VOLVO COMPACT EXCAVATORS
EC15C, EC17C, EC18C, EC20C
1.54-1.94 t  16.8 hp
GET IT DONE IN COMFORT.

The compact excavator range of Volvo EC15C, EC17C, EC18C and EC20C is ready to help you tackle all your jobs. Each is built for comfort – your all-day comfort in the cab and to comfortably fit in and around a wide range of job applications. Climb in, get behind the controls and go to work. Another productive day awaits you.

Room to operate
Long days are more comfortable in the large and roomy, uncluttered cab.
• Single-piece cab platform is quick and easy to clean and maintain.
• Due to the functional control on the right joystick for the attachment circuit and offset function, the control pedal has been removed for even more foot space.
• More operator comfort means more productivity.

Get a good read on it all
The new instrument panel provides you with complete monitoring of all machine gauges, controls and warnings.
• Easy to view, located on the right side of the operator.
• The digital operating hour meter and fuel level gauge are located on the top part of the instrument panel.
• Keep tabs on maintenance costs, service warnings and more: central warning, engine temperature, engine oil pressure, battery charge, offset, preheating, air filter, seat belt.
• Clear, precise operator information for more comfort and safety.

Counting the hours
A digital hour meter on the side instrument panel shows the total engine running hours.
• Hours display without starting the machine for quick and easy checks – even from outside the cab.

A wide range of...
The range of Volvo compact excavators is right for your work. Choose from the Volvo EC15C, EC17C, EC18C or EC20C and perform a wide range of jobs, from digging trenches and footers, to drainage work, loading and site preparation.

• Fully-opening front window comfort.
• All-around visibility for jobsite safety.
• Large travel pedals for comfort and control.
• Volvo quick coupler makes attachment changes easy.
- Easy combined control of slew and boom offset.
- Smooth, precise control, at your fingertips.
- Spacious comfort in the Volvo Care Cab.

- Dozer blade positioned for maximum reach.
A quality product lasts, and that’s why the Volvo EC15C, EC17C, EC18C and EC20C are built with more care, more quality and reliability you can see and feel. They are sturdy and stable to handle whatever you put in front of it, year after year.

**Sturdy and durable**

The sturdy digging equipment is designed for durability, much like on larger machines.
- Boom and arm ends are made of cast steel to offer maximum durability between boom and arm connection.
- More reliability for lower operating and maintenance costs.

Hydraulic hoses are fully protected through routing in the boom.
- Protective guards for important parts: arm cylinder hoses, bucket cylinder hoses and attachment hydraulic circuit.

**Travel at your speed**

In high speed mode, travel speed is automatically shifted from high to low speed according to the travel load.
- Adapts for optimal tractive force when working on slopes, levelling or performing backfilling work with the blade.

High travel speed performance has been increased compared to previous models.
- Provides more productivity during travelling or levelling applications.

**High performance equipment**

VOLVO buckets deliver considerable breakout and tear-out forces for machines in this category.
- It’s quicker and easier to tear into your work, improving cycle times and productivity.

The bucket has a wide 195° rotation angle, providing a good attack and square excavations at all depths.
- Helps retain more material during loading and dumping movements, reducing risk/injury from falling material.

**Aiding your productivity**

Each machine is equipped as standard with a hydrostatic slewing brake.
- Greater precision and safety during slewing applications.

The EC15C and EC17C are equipped with a hydraulic fix displacement pump.
- Gear pump generates constant flow at different pressure levels for sturdy, reliable operation.

The EC18C and EC20C are equipped with a hydraulic variable displacement pump.
- Pump flow is automatically adapted to the application need, saving fuel and operating costs.
• Precise travel and operational movements.
• Durable counterweight offers high level rear protection.
One of the keys to productivity is uptime. Get working faster each day and stay out there longer with an easy to maintain machine that is built for easy owning and operating. And to keep you working smarter, the Volvo EC15C, EC17C, EC18C and EC20C lead the way in safe operation.

Seated in safety
A retracting seat belt is available in two sizes: 2" (50.8 mm) or 3" (76.2 mm).
• Offers perfect adjustment to safely and comfortably suit each operator, and retracts out of the way when not in use.

Always in control
To avoid risk of an accident when the operator gets into or out of the cab, all of the machine’s controls are locked when the safety strut is raised.
• Covers equipment, offset and travel controls – for less risk and more safety.

Easier hydraulic maintenance
Very good access to all the main hydraulic components.
• Removing right hand cover provide access to all main hydraulic components.
• Simply remove 6 screws in the cab floor for easy, direct access to main control valve and slew motor.
• Fast hydraulic maintenance: top of the main control valve, slewing joint, slewing motor, various hoses, travel control.
• Tilting oil cooler for easy cleaning

Volvo warranty service
For full fleet coverage on virtually any jobsite in the world, Volvo’s CareTrack System keeps close track of your machines through real time monitoring from the moment they leave our factory.
• Remotely track machine location, usage.
• Feel protected in the TOPS/ROPS/OPG1 structure.
• Controls lock when the safety strut is raised.
• The easy-access main control valve.
• Trusted dealer parts and service support.
• Fast daily maintenance access under the large engine hood.

• Easy-access battery disconnect switch.
PRODUCTIVITY IN VIEW.

• Dozer blade positioned for maximum reach.

• Automatic two-speed travel according to load.

• Improved travel speed performance.

• The comfort of slew and offset function combination.

• Fully-opening front window comfort and communication.

• Smooth, precise control for accessory line and boom offset, at your fingertips.

• Protected, smartly-positioned boom cylinder.

• Sturdy digging equipment designed for durability.
• Operate in a protected TOPS/ROPS/OPG1 safety structure.

• Feel the spacious comfort in the Volvo Care Cab.

• Fast daily maintenance access under the hood.

• Reliable Tier 4 Volvo diesel engine with automatic shut down function.

• Durable counterweight offers rear protection.

• Precise travel and operational movements.
### Specifications EC15C, EC17C, EC18C

#### Engine
Low emission, water-cooled, indirect injection, Volvo 3 cylinder diesel engine, meeting Tier 4 environmental regulations and equipped with automatic engine shut down (low engine oil pressure or too high engine temperature)

- **Model**: D1.1DCAE4
- **Gross power, rated (ISO 3046/1)**: 12.3 kW (16.8 hp) at 2000 rpm
- **Power, installed (ISO 3046/1)**: 11.9 kW (16.2 hp) at 2000 rpm
- **Displacement, total**: 1116 cc
- **Maximum torque according to ISO 3046/1**: 65.2 Nm (+/-5%) at 1 500 rpm (+/-100)
- **Bore x stroke**: 76 mm x 82 mm

#### Electrical system
- **Battery capacity**: 12 V - 62 Ah
- **Alternator rating**: 12 V - 40 A
- **Starter motor output**: 12 V - 1.1 kW

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

- **Control**: power-assisted hydraulic controls
- **Hydraulic pump for all the equipment and travel circuits**
  - **Maximum flow**
    - EC15C, EC17C - Gear pump: 31 l/min
    - EC18C - Variable displacement pump: 44 l/min
  - **Maximum operating pressure**: 17 MPa (170 bar)
- **Finger-tip controlled double-acting hydraulic circuit for accessories**: Electro propoisionnal.
  - **Maximum adjustable flow**
    - EC15C, EC17C: 31 l/min
    - EC18C: 44 l/min
  - **Maximum operating pressure**: 17 MPa (170 bar)
- **End-of-stroke cushions**
  - On boom ram: at the end of the rod extension

#### Bucket performance
- **Breakout force**: 1510 daN
- **Tearout force (short arm)**: 900 daN
- **Tearout force (long arm)**: 700 daN

#### Slewing system
Tumtable slewing is provided by an axial piston type swing moto:
- **Slewing speed**: 9.5 rpm
- **Turntable braking**: automatic multi-disc brake
- **Absorption of hydraulic shocks**: Shockless valve

#### Undercarriage
- **Bottom/top rollers per side**: 3 / 0
- **Track width**: 230 mm
- **Track tension**: by grease piston
- **Blade (width x height)**
  - EC15C: 980 mm x 238 mm
  - EC17C: 980 mm x 234 mm
  - EC18C: 994 / 1336 mm x 248 mm

#### Drivetrain
- **Max. speed (low speed/ high speed)**
  - EC15C: 1.9 km/h / 3.7 km/h
  - EC17C: 1.9 km/h / 3.7 km/h
  - EC18C: 2.5 km/h / 4.6 km/h
- **Max. tractive force**: 1160 daN

The travel control is automatically locked when the operator raises the left console.

#### Service fill capacities
- **Fuel tank**: 20 l
- **Hydraulic tank**: 14.6 l
- **Hydraulic system, total**
  - EC15C, EC17C: 21 l
  - EC18C: 22 l
- **Engine oil including filter**: 3.5 l
- **Cooling system**: 5.6 l

#### Weight and ground pressure
Operating weight according to ISO 6016
(according to most usual configuration and including 75kg operator)

<table>
<thead>
<tr>
<th></th>
<th>EC15C</th>
<th>EC17C</th>
<th>EC18C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating weight (kg)</td>
<td>1540</td>
<td>1650</td>
<td>1760</td>
</tr>
<tr>
<td>Ground pressure cab (kg/cm² kPa)</td>
<td>0.28 (28.5)</td>
<td>0.30 (29.5)</td>
<td>0.31 (30.5)</td>
</tr>
<tr>
<td>Ground pressure canopy (kg/cm² kPa)</td>
<td>0.28 (27.5)</td>
<td>0.29 (27.5)</td>
<td>0.30 (30.5)</td>
</tr>
<tr>
<td>Transport weight (Heated cab, 230mm rubber tracks, short arm, 500mm direct-fit bucket, full fuel tank) (kg)</td>
<td>1550</td>
<td>1570</td>
<td>1680</td>
</tr>
<tr>
<td>With canopy (kg)</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>With long arm (kg)</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Sound Level
- **Interior sound level according to ISO 6396 (LpA)**: EC15C: 78 dB(A), EC17C: 78 dB(A), EC18C: 78 dB(A)
- **External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009 (LwA)**: EC15C: 93 dB(A), EC17C: 93 dB(A), EC18C: 93 dB(A)
Specifications EC20C

Engine
Low emission, water-cooled, indirect injection, Volvo 3 cylinder diesel engine, meeting Tier 4 environmental regulations and equipped with automatic engine shut down (low engine oil pressure or too high engine temperature)

Model
D1.1DCAE4

Gross power, rated (ISO 3046/1) 12.3 kW (16.8 hp) at 2000 rpm
Power, installed (ISO 3046/1) 11.9 kW (16.2 hp) at 2000 rpm
Displacement, total 1166 cc

Maximum torque according to ISO 3046/1
65.2 Nm (+/-5%) at 1 500 rpm (+/-100)

Bore x stroke 76 mm x 82 mm

Undercarriage
Bottom/top rollers per side 4 / 0
Track width 250 mm
Track tension by grease piston
Blade (width x height) 994 / 1336 mm x 248 mm

Drivetrain
Max. speed (low speed/ high speed) 2.5 km/h / 4.6 km/h
Max. tractive force 1440 daN

The travel control is automatically locked when the operator raises the left console.

Electrical system
Battery capacity 12 V - 62 Ah
Alternator rating 12 V - 40 A
Starter motor output 12 V - 1.1 kW

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

Control power-assisted hydraulic controls

Hydraulic pump for all the equipment and travel circuits.
Variable displacement pump

Maximum flow 44 l/min
Maximum operating pressure 21 MPa (210 bar)

Finger-tip controlled double-acting hydraulic circuit for accessories
Electro proportional

Maximum adjustable flow 44 l/min
Maximum operating pressure 21 MPa (210 bar)

End-of-stroke cushions:

On boom ram at the end of the rod extension

Bucket performance
Breakout force 1850 daN
Tearout force (short arm) 1250 daN
Tearout force (long arm) 1050 daN

Slewbar system
Turntable slewing is provided by an axial piston type swing motor:

Sliding speed 9.5 rpm
Turntable braking automatic multi-disc brake
Absorption of hydraulic shocks Shockless valve

Service fill capacities
Fuel tank 20 l
Hydraulic tank 14.6 l
Hydraulic system, total 25 l
Engine oil including filter 3.5 l
Cooling system 5.6 l

Weight and ground pressure
Operating weight according to ISO 6016
(according to most usual configuration and including 75kg operator)

<table>
<thead>
<tr>
<th></th>
<th>EC20C</th>
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<tbody>
<tr>
<td>Operating weight (kg)</td>
<td>1940</td>
</tr>
<tr>
<td>Ground pressure cab (kg/cm² kpa)</td>
<td>0.28 (275)</td>
</tr>
<tr>
<td>Ground pressure canopy (kg/cm² kpa)</td>
<td>0.27 (265)</td>
</tr>
<tr>
<td>Transport weight (Heated cab, 230mm rubber tracks, short arm, 500mm direct-fit bucket, full fuel tank) (kg)</td>
<td>1845</td>
</tr>
<tr>
<td>With canopy (kg)</td>
<td>-90</td>
</tr>
<tr>
<td>With long arm (kg)</td>
<td>+10</td>
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</table>

Sound Level

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<tbody>
<tr>
<td>Interior sound level according to ISO 6396 (LpA) (dB(A))</td>
<td>78</td>
</tr>
<tr>
<td>External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009 (LwA) (dB(A))</td>
<td>96</td>
</tr>
</tbody>
</table>
**STANDARD EQUIPMENT**

**Engine**
Rear mounted low-emission EPA Tier 4 Volvo diesel engine, water cooled, indirect injection
Dry-type air filter
Electric feeding fuel pump
Fuel filter + transparent sediment chamber
Drain plugs under the hydraulic oil and fuel tanks
Automatic engine shut down

**Electrical system**
Water-resistant electrical connectors (IP67)
Two work lights on cab version
One work light on canopy version
Battery disconnect switch
Two 12V power sockets

**Hydraulic system**
Load-sensing system
ISO power-assisted hydraulic controls
Automatic two speed travel (EC17C/EC18C/EC20C)
Control of forward and backward movements by two levers coupled to hydraulic travel pedals
Double-acting hydraulic circuit for accessories
Progressive fingertip control of the accessory circuit and offset
Hydraulic variable displacement pump (EC18C/EC20C)
Hydraulic gear pump (EC15C/EC17C)
Automatic slewing multi-disc brake
Hydraulic hoses routed in the boom
Cushion on boom cylinder
ORFS hydraulic connectors
Return oil filter

**Seat**
High resistant fabric or vinyl suspended seat with non retractable seat belt

**Cab**
Suspended and insulated cab platform
In cab heating and ventilation adjustment
Fully opening front window power-assisted by gas cylinder
Right hand side sliding window
Radio preparation (location for a radio and two speakers, aerial and electric wiring already fitted)
Windscreen wiper and washer (front)
Large and roomy uncluttered floor
Flat lockable windows
Lockable tool box and document box

**Canopy**
Suspended and insulated canopy platform
Large and roomy uncluttered floor
4 pillars canopy with safe handrail
Easy removable canopy

**Instrumentation and monitoring**
Central warning lamp
Control lamp for offset, engine temperature, preheating, air filter, engine oil, seat belt and battery charge control lamps
Fuel level gauge
Digital operating hour meter

**Earthwork equipment**
1750 mm long monobloc boom (EC15C/EC17C/EC18C)
1900 mm long monobloc boom (EC20C)
950 mm arm (EC15C/EC17C/EC18C)
1050 mm arm (EC20C)
Dozer blade with 2 additional extensions (EC18C/EC20C)
Protected blade cylinder

**Safety**
Machines cab and canopy are:
- TOPS (Tip-Over Protective Structure)
- ROPS (Roll-Over Protective Structure)
- OPG 1 (Object Protective Guard)
All around visibility
Device for locking the earthwork equipment’s controls and the travel levers when the left console is raised to gain access to the driver’s cab.
Engine starting safety device: the left console must be raised to operate the starter
Retractable and non retractable seat belts
Right rearview mirror

**Official approval**
Machine conforming to European directive 2006/42/EC
Noise emissions in the environment conforming to directive 2000/14/EC
Hand Arm Vibrations - Whole Body Vibrations compliant with directive 2002/44/EC
Electromagnetic compatibility (EMC) conforming to European directive 2004/108/EC and its amendments.
Object handling device conforming to EN 474-1 and EN 474-5 standards.
ROPS conforming to ISO 3471-1 and SAE J1040 standards.
TOPS conforming to ISO 12117 and EN 13831 standards.
OPG 1 conforming to ISO 10262 standard.

**OPTIONAL EQUIPMENT**

**Handling and earthwork equipment**
Long arm : 1150 mm (EC15C/EC17C/EC18C), 1350 mm (EC20C)
The long arm is recommended only for special applications with long reach and low density materials.
Safety valve piloted by the power assistance circuit on the boom and arm cylinders
Double acting accessory arm line
Kit 2 Flat Face hydraulic couplings

**Hydraulic circuits for attachments**
Drain kit return to hydraulic tank

**Lighting**
Additional work light on the boom
Additional rear work light and rotating beacon

**Environmental protection**
Bio-degradable normal climat hydraulic oil VG46
Bio-degradable cold climat hydraulic oil VG32

**Comfort**
Deluxe high back fabric or vinyl suspended seat with 4 adjustments

**Retracting seat belt 2” or 3” with visual indicator on instrument panel**
Radio CD/MP3
Anti-theft system

**Safety**
Left rear view side mirror
Caretrack GPS/GSM system
Control pattern selector and travel alarm

**Service and maintenance**
Tool kit
Dual stage air filter

**Miscellaneous**
Special colours options (RAL specifications)

**ATTACHMENT OFFER**

**Hydraulic Breaker and dedicated tools**
Mechanical Volvo pin grabber quick coupler
Mechanical Lehnhoff quick coupler
Complete range of Volvo genuine trenching and ditching buckets (pin-on, LOQ)

14
Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 180 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.

Not all products are 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.