chart displayed in the driver's cab).  
Remote lubrication of the bottom of the offset ram.

### Safety

Engine safety start device : the left console must be raised to operate the starter.  
Nitrogen accumulator on the power assistance circuit in order to be able to put the equipment on the ground if the engine is switched off.  
Window-breaker hammer (cab).  
Key-lockable toolbox.

### Official approval

Machine conforming to directive n° 98/37 EEC and its amendments.  
Sources emissions in the environment conforming to directive 2000/14/CE.  
Handling device conforming to EN standard 474-5.  
FOPS 1 conforming to ISO standard 3449.  
TOPS conforming to ISO standard 12117.  
Electromagnetic compatibility (EMC) conforming to directive n° 89/336 EEC and its amendments.

## OPTIONAL EQUIPMENT

### Working equipment

Long dipper (1150 mm).  
Mechanically-controlled quickrelease attachment bracket.

### Hydraulic circuits for attachments

Hydraulic circuit for single or double-acting attachments (Auger...)  
Hydraulic circuit for operating a clam-shell bucket (opening/closing and rotation of the bucket).  
Push-pull connectors for attachment line.

### Undercarriage

Steel tracks (230 mm wide)  
(not EC15B XR).

### Lighting

Additional working light on the boom.  
Additional rear working light.  
Rotating beacon.

### Environmental protection

Bio-degradable hydraulic oil.  
Catalytic exhaust.

### Comfort and safety

Radio (cab).  
Anti-theft system (2 programmable codes).

Rear wind-deflector on canopy.  
Battery isolator switch.  
Fabric seat (cab).  
Translation pedals.  
Retractable seatbelt.  
Safety valve on boom and dipper ram.  
Dual stage air filter.  
Audible travel warning.  
Document storage.

### Miscellaneous

Tool kit.  
Special customised paint  
(RAL specifications).





Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 170 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



*All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.*

**VOLVO**

**Construction Equipment**

**[www.volvoce.com](http://www.volvoce.com)**

Ref. No. 21 2 432 1160  
Printed in Sweden  
Volvo, Belley

English  
2006.12  
CEX