

Item # 100

Volvo EC35D Compact Excavator

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Model: Volvo EC35D Compact Excavator

| Description | Article |
|---|---------|
| Volvo EC35D Compact Excavator | EC35D |
| Standard Arm, 55" with Thumb Bracket | CX11023 |
| Standard Dozer Blade with Float | CX12001 |
| 12" rubber tracks | CX21004 |
| Tier 4F Engine | CX30007 |
| Auto idling | CX31001 |
| Dual stage air filter | CX32001 |
| Canopy ROPS, FOPS & TOPS | CX40001 |
| Seat, vinyl deluxe w/ 3" retractable seat belt (canopy only) | CX41009 |
| Electric Pattern Change+Travel Alarm | CX42006 |
| Left Rear View Mirror | CX43010 |
| Hour Meter | CX45001 |
| Work Light on Boom | CX50002 |
| Hydraulic oil ISO VG46 14°F to 86°F (-10°C to 30°C) | CX60001 |
| X1 Double and Single Acting Hydraulics | CX61006 |
| 2X flat face hyd. couplings (2 for machine end, 2 for attach. hoses (shipped loose)) | CX65003 |
| Manual, English | CX70002 |
| Standard paint, Volvo colors | CX82001 |
| US marking | CX83002 |
| Standard pin on Bucket configuration | CX90004 |



Volvo Construction Equipment

EC35D

Volvo Compact Excavators 3.5 t / 7,780 lb 24.8 hp



Perform with precision

The EC35D features a comfortable cab and easy-to-use controls for high performance and precise operation. With its excellent hydraulic performance and easy serviceability you can do more for less in all applications.

Optimized efficiency

For lower costs, increased productivity and maximum uptime a number of efficient features combine on the EC35D. ECO mode allows you to choose the right machine setting for the job at hand for impressive fuel efficiency. Robust design and quality digging equipment delivers durability and long term machine value. Auto idle and auto engine shut down reduce noise disturbance, fuel consumption, maintenance costs and slow down depreciation of your machine.



Superior serviceability

The EC35D is built to ensure servicing is safe, quick and easy, featuring easy service access with wide-opening hoods, centralized lubrication and ground-level greasing points. The patented multifunction transparent hydraulic filter and extended greasing intervals of 50 hours, enhance machine availability and uptime.



Hydraulics in harmony

The machine's state-of-the-art hydraulic system is perfectly matched to the premium Volvo engine delivering high performance and smooth operation. Intuitive fingertip controls enhance ease of operation, reduce fatigue and improve fluency. Adjust hydraulic flows in each direction from inside the cab for ultimate precision and versatility. Easily switch between operators with the ability to change from excavator to backhoe controls with a simple flick of the switch on the armrest.



Performance and precision

Increase your power and precision in all applications with the EC35D. The machine's outstanding lifting capacity and digging force deliver extra productivity and faster cycle times. Impressive tractive force and superior blade design delivers an increased performance when dozing. The float function, compatible with the angle blade, achieves a precise finish in grading applications.

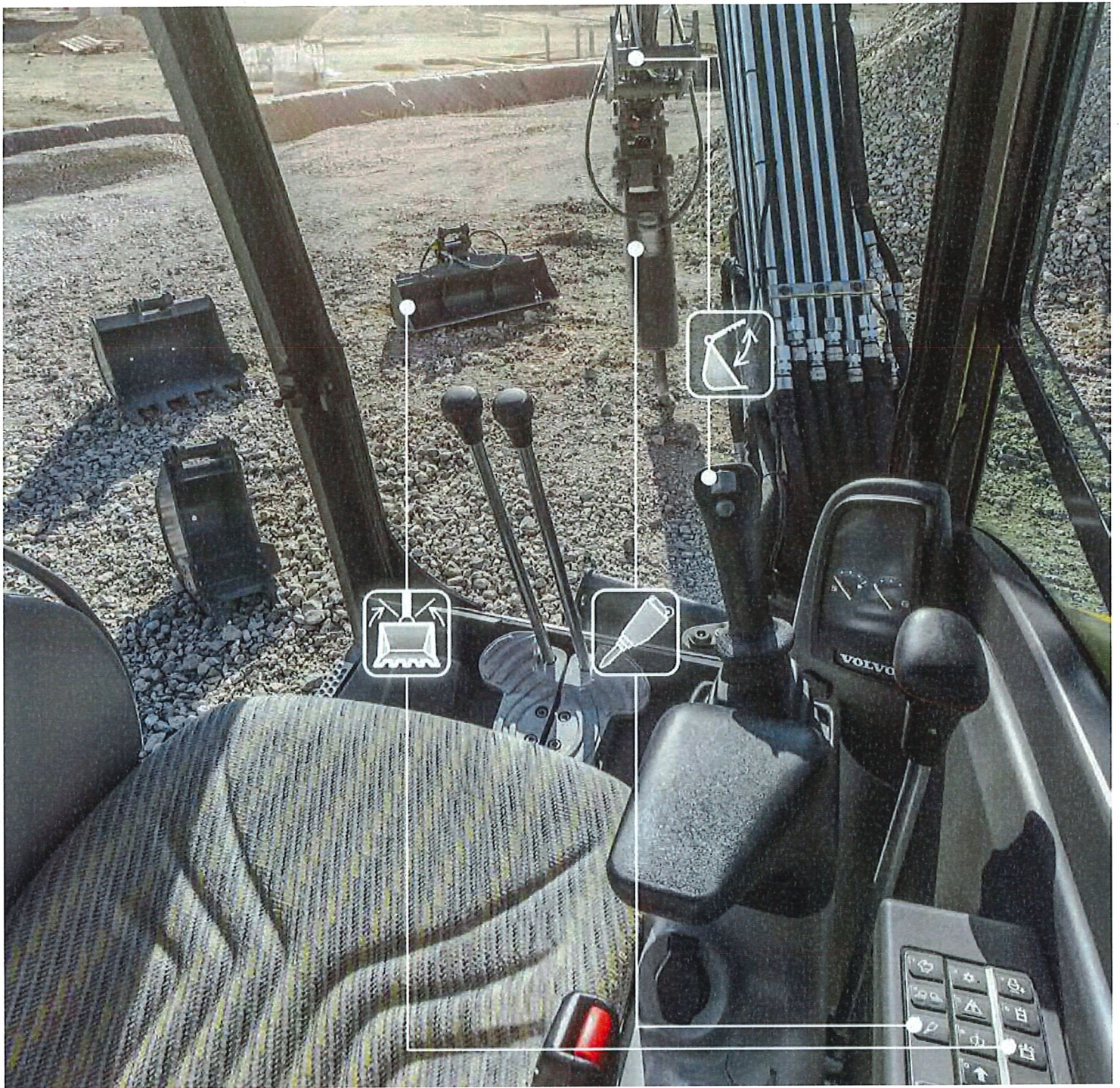




OPERATOR ENVIRONMENT



Operate in a best-in-class cab for superior operator comfort and less fatigue. The EC35D is equipped with a spacious operator environment offering excellent all-around visibility and an adjustable suspended seat and console. All relevant machine functions and settings can be quickly accessed through keypad and monitor for maximum control of your machine.



BUILT READY



Get the most out of your machine. The EC35D is a perfect match with Volvo attachments allowing you to change hydraulic settings directly and easily from the keypad. For increased versatility and uptime, Volvo has a durable range of attachments so you can access more applications and effectively perform a variety of jobs.

More than a machine

Tailored to your business and operations, choose from a wide range of Volvo attachments and Customer Solutions to improve your performance, productivity and versatility. Volvo offers a complete range of robust attachments for all working conditions and can offer a long-term partnership, protect your revenue and provide a full range of services using Genuine Volvo parts, delivered by passionate people.

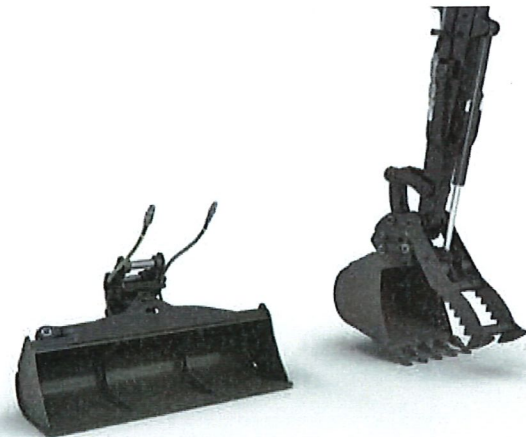
Quick Couplers

The mechanical and hydraulic pin grabber quick couplers allow attachments to be changed quickly and efficiently. The hydraulic pin grabber's design allows the use of a wide range of a wide range of other attachments for greater flexibility.



Advanced attachment solutions

The machine is compatible with a range of hydraulic attachments, including thumb, breaker and tiltable ditching bucket for more advanced and specialist applications. Available from the factory or aftermarket, do not hesitate to contact your local Volvo dealer and benefit from leading expertise and advanced attachment solutions.



Dealer support

For less downtime and expert care, Volvo pro-actively respond to your requirements faster and fully support your service and maintenance needs through its local workshops and on-site service vans. Your attentive Volvo dealer offers professional expertise and preventative maintenance solutions to keep you working and ensure more uptime.



Genuine Volvo Parts

Our attention to detail is what makes us stand out and our leading parts availability ensures maximum uptime of your machine. For a long life, parts are extensively tested and approved because every part is vital for machine longevity and uptime.



Perform with precision

Automatic engine idle plus shutdown

This function automatically turns the engine down to idle mode and then off to reduce fuel consumption and cut engine operating hours when the machine is inactive for a selectable pre-set amount of time to match applications needs.

Automatic travel speed

Automatic two speed travel allows the operator to continually drive the machine at high speed. Speed is automatically reduced when traction is needed.

Ultimate lifting capacity

Excellent stability and outstanding hydraulics ensure the machines are capable of lifting heavy loads.

50 hour greasing interval

The greasing interval is 50 hours – therefore there is no need to re-grease between jobs.

BUILT READY



Volvo's durable attachments have been purpose-built to deliver maximum productivity and long service life in combination with Volvo machines

In-track boom swing

The swing post and cylinder stay within the tracks when in an offset position, avoiding the risk of damage to your machine when working alongside obstacles.

ISO Selector

A simple and conveniently located switch makes it easy, fast and safe for operator to change controls.



Anti-theft system

To reduce the risk of theft, a code can be entered through the keypad to start the machine. It can be changed via the machine management system.

OPERATOR ENVIRONMENT



The industry-leading, spacious Volvo FOPS1 on top, TOPS and ROPS cab boasts all around visibility, ergonomically positioned controls and excellent vibration and noise insulation.

Suspended seat and console

The multi-adjustable seat and console are mounted on the same suspension and therefore move together – providing excellent shock and vibration absorption.

Patented hydraulic filter

Filtration occurs when filling the tank or topping up and when the oil returns to tank via the drain lines. The transparent bowl enables easy oil level check and visibility to any contamination.

Service access

The side position of the engine together with two, wide-opening hoods ensures safe and easy access to all components and service check points from ground level.

ECO mode

By simply pressing a button, the unique Volvo ECO mode reduces fuel consumption by up to 10%.

Customer Solutions

Volvo provides the right solutions throughout the entire life cycle of your machine to lower total cost of ownership.



EC35D in detail

Engine

| | | |
|-----------------------------------|-------------|---------------|
| Engine | Volvo D1.7A | |
| Max. power at | r/min (r/s) | 2,200 (36.7) |
| Gross | kW (hp) | 18.5 (24.8) |
| Gross power according to ISO 2534 | | |
| Max. torque | Nm (ft lbf) | 97 (71.5) |
| at engine speed | r/min | 1,600 |
| No. of cylinders | | 3 |
| Displacement | cm³ (in³) | 1,650 (100.7) |
| Bore | mm (in) | 87 (3.4) |
| Stroke | mm (in) | 92.4 (3.6) |
| Compression ratio | | 20.5 |

Electrical System

| | | |
|------------------|------|--------|
| Voltage | V | 12 |
| Battery | V | 1 x 12 |
| Battery capacity | Ah | 74 |
| Alternator | V/Ah | 12/60 |

Swing System

| | | |
|------------------|---------------|-------------|
| Max. slew speed | r/min | 9 |
| Max. slew torque | daNm (ft lbf) | 710 (5,237) |

Undercarriage

| | | |
|-----------------------------|---------|-------------------------|
| Rubber track width | mm (in) | 300 (11.8) |
| Steel track width | mm (in) | 300 (11.8) |
| Bottom/top rollers per side | | 4/1 |
| Track tension | | |
| Blade (width x height) | mm (in) | 1 650 x 368 (65 x 14.5) |

Digging Performances

| | | |
|--|------------|---------------|
| Standard bucket width (blade, W/O side cutter) | mm (in) | 600 (23.6) |
| Standard bucket mass | kg (lb) | 90 (198) |
| Standard bucket rated capacity | l (ft³) | 114 (4) |
| Bucket rotation | ° | 199 |
| Bucket breakout force (ISO) | daN (lbf) | 3,289 (7,394) |
| Short arm tearout force (ISO) | daN (lbf) | 2,371 (5,330) |
| With short arm | mm (ft in) | 1 400 (4' 7") |
| Long arm tearout force (ISO) | daN (lbf) | 2,060 (4,631) |
| With long arm | mm (ft in) | 1 700 (5' 7") |

Weight and Ground Pressure

| | | |
|---|-----------|---------------|
| Operating weight according to ISO 6,016 | kg (lb) | 3,530 (7,782) |
| Ground pressure (cab) | kPa (psi) | 32.5 (4.7) |
| Ground pressure (canopy) | kPa (psi) | 31.3 (4.5) |
| Transport weight | kg (lb) | 3,455 (7,617) |
| With heated cab | | |
| With direct-fit bucket | | |
| With rubber tracks | mm (in) | 300 (11.8) |
| With short arm | mm (in) | 1 400 (55) |
| With fuel tank capacity | % | 100 |
| With thumb | +kg (Hlb) | 64 (141) |
| With canopy | -kg (-lb) | 135 (298) |
| With extra counterweight | +kg (Hlb) | 170 (375) |
| With long arm | +kg (Hlb) | 15 (33.1) |
| With steel tracks | +kg (Hlb) | 66 (146) |

Hydraulic System

| | | |
|---|-----------------|------------|
| Maximum system flow | l/min (gal/min) | 103 (27.2) |
| Maximum flow for accessories | l/min (gal/min) | 65 (17.2) |
| Maximum pressure for accessories | MPa (psi) | 22 (3,191) |
| Maximum flow for 2nd accessory circuit (option) | l/min (gal/min) | 23 (6.1) |
| Maximum operating pressure | MPa (psi) | 24 (3,481) |

Travel system

| | | |
|------------------------|-------------|---------------|
| Max. drawbar pull | daN (lbf) | 3,100 (6,969) |
| Max. travel speed low | km/h (mi/h) | 2.7 (1.7) |
| Max. travel speed high | km/h (mi/h) | 4.5 (2.8) |
| Gradeability | ° | 20 |

Service Refill

| | | |
|-------------------------|---------|---------------------|
| Fuel tank | l (gal) | 64 (16.9) |
| Hydraulic system, total | l (gal) | 62 (16.3) |
| Hydraulic tank | l (gal) | 32 (8.5) |
| Engine oil | l (gal) | 7 (1.8) |
| Engine coolant | l (gal) | 7 (1.8) |
| Travel reduction unit | l (gal) | 2 x 0.7 (2 x 0.185) |

Sound Level

| | | |
|--|-------|----|
| Interior sound level according to ISO 6396 | | |
| LpA | dB(A) | 78 |
| External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009 | | |
| LwA | dB(A) | 93 |

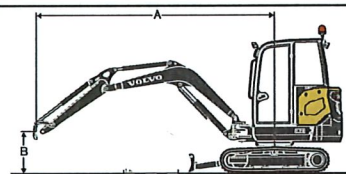
LIFTING CAPACITY EC35D











These capacities are given for a machine equipped with a cabin, 300 mm (1' 0") rubber tracks and without a bucket or quick-coupler.

The below values are in compliance with ISO standard 10567. They do not exceed 75% of the tipping load or 87% of the hydraulic limit with the machine on firm level ground.

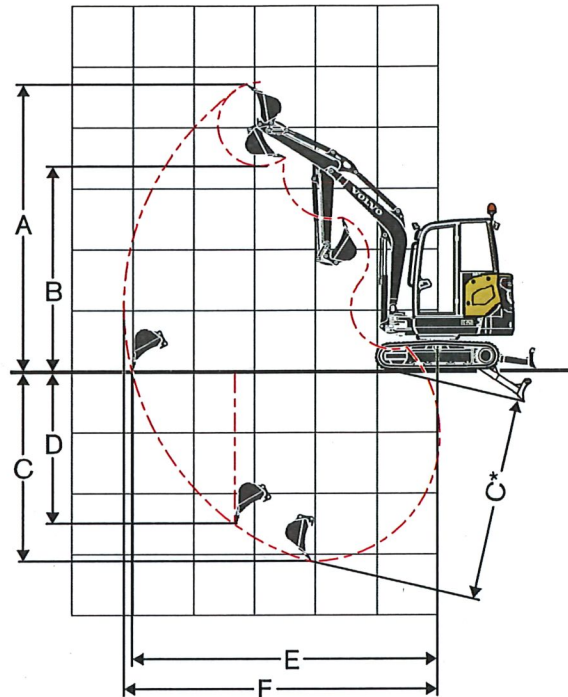
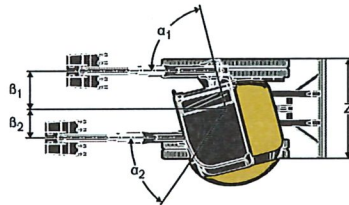
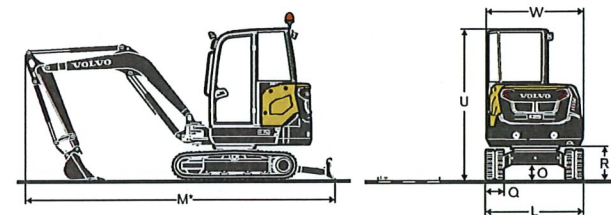
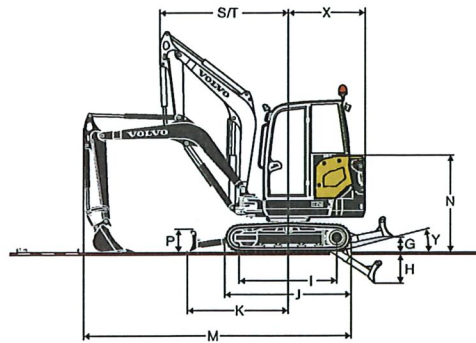
Loads marked with an asterisk (*) are limited by machine's hydraulic lifting capacity rather than tipping load.

Caution: In accordance with standard EN 474-5, the machine must be equipped to carry out handling operations. It is the operator's obligation to know and follow the applicable national and local safety regulations.



| | | Lifting point height (B) m | Lifting point radius (A) | | | | | | | | | |
|--|-----------|-------------------------------|---|---|---|---|---|---|---|--|---|---|
| | | | 2.0 m (6.5 ft) | | 3.0 m (9.8 ft) | | 4.0 m (13.1 ft) | | Max. reach | | Max. | |
| | | |  |  |  |  |  |  |  |  |  |  |
| Arm: 1,400 mm (4' 7") + Dozer blade up | 3 (9.8) | kg (lb) | - | - | - | - | - | - | 645 (1,422) | 589 (1,299) | 3.9 (12' 9") | |
| | 2 (6.5) | kg (lb) | - | - | *891 (1,964) | 860 (1,896) | 609 (1,343) | 556 (1,226) | 536 (1,182) | 489 (1,078) | 4.3 (14' 3") | |
| | 1 (3.3) | kg (lb) | - | - | 895 (1,973) | 808 (1,781) | 590 (1,301) | 537 (1,184) | 502 (1,107) | 457 (1,008) | 4.5 (14' 8") | |
| | 0 (0) | kg (lb) | 1,595 (3,516) | 1,397 (3,080) | 858 (1,892) | 773 (1,704) | 574 (1,265) | 522 (1,151) | 517 (1,140) | 471 (1,038) | 4.3 (14' 2") | |
| | -1 (-3.3) | kg (lb) | 1,602 (3,532) | 1,404 (3,095) | 851 (1,876) | 766 (1,689) | - | - | 603 (1,329) | 547 (1,206) | 3.9 (12' 8") | |
| | 2 (-6.5) | kg (lb) | 1,642 (3,620) | 1,442 (3,179) | - | - | - | - | 924 (2,037) | 832 (1,834) | 2.9 (9' 6") | |
| Arm: 1,700 mm (5' 7") + Dozer blade up | 3 (9.8) | kg (lb) | - | - | - | - | 628 (1,385) | 574 (1,265) | 573 (1,263) | 523 (1,153) | 4.2 (13' 10") | |
| | 2 (6.5) | kg (lb) | - | - | *746 (1,645) | *746 (1,645) | 616 (1,358) | 562 (1,239) | 488 (1,076) | 445 (981) | 4.6 (15' 2") | |
| | 1 (3.3) | kg (lb) | 1,674 (3,691) | 1,471 (3,243) | 903 (1,991) | 816 (1,799) | 592 (1,305) | 539 (1,188) | 459 (1,012) | 418 (922) | 4.7 (15' 7") | |
| | 0 (0) | kg (lb) | 1,579 (3,481) | 1,382 (3,047) | 855 (1,885) | 770 (1,698) | 571 (1,259) | 519 (1,144) | 469 (1,034) | 427 (941) | 4.6 (15' 1") | |
| | -1 (-3.3) | kg (lb) | 1,573 (3,468) | 1,376 (3,034) | 839 (1,850) | 754 (1,662) | 564 (1,243) | 512 (1,129) | 532 (1,173) | 483 (1,065) | 4.2 (13' 9") | |
| | 2 (-6.5) | kg (lb) | 1,606 (3,541) | 1,407 (3,102) | 854 (1,883) | 768 (1,693) | - | - | 734 (1,618) | 664 (1,464) | 3.4 (11' 0") | |
| Arm: 1,400 mm (4' 7") + Dozer blade down | 3 (9.8) | kg (lb) | - | - | - | - | - | - | *784 (1,728) | 589 (1,299) | 3.9 (12' 9") | |
| | 2 (6.5) | kg (lb) | - | - | *891 (1,964) | 860 (1,896) | *825 (1,819) | 556 (1,226) | *835 (1,841) | 489 (1,078) | 4.3 (14' 3") | |
| | 1 (3.3) | kg (lb) | - | - | *1,270 (2,800) | 808 (1,781) | *956 (2,108) | 537 (1,184) | *899 (1,982) | 457 (1,008) | 4.5 (14' 8") | |
| | 0 (0) | kg (lb) | *1,752 (3,862) | 1,397 (3,080) | *1,536 (3,386) | 773 (1,704) | *1,066 (2,350) | 522 (1,151) | *980 (2,161) | 471 (1,038) | 4.3 (14' 2") | |
| | -1 (-3.3) | kg (lb) | *2,728 (6,014) | 1,404 (3,095) | *1,563 (3,446) | 766 (1,689) | - | - | *1,086 (2,394) | 547 (1,206) | 3.9 (12' 8") | |
| | 2 (-6.5) | kg (lb) | *2,094 (4,616) | 1,442 (3,179) | - | - | - | - | *1,237 (2,727) | 832 (1,834) | 2.9 (9' 6") | |
| Arm: 1,700 mm (5' 7") + Dozer blade down | 3 (9.8) | kg (lb) | - | - | - | - | *671 (1,479) | 574 (1,265) | *711 (1,567) | 523 (1,153) | 4.2 (13' 10") | |
| | 2 (6.5) | kg (lb) | - | - | *746 (1,645) | *746 (1,645) | *735 (1,620) | 562 (1,239) | *760 (1,676) | 445 (981) | 4.6 (15' 2") | |
| | 1 (3.3) | kg (lb) | *2,178 (4,802) | 1,471 (3,243) | *1,143 (2,520) | 816 (1,799) | *886 (1,953) | 539 (1,188) | *819 (1,806) | 418 (922) | 4.7 (15' 7") | |
| | 0 (0) | kg (lb) | *1,828 (4,030) | 1,382 (3,047) | *1,467 (3,234) | 770 (1,698) | *1,028 (2,266) | 519 (1,144) | *892 (1,967) | 427 (941) | 4.6 (15' 1") | |
| | -1 (-3.3) | kg (lb) | *2,819 (6,215) | 1,376 (3,034) | *1,570 (3,461) | 754 (1,662) | *1,061 (2,339) | 512 (1,129) | *989 (2,180) | 483 (1,065) | 4.2 (13' 9") | |
| | 2 (-6.5) | kg (lb) | *2,368 (5,221) | 1,407 (3,102) | *1,361 (3,000) | 768 (1,693) | - | - | *1,126 (2,482) | 664 (1,464) | 3.4 (11' 0") | |

Specifications



DIMENSIONS

| Description | Unit | EC35D | |
|---|------------|-----------------|-----------------|
| Arm | mm (ft in) | 1 400 (4' 7") | 1 700 (5' 7") |
| A Maximum cutting height | mm (ft in) | 4 690 (15' 5") | 4 853 (15' 11") |
| B Maximum dump height | mm (ft in) | 3 347 (11' 0") | 3 514 (11' 6") |
| C Digging depth | mm (ft in) | 3 131 (10' 3") | 3 431 (11' 3") |
| C* Maximum digging depth | mm (ft in) | 3 339 (10' 11") | 3 632 (11' 11") |
| D Maximum vertical wall digging depth | mm (ft in) | 2 521 (8' 3") | 2 814 (9' 3") |
| E Maximum digging reach at ground level | mm (ft in) | 5 031 (16' 6") | 5 320 (17' 5") |
| F Maximum digging reach | mm (ft in) | 5 153 (16' 11") | 5 434 (17' 10") |
| G Highest position dozer blade | mm (ft in) | | 370 (1' 3") |
| H Lowest position dozer blade | mm (ft in) | | 525 (1' 9") |
| I Tumbler length | mm (ft in) | | 1 604 (5' 3") |
| J Track length | mm (ft in) | | 2 055 (6' 9") |
| K Dozer blade, maximum reach at ground level | mm (ft in) | | 1 648 (5' 5") |
| L Overall width with 300 mm (1' 0") rubber tracks | mm (ft in) | | 1 780 (5' 10") |
| M Overall length | mm (ft in) | 4 660 (15' 3") | 4 555 (14' 11") |
| M* Transport length | mm (ft in) | 5 435 (17' 10") | 5 380 (17' 8") |
| N Overall height of engine hood | mm (ft in) | | 1 573 (5' 2") |
| O Minimum ground clearance | mm (ft in) | | 285 (0' 11") |
| P Dozer blade height | mm (ft in) | | 368 (1' 2") |
| Q Shoe width (rubber) | mm (ft in) | | 300 (1' 0") |
| R Ground clearance to superstructure | mm (ft in) | 557 (1' 10") | |
| S Front slew radius | mm (ft in) | 2 394 (7' 10") | 2 418 (7' 11") |
| T Front slew radius with maximum offset | mm (ft in) | 1 869 (6' 2") | 1 889 (6' 2") |
| U Overall height | mm (ft in) | | 2 481 (8' 2") |
| W Overall width of superstructure | mm (ft in) | | 1 575 (5' 2") |
| X Tail slew radius | mm (ft in) | 885 (2' 11") | 970 (3' 2") |
| X' Additional counterweight overhang | mm (ft in) | 85 (0' 3") | (incl.) |
| Y Angle of approach | ° | | 24 |
| Z Dozer blade width | mm (ft in) | | 1 780 (5' 10") |
| a1 Maximum boom swing angle to the left | ° | | 76 (0' 3") |
| b1 Maximum boom offset to the right | mm (ft in) | | 995 (3' 3") |
| a2 Maximum boom swing angle to the right | ° | | 56 (56) |
| b2 Maximum boom offset to the left | mm (ft in) | | 787 (2' 7") |

1: Option

Equipment

STANDARD EQUIPMENT

Engine

Low emission, direct injection, water-cooled, Volvo 4-cylinder diesel engine.
Engine restart prevention system. Starter motor is protected against ignition when engine is already running.
Dry-type single element air filter.
Plastic fuel tank with drain plug.
Protective strainer on the fuel suction pipe inside the tank
Water separator.
Translucent fuel filter.

Electric/Electronic control system

Maintenance free battery.
IP67 protected electrical system and high quality connectors.
Removable battery cut-off switch.
In-cab 12V power socket.

Hydraulic system

Large hinged and key-locked access panel.
Variable displacement, load-sensing piston pump.
Closed centre flow-sharing main control valve.
Cushioning on cylinders:
Boom up
Arm out

Patented filtering and filling element.
Single layer cooling system.
Double-acting hydraulic circuit for accessories.
Hammer / shear valve.
Plastic tank with drain plug.

Swing system

Radial piston hydraulic motor with direct engagement on the ball internal crown wheel (no reduction gears).
Integrated shockless valve.
Automatic multi-disc slow brake.
Centralized and remote lubrication of crown wheel & ball bearing.

Drivetrain

Axial piston hydraulic motors equipped with an epicyclic reduction gears.
Automatic two speed travel
Bottom flanged rollers lubricated for life.
Grease tensioning wheel lubricated for life.

Undercarriage and dozer blade

"X" shape, box welded fabricated frame with sloping side members.
2 Tie-down points on the dozer blade.
2 Tie-down points on the frame.
2 Integrated lifting points.
Sturdy removable protecting covers for track motors and slew system.
400HB weld-on edge on dozer blade

Digging Equipment

Monobloc box welded boom.
Boom cylinder rod protection.
Integrated lifting point on the boom.
Monobloc box welded arm.
Long-life steel bushings.
Hardened, pre-lubricated and corrosion resistant pins.
50 hours greasing intervals.

Canopy

FOPS level 1 on top (Falling Objects Protective Structure)
TOPS (Tip-Over Protective Structure)
ROPS (Roll-Over Protective Structure)
Cushionned operator station
Large and roomy uncluttered floor
Left hand-rail access
Seat-belt with warning indicator
Right rear-view mirror

Cab

FOPS on top level 1 (Falling Object Protective Structure).
TOPS (Tip-Over Protective Structure).
ROPS (Roll-Over Protective Structure).
Cushioned operator station.
Large door access.
Large and roomy uncluttered floor.
Gas-strut assisted front window opening.
Full opening front bay with in-cab storage for the front lower window.
Front windscreen wiper and washer nozzle.
Right hand side sliding window.
Heating systems.
Multiple adjustable air vents.
Filtered air inlet.
Cab inside light.
Seat-belt with warning indicator.
Right rear-view mirror.

STANDARD EQUIPMENT

Two working lights on top front of the cab.

Machine controls

Finger tip control for boom offset.
Finger tip control for auxiliary circuit.
Breaker toggle switch on right joystick
Automatic locking device for pilot controls and travel levers when the left console is raised.
Engine starting safety device: the left console must be raised to operate the starter.
Pressure accumulator to lower the equipment on the ground when the engine is switched off.
High torque / automatic two speed change over button on the keypad.
High speed toggle switch on the dozer blade lever.
Large travel pedals.

Instrumentation and monitoring

Water temperature and fuel level gauges.
Warning lights for hydraulic filter and air filter restriction.
Self-acting emergency engine shutdown. Prevents failures in case of coolant overheating or too low engine oil pressure.
Several warning lights, coupled to an audible signal, in the event of malfunction (overheating, drop in oil pressure, low battery voltage...)

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.
FOPS on top level 1 conforming to ISO 10262 standard.
TOPS conforming to ISO 12117 and EN 13531 standards.
ROPS conforming to ISO 3471-1 and / SAE J1040 standards.

EQUIPMENT

• = Standard
○ = Option

| | Basic | Standard |
|--|-------|----------|
| Operator environment | | |
| Canopy | ○ | ○ |
| Cab with heater | ○ | ○ |
| Cab with heater and air conditioning | | ○ |
| Vinyl or textile seat, with mechanical suspension, low-back seat and 2" seat belt | ○ | ○ |
| Vinyl or textile seat, height adjustable, with mechanical suspension, high back and 2" or 3" retractable seat belt | ○ | ○ |
| Storage box | | • |
| Cab roof | | ○ |
| ISO / SAE control pattern change (in-cab electric switch) | ○ | ○ |
| Travel alarm | ○ | ○ |
| Radio preparation (cab) | • | • |
| Radio, AUX, USB, Bluetooth | | ○ |
| Anti-theft device | ○ | ○ |
| Digital hour meter | • | • |
| Extra hour meter (mechanical) | ○ | ○ |
| Cup holder | | ○ |
| Machine exterior | | |
| Right rearview mirror | • | • |
| Left rearview mirror | ○ | ○ |
| Protected work light on the boom | ○ | ○ |
| Rear work light | ○ | ○ |
| Rotating beacon | ○ | ○ |
| Additional counterweight | ○ | ○ |
| Front canopy guard (OPG1) | ○ | ○ |
| Severe-duty guards for cab or canopy (OPG2, front & top) | ○ | ○ |
| Several level of paint customization (RAL specifications) to match with your corporate identity | ○ | ○ |
| Digging equipment | | |
| Short arm | ○ | ○ |
| Short arm + thumb bracket | ○ | ○ |
| Long arm | ○ | ○ |
| Long arm + thumb bracket | ○ | ○ |

EQUIPMENT

- = Standard
- = Option

| | Basic | Standard |
|--|-------|----------|
| Undercarriage equipment | | |
| 300 mm (1' 0") rubber tracks | ○ | ○ |
| 300 mm (1' 0") steel tracks | ○ | ○ |
| Standard dozer blade | • | ○ |
| Hydraulic angle blade | | ○ |
| Hydraulic equipment | | |
| Proportional finger tip control for boom offset | | • |
| On / Off finger tip control for boom offset | • | |
| Proportional finger tip control for accessories | | • |
| On / off finger tip control for accessories | • | |
| Accessory flow adjustment with 3 function oriented button and user-defined settings. | | • |
| Secondary relief valves for auxiliaries | • | • |
| Hydraulic drain for accessories | | ○ |
| Breaker and clamshell auxiliaries | | ○ |
| Second accessory circuit | | ○ |
| Flat face hydraulic quick couplings | ○ | ○ |
| Single acting circuit for quick couplers | ○ | ○ |
| Double acting circuit for quick couplers | ○ | ○ |
| Boom & arm safety lifting valves with overload indicator | ○ | ○ |
| Boom, arm and dozer blade safety lifting valves with overload indicator | ○ | ○ |
| Float blade | • | • |
| Safety valve certification | ○ | ○ |
| Mineral hydraulic oil VG46 | ○ | ○ |
| Bio hydraulic oil VG46 (PANOLIN®) | ○ | ○ |
| Mineral hydraulic oil VG68 | ○ | ○ |
| Mineral hydraulic oil VG32 | ○ | ○ |
| Bio hydraulic oil VG32 (PANOLIN®) | ○ | ○ |

EQUIPMENT

- = Standard
- = Option

| | Basic | Standard |
|--|-------|----------|
| Engine | | |
| Manual engine control | • | |
| Digital engine control with two preset engine speed buttons (user adjustable) | | • |
| Engine auto idling with time adjustment | | ○ |
| ECO mode | | • |
| Engine auto shut-down with time adjustment | | ○ |
| Dual stage air filter | ○ | ○ |
| Service and maintenance | | |
| In-cab air filter clog warning lamp | • | • |
| In-cab engine overheating warning indicator | • | • |
| Tool kit | ○ | ○ |
| Electronic service reminder | | • |
| V-CADS pro | | • |
| Telematics | | |
| Care Track | | ○ |
| Attachments | | |
| Volvo quick coupler mechanical (pin-on) | ○ | ○ |
| Volvo hydraulic quick coupler (pin-on) | ○ | ○ |
| Extra pin kit | ○ | ○ |
| Lehnhoff® Quick Coupler Mechanical (MS03) | ○ | ○ |
| S-type hydraulic quick coupler (S40) | ○ | ○ |
| Thumb with short clamp (for direct fit bucket) | ○ | ○ |
| Thumb with long clamp (when using quick coupler) | ○ | ○ |
| General purpose buckets (300 mm (1' 0") / 52 l (14 gal) up to 750 mm (2' 6") / 148 L (39 gal)) | ○ | ○ |
| Bolt-on side cutters | ○ | ○ |
| Fix ditching buckets (1,300 mm (4' 3") / 150 l (40 gal)) | ○ | ○ |
| Tilttable ditching buckets (1,200 mm (3' 11") / 125 l (33 gal)) | ○ | ○ |
| Hydraulic breaker HB03LN | ○ | ○ |

SELECTION OF VOLVO OPTIONAL EQUIPMENT

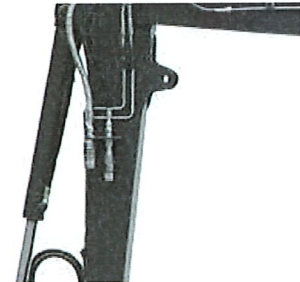
Anti theft



Auto engine shutdown



Additional auxiliary piping



OPG



Air conditioning



Angle blade



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.

VOLVO

Volvo Construction Equipment

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VOLVO

Volvo Construction Equipment North America Warranty – Disclaimers – Limitations Limited Warranty

Volvo Construction Equipment North America ("Volvo CE") hereby extends to its authorized dealers ("Dealer") and the Dealer's end-use customers ("Customer", and both Dealer and Customer are referred to herein as a "Buyer"), who purchase a new Volvo construction equipment machine ("Machine") or new Volvo part ("Part", both of which are referred to herein as a "Product") from Volvo the following limited warranty:

Subject to the exceptions and limitations set forth below, Volvo CE or Dealer will repair or replace any part of a new Machine or new Part which proves to be defective in material or workmanship during the following periods (the "Warranty Period"):

- Volvo wheel loaders: 12 months/2500 hours, whichever first occurs
- Volvo articulated haulers: 12 months/2500 hours, whichever first occurs
- Volvo hydraulic excavators: 12 months/2500 hours, whichever first occurs
- Volvo motor graders: 12 months/2500 hours, whichever first occurs
- Volvo compactors: 12 months/2500 hours, whichever first occurs
24 month unlimited hours on DD90 and larger compactors
- Volvo pavers: 12 months/2500 hours, whichever first occurs
24 month unlimited hours on 6000 / 7000 series pavers
- Volvo milling: 12 months/2500 hours, whichever first occurs
- Volvo compact wheel loaders (up to 100 net hp.): 12 months/unlimited hours
- Volvo skid steer loaders: 12 months/unlimited hours; Lifetime arm for one-sided
- Volvo compact hydraulic excavators (less than 11 metric tons): 12 months/unlimited hours
- Volvo backhoe loaders: 12 months/unlimited hours
- Volvo engines: 12 months/2500 hours, whichever first occurs
- Volvo parts: 6 months/1500 hours, whichever first occurs
- Volvo remanufactured components: 12 months/2500 hours, whichever first occurs
- Volvo Attachments: 12 months

The Warranty Period commences immediately following the delivery of said Product to the Buyer who first puts said Product into use. The foregoing limited warranty shall include the labor cost to accomplish the repair or replacement of the defective part provided that the repair or replacement was performed by a Dealer.

The foregoing warranty does not cover: (i) any Product found to have been damaged by abuse, accident, other casualty or a failure to maintain or use the warranted Product in accordance with the applicable manuals or instructions (Buyer is required to use only original equipment manufacturer filters during the Warranty Period); (ii) the labor costs to repair or replace defective Parts after the expiration of the Warranty Period of the Machine in which such Part is located; (iii) overtime labor premiums; (iv) costs and expenses associated with the transportation of Dealer's service personnel to and from the location of the warranted Product; (v) any parts, components, attachments or accessories for which Buyer receives a separate warranty by the manufacturer or producer thereof (in specified cases said warranty may be administered by Volvo CE); (vi) maintenance items or ground engaging parts that have achieved their normal service life.

DISCLAIMER OF IMPLIED WARRANTIES AND LIMITATION OF REMEDIES

THE FOREGOING WARRANTY TO BUYER IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

REMEDIES AVAILABLE TO BUYER ARE LIMITED TO MAKING A CLAIM UNDER THE FOREGOING WARRANTY AND ARE EXCLUSIVE AND EXPRESSLY LIMITED TO OBTAINING THE PARTS AND LABOR IN ACCORDANCE WITH THE TERMS OF SAID WARRANTY.

Warranty – Disclaimers – Limitations

LIMITATIONS OF LIABILITY AND DAMAGES

Regardless of whether a claim against Volvo CE or Dealer is based on the foregoing warranty or is an action in contract, tort (negligence or strict liability) or otherwise, their respective liability for losses, damages or expenses of any kind arising from the design, manufacture, repair or sale of the Products is limited, unless otherwise prohibited by law, to an amount not exceeding the cost performing the obligations contained in the foregoing warranty, and in no event shall their respective or joint liability exceed the value of the Product or part thereof giving rise to such liability.

CONSEQUENTIAL AND SIMILAR DAMAGES NOT RECOVERABLE

Except for performing the obligations of the foregoing warranty in accordance with its terms, Volvo CE and Dealer shall have no liability for loss, damage, or expense, directly or indirectly, attributable to a loss of use of a Product, loss or damage to property other than the Product, loss or damage to the Product or any part thereof or any other economic or commercial loss, including, without limitation, lost profits or special or consequential damages (except liability for any type of consequential damages which by law may not be disclaimed). The parties intend that this prohibition against consequential and similar damages will survive and be effective even if the limitation of remedies in the foregoing sections is found to fail of its essential purpose under section 2-719 of the Uniform Commercial Code.

ALLOCATION OF RISK

The foregoing warranty disclaimers, limitations of liability and limitation of remedies are bargained allocations of risks among (i) the Customer who purchased the Product; (ii) the Dealer who sold the Product, and (iii) Volvo CE, which is a third party beneficiary of the contract of sale between the Customer and the Dealer. The Buyer of the Product accepts the foregoing warranty and the other bargained for allocations of risk as part of the agreed price for the purchase of the Product to which the foregoing warranty applies. Volvo CE is prepared to offer different warranties and other allocations of risk for other prices. However, any such change in the warranty or the allocation of risks must be confirmed in writing by Volvo CE.

STATUTE OF LIMITATIONS

Any action by a Buyer of a Product for breach of contract, for breach of warranty arising under, or for a cause of action arising out of the sale of a Product, whether based on contract, tort (negligence or strict liability) or otherwise, shall be commenced within one (1) year after the cause of action has accrued. Any such cause of action shall be deemed to have accrued at the earlier of (i) the discovery of the defect or breach, or (ii) the expiration of the applicable Warranty Period.