

VOLVO EXCAVATORS

EC340D, EC380D, EC480D

34-51 t / 75,260-111,790 lb 288-355 hp



A PASSION FOR PERFORMANCE.

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



You learn a lot in 175 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

We have a passion for performance.



Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Aero



Volvo Financial Services

SEE IT ALL. DO IT ALL.



When you are working comfortably, long work shifts go by quickly. You see everything clearly. Everything seems easier and you get more accomplished. That is the goal every day. Do it with Volvo.



Volvo care cab

All-day cab comfort is yours with Volvo. Expect an excellent operator environment and take command in all-around quality and ergonomic comfort. A comfortable seat, ideally-placed controls, excellent visibility and plenty of cab room. It all adds up to greater productivity, day after day.



Color I-ECU monitor

Operators always know exactly where their machine stands from a diagnostic point of view with the color I-ECU monitor. It's clear and easy to read, in all light conditions, for visual status checks. Its position from left to right is adjustable. A service mode allows engineers to perform quick diagnostic checks, helping to increase uptime and productivity. The monitor also permits rear view camera images to be displayed.



Noise reduction

Excellent noise insulation and vibration dampening reduces fatigue and ensures high operator productivity all day long.

Viscous silicon rubber

The Volvo Care Cab is mounted on viscous, silicon rubber mounts. This system absorbs shocks, providing excellent comfort and greatly reducing whole body vibration. Also produces less noise, resulting in less fatigue and more comfort that leads to more all-day productivity.

ROPS

The cab features Roll Over Protective Structure (ROPS) safety certification. Provides more operator safety and peace-of-mind when operating in tough environments or in the event of the machine rolling over.

VOLVO STRENGTH IS BEHIND YOU.

Volvo engine

The new Volvo Tier 4i emissions compliant engine fully meets today's environmental requirements. Engine noise is also reduced.



Digging power

Excellent digging power performance allows for quick cycle times and efficient extraction of hard or compacted material.



Tractive force

Improved tractive force for excellent speed and traveling on inclines or difficult terrain.



Digging speed

Increased pump flow and 2-pump flow for bucket in, results in faster cycle times and higher productivity.



Boom float

With the float position it is possible to get the boom "floating" over the ground without any pressure in the boom cylinders. This feature is useful for grading/finishing operation and for grab working.

Mechanical variable width (EC480D only)

Better stability and protection from an additional 150 mm (5.9") width and 196 mm (7.7") of ground clearance, whilst bucket capacity can also be increased.



You think it and you act. The reaction time is instantaneous. From your mind to your hand, there is no hesitation. It's intuitive and it's the same in your Volvo Excavator. Move swiftly and dig in with powerful productivity.

TECHNOLOGY AT WORK FOR YOU.



Your excavator does much more than one task, and Volvo uses advanced technology to help you get the most out of each job. Pick the right work mode, settings and attachments. Multi-task, go for speed or handle heavy loads. It's your choice and you can do each with maximum efficiency.



Selection work mode

Four working modes allow the operator to select the most appropriate mode for the application at hand. Assures the right amount of performance, along with an efficient use of fuel to suit the task.

I (Idle) stages 1 and 2 (2 being the lowest) – reduces rpm during inactive periods. Can be deselected at the press of a switch.

F (Fine) stages 1, 2 and 3 – increased hydraulic pressure via continuous Power Boost for lifting.

G (General) stages 1, 2 and 3 (1 being the highest) – G1 = good productivity and fuel consumption.

H (Heavy) – high productivity and maximum performance for intensive bulk earthmoving.



Attachment management system

Permits storage of up to 18 different attachment presets. Enables hydraulic flow (standard) and pressure (optional) adjustments according to requirements. Operator can choose hydraulic settings that are 1-way, 2-way, push button, toggle or proportional (optional). Allows operators to quickly change attachments without the need for manual setup. This saves downtime and increases productivity. The system can be password protected to prevent possible misuse by operators or rental users with insufficient knowledge of using hydraulic attachments.

BUILT TO OUTLAST.

Durability

Durability is built in, top to bottom, arm to counterweight. With Volvo, unforgiving conditions are no match.

Undercarriage frame

Three-piece, high tensile steel undercarriage is built for durability to withstand the toughest conditions.

Superstructure underside

Standard HD plates are hinged to provide not only excellent underside protection, but also safety for service personnel. All models benefit from bolt-head protection in the event of the underside being scraped.

Gear box

Employs a 3-stage, planetary reduction gear. Automatic 2-speed track motors utilize durable covers with recessed bolts.

Top rollers

Forged steel and deep-hardened to ensure long-term durability.

Sprocket

Designed with high quality, heat-treated material for hardness and durability.

Track guards

Protects against track derailment. Two guards per track frame (standard) or full length track guards (optional).

Track shoes

Strong, durable and available in various widths to suit the application at hand.

Bottom rollers

Volvo forged steel bottom rollers are oil-lubricated with EP (Extreme Pressure) oil, ensuring high and consistent viscosity even under heavy loads and high shocks, and a reduced internal temperature.

Idler wear strip protection

Located on the inside and outside of the idler bracket, providing protection and long-term durability.





Idlers

Durable, hardened, large-radius fabricated idlers.

HD boom

HD booms are heavily reinforced in order to withstand high-impact materials such as blasted rock.

HD arm

High tensile steel arms feature strong welds, castings and forged bearings for severe-use durability.

Arm wear stripes

Long wear strips are welded to the inside of the arm, providing protection and durability.

Linkage yoke reinforcement

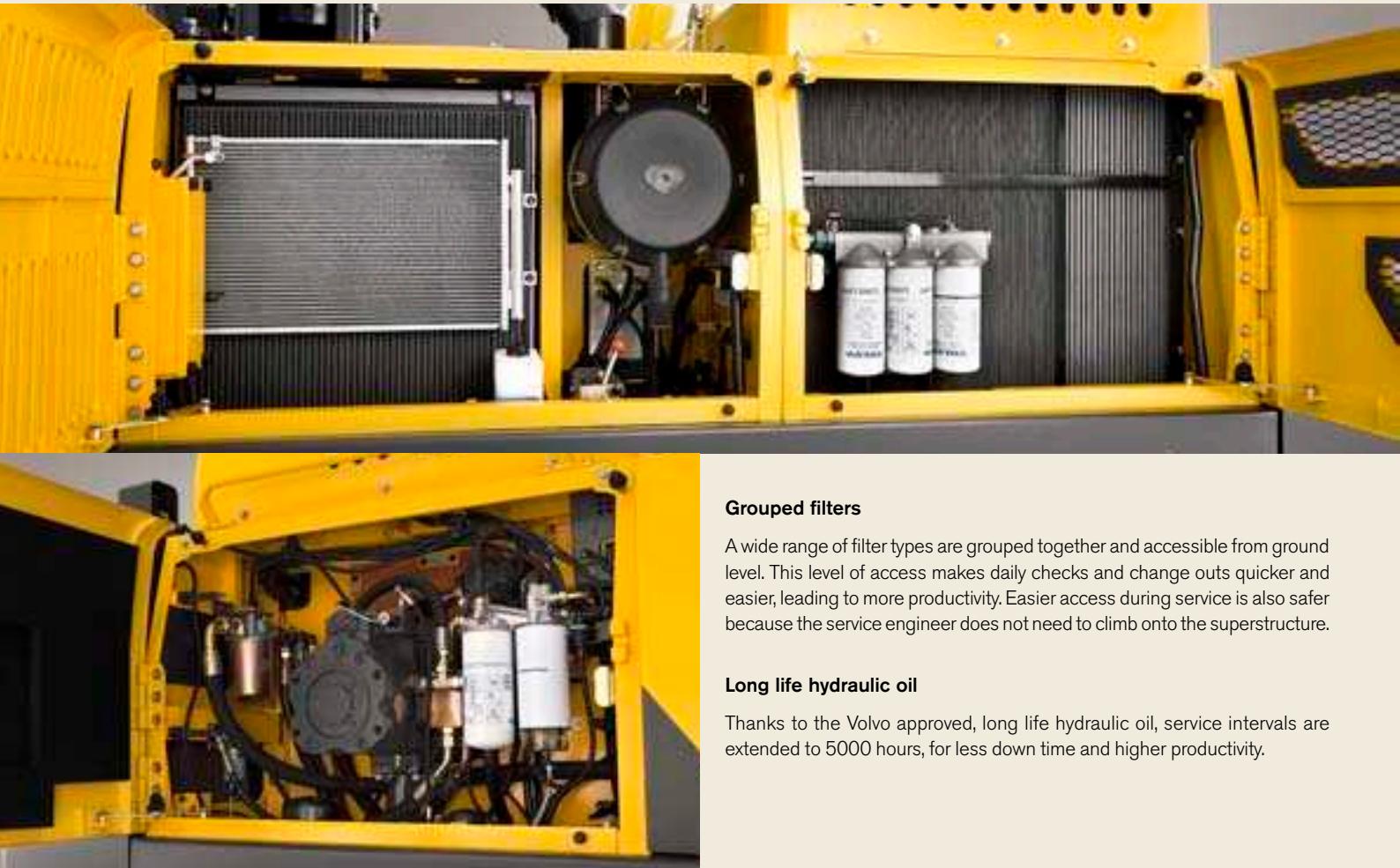
Incorporates a support bar for additional strength and durability. Extra assurance for severe applications.

Track chains

Volvo track links are deep-hardened, heat-treated, induction-hardened, heat-treated again and finally machined. Track link pins and bushings are grease lubricated with lithium based grease and sealed for life, thereby reducing maintenance and downtime. In addition, an M-type seal keeps grease inside the pin and bushing, whilst preventing the ingress of dirt/abrasive materials.

MORE UPTIME, IN REACH.

Volvo makes it easier for you to keep working. It starts with ease of serviceability. Compartments open easily, revealing grouped service points. It's in reach without having to climb all over the machine. It's designed to help you reach greater profits.



Grouped filters

A wide range of filter types are grouped together and accessible from ground level. This level of access makes daily checks and change outs quicker and easier, leading to more productivity. Easier access during service is also safer because the service engineer does not need to climb onto the superstructure.

Long life hydraulic oil

Thanks to the Volvo approved, long life hydraulic oil, service intervals are extended to 5000 hours, for less down time and higher productivity.



VOLVO



Access

Large opening service compartment doors provide faster, safer service access. Service points are grouped and as close to ground level as possible. This helps avoid climbing to heights or working from the superstructure. Reducing service time helps to increase uptime.

THE LOOK OF PRODUCTIVITY.

Working Modes

Four working modes to select the right mode and efficiency for the application at hand.

Attachment Management

Store up to 18 different password-protected attachment presets.

Boom Float

Lowers using only gravity, for more hydraulic flow availability and faster dig speed.





Care cab

The roomy Volvo cab has it all: clear visibility, ergonomic comfort and perfectly-placed controls.

ROPS Safety

More operator safety and peace-of-mind when operating.



Technology

Designed with intelligence to help you do a variety of tasks, from heavy to fine, with a wide range of tools.



Volvo Power

Dependable power with high torque at low RPM, along with low fuel consumption, emissions and noise.



Serviceability

Fast, easy service from grouped, ground-level access.



Durability

Built to outlast. Built for your work, through and through.

Tractive force

Travel on inclines or difficult terrain with excellent speed and tractive force.

TOP PERFORMANCE DESERVES SUPPORT.

The day you receive your new Volvo Excavator is just the start of your working relationship with Volvo. From service and maintenance to our CareTrack telematics system – Volvo has a comprehensive and sophisticated aftermarket portfolio to continuously add value to your business.

Volvo designed and built your machines, so no-one knows how to keep them working in top condition more than us. When it comes to your machine, our Volvo trained technicians are the experts.

Our technicians work with industry leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your Volvo dealer about how genuine Volvo services can best provide the service and maintenance plan that is the right fit for you and your business.



State-of-the-art machines require state-of-the-art support and your Volvo dealer can provide a catalogue of services designed to get the most out of your machine, helping you maximise uptime, productivity and residual value. Your Volvo dealer can provide a number of sophisticated support offers, including:

Service plans ranging from routine wear inspections, through to comprehensive maintenance and repair agreements.

Analysis and diagnostics to help you understand how your machine is running, highlight potential maintenance issues and identify where performance can be improved.

Eco Operator training courses can help your operators work towards a safer, more productive and fuel efficient performance.



CareTrack*

Each Volvo Excavator comes standard equipped with CareTrack, the Volvo telematics system. CareTrack provides information for better planning and smarter working; including fuel consumption reports, location reports and service reminders. Save fuel. Reduce costs. Maximise profitability. You can with CareTrack.

*In markets where CareTrack is available

VOLVO EC340D, EC380D, EC480D IN DETAIL.

Engine

The latest generation, Volvo engine Tier 4i emission compliant diesel engine fully meets the demands of the latest, emission regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, highpressure fuel injectors, variable geometry turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage with precleaner.

Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

Low-Emission Engine.

EC340D

Engine	Volvo	D13H
Max power at	r/s / r/min	28 / 1 700
Net, ISO 9249/SAE J1349	kW / hp	208 / 279
Gross, ISO 14396/SAE J1995	kW / hp	215 / 288
Max torque at	Nm / r/min	1 580 / 1 300
	lb.ft	1,165
No. of cylinders		6
Displacement	l / cu.in	12.8 / 781
Bore	mm / "	131 / 5.16
Stroke	mm / "	158 / 6.22

EC380D

Engine	Volvo	D13H
Max power at	r/s / r/min	28 / 1 700
Net, ISO 9249/SAE J1349	kW / hp	208 / 279
Gross, ISO 14396/SAE J1995	kW / hp	215 / 288
Max torque at	Nm / r/min	1 580 / 1 300
	lb.ft	1,165
No. of cylinders		6
Displacement	l / cu.in	12.8 / 781
Bore	mm / "	131 / 5.16
Stroke	mm / "	158 / 6.22

EC480D

Engine	Volvo	D13H
Max power at	r/s / r/min	30 / 1800
Net, ISO 9249/SAE J1349	kW / hp	256 / 343
Gross, ISO 14396/SAE J1995	kW / hp	265 / 355
Max torque at	Nm / r/min	1 800 / 1 400
	lb.ft	1,328
No. of cylinders		6
Displacement	l / cu.in	12.8 / 781
Bore	mm / "	131 / 5.16
Stroke	mm / "	158 / 6.22

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Contronics provides advanced monitoring of machine functions and important diagnostic information.

	EC340D	EC380D	EC480D
Voltage	V	24	
Batteries	V	2 x 12	
Battery capacity	Ah	200	
Alternator	V / Ah	28 / 80	

Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	r/min	10.2	10.2	8.8
Max. slew torque	kNm	119.0	130.5	166.3
	lbf.ft	87,770	96,250	12,2660

Drive

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. drawbar pull	kN	276.5	276.5	333
	lb	62,170	62,170	74,870
Max. travel speed	km/h	3.4/5.3	3.4/5.3	3.1/5.2
	mph	2.1/3.3	2.1/3.3	1.9/3.2
Gradeability	°	35	35	35

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

Track pads	2 x 48	2 x 50	2 x 52
Link pitch	mm	215.9	215.9
	in	8.5	8.5
Shoe width, triple grouser	mm	600/700/800/900	
	in	24/28/32/36	
Shoe width, double grouser	mm	600	600
	in	24	24
Bottom rollers		2 x 8	2 x 9
Top rollers		2 x 2	2 x 2

Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode" is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm, bucket and swing priority along with boom and arm regeneration provides optimum performance. The following important functions are included in the system:

Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.

Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.

Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

Swing priority: Gives priority to swing functions for faster simultaneous operations.

Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.

Power boost: All digging and lifting forces are increased.

Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

EC340D EC380D EC480D

Main pump, Type 2 x variable displacement axial piston pumps

Maximum flow	l/min	2 x 300	2 x 300	2 x 358
	gpm	2 x 79	2 x 79	2 x 95

Pilot pump, Type Gear pump

Maximum flow	l/min	30.0	30.0	32
	gpm	7.9	7.9	8.4

Hydraulic motors

EC340D EC380D EC480D

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement axial piston motor with mechanical brake

Relief valve setting

Implement	MPa	32.4/35.3	32.4/35.3	32.4/35.3
	psi	4,690/ 5,120	4,690/ 5,120	4,690/ 5,120
Travel circuit	MPa	35.3	35.3	32.4
	psi	5,120	5,120	4,699
Slew circuit	MPa	25.5	27.9	25.8
	psi	3,700	4,050	3,740
Pilot circuit	MPa	3.9	3.9	3.9
	psi	570	570	570

Hydraulic cylinders

		EC340D	EC380D	EC480D
Mono boom		2	2	2
Bore x Stroke	Ø x mm Ø x in	160 x 1 530 6.3 x 60.2	160 x 1 530 6.3 x 60.2	165 x 1 590 6.5 x 62.6
Arm		1	1	1
Bore x Stroke	Ø x mm Ø x in	175 x 1 700 6.9 x 66.9	175 x 1 700 6.9 x 66.9	190 x 1 850 7.5 x 72.8
Bucket		1	1	1
Bore x Stroke	Ø x mm Ø x in	145 x 1 285 5.7 x 50.6	145 x 1 285 5.7 x 50.6	165 x 1 335 6.5 x 52.6
ME Bucket		1	1	1
Bore x Stroke	Ø x mm Ø x in	160 x 1 250 6.3 x 49.2	160 x 1 250 6.3 x 49.2	175 x 1 335 6.9 x 52.6

Service refill capacities

Fuel tank	l gal	620 164	620 164	685 181
Hydraulic system, total	l gal	500 132	500 132	525 139
Hydraulic tank	l gal	220 58	220 58	270 71
Engine oil	l gal	42 11	42 11	42 11
Engine coolant	l gal	60 16	60 16	60 16
Slew reduction unit	l gal	6 1.6	6.5 1.7	2 x 6 2 x 1.6
Travel reduction unit	l gal	2 x 6.8 2 x 1.8	2 x 6.8 2 x 1.8	2 x 8 2 x 2.1

Cab

Integrated air-conditioning and heating system:

The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.

Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Sound level

		EC340D	EC380D	EC480D
Sound level in cab according to ISO 6396	LpA	dB(A)	71	71
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009	LwA	dB(A)	105	105
				106

SPECIFICATIONS.

VOLVO BUCKETS

Loose soil, re-handling material or abrasive rock; excavators and attachments work hand in hand to move almost any type of material. Volvo's experience together with excavator and attachment technology ensures a reduction in cycle times, increased productivity and lower fuel costs through higher breakout forces and quicker bucket fill times.

The efficiency of any type of excavation depends upon the selection of the right bucket therefore a broad bucket offering available from the same retailer as your excavator means the machine can be easily adjusted to operate in any conditions.

As the technology and experience in design for both Volvo's attachments and excavators stems from the same origin, availing from another service like Volvo's aftermarket support ensures the machine is running harder for longer.



(GP) General purpose bucket

Designed for digging and re-handling soft to medium materials e.g. soils with low wear characteristics. The GP bucket has anti-abrasive side cutters, a hardened lip plate and self-sharpening bucket teeth.

(HD) Heavy-duty bucket

Intended for digging in dense materials such as hard packed clay and gravel. The HD bucket has heavier overall fabrication with a thicker side cutting edge and hardened plating on all critical ground-engaging areas.

(RK) Rock bucket

Together with harder and thicker plating on all critical leading edges the rock bucket provides digging performance in soils with a high degree of rock content and well blasted rock.

(ES) Extreme service bucket

Provides additional wear protection for use in high impact or wearing applications. Inner protection and D edge as standard.

(FD) Fixed ditching bucket

A wide face, round profile and drain holes make the FD bucket ideal for ditch cleaning or removal of other soft material. An inner stiffener and optional bolt-on cutting edge bolster performance.

VOLVO TOOTH SYSTEM



Self-Sharpening Tooth System Cuts Through the Toughest Jobs

Volvo perfects the excavator bucket's point of attack with a robust tooth system that delivers performance and long life. Cast and tempered from a high-strength alloy, Volvo teeth resist stress and deliver optimum penetration in hard or abrasive material. An innovative design lessens internal wear between tooth and adapter — and makes it easy to change teeth.

LOCKING DEVICE

Patented vertical locking device. The steel pin with flexible lock retainer tightly secures the tooth to the adapter. Smart design transfers working stresses away from the locking device, saving wear on the steel pin and extending pin life. Self-sharpening Volvo teeth are designed for a small penetration area, which reduces stress and wear at the point of contact.

GPE

Self-sharpening general-purpose tooth with good penetration and long service life.

AMRE

Self-sharpening tooth resists wear in rock and other abrasive materials.

PPE

Pick-point excavator tooth delivers maximum penetration in hard clay or frozen ground.

SNE

Spade nose tooth is designed for finishing work such as leveling, grading, cleaning & backfilling.

TPE

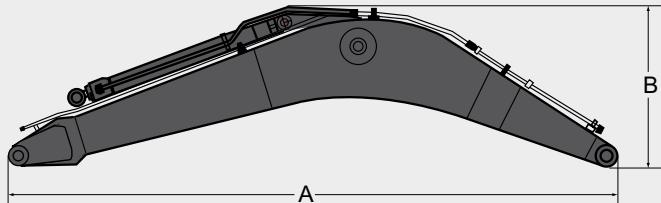
Twin pick point with sharp, dual-point profile is ideal for compact or frozen ground.

Wear Cap & BL Adapter

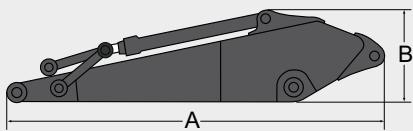
The wear cap protects the adapter from unnecessary wear.
BL: 11/2 bottom leg adapter for welding to both sides of the cutting edge

DIMENSIONS

Boom



Arm



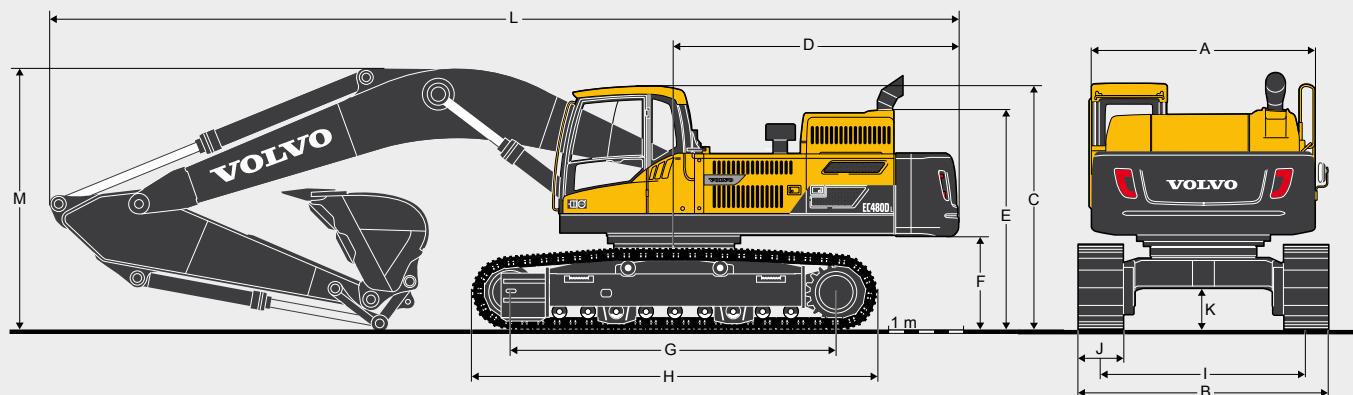
		EC340DL			EC380DL			EC480DL					EC340DL			EC380DL			EC480DL		
Description	Unit																				
Boom	m	6.2 ME	6.45	6.2 ME	6.45	6.5 ME	7.0	Arm	m	2.6	3.2	3.9	2.6	3.2	3.9	2.55	3.35	3.9	4.8		
	in	20'4"	21'2"	20'4"	21'2"	21'4"	23'		in	8'6"	10'6"	12'10"	8'6"	10'6"	12'10"	8'4"	11'	12'10"	15'9"		
Length	mm	6 460	6 700	6 460	6 700	6 750	7 250	Length	mm	3 780	4 360	5 080	3 780	4 360	5 080	3 770	4 590	5 140	6 100		
	in	21'2"	22'	21'2"	22'	22'2"	23'9"		in	12'5"	14'4"	16'8"	12'5"	14'4"	16'8"	12'4"	15'1"	16'10"	20'0"		
Height	mm	1 740	1 800	1 740	1 800	2 000	1 840	Height	mm	1 145	1 146	1 140	1 145	1 146	1 140	1 235	1 235	1 240	1 250		
	in	5'9"	5'11"	5'9"	5'11"	6'7"	6'		in	3'9"	3'9"	3'9"	3'9"	3'9"	3'9"	4'1"	4'1"	4'1"	4'1"		
Width	mm	820	820	820	820	960	960	Width	mm	560	560	560	560	560	560	600	600	600	600		
	in	2'8"	2'8"	2'8"	2'8"	3'2"	3'2"		in	1'10"	1'10"	1'10"	1'10"	1'10"	1'10"	2'	2'	2'	2'		
Weight	kg	3 353	3 146	3 353	3 346	4 127	4 176	Weight	kg	2 049	2 053	2 300	2 049	2 180	2 300	2 331	2 579	2 582	2 726		
	lb	7,390	6,940	7,390	7,380	9,100	9,210		lb	4,520	4,530	5,070	4,520	4,810	5,070	5,140	5,690	5,690	6,010		

*Includes arm cylinder, piping and pin

*Includes bucket cylinder, linkage and pin

SPECIFICATIONS.

DIMENSIONS

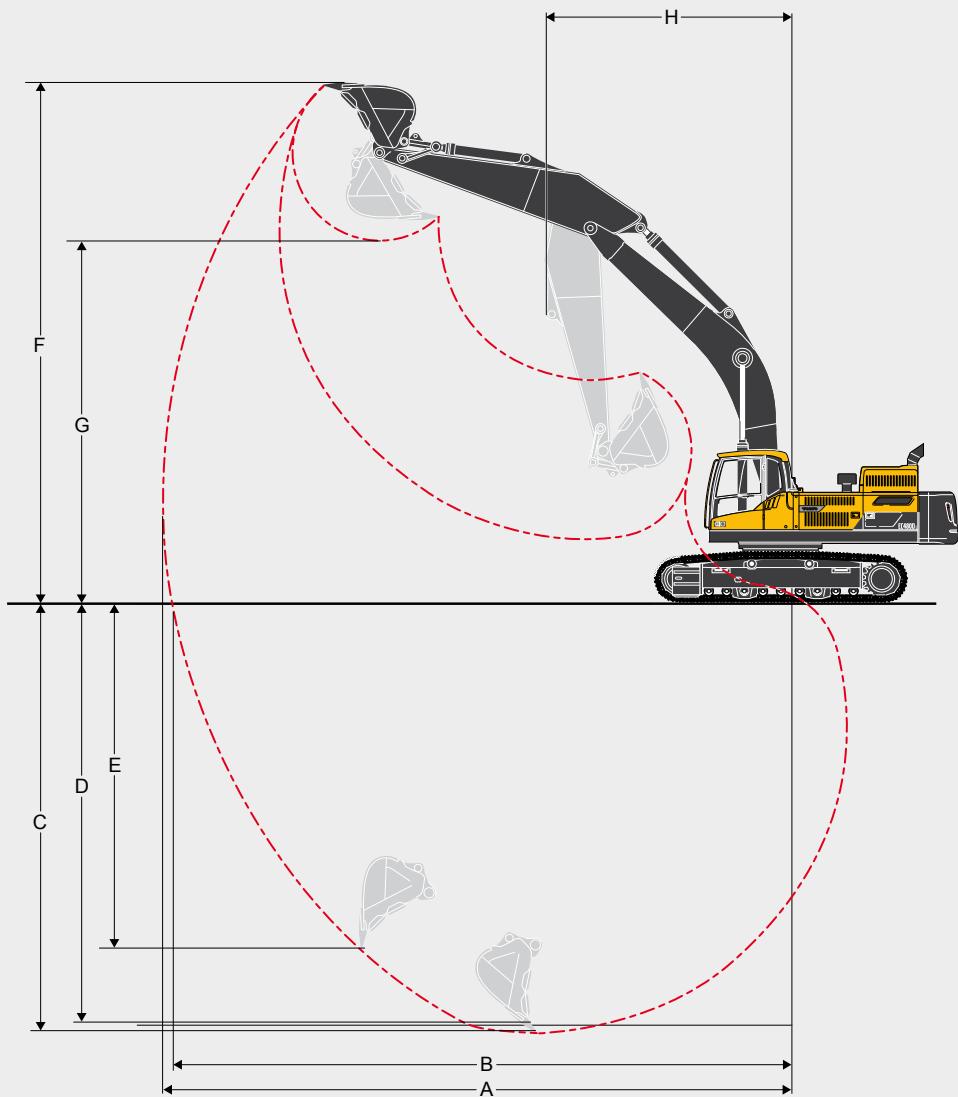


Description	Unit	EC340DL						EC380DL					
Boom	m, ft-in	6.2 ME 20'4"						6.45/21'2"					
Arm	m, ft-in	2.6 8'6" 2.6 8'6" 3.2 10'6" 3.9 12'10"						2.6 8'6" 2.6 8'6" 3.2 10'6" 3.9 12'10"					
A. Overall width of upper structure	mm, ft-in	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"
B. Overall width	mm, ft-in	3 390	11'1"	3 390	11'1"	3 390	11'1"	3 390	11'1"	3 540	11'7"	3 540	11'7"
C. Overall height of cab	mm, ft-in	3 225	10'7"	3 225	10'7"	3 225	10'7"	3 225	10'7"	3 225	10'7"	3 225	10'7"
D. Tail swing radius	mm, ft-in	3 560	11'8"	3 560	11'8"	3 560	11'8"	3 560	11'8"	3 560	11'8"	3 560	11'8"
E. Overall height of engine hood	mm, ft-in	2 900	9'6"	2 900	9'6"	2 900	9'6"	2 900	9'6"	2 900	9'6"	2 900	9'6"
F. Counterweight clearance*	mm, ft-in	1 210	4'	1 210	4'	1 210	4'	1 210	4'	1 210	4'	1 210	4'
G. Tumbler length	mm, ft-in	4 240	13'11"	4 240	13'11"	4 240	13'11"	4 240	13'11"	4 240	13'11"	4 240	13'11"
H. Track length	mm, ft-in	4 960	16'3"	4 960	16'3"	4 960	16'3"	4 960	16'3"	5 180	17'	5 180	17'
I. Track gauge	mm, ft-in	2 590	8'6"	2 590	8'6"	2 590	8'6"	2 590	8'6"	2 740	9'	2 740	9'
J. Shoe width	mm, ft-in	800	32"	800	32"	800	32"	800	32"	800	32"	800	32"
K. Min. ground clearance*	mm, ft-in	536	1'9"	536	1'9"	536	1'9"	536	1'9"	530	1'9"	530	1'9"
L. Overall length	mm, ft-in	11 020	36'2"	11 270	37'11	190	36'9"	11 240	36'11"	11 020	36'2"	11 280	37'0"
M. Overall height of boom	mm, ft-in	3 510	11'6"	3 460	11'4"	3 210	10'6"	3 480	11'5"	3 510	11'6"	3 530	11'7"

Description	Unit	EC480DL fixed undercarriage						EC480DL retractable undercarriage					
Boom	m, ft-in	6.5 ME 21'4"						7/23'					
Arm	m, ft-in	2.55	8'4"	2.55	8'4"	3.35	11'	3.9	12'10"	4.8	15'9"	2.55	8'4"
A. Overall width of upper structure	mm, ft-in	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"
B. Overall width (extended)	mm, ft-in	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 790	12'5"
Overall width (retracted)	mm, ft-in	-	-	-	-	-	-	-	-	-	-	3 290	10'10"
C. Overall height of cab	mm, ft-in	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 390	11'1"	3 390	11'1"
D. Tail swing radius	mm, ft-in	3 800	12'6"	3 800	12'6"	3 800	12'6"	3 800	12'6"	3 800	12'6"	3 800	12'6"
E. Overall height of engine hood	mm, ft-in	2 970	9'9"	2 970	9'9"	2 970	9'9"	2 970	9'9"	3 070	10'1"	3 070	10'1"
F. Counterweight clearance *	mm, ft-in	1 275	4'2"	1 275	4'2"	1 275	4'2"	1 275	4'2"	1 375	4'6"	1 375	4'6"
G. Tumbler length	mm, ft-in	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"
H. Track length	mm, ft-in	5 400	17'9"	5 400	17'9"	5 400	17'9"	5 400	17'9"	5 380	17'8"	5 380	17'8"
I. Track gauge (retracted)	mm, ft-in	2 740	9'	2 740	9'	2 740	9'	2 740	9'	2 390	7'10"	2 390	7'10"
Track gauge (extended)	mm, ft-in	-	-	-	-	-	-	-	-	-	-	2 890	9'6"
J. Shoe width	mm, ft-in	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"
K. Min. ground clearance *	mm, ft-in	560	1'10"	560	1'10"	560	1'10"	560	1'10"	746	2'5"	746	2'5"
L. Overall length	mm, ft-in	11 610	38'1"	12 110	39'9"	12 140	39'10"	12 130	39'10"	12 020	39'5"	11 620	38'1"
M. Overall height of boom	mm, ft-in	3 985	13'1"	3 890	12'9"	3 545	11'8"	3 570	11'9"	4 575	15'0"	4 015	13'2"

*Without shoe grousers

WORKING RANGES



Description	Unit	6.2 ME	20'4"	EC340DL					
	m, ft-in			6.45/21'2"					
Boom									
Arm	m, ft-in	2.6	8'6"	2.6	8'6"	3.2	10'6"	3.9	12'10"
A. Max. digging reach	mm, ft-in	10 440	34'3"	10 550	34'7"	11 070	36'4"	11 710	38'5"
B. Max. digging reach on ground	mm, ft-in	10 210	33'6"	10 330	33'11"	10 860	35'8"	11 520	37'10"
C. Max. digging depth	mm, ft-in	6 740	22'1"	6 850	22'6"	7 450	24'5"	8 150	26'9"
D. Max. digging depth (2,44 m, 8' level)	mm, ft-in	6 560	21'6"	6 650	21'10"	7 270	23'10"	8 000	26'3"
E. Max. vertical wall digging depth	mm, ft-in	5 260	17'3"	5 430	17'10"	5 870	19'3"	6 500	21'4"
F. Max. cutting height	mm, ft-in	10 070	33'0"	10 170	33'4"	10 340	33'11"	10 610	34'10"
G. Max. dumping height	mm, ft-in	6 810	22'4"	7 090	23'3"	7 280	23'11"	7 560	24'10"
H. Min. front slew radius	mm, ft-in	4 120	13'6"	4 320	14'2"	4 280	14'1"	4 300	14'1"
Digging forces with direct fit bucket									
Bucket radius	mm, ft-in	1 810	5'11"	1 623	5'4"	1 623	5'4"	1 623	5'4"
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN, lb	214.5	48,221	198	44,512	198	44,512	198
	SAE J1179	kN, lb	234.5	52,717	215	48,333	215	48,333	215
	ISO 6015	kN, lb	243.4	54,718	221.7	49,840	221.7	49,840	221.7
	ISO 6015	kN, lb	265.4	59,664	242.7	54,561	242.7	54,561	242.7
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN, lb	187.7	42,196	195.9	44,040	161.9	36,396	141.3
	SAE J1179	kN, lb	205.7	46,243	212.9	47,861	176.9	39,768	154.3
	ISO 6015	kN, lb	193.9	43,590	201.1	45,209	166	37,318	144.4
	ISO 6015	kN, lb	211.9	47,637	219.1	49,255	181	40,690	157.4
Rotation angle, bucket	°	164	164	177	177	177	177	177	177

EXPLANATION OF LIFTING CAPACITY TABLES

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

Example: LIFTING CAPACITY EC340DL

		Lifting Point		4.5m (15')				6m (20')				7.5m (25')				9m (30')			
				along		across		along		across		along		across		along		across	
		m	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	
Boom : 6.45m	9.0	30'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
+ 21'2"	7.5	25'	-	-	-	-	-	-	-	-	-	*8.2	*18240	8.1	17470	-	-	-	-
Arm : 3.9m	6	20'	-	-	-	-	-	-	-	-	-	*8.6	*18860	8.0	17250	*7.3	*13870	5.9	12630
+ 12'10"	4.5	15'	-	-	-	-	*10.5	*22740	*10.5	*22740	*9.5	*20690	7.8	16730	8.7	18740	5.8	12450	
Shoe : 800mm	3	10'	*16.6	*35730	16.0	34460	*12.6	*27300	10.4	22410	*10.7	*23160	7.5	16070	8.5	18390	5.6	12130	
+ 32'	1.5	5'	*20.3	*43860	14.9	32080	*14.7	*31720	9.8	21220	11.0	23730	7.2	15420	8.4	18010	5.5	11780	
CWT : 7050kg	0	0'	*22.4	*48420	14.3	30740	15.1	32510	9.4	20360	10.8	23160	6.9	14900	8.2	17710	5.3	11500	
15550 lb	-1.5	-5'	*22.9	*49570	14.1	30250	14.9	32000	9.2	19920	10.6	22840	6.8	14610	8.2	17580	5.3	11390	
	-3	-10'	*22.1	*47880	14.1	30320	14.8	31930	9.2	19850	10.6	22820	6.8	14590	-	-	-	-	
	-4.5	-15'	*19.9	*43010	14.3	30840	15.0	*32300	9.4	20190	-	-	-	-	-	-	-	-	
	-6.0	-20'	*15.4	*32550	14.8	32000	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:

- Machine in "Fine Mode-F" (Power Boost) for lifting capacities.

2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.

3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.

4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.



EQUIPMENT.

STANDARD EQUIPMENT

	EC340D	EC380D	EC480D
Engine			
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4i (Stage IIIB) requirements	•	•	•
Air filter with indicator	•	•	•
Air intake heater	•	•	•
Cyclone pre-cleaner	•	•	•
Electric engine shut-off	•	•	•
Fuel filter and water separator	•	•	•
Alternator, 80 A	•	•	•
Electric/Electronic control system			
Contronics	•	•	•
- Advanced mode control system	•	•	•
- Self-diagnostic system	•	•	•
CareTrack Satelite	•	•	•
CareTrack 3 yr subscription	•	•	•
Machine status indication	•	•	•
Engine speed sensing power control	•	•	•
Automatic idling system	•	•	•
One-touch power boost	•	•	•
Safety stop/start function	•	•	•
Adjustable LCD color monitor	•	•	•
Master electrical disconnect switch	•	•	•
Engine restart prevention circuit	•	•	•
High-capacity halogen lights:	•	•	•
- Frame-mounted 2	•	•	•
- Boom-mounted 2	•	•	•
Batteries, 2 x 12 V / 200 Ah	•	•	•
Start motor, 24 V / 7 kW	•	•	•
Travel alarm	•	•	•
Hydraulic system			
Automatic sensing hydraulic system	•	•	•
- 2-pump flow bucket circuit	•	•	•
- Summation system	•	•	•
- Boom priority	•	•	•
- Arm priority	•	•	•
- Swing priority	•	•	•
Boom, arm regeneration valves	•	•	•
Swing anti-rebound valves	•	•	•
Boom and arm holding valves	•	•	•
Multi-stage filtering system	•	•	•
Cylinder cushioning	•	•	•
Cylinder contamination seals	•	•	•
Auxiliary hydraulic valve	•	•	•
Automatic two-speed travel motors	•	•	•
Hydraulic oil, longlife oil 46	•	•	•
Frame			
Access way with handrail	•	•	•
Tool storage area	•	•	•
Punched metal anti-slip plates	•	•	•
Undercover (heavy-duty)	•	•	•
Full height counterweight:			
7 000kg(15,440 lb)	•		
7 550kg(16,650 lb)		•	
9 750kg(21,500 lb)			•
Cab and interior			
ROPS (ISO12117-2) certified cab	•	•	•
Silicon oil and rubber mounts with spring	•	•	•
Pilot control pattern change	•	•	•
Travel pedals and hand levers	•	•	•
Straight Travel pedal	•	•	•
Fabric seat with heater	•	•	•
Adjustable operator seat and joystick control console	•	•	•
Control joysticks with 4 switches each	•	•	•
Heater & air-conditioner, automatic	•	•	•
Flexible antenna	•	•	•
AM/FM stereo with CD player and MP3 input	•	•	•
Control lock out lever	•	•	•

	EC340D	EC380D	EC480D
Cab, all-weather sound suppressed, includes:	•	•	•
- Cup holders	•	•	•
- Door locks	•	•	•
- Tinted glass	•	•	•
- Floor mat	•	•	•
- Horn	•	•	•
- Large storage area	•	•	•
- Pull-up type front window	•	•	•
- Removable lower windshield	•	•	•
- Seat belt	•	•	•
- Safety glass	•	•	•
- Sun screens, front, roof, rear	•	•	•
- Windshield wiper with intermittent feature	•	•	•
Opening top hatch	•	•	•
Rear view camera	•	•	•
Master key	•	•	•
Undercarriage			
Undercover (heavy-duty)	•	•	•
Hydraulic track adjusters	•	•	•
Greased and sealed track link	•	•	•
Track Guard	•	•	•
Track shoes			
800 mm (32") with triple grousers	•	•	
900 mm (36") with triple grousers			•
Digging equipment			
Boom: 6,45 m (21'2") GP	•		
Boom: 6,45 m (21'2") HD		•	
Boom: 7.0 m (23') HD			•
Arm: 3.2 m (10'6") GP		•	
Arm: 3.2 m (10'6") HD			•
Arm: 3.35 m (11') HD			•
Linkage without lifting eye	•	•	•
Manual centralized lubrication	•	•	•
Service			
Cab entrance platform	•	•	•

OPTIONAL EQUIPMENT

	EC340D	EC380D	EC480D
Engine			
Block heater: 120 V	•	•	•
Oil bath pre-cleaner	•	•	•
Diesel coolant heater, 10 kW	•	•	•
Water separator with heater	•	•	•
Auto engine shutdown	•	•	•
Electric			
Extra lights:	•	•	•
- Cab-mounted 3	•	•	•
- Boom-mounted 2	•	•	•
- Counterweight-mounted 1	•	•	•
Anti-theft system	•	•	•
Rotating warning beacon	•	•	•
Fuel filler pump: 50 l/min (13.2 gpm), with automatic shut-off	•	•	•
Hydraulic system			
Hose rupture valve: boom	•	•	•
Hose rupture valve: arm	•	•	•
Overload warning device	•	•	•
Boom float function	•	•	•

OPTIONAL EQUIPMENT

	EC340D	EC380D	EC480D
Hydraulic piping:			
- Work tool management system (up to 18 programmable memories)	•	•	•
- Hammer & shear, 1 and 2 pump flow	•	•	•
- Hammer & shear: variable flow and pressure pre-setting	•	•	•
- Additional return filter	•	•	•
- Slope & rotator	•	•	•
- Grapple	•	•	•
- Oil leak (drain) line	•	•	•
- Quick coupler piping	•	•	•
Volvo hydraulic quick coupler S3	•	•	•
Volvo hydraulic quick coupler U36	•	•	
Volvo hydraulic quick coupler U46			•
Hydraulic oil, biodegradable 46	•	•	•
Hydraulic oil, longlife oil 32	•	•	•
Hydraulic oil, longlife oil 68	•	•	•
Frame			
Hydraulic removable counterweight		•	
Full height counterweight:			
5 800 kg (12,790 lb), 6 500 kg (14,330 lb)	•		
6 500 kg (14,330 lb), 7 000 kg (15,440 lb)		•	
8 450 kg (18,630 lb), 9 050 kg (19,960 lb)		•	
Cab and interior			
Fabric seat with heater and air suspension	•	•	•
Fixed top hatch	•	•	•
Rain shield	•	•	•
Falling object guard (FOG)	•	•	•
- Frame-mounted	•	•	•
- Cab-mounted	•	•	•
Cab-mounted falling object protective structure (FOPS)	•	•	•
Ashtray and Lighter	•	•	•
Safety net for front window	•	•	•
Lower wiper with intermittent control	•	•	•
Anti-vandalism kit	•	•	•
Undercarriage			
Full track guard	•	•	•
Mechanically retractable width track gauge			•
Track shoes			
600/700/900 mm (24"/28"/36") with triple grousers	•	•	
600/700/800 mm (24"/28"/32") with triple grousers			•
Track shoes 600 mm (24") with double grousers	•	•	•
Digging equipment			
Boom: 6.2 m (20'4") ME	•	•	
Boom: 6.5 m (21'4") ME			•
Arm: 2.6 m (8'6") HD, 3.9 m (12'10")	•	•	
Arm: 2.55 m (8'4") HD, 3.9 m (12'10"), 4.8 m (15'9")			•
Linkage with lifting eye	•	•	•
Service			
Walk way, full, left hand side	•	•	•
Tool kit, daily maintenance	•	•	•
Tool kit, full scale	•	•	•
Automatic lubrication system	•	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT



VOLVO CONSTRUCTION EQUIPMENT



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 175 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.

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