VOLVO EXCAVATOR

EC160B PRIME

16.5 – 18.4 t, 122 metric hp

MORE CARE. BUILT IN.

TAKE A TOUR. EXPERIENCE THE EC160B PRIME.

MORE SAFETY

- **Safety** is a **core value** at Volvo and it shows in our machine.
- **Anti-slip steps and platforms** with punched steel plates for superior grip even when wet or icy.
- **Low engine emission levels and low noise.**
- **Tumbler length** ensures stability.
- **Recessed bolts on superstructure** walk areas for less risk of trip hazard.
- **Lead-free exterior paint** is in harmony with the environment.

MORE PROFIT

- **Powerful, innovative and efficient Volvo engine:** well-matched to hydraulic system, components and design.
- Volvo continues to deliver **industry-leading fuel efficiency.**
- **Advanced hydraulic system** with priority functions and optional float position.
- **Optional hydraulic quick fit** increases versatility.

MORE COMFORT

- **Large and comfortable cab** puts you in command with ergonomic controls.
- **Roomy, adjustable seat** supports your whole body.
- **Top-mounted windshield wiper** cleans a wider area – including both upper corners.
- **Vibration dampening** protects against whole body fatigue for all-day productivity.
- **Electronic climate control system** delivers the highest-capacity heating and cooling available.

MORE UPTIME

- **Simplified, ground level serviceability** means more uptime.
- **Easy access, centralized lubrication points.**
- **Easy to learn. Easy to operate. Easy to get more done.**

MORE QUALITY

- **Strengthened undercarriage frame** endures daily abuse.
- **Reinforced boom/arm and proven components** deliver every time.
- **Reinforced superstructure** with double welded corners.
- **Lifetime greased, sealed track link** prevents leaks and guarantees long life.

VOLVO – A PARTNER TO TRUST.

Your machine and your word. The two things that matter most to the growth of your success. Trust the Volvo EC160B prime Excavator to help you keep both working for you. And because you can rely on Volvo uptime, you can keep moving — on to the next job. Its versatility is ideal for small-scale contractors or owner/operators. Perfect for general drainage, landscaping, footings and road maintenance, the Volvo EC160B prime is ready to be your partner. And with proven, industry-leading fuel economy and an enhanced Volvo Care Cab — this trusted partner will help you pay the bills everyday.

Your local partner around the globe
Since 1927, Volvo has earned a global reputation for providing complete solutions. Volvo is built on core values of quality, safety and environmental care. The extensive line of construction equipment is augmented by Volvo's commercial transport solutions, including buses and trucks. This global experience and expertise have led to the ongoing development of engines with the lowest fuel consumption in their class. Today, the tradition continues with Volvo B prime-Series Excavators — designed and built to the exacting standards that make each machine a trusted Volvo partner.

The protection of Volvo quality
Test the competitors — then test the Volvo EC160B prime. The difference is obvious: Volvo builds more care and quality throughout — from the well-built cab details to the reinforced service doors to the rigid, longlife undercarriage. If you have ever owned or operated a Volvo Wheel Loader, Articulated Hauler or any one of our full scope of global equipment offerings, you know that Volvo stands for quality, comfort and safety. You can trust the Volvo EC160B prime Excavator to be the partner you can rely on — year after year.

Volvo innovates comfort – again
Volvo is known as an innovative leader in comfort. That's because Volvo listens to customers — and then intelligently uses technology and constant improvements to deliver. The EC160B prime carries on the tradition with a larger, more ergonomic work environment. Visibility is better. So are the seat, floor space and access to controls. Take command.

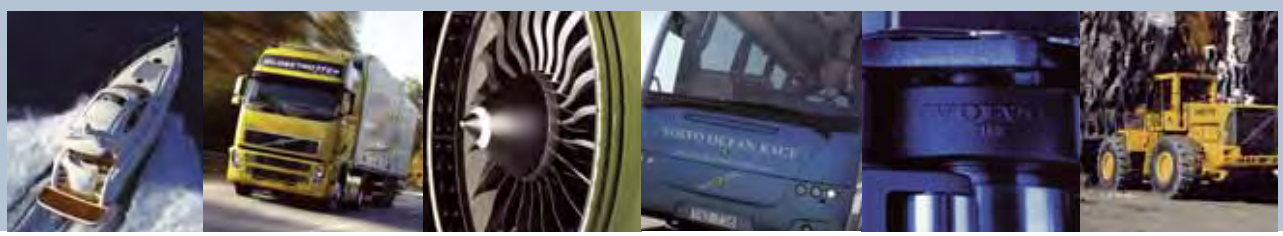
Better fuel economy: your edge
Volvo is also known for fuel efficiency. Once again, Volvo doesn't rest on reputation and the EC160B prime is set to remain the industry leader that gets the most out of each tank. Volvo: your most fuel-efficient option.

Ease into your application
From digging foundations and pools, landscaping and stump removal to pipe laying, loading and trenching, the versatile Volvo EC160B prime Excavator makes your work easier.

Strength and endurance
When you face brutal terrain and long workdays, it's nice to know your excavator is up to the challenge. The Volvo EC160B prime answers with proven booms and arms that have been designed and tested to live up to high Volvo standards. The Volvo EC160B prime Excavator will help you get the job done so you can move on to the next job — and the next pay check.

VOLVO'S ENGINE LEADERSHIP SPANS LAND, SEA, SKY AND SPACE

As the world's second largest manufacturer of 9-to18-liter diesel engines, Volvo has unmatched expertise designing power systems that move the world. Volvo engines for Volvo Construction Equipment, Volvo Aero, Volvo Buses, Volvo Penta and Volvo Trucks define productivity and fuel economy. Our performance has been honed on land, over the sea, across the sky and into space. Leading research and development keeps all Volvo Group products at the forefront of productivity. So when we say Volvo engines are tested — and proven — you can believe it. Trust in it. It's the real advantage of Volvo Power.



BUILT TO RUN – SUPPORTED FOR LIFE.

Even the best machines need service and maintenance to be as productive tomorrow as they are today. With superior attention to detail, we've created a productivity chain of machines, parts and service. Our global Customer Support organization delivers the values you've come to expect from Volvo Construction Equipment.

We care about your operation – anywhere, anytime
Volvo Construction Equipment comes with a professional Customer Support organization providing genuine parts, aftersale service and training - providing you with controlled owning and operation costs. With all the products and resources at our disposal, we can offer you the best support there is. Anywhere, anytime.

Four levels of support, one level of care
The best way to get the most out of your Volvo is to invest in a Volvo Customer Support Agreement. Since business' needs vary, we've made it easy for you to select the agreement that's right for your business by creating four levels of Customer Support Agreements. We offer programs that provide everything from regular machine inspections to a comprehensive repair and maintenance program that takes the hassle and worry out of running a workshop and gives you total peace of mind.

CareTrack – fast and correct information
CareTrack is an optional GPS monitoring program that works with the machine's diagnostic system. Installation is simple. You and your dealer can remotely track usage, productivity, fuel consumption and more. Maximize uptime through important service reminders. CareTrack also monitors geographic machine location and can even prevent unauthorized use. With CareTrack, you can focus on the care of your business while your Volvo dealer focuses on the care of your machine.

MATRIS reports on your efficiency
MATRIS delivers detailed operating history analysis about the utilization and efficiency factors that influence your operating costs. MATRIS turns the data captured inside the machine's computer into easy-to-use graphs and reports. Maximize machine and operator performance, while reducing maintenance costs and increasing service life.

PROSIS makes parts ordering faster
PROSIS is a CD-ROM application that makes it quick and easy for your Volvo dealer to order all your Volvo CE product parts. Your dealer will help you find the right part, place your order and get you back up and running fast.

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.


VOLVO

SPECIFICATIONS

Engine

The new Volvo diesel engine delivers lower emissions, superior performance and fuel efficiency. The engine uses precise, high-pressure fuel injectors turbo charger and electronic engine controls to optimize machine performance.

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.

Engine	Volvo D6D
Power output at	32 r/s (1,900 rpm)
Net (ISO 9249/SAE J1349)	81 kW (110 metric hp)
Gross (SAE J1995)	90 kW (122 metric hp)
Max. torque at 1,450 rpm	542 Nm
No. of cylinders	6
Displacement	5.7 l
Bore	98 mm
Stroke	126 mm

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.

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

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	150 Ah
Alternator	28 V/80 A

Service refill capacities

Fuel tank	260 l
Hydraulic system, total	245 l
Hydraulic tank	120 l
Engine oil	25 l
Engine coolant	22 l
Swing reduction unit	2.6 l
Travel reduction unit	2 x 5.8 l

Swing system

The superstructure is swung by the means of an axial piston motor and a planetary reduction gear. Automatic swing holding brake and anti-rebound valve are standard.

Max. swing speed	11.9 rpm

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. tractive effort	145 kN (14,790 kg)
Max. travel speed	3.0/5.6 km/h
Gradeability	35° (70%)

Undercarriage

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

No. of track pads	2 x 44
Link pitch	190 mm
Shoe width, triple grouser	500/600/700/800 mm
No. of bottom rollers	2 x 7
No. of top rollers	2 x 2

Hydraulic system

The hydraulic system, also known as the "Automatic Work Mode", is designed for high-productivity, high-digging capacity, high-maneuvering precision and good fuel economy. The summation system, boom, arm and swing priority along with boom and arm regeneration provide 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.

Main pump	
Type	2 x variable displacement axial piston pumps
Maximum flow	2 x 145 l/min
Pilot pump	
Type	Gear pump
Maximum flow	1 x 19 l/min

Hydraulic motors	
Travel	Variable displacement axial piston motors with mechanical brake
Swing	Fixed displacement axial piston motor with mechanical brake

Relief valve setting	
Implement	32.4/34.3 Mpa (330/350 kg/cm²)
Travel system	34.3 Mpa (350 kg/cm²)
Swing system	26.5 Mpa (270 kg/cm²)
Pilot system	3.9 Mpa (40 kg/cm²)

Hydraulic cylinders	
Boom	2
Bore x Stroke	ø115 x 1,165 mm
1st boom of 2-piece boom	2
Bore x Stroke	ø115 x 1,165 mm
2nd boom of 2-piece boom	1
Bore x Stroke	ø160 x 950 mm
Arm	1
Bore x Stroke	ø120 x 1,345 mm
Bucket	1
Bore x Stroke	ø105 x 1,000 mm

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling and the lower front glass can be removed and stored in the side door.

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 13 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 in cab according to ISO 6396:	LpA 72 dB(A)
External sound level according to ISO 6395 and EU Directive 2000/14/EC:	LwA 101 dB(A)

Ground pressure

• **EC160B LC prime** with 5.2 m boom, 2.6 m arm, 570 l (470 kg) bucket and 2,850 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	16,580 kg	47.0 kPa (0.48 kg/cm²)	2,700 mm
	600 mm	16,800 kg	39.7 kPa (0.40 kg/cm²)	2,800 mm
	700 mm	17,010 kg	34.4 kPa (0.35 kg/cm²)	2,900 mm
	800 mm	17,230 kg	30.5 kPa (0.31 kg/cm²)	3,000 mm

• **EC160B LC prime dozer blade** with 5.2 m boom, 2.6 m arm, 570 l (470 kg) bucket and 2,850 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	17,710 kg	50.2 kPa (0.51 kg/cm²)	2,800 mm
	600 mm	17,930 kg	42.4 kPa (0.43 kg/cm²)	2,800 mm
	700 mm	18,140 kg	36.7 kPa (0.37 kg/cm²)	2,900 mm
	800 mm	18,360 kg	32.5 kPa (0.33 kg/cm²)	3,000 mm

• **EC160B NLC prime** with 5.2 m boom, 2.6 m arm, 570 l (470 kg) bucket and 2,850 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	16,480 kg	46.7 kPa (0.48 kg/cm²)	2,490 mm
	600 mm	16,700 kg	39.5 kPa (0.40 kg/cm²)	2,590 mm
	700 mm	16,910 kg	34.2 kPa (0.35 kg/cm²)	2,690 mm
	800 mm	17,130 kg	30.4 kPa (0.31 kg/cm²)	2,790 mm

• **EC160B NLC prime dozer blade** with 5.2 m boom, 2.6 m arm, 570 l (470 kg) bucket and 2,850 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	17,610 kg	49.9 kPa (0.51 kg/cm²)	2,590 mm
	600 mm	17,830 kg	42.1 kPa (0.43 kg/cm²)	2,590 mm
	700 mm	18,040 kg	36.5 kPa (0.37 kg/cm²)	2,690 mm
	800 mm	18,260 kg	32.4 kPa (0.33 kg/cm²)	2,790 mm

Max. permitted buckets

Notes: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.
2. "Max. permitted sizes" are for reference only and are not necessarily available from the factory.
3. Bucket widths are less than bucket's tip radius.

• **EC160B LC prime** with **direct fit bucket,** 2,850 kg counterweight.

Description	Max. bucket volume / weight	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
GP bucket 1.5 t/m³	l / kg	1,225/1,000	1,025/850	850/700
GP bucket 1.8 t/m³	l / kg	1,075/900	900/750	750/600

• **EC160B LC prime** with **S1 quick fit bucket,** 2,850 kg counterweight.

Description	Max. bucket volume / weight	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
GP bucket 1.5 t/m³	l / kg	1,125/950	950/800	750/600
GP bucket 1.8 t/m³	l / kg	1,000/850	825/700	675/550

• **EC160B LC prime** with **S6 quick fit bucket,** 2,850 kg counterweight.

Description	Max. bucket volume / weight	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
GP bucket 1.5 t/m³	l / kg	1,150/950	975/800	775/650
GP bucket 1.8 t/m³	l / kg	1,025/850	850/700	700/550

• **EC160B NLC prime** with **direct fit bucket,** 2,850 kg counterweight.

Description	Max. bucket volume / weight	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
GP bucket 1.5 t/m³	l / kg	1,125/950	1,025/850	850/700
GP bucket 1.8 t/m³	l / kg	1,000/850	900/750	750/600

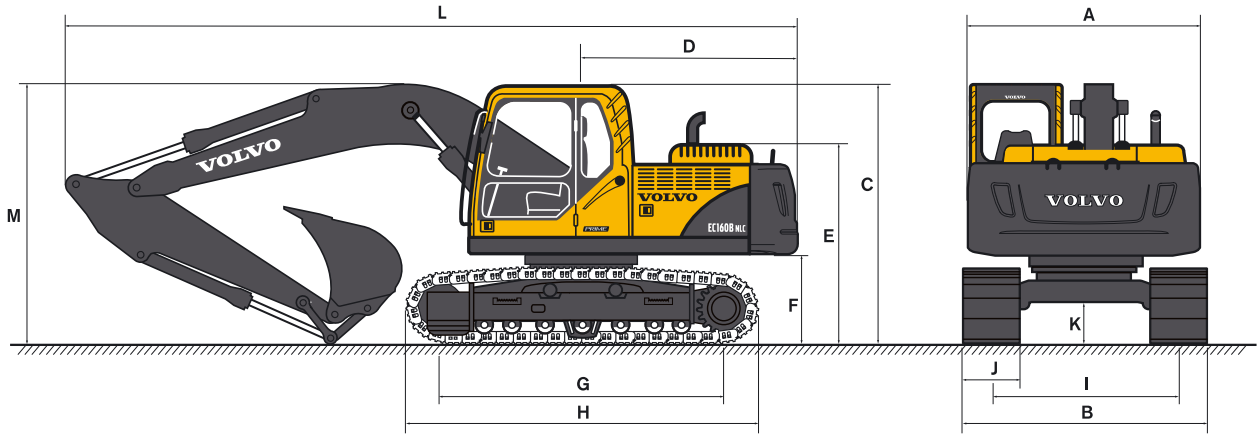
• **EC160B NLC prime** with **S1 quick fit bucket,** 2,850 kg counterweight.

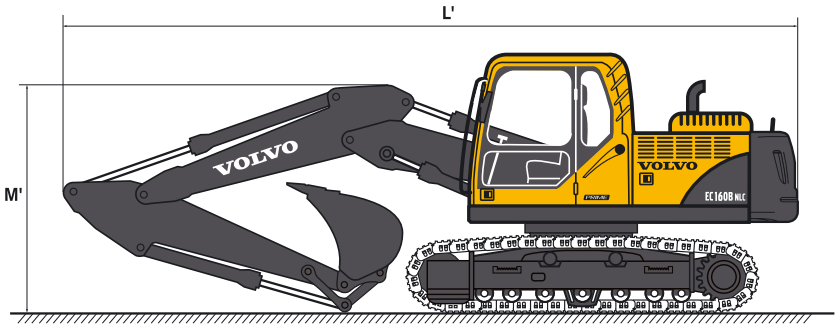
Description	Max. bucket volume / weight	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
GP bucket 1.5 t/m³	l / kg	1,025/850	950/800	750/600
GP bucket 1.8 t/m³	l / kg	900/750	825/700	675/550

• **EC160B NLC prime** with **S6 quick fit bucket,** 2,850 kg counterweight.

Description	Max. bucket volume / weight	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
GP bucket 1.5 t/m³	l / kg	1,050/900	975/800	775/650
GP bucket 1.8 t/m³	l / kg	925/800	850/700	700/550

Dimensions



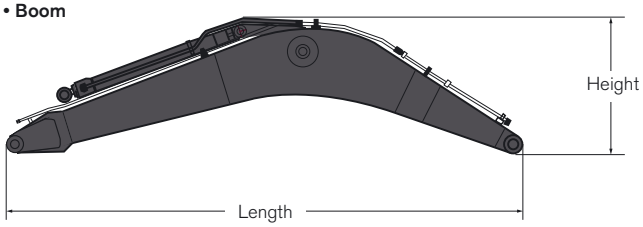


Description	Unit	LC prime			LCM prime		
		4.6 m boom			4.6 m boom		
		2.1 m arm	2.5 m arm	3.0 m arm	2.1 m arm	2.5 m arm	3.0 m arm
A. Overall width of superstructure	mm	2,450	2,450	2,450	2,450	2,450	2,450
B. Overall width	mm	2,590	2,590	2,590	2,690	2,690	2,690
C. Overall height of cab	mm	2,770	2,770	2,770	2,960	2,960	2,960
D. Tail swing radius	mm	2,200	2,200	2,200	2,200	2,200	2,200
E. Overall height of engine hood	mm	2,080	2,080	2,080	2,270	2,270	2,270
F. Counterweight clearance *	mm	900	900	900	1,080	1,080	1,080
G. Tumbler length	mm	3,000	3,000	3,000	3,000	3,000	3,000
H. Track length	mm	3,740	3,740	3,740	3,790	3,790	3,790
I. Track gauge	mm	1,990	1,990	1,990	1,990	1,990	1,990
J. Shoe width	mm	600	600	600	700	700	700
K. Min. ground clearance *	mm	430	430	430	540	540	540
L. Overall length	mm	7,700	7,700	7,580	7,670	7,690	7,650
L'. Overall length	mm	7,680	7,620	7,390	7,700	7,670	7,490
M. Overall height of boom	mm	2,710	2,830	3,210	2,780	2,900	3,160
M'. Overall height of boom	mm	2,720	2,950	3,350	2,820	2,990	3,370

* Without shoe grouser

Dimensions

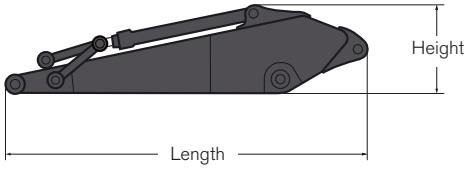
• **Boom**



Description	Unit	5.2 m	5.0 m 2-piece
Length	mm	5,400	5,200
Height	mm	1,640	1,270
Width	mm	565	565
Weight	kg	1,350	1,600

* Includes cylinder, pin and piping

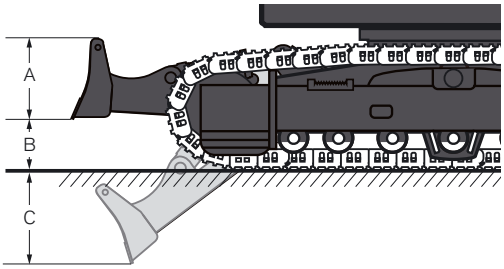
• **Arm**



Description	Unit	2.3 m	2.6 m	3.0 m
Length	mm	3,240	3,500	3,900
Height	mm	855	855	845
Width	mm	395	395	395
Weight	kg	760	775	840

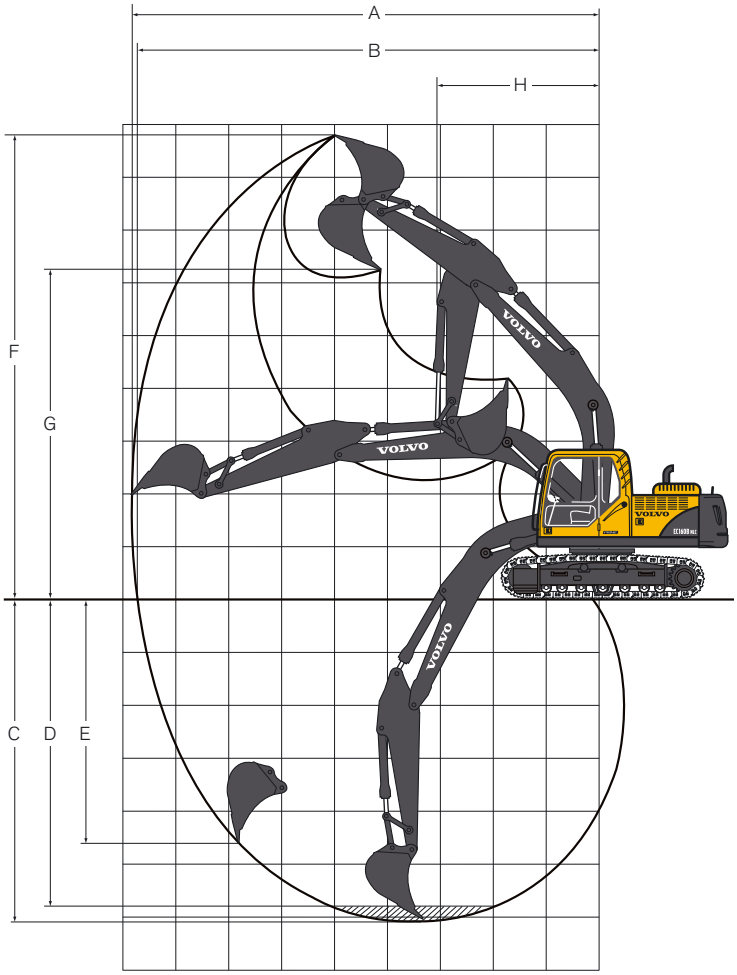
* Includes cylinder, piping and linkage

• **Front dozer blade**



Description	Unit	Measurement	
		LC	NLC
A. Height	mm	516	516
Width	mm	2,800	2,590
Weight	kg	600	575
B. Lift height	mm	710	710
C. Digging depth	mm	607	607

Working ranges & digging forces

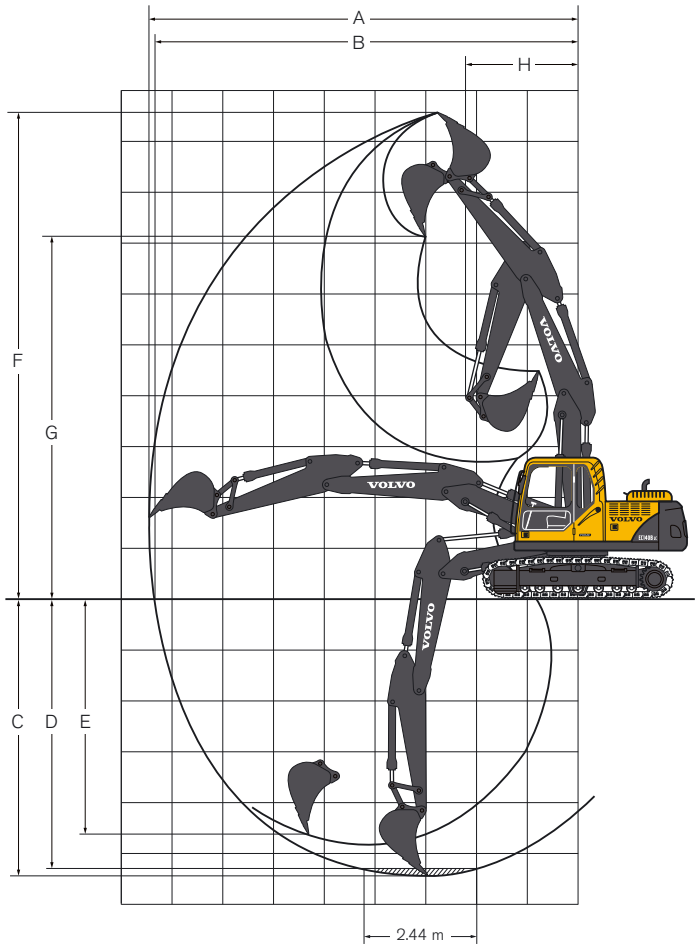


2.44 m

Machine with direct fit bucket	Unit	5.2 m boom		
		2.3 m arm	2.6 m arm	3.0 m arm
A. Max. digging reach	mm	8,650	8,970	9,340
B. Max. digging reach on ground	mm	8,490	8,810	9,180
C. Max. digging depth	mm	5,740	6,040	6,440
D. Max. digging depth (2.44 m level)	mm	5,430	5,770	6,200
E. Max. vertical wall digging depth	mm	4,070	4,540	4,960
F. Max. cutting height	mm	8,530	8,790	9,000
G. Max. dumping height	mm	6,110	6,340	6,540
H. Min. front swing radius	mm	3,070	3,070	3,070

Digging forces with direct fit bucket		Unit	5.2 m boom		
			2.3 m arm	2.6 m arm	3.0 m arm
Bucket radius		mm	1,315	1,315	1,315
Breakout force – bucket (Normal/Power boost)	SAE J1179	kN	99.2/105.2	99.2/105.2	99.2/105.2
	ISO 6015	kN	111.3/118.1	111.3/118.1	111.3/118.1
Tearout force – arm (Normal/Power boost)	SAE J1179	kN	84.9/90.1	75.5/80.0	68.4/72.6
	ISO 6015	kN	87.3/92.6	77.4/82.1	69.9/74.1
Rotation angle, bucket		deg	174	174	174

Working ranges & digging forces



Machine with direct fit bucket	Unit	LC prime			LCM prime		
		4.6 m 2-piece boom			4.6 m 2-piece boom		
		2.1 m arm	2.5 m arm	3.0 m arm	2.1 m arm	2.5 m arm	3.0 m arm
A. Max. digging reach	mm	8,050	8,440	8,930	8,050	8,440	8,930
B. Max. digging reach on ground	mm	7,910	8,300	8,800	7,880	8,270	8,780
C. Max. digging depth	mm	5,060	5,450	5,960	4,900	5,300	5,800
D. Max. digging depth (2.44 m level)	mm	4,940	5,340	5,850	4,780	5,180	5,690
E. Max. vertical wall digging depth	mm	4,270	4,660	5,190	4,120	5,400	5,040
F. Max. cutting height	mm	9,250	9,610	10,090	9,400	9,770	10,240
G. Max. dumping height	mm	6,780	7,140	7,630	6,930	7,290	7,780
H. Min. front swing radius	mm	1,960	2,220	2,640	1,960	2,220	2,640

Digging forces with direct fit bucket		Unit	LC prime			LCM prime		
			4.6 m 2-piece boom			4.6 m 2-piece boom		
			2.1 m arm	2.5 m arm	3.0 m arm	2.1 m arm	2.5 m arm	3.0 m arm
Bucket radius		mm	1,250	1,250	1,250	1,250	1,250	1,250
Breakout force – bucket (Normal / Power boost)	SAE J1179	kN	82.4 / 87.3	82.4 / 87.3	82.4 / 87.3	82.4 / 87.3	82.4 / 87.3	82.4 / 87.3
	ISO 6015	kN	93.2 / 98.1	93.2 / 98.1	93.2 / 98.1	93.2 / 98.1	93.2 / 98.1	93.2 / 98.1
Tearout force – arm (Normal / Power boost)	SAE J1179	kN	69.6 / 73.5	61.8 / 65.7	54.9 / 58.8	69.6 / 73.5	61.8 / 65.7	54.9 / 58.8
	ISO 6015	kN	71.6 / 75.5	63.7 / 67.7	56.9 / 59.8	71.6 / 75.5	63.7 / 67.7	56.9 / 59.8
Rotation angle, bucket		deg	174	174	173	174	174	173

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 fit from the following values.

• EC160B LC prime

Across undercarriage / Along undercarriage	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
															Max. mm
Boom 5.2 m + Arm 2.3 m + Shoe 600 mm + Counterweight 2,850 kg	6.0 m	kg											*4,210	3,680	5,880
	4.5 m	kg					*4,670	*4,670	*4,380	3,500			4,110	2,890	6,760
	3.0 m	kg					*6,170	5,130	4,830	3,360			3,640	2,540	7,220
	1.5 m	kg					7,240	4,800	4,680	3,210			3,470	2,410	7,340
	0 m	kg					7,030	4,610	4,560	3,100			3,560	2,450	7,140
	-1.5 m	kg			*9,840	8,660	6,980	4,570	4,520	3,070			3,970	2,710	6,590
	-3.0 m	kg			*12,170	8,810	7,050	4,640					5,080	3,440	5,590
	-4.5 m	kg													
Boom 5.2 m + Arm 2.6 m + Shoe 600 mm + Counterweight 2,850 kg	6.0 m	kg							*3,900	3,600			*3,830	3,340	6,270
	4.5 m	kg					*4,300	*4,300	*4,120	3,540			*3,760	2,690	7,100
	3.0 m	kg			*9,120	*9,120	*5,810	5,200	*4,770	3,390	3,440	2,400	3,410	2,380	7,540
	1.5 m	kg					7,280	4,840	4,690	3,230	3,370	2,340	3,270	2,270	7,650
	0 m	kg			*5,100	*5,100	7,040	4,620	4,560	3,110			3,340	2,300	7,460
	-1.5 m	kg	*5,250	*5,250	*9,000	8,600	6,960	4,550	4,500	3,050			3,670	2,520	6,940
	-3.0 m	kg	*9,380	*9,380	*12,590	8,740	7,010	4,600					4,560	3,100	6,000
	-4.5 m	kg			*10,100	9,040							*6,960	5,040	4,350
Boom 5.2 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,850 kg	6.0 m	kg							*3,450	*3,450			*3,240	3,000	6,720
	4.5 m	kg							*3,750	3,560			*3,180	2,460	7,500
	3.0 m	kg			*7,710	*7,710	*5,270	5,260	*4,430	3,400	3,440	2,400	3,160	2,200	7,910
	1.5 m	kg			*5,140	*5,140	*6,970	4,870	4,700	3,230	3,360	2,320	3,030	2,090	8,020
	0 m	kg			*5,570	*5,570	7,030	4,610	4,540	3,080	3,280	2,250	3,080	2,110	7,840
	-1.5 m	kg	*4,800	*4,800	*8,430	*8,430	6,910	4,500	4,460	3,010			3,350	2,290	7,350
	-3.0 m	kg	*8,160	*8,160	*13,000	8,590	6,930	4,520	4,470	3,020			4,030	2,740	6,470
	-4.5 m	kg			*11,010	8,850	7,100	4,670					6,060	4,050	4,990

Notes: 1. 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.

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 fit from the following values.

• EC160B LC prime

Across undercarriage / Along undercarriage	Lifting hook related to ground level	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
														Max. mm
2-piece boom 5.0 m + Arm 2.3 m + Shoe 600 mm + Counterweight 2,850 kg	7.5 m kg											*5,560	*5,560	4,120
	6.0 m kg					*6,450	5,680					*4,800	3,760	5,740
	4.5 m kg			*7,860	*7,860	*6,990	5,480	4,970	3,450			4,190	2,910	6,640
	3.0 m kg					7,630	5,100	4,820	3,310			3,690	2,540	7,110
	1.5 m kg					7,220	4,740	4,650	3,160			3,520	2,410	7,230
	0 m kg					6,990	4,540	4,530	3,050			3,620	2,460	7,030
	-1.5 m kg			*10,050	8,550	6,950	4,510	4,510	3,030			4,060	2,750	6,470
	-3.0 m kg					*5,350	4,610					*4,090	3,610	5,380
2-piece boom 5.0 m + Arm 2.6 m + Shoe 600 mm + Counterweight 2,850 kg	7.5 m kg					*4,790	*4,790					*4,350	*4,350	4,670
	6.0 m kg					*5,550	*5,550	*4,290	3,540			*3,790	3,390	6,140
	4.5 m kg			*5,870	*5,870	*6,360	5,550	5,020	3,500			*3,650	2,700	6,980
	3.0 m kg			*11,810	9,780	7,710	5,170	4,850	3,350			3,450	2,380	7,430
	1.5 m kg					7,270	4,790	4,670	3,170	3,340	2,280	3,300	2,260	7,550
	0 m kg			*5,630	*5,630	7,010	4,550	4,530	3,050			3,380	2,300	7,355
	-1.5 m kg			*9,670	8,490	6,930	4,490	4,490	3,010			3,750	2,540	6,830
	-3.0 m kg					*5,940	4,560					*3,950	3,190	5,860
2-piece boom 5.0 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,850 kg	7.5 m kg					*4,650	*4,650					*3,600	*3,600	5,270
	6.0 m kg					*4,680	*4,680	*4,340	3,600			*3,200	3,030	6,600
	4.5 m kg					*5,140	*5,140	5,060	3,530			*3,080	2,460	7,390
	3.0 m kg			*10,820	10,110	*7,350	5,250	4,880	3,370	3,410	2,350	*3,130	2,190	7,810
	1.5 m kg			*6,320	*6,320	7,330	4,830	4,680	3,180	3,330	2,270	3,050	2,080	7,930
	0 m kg			*6,050	*6,050	7,000	4,540	4,510	3,030	3,260	2,210	3,110	2,110	7,740
	-1.5 m kg			*9,010	8,370	6,880	4,430	4,440	2,960			3,410	2,300	7,240
	-3.0 m kg			*8,880	8,520	*6,560	4,470	4,480	3,000			*3,940	2,800	6,350

Notes: 1. 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.

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 fit from the following values.

• EC160B NLC prime

Across undercarriage / Along undercarriage	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
															Max. mm
Boom 5.2 m + Arm 2.3 m + Shoe 600 mm + Counterweight 2,850 kg	6.0 m	kg											*4,210	3,310	5,880
	4.5 m	kg					*4,670	*4,670	*4,380	3,150			4,120	2,590	6,760
	3.0 m	kg					*6,170	4,570	4,850	3,010			3,640	2,270	7,220
	1.5 m	kg					7,240	4,240	4,680	2,860			3,480	2,140	7,340
	0 m	kg					7,030	4,060	4,560	2,750			3,560	2,180	7,140
	-1.5 m	kg			*9,840	7,460	6,980	4,020	4,530	2,720			3,970	2,410	6,590
	-3.0 m	kg			*12,170	7,600	7,060	4,090					5,090	3,050	5,590
	-4.5 m	kg													
Boom 5.2 m + Arm 2.6 m + Shoe 600 mm + Counterweight 2,850 kg	6.0 m	kg							*3,900	3,240			*3,830	3,010	6,270
	4.5 m	kg					*4,300	*4,300	*4,120	3,180			*3,760	2,410	7,100
	3.0 m	kg			*9,120	8,450	*5,810	4,630	*4,770	3,030	3,440	2,150	3,420	2,130	7,540
	1.5 m	kg					7,290	4,280	4,700	2,870	3,370	2,080	3,270	2,020	7,650
	0 m	kg			*5,100	*5,100	7,050	4,070	4,570	2,760			3,340	2,040	7,460
	-1.5 m	kg	*5,250	*5,250	*9,000	7,410	6,970	4,010	4,510	2,710			3,680	2,240	6,940
	-3.0 m	kg	*9,380	*9,380	*12,590	7,530	7,020	4,050					4,560	2,750	6,000
	-4.5 m	kg			*10,100	7,820							*6,960	4,450	4,350
Boom 5.2 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,850 kg	6.0 m	kg							*3,450	3,280			*3,240	2,700	6,720
	4.5 m	kg							*3,750	3,200			*3,180	2,200	7,500
	3.0 m	kg			*7,710	*7,710	*5,270	4,690	*4,430	3,050	3,450	2,140	3,160	1,960	7,910
	1.5 m	kg			*5,140	*5,140	*6,970	4,310	4,700	2,870	3,360	2,060	3,030	1,860	8,020
	0 m	kg			*5,570	*5,570	7,040	4,060	4,550	2,730	3,290	2,000	3,080	1,870	7,840
	-1.5 m	kg	*4,800	*4,800	*8,430	7,300	6,920	3,960	4,470	2,660			3,350	2,030	7,350
	-3.0 m	kg	*8,160	*8,160	*13,000	7,390	6,930	3,970	4,480	2,670			4,040	2,430	6,470
	-4.5 m	kg			*11,010	7,640	7,100	4,110					6,060	3,580	4,990

Notes: 1. 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.
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4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

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 fit from the following values.

• EC160B NLC prime

Across undercarriage / Along undercarriage	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		Max. reach		
															Max. mm
2-piece boom 5.0 m + Arm 2.3 m + Shoe 600 mm + Counterweight 2,850 kg	7.5 m	kg											*5,560	*5,560	4,120
	6.0 m	kg					*6,450	5,090					*4,800	3,360	5,740
	4.5 m	kg			*7,860	*7,860	*6,990	4,890	4,980	3,090			4,200	2,600	6,640
	3.0 m	kg					7,640	4,530	4,820	2,950			3,690	2,260	7,110
	1.5 m	kg					7,230	4,170	4,650	2,800			3,520	2,130	7,230
	0 m	kg					7,000	3,980	4,530	2,690			3,620	2,170	7,030
	-1.5 m	kg			*10,050	7,340	6,960	3,950	4,510	2,670			4,070	2,430	6,470
	-3.0 m	kg					*5,350	4,050					*4,090	3,190	5,380
2-piece boom 5.0 m + Arm 2.6 m + Shoe 600 mm + Counterweight 2,850 kg	7.5 m	kg					*4,790	*4,790					*4,350	*4,350	4,670
	6.0 m	kg					*5,550	5,160	*4,290	3,170			*3,790	3,040	6,140
	4.5 m	kg			*5,870	*5,870	*6,360	4,960	5,020	3,130			*3,650	2,410	6,980
	3.0 m	kg			*11,870	8,500	7,720	4,600	4,860	2,980			3,460	2,110	7,430
	1.5 m	kg					7,280	4,220	4,670	2,820	3,340	2,020	3,310	2,000	7,550
	0 m	kg			*5,630	*5,630	7,010	3,990	4,540	2,690			3,390	2,040	7,355
	-1.5 m	kg			*9,670	7,280	6,940	3,930	4,490	2,650			3,760	2,250	6,830
	-3.0 m	kg					*5,940	4,000					*3,950	2,820	5,860
2-piece boom 5.0 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,850 kg	7.5 m	kg					*4,650	*4,650					*3,600	*3,600	5,270
	6.0 m	kg					*4,680	*4,680	*4,340	3,230			*3,200	2,710	6,600
	4.5 m	kg					*5,140	5,040	5,070	3,160			*3,080	2,190	7,390
	3.0 m	kg			*10,820	8,800	*7,350	4,670	4,890	3,000	3,420	2,090	*3,130	1,940	7,810
	1.5 m	kg			*6,320	*6,320	7,330	4,260	4,680	2,820	3,330	2,010	3,060	1,840	7,930
	0 m	kg			*6,050	*6,050	7,010	3,980	4,520	2,670	3,260	1,950	3,120	1,860	7,740
	-1.5 m	kg			*9,010	7,160	6,880	3,880	4,440	2,600			3,410	2,030	7,240
	-3.0 m	kg			*8,880	7,300	*6,560	3,910	4,490	2,640			*3,940	2,470	6,350

Notes: 1. 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.
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4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

STANDARD EQUIPMENT

Engine
Turbocharged, 4 stroke 6 cylinder diesel engine water cooling, direct injection and charged air cooler
Air filter with indicator
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Alternator, 80 A

Electric / Electronic control system
Contronics:
- Advanced mode control system
- Self-diagnostic system

Machine status indication
Engine speed sensing power control
"Power Max" mode system
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable monitor
Engine restart prevention circuit
High capacity halogen lights:
- Frame mounted 2
- Boom mounted 1

Batteries, 2 x 12 V/150 Ah
Start motor, 24 V/4.8 kW

Hydraulic system
Automatic hydraulic system:
- Summation system
- Boom priority
- Arm priority
- Swing priority

Boom and 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

Superstructure
Access way with handrail
Tool storage area
Punched metal anti-slip plates

Cab and interior
Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Control joystick with 3 switches each
Flexible antenna
Hydraulic control lock-out lever
Cab, all-weather sound suppressed, includes:
- Ashtray
- Cup holder
- Lighter
- Tinted glass
- Door locks
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Tinted safety glass
  Front (upper & lower): laminated glass
  Side & rear: tempered glass
- Windshield wiper with intermittent function

Master key

Undercarriage
Hydraulic track adjusters
Greased and sealed track chain
Track guards

OPTIONAL EQUIPMENT

Engine
Diesel coolant heater, 5 kW
Block heater; 120 V, 240 V
Fuel filler pump: 35 l/min
Fuel filler pump: 50 l/min with automatic shut-off
Tropical cooling kit

Electric
Extra lights:
- Cab-mounted 3, (front 2, rear 1)
- Boom-mounted 1
- Counterweight-mounted 1

Rotating warning beacon
Travel alarm
Anti-theft system

Hydraulic system
Hose rupture valve: boom, arm
Overload warning device
Boom floating function
Hammer & shear piping
- 1 and 2 pump flow
- Pump flow control for hammer & shears
- Additional return filter
- 1 switch control
- 2 switch control
- Pedal control

Volvo hydraulic quick fit (S1, S6, UQF16)
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 46
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46

Superstructure
Counterweight, 2,850/3,350 kg
Undercover: 2.3/4.5 mm

Cab and interior
Fabric seat
Fabric seat with heater
Fabric seat with heater and air suspension
Air-conditioner without heater, manual
Heater & air-conditioner, automatic
Pilot control pattern change
Semi-long joysticks
Control joystick with 5 switches each
Cab-mounted falling object guard (FOG)
Cab-mounted falling object protective structures (FOPS)
AM/FM stereo radio
AM/FM stereo with CD player and MP3 input
Rain shield, front
Sun screens, front, roof, rear
Sunlight protection, roof (steel)
Safety screen for front window
Lower wiper
Anti-vandalism kit assembly preparation
Anti-vandalism kit
Specific key

Undercarriage
Undercover: 4.5 mm/10 mm HD
Front dozer blade

Track shoes
Track shoes 500/600/700/800/900 mm with triple grousers

Digging equipment
Boom: 5.2 m monoblock
5.0 m 2-piece
Arm: 2.3 m/2.6 m/3.0 m

Service
Hand lamp
Spare parts
Tool kit, full scale
Tool kit, daily maintenance

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.

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. And we're proud of what makes Volvo different – **More care. Built in.**

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