

VOLVO EXCAVATORS

EC140B PRIME

13,4-15,6t 94hp



TAKE A TOUR. EXPERIENCE THE EC140B 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.

If you count on only one machine to handle a wide variety of your jobs, make sure you've got a Volvo EC140B prime Excavator. It's easy to transport, easy to operate and easy to maintain. And with reliable Volvo support, dependable Volvo quality and legendary Volvo comfort – it's also easy to make more money.

Volvo: your global, local partner

- Complete solutions since 1927.
- Built on the core values of quality, safety and environmental care.
- Construction equipment, commercial transport, buses, trucks and more.
- Global expertise: development of engines with leading fuel efficiency.

Protection through quality

- More care and quality throughout – from the well-built cab details to the reinforced service doors to the rigid, long-life undercarriage.
- Strength and endurance to handle tough conditions.
- Proven booms and arms tested to live up to high Volvo standards.

Volvo Care Cab comfort

- The next step in legendary Volvo comfort.
- A larger, more ergonomic work environment.
- Improved visibility for complete jobsite command.
- High-capacity climate control system: operator comfort from cab floor to ceiling.

Your edge for fuel economy

- The industry leader that gets the most out of each tank.
- Less time at the pump – more time at work.

Versatility for your application

- City/public works: cable laying and drainage work.
- Road works: loading and trenching.
- Construction: digging for footers and foundations.
- Landscaping: site preparation and stump removal.





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

As the world's second largest manufacturer of 9-to-18-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.

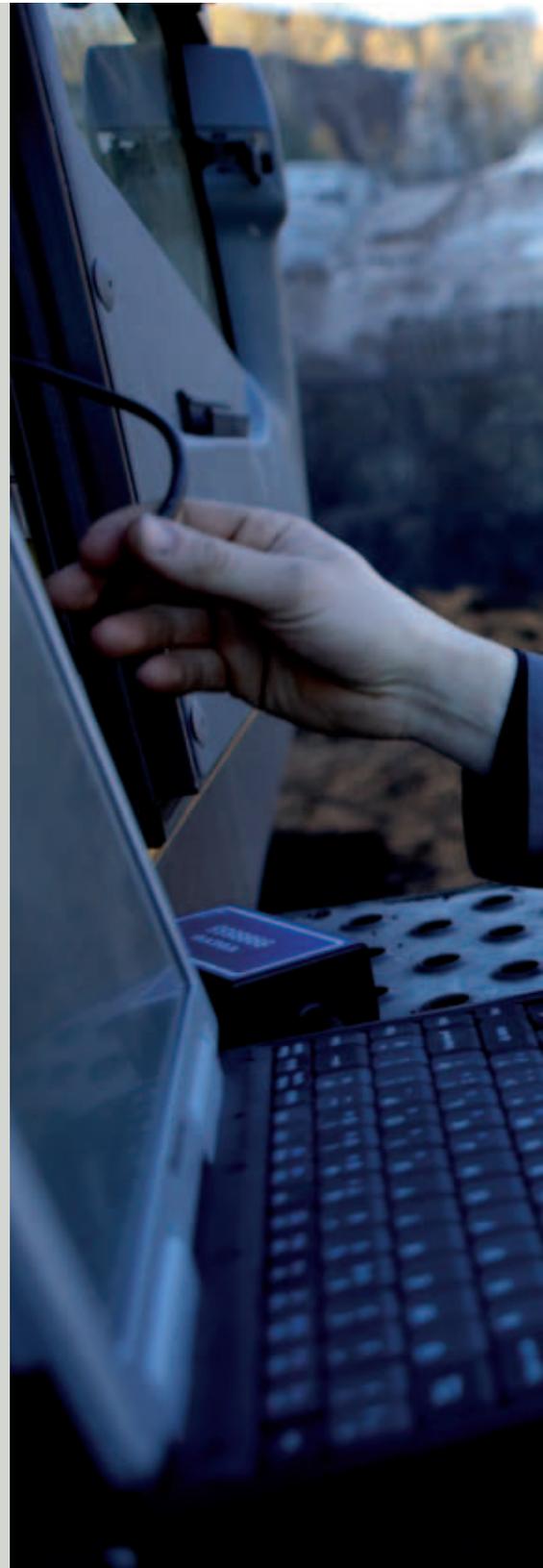
MATRIS reports on your efficiency

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.





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 D4D
Power output at	35 r/s (2,100 rpm)
Net (ISO 9249/SAE J1349)	69 kW (94 metric hp)
Gross (SAE J1995)	73 kW (99 metric hp)
Max. torque at 1,500 rpm	390 Nm
No. of cylinders	4
Displacement	4 l
Bore	101 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	2 x 100 Ah
Alternator	28 V / 80 A

Service refill capacities

Fuel tank	260 l
Hydraulic system, total	205 l
Hydraulic tank	100 l
Engine oil	15.5 l
Engine coolant	20.3 l
Swing reduction unit	3.8 l
Travel reduction unit	
LC prime	2 x 3.5 l
LCM prime	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	11.0 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.

LC prime

Max. tractive effort	109.8 kN (11,200 kg)
Max. travel speed	3.2 / 5.5 km/h
Gradeability	35° (70%)

LCM prime

Max. tractive effort	140.2 kN (14,300 kg)
Max. travel speed	2.5 / 4.3 km/h
Gradeability	35° (70%)

Undercarriage

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

LC prime

No. of track pads	2 x 46
Link pitch	171.45 mm
Shoe width, triple grouser	500 / 600 / 700 / 750 mm
No. of bottom rollers	2 x 7
No. of top rollers	2 x 1

LCM prime

No. of track pads	2 x 42
Link pitch	190 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
No. of bottom rollers	2 x 6
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 118 l/min

Pilot pump

Type	Gear pump
Maximum flow	1 x 21 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/cm ²)
Travel system	34.3 Mpa (350 kg/cm ²)
Swing system	24.5 Mpa (250 kg/cm ²)
Pilot system	3.9 Mpa (40 kg/cm ²)

Hydraulic cylinders

Boom	2
Bore x Stroke	ø105 x 980 mm
1st boom of 2-piece boom	2
Bore x Stroke	ø110 x 980 mm
2nd boom of 2-piece boom	1
Bore x Stroke	ø160 x 765 mm
Arm	1
Bore x Stroke	ø120 x 1,045 mm
Bucket	1
Bore x Stroke	ø100 x 865 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 100 dB(A)

Ground pressure

- **EC140B LC prime** with 4.6 m boom, 2.5 m arm, 450 l (400 kg) bucket and 2,100 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	13,390 kg	40.3 kPa (0.41 kg/cm ²)	2,490 mm
	600 mm	13,600 kg	34.1 kPa (0.35 kg/cm ²)	2,590 mm
	700 mm	13,810 kg	29.7 kPa (0.30 kg/cm ²)	2,690 mm
	750 mm	13,920 kg	28.0 kPa (0.29 kg/cm ²)	2,740 mm

- **EC140B LC prime** with 4.6 m boom, 2.5 m arm, 450 l (400 kg) bucket and 2,450 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	13,740 kg	41.1 kPa (0.42 kg/cm ²)	2,490 mm
	600 mm	13,950 kg	35.0 kPa (0.36 kg/cm ²)	2,590 mm
	700 mm	14,160 kg	30.5 kPa (0.31 kg/cm ²)	2,690 mm
	750 mm	14,270 kg	28.7 kPa (0.29 kg/cm ²)	2,740 mm

- **EC140B LC prime dozer blade** with 4.6 m boom, 2.5 m arm, 450 l (400 kg) bucket and 2,100 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	14,290 kg	43.0 kPa (0.44 kg/cm ²)	2,490 mm
	600 mm	14,500 kg	36.4 kPa (0.37 kg/cm ²)	2,590 mm
	700 mm	14,710 kg	31.6 kPa (0.32 kg/cm ²)	2,690 mm
	750 mm	14,820 kg	29.8 kPa (0.30 kg/cm ²)	2,740 mm

- **EC140B LC prime dozer blade** with 4.6 m boom, 2.5 m arm, 450 l (400 kg) bucket and 2,450 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	500 mm	14,640 kg	44.1 kPa (0.45 kg/cm ²)	2,490 mm
	600 mm	14,850 kg	37.3 kPa (0.38 kg/cm ²)	2,590 mm
	700 mm	15,060 kg	32.4 kPa (0.33 kg/cm ²)	2,690 mm
	750 mm	15,170 kg	30.5 kPa (0.31 kg/cm ²)	2,740 mm

- **EC140B LCM prime** with 4.6 m boom, 2.5 m arm, 450 l (400 kg) bucket and 2,100 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	600 mm	14,590 kg	36.3 kPa (0.37 kg/cm ²)	2,590 mm
	700 mm	14,800 kg	31.6 kPa (0.32 kg/cm ²)	2,690 mm
	800 mm	15,010 kg	28.0 kPa (0.29 kg/cm ²)	2,790 mm
	900 mm	15,220 kg	25.3 kPa (0.26 kg/cm ²)	2,890 mm

- **EC140B LCM prime** with 4.6 m boom, 2.5 m arm, 450 l (400 kg) bucket and 2,450 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	600 mm	14,940 kg	37.2 kPa (0.38 kg/cm ²)	2,590 mm
	700 mm	15,150 kg	32.3 kPa (0.33 kg/cm ²)	2,690 mm
	800 mm	15,360 kg	28.7 kPa (0.29 kg/cm ²)	2,790 mm
	900 mm	15,570 kg	25.8 kPa (0.26 kg/cm ²)	2,890 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.

- **EC140B LC prime** with **direct fit bucket**, 2,100 kg/2,450 kg* counterweight.

Description	Max. bucket volume	4.6 m 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
GP bucket 1.5 t/m ³	I	925 / 975*	825 / 900*	725 / 800*	900	775	675
GP bucket 1.8 t/m ³	I	800 / 850*	725 / 775*	650 / 700*	800	675	600

- **EC140B LC prime** with **quick fit bucket**, 2,100 kg/2,450 kg* counterweight.

Description	Max. bucket volume	4.6 m 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
GP bucket 1.5 t/m ³	I	875 / 950*	800 / 850*	700 / 750*	850	725	625
GP bucket 1.8 t/m ³	I	775 / 825*	700 / 750*	600 / 650*	750	650	550

- **EC140B LCM prime** with **direct fit bucket**, 2,100 kg/2,450 kg* counterweight.

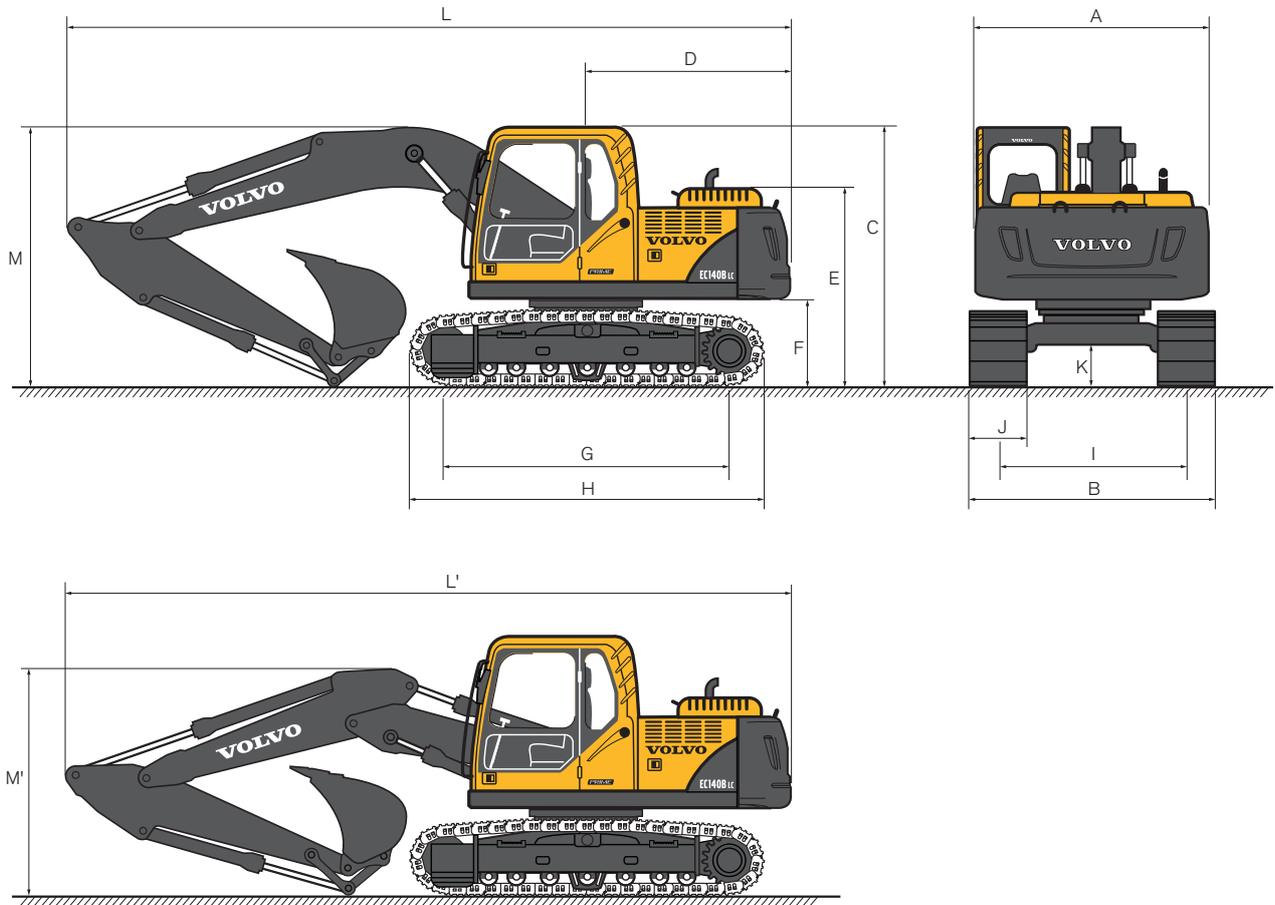
Description	Max. bucket volume	4.6 m boom			4.6 m 2-piece boom*		
		2.1 m arm	2.5 m arm	3.0 m arm	2.1 m arm	2.5 m arm	3.0 m arm
GP bucket 1.5 t/m ³	I	1,025 / 1,075*	925 / 1,000*	825 / 875*	900	775	675
GP bucket 1.8 t/m ³	I	875 / 950*	800 / 975*	725 / 775	800	675	600

- **EC140B LCM prime** with **quick fit bucket**, 2,100 kg/2,450 kg* counterweight.

Description	Max. bucket volume	4.6 m 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
GP bucket 1.5 t/m ³	I	975 / 1,050*	875 / 950*	775 / 850*	850	725	625
GP bucket 1.8 t/m ³	I	850 / 900*	775 / 825*	675 / 725*	750	650	550

*Counterweight 2,450 kg

Dimensions

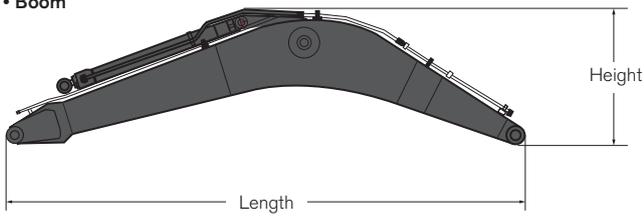


Description	Unit	LC prime			LCM prime		
		4.6 m boom			4.6 m boom		
		2.1 m arm	2.5 m arm	3.0 m arm	2.1 m arm	2.5 m arm	3.0 m arm
A. Overall width of superstructure	mm	2,450	2,450	2,450	2,450	2,450	2,450
B. Overall width	mm	2,590	2,590	2,590	2,690	2,690	2,690
C. Overall height of cab	mm	2,770	2,770	2,770	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

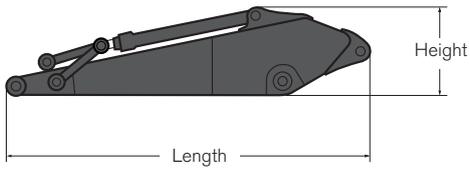
• Boom



Description	Unit	4.6 m	4.6 m 2-piece
Length	mm	4,770	4,765
Height	mm	1,370	1,225
Width	mm	545	545
Weight	kg	1,000	1,280

* Includes cylinder, pin and piping

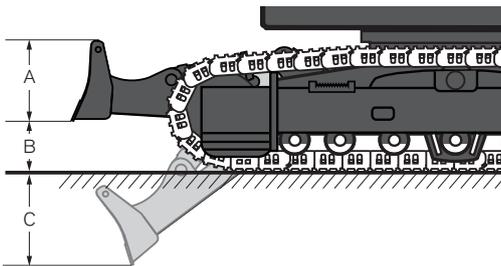
• Arm



Description	Unit	2.1 m	2.5 m	3.0 m
Length	mm	2,800	3,190	3,690
Height	mm	760	760	760
Width	mm	300	300	300
Weight	kg	570	645	720

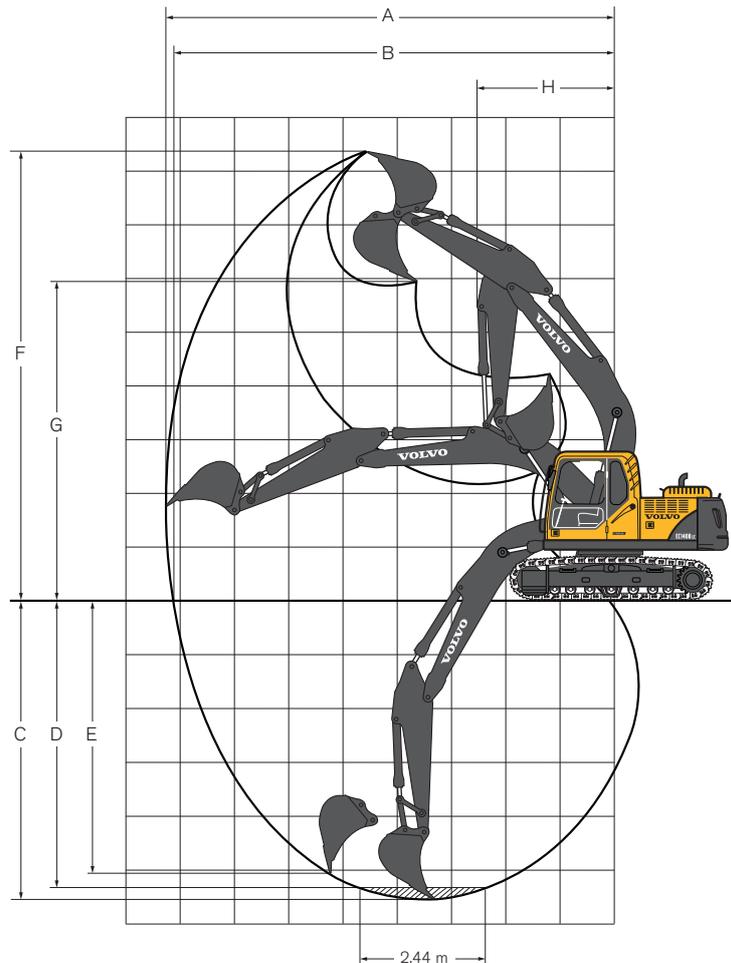
* Includes cylinder, piping and linkage

• Front dozer blade (for LC prime only)



Description	Unit	Measurement
A. Height	mm	580
Width	mm	2,590
Weight	kg	900
B. Lift height	mm	504
C. Digging depth	mm	562

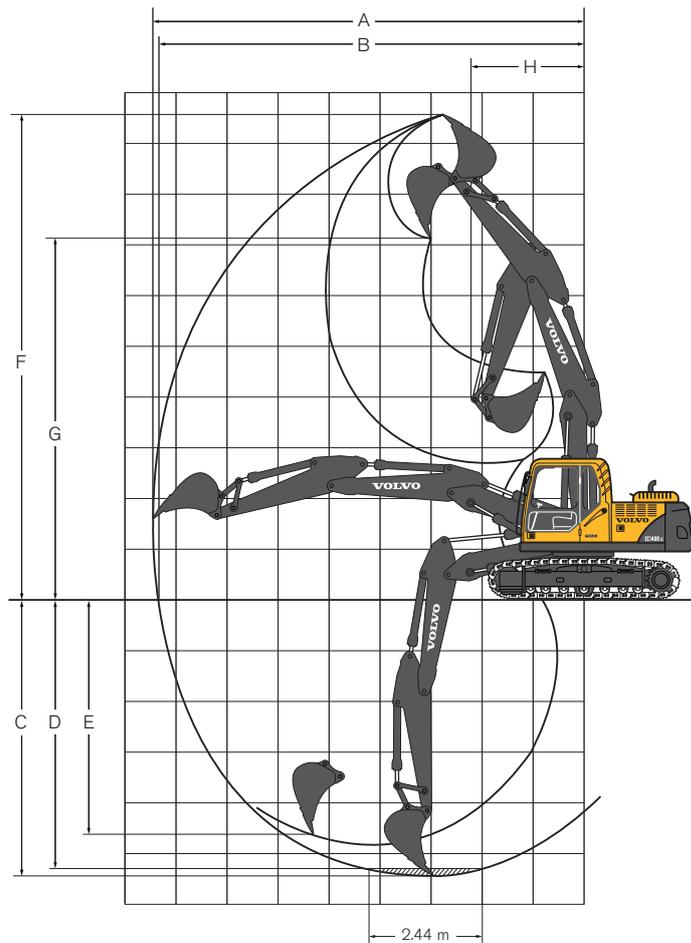
Working ranges & digging forces



Machine with direct fit bucket	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. Max. digging reach	mm	7,960	8,330	8,820	7,960	8,330	8,820
B. Max. digging reach on ground	mm	7,810	8,190	8,690	7,780	8,160	8,660
C. Max. digging depth	mm	5,130	5,530	6,030	4,980	5,380	5,880
D. Max. digging depth (2.44 m level)	mm	4,870	5,310	5,850	4,710	5,160	5,690
E. Max. vertical wall digging depth	mm	4,580	5,060	5,500	4,430	4,900	5,330
F. Max. cutting height	mm	8,180	8,420	8,770	8,340	8,570	8,930
G. Max. dumping height	mm	5,740	5,980	6,320	5,900	6,130	6,470
H. Min. front swing radius	mm	2,570	2,630	2,840	2,570	2,640	2,830

Digging forces with direct fit bucket		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
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

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.

• EC140B 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 4.6 m + Arm 2.1 m + Shoe 600 mm + Counterweight 2,100 kg	6.0 m kg					*3,330	*3,330						*3,510	3,190	4,880
	4.5 m kg					*3,480	*3,480						3,510	2,300	5,970
	3.0 m kg				*6,230	*6,230	*4,330	3,450	3,430	2,230			3,000	1,950	6,530
	1.5 m kg						5,180	3,240	3,340	2,150			2,830	1,820	6,710
	0 m kg				*5,180	*5,180	5,030	3,100	3,270	2,090			2,900	1,860	6,530
	-1.5 m kg	*4,800	*4,800	*9,460	5,640	4,990	3,070						3,290	2,090	5,970
	-3.0 m kg			*8,230	5,760	5,060	3,130						4,460	2,800	4,900
Boom 4.6 m + Arm 2.5 m + Shoe 600 mm + Counterweight 2,100 kg	6.0 m kg					*2,830	*2,830						*3,190	2,740	5,390
	4.5 m kg					*3,070	*3,070	*3,180	2,300				*3,080	2,060	6,380
	3.0 m kg				*5,300	*5,300	*3,940	3,470	3,440	2,230			2,730	1,770	6,910
	1.5 m kg				*6,300	5,840	*5,060	3,230	3,330	2,130			2,590	1,660	7,080
	0 m kg				*5,770	5,560	5,000	3,070	3,240	2,050			2,640	1,680	6,910
	-1.5 m kg	*4,400	*4,400	*9,280	5,530	4,930	3,010	3,210	2,030				2,940	1,860	6,390
	-3.0 m kg	*8,600	*8,600	*8,670	5,630	4,970	3,050						3,790	2,380	5,400
Boom 4.6 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,100 kg	6.0 m kg							*2,790	2,310				*2,720	2,290	6,020
	4.5 m kg							*2,760	2,310				*2,550	1,790	6,920
	3.0 m kg						*3,420	*3,420	*3,120	2,230			2,430	1,560	7,410
	1.5 m kg				*7,290	5,970	*4,600	3,250	3,320	2,120	2,340	1,490	2,310	1,470	7,570
	0 m kg				*6,230	5,540	4,980	3,040	3,210	2,020			2,340	1,480	7,410
	-1.5 m kg	*3,800	*3,800	*8,380	5,430	4,860	2,950	3,150	1,970				2,570	1,610	6,930
	-3.0 m kg	*7,040	*7,040	*9,060	5,490	4,870	2,950	3,180	1,990				3,160	1,980	6,030
Boom 4.6 m + Arm 2.1 m + Shoe 600 mm + Counterweight 2,450 kg	6.0 m kg					*3,330	*3,330						*3,510	3,400	4,880
	4.5 m kg					*3,480	*3,480						*3,570	2,450	5,970
	3.0 m kg				*6,230	*6,230	*4,330	3,670	3,630	2,390			3,170	2,090	6,530
	1.5 m kg						*5,390	3,460	3,540	2,310			3,000	1,960	6,710
	0 m kg				*5,180	*5,180	5,320	3,320	3,470	2,240			3,070	2,000	6,530
	-1.5 m kg	*4,800	*4,800	*9,460	6,040	5,280	3,290						3,480	2,250	5,970
	-3.0 m kg			*8,230	6,160	5,360	3,360						4,720	3,000	4,900
Boom 4.6 m + Arm 2.5 m + Shoe 600 mm + Counterweight 2,450 kg	6.0 m kg					*2,830	*2,830						*3,190	2,920	5,390
	4.5 m kg					*3,070	*3,070	*3,180	2,450				*3,080	2,200	6,380
	3.0 m kg				*5,300	*5,300	*3,940	3,690	*3,480	2,390			2,900	1,900	6,910
	1.5 m kg				*6,300	6,240	*5,060	3,460	3,520	2,290			2,740	1,790	7,080
	0 m kg				*5,770	*5,770	5,290	3,290	3,440	2,210			2,800	1,810	6,910
	-1.5 m kg	*4,400	*4,400	*9,280	5,930	5,220	3,230	3,410	2,180				3,120	2,010	6,390
	-3.0 m kg	*8,600	*8,600	*8,670	6,030	5,260	3,270						4,010	2,560	5,400
Boom 4.6 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,450 kg	6.0 m kg							*2,790	2,470				*2,720	2,450	6,020
	4.5 m kg							*2,760	2,470				*2,550	1,920	6,920
	3.0 m kg						*3,420	*3,420	*3,120	2,390			*2,540	1,680	7,410
	1.5 m kg				*7,290	6,360	*4,600	3,470	3,510	2,270	2,490	1,610	2,450	1,580	7,570
	0 m kg				*6,230	5,930	5,270	3,270	3,400	2,170			2,490	1,600	7,410
	-1.5 m kg	*3,800	*3,800	*8,380	5,830	5,160	3,170	3,350	2,120				2,730	1,750	6,930
	-3.0 m kg	*7,040	*7,040	*9,060	5,880	5,170	3,180	3,380	2,150				3,350	2,130	6,030

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.

• EC140B 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 4.6 m + Arm 2.1 m + Shoe 600 mm + Counterweight 2,450 kg	7.5 m kg												*5,360	*5,360	2,900
	6.0 m kg			*5,080	*5,080	*4,810	3,940						*3,820	3,260	5,010
	4.5 m kg			*5,230	*5,230	*4,950	3,880	3,710	2,440				*3,430	2,380	6,070
	3.0 m kg					*5,740	3,680	3,660	2,390				3,110	2,030	6,620
	1.5 m kg					5,510	3,450	3,560	2,300				2,940	1,910	6,800
	0 m kg					5,340	3,310	3,480	2,230				3,020	1,950	6,630
	-1.5 m kg			*9,280	6,000	5,290	3,270	3,480	2,230				3,420	2,190	6,080
2-piece boom 4.6 m + Arm 2.5 m + Shoe 600 mm + Counterweight 2,450 kg	7.5 m kg			*5,080	*5,080								*3,990	*3,990	3,740
	6.0 m kg			*4,210	*4,210	*4,320	4,000						*3,080	2,800	5,530
	4.5 m kg			*3,960	*3,960	*4,550	3,930	3,740	2,460				*2,810	2,130	6,500
	3.0 m kg			*7,570	7,000	*5,370	3,710	3,660	2,390				*2,750	1,840	7,020
	1.5 m kg					5,520	3,460	3,550	2,280				2,690	1,740	7,180
	0 m kg			*5,230	*5,230	5,310	3,280	3,450	2,200				2,750	1,760	7,020
	-1.5 m kg			*8,810	5,890	5,230	3,210	3,420	2,170				3,060	1,950	6,510
2-piece boom 4.6 m + Arm 3.0 m + Shoe 600 mm + Counterweight 2,450 kg	7.5 m kg			*4,120	*4,120	*3,450	*3,450						*3,100	*3,100	4,640
	6.0 m kg					*3,660	*3,660	*3,010	2,480				*2,530	2,350	6,160
	4.5 m kg			*2,850	*2,850	*3,600	*3,600	*3,750	2,490				*2,330	1,860	7,050
	3.0 m kg					*4,670	3,760	3,670	2,400	*2,430	1,640		*2,280	1,630	7,520
	1.5 m kg					5,550	3,480	3,540	2,270	2,500	1,600		*2,350	1,540	7,680
	0 m kg					5,300	3,250	3,420	2,160	2,460	1,560		2,450	1,550	7,530
	-1.5 m kg	*3,460	*3,460	*7,910	5,790	5,170	3,150	3,360	2,110				2,680	1,700	7,050

- 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.

• EC140B LCM 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 4.6 m + Arm 2.1 m + Shoe 700 mm + Counterweight 2,100 kg	6.0 m kg					*3,330	*3,330					*3,510	3,480	4,880
	4.5 m kg					*3,480	*3,480					3,570	2,520	5,970
	3.0 m kg			*6,230	*6,230	*4,330	3,770	3,740	2,460			3,270	2,150	6,530
	1.5 m kg					*5,390	3,560	3,650	2,370			3,090	2,020	6,710
	0 m kg			*5,180	*5,180	5,490	3,420	3,580	2,310			3,170	2,060	6,530
	-1.5 m kg	*4,800	*4,800	*9,460	6,240	5,450	3,390					3,600	2,320	5,970
	-3.0 m kg			*8,230	6,360	*5,480	3,460					*4,850	3,090	4,900
Boom 4.6 m + Arm 2.5 m + Shoe 700 mm + Counterweight 2,100 kg	6.0 m kg					*2,830	*2,830					*3,190	3,000	5,390
	4.5 m kg					*3,070	*3,070	*3,180	2,520			*3,080	2,260	6,380
	3.0 m kg			*5,300	*5,300	*3,940	3,790	*3,480	2,450			2,990	1,950	6,910
	1.5 m kg			*6,300	*6,300	*5,060	3,560	3,640	2,350			2,830	1,840	7,080
	0 m kg			*5,770	*5,770	5,460	3,390	3,550	2,280			2,890	1,870	6,910
	-1.5 m kg	*4,400	*4,400	*9,280	6,130	5,390	3,330	3,520	2,250			3,220	2,070	6,390
	-3.0 m kg	*8,600	*8,600	*8,670	6,230	5,430	3,370					4,140	2,640	5,400
Boom 4.6 m + Arm 3.0 m + Shoe 700 mm + Counterweight 2,100 kg	6.0 m kg							*2,790	2,530			*2,720	2,510	6,020
	4.5 m kg							*2,760	2,540			*2,550	1,970	6,920
	3.0 m kg					*3,420	*3,420	*3,120	2,450			*2,540	1,730	7,410
	1.5 m kg			*7,290	6,570	*4,600	3,570	3,630	2,340	2,580	1,660	2,540	1,630	7,570
	0 m kg			*6,230	6,130	5,440	3,370	3,520	2,240			2,580	1,650	7,410
	-1.5 m kg	*3,800	*3,800	*8,380	6,030	5,330	3,270	3,460	2,190			2,820	1,800	6,930
	-3.0 m kg	*7,040	*7,040	*9,060	6,080	5,330	3,270	3,490	2,210			3,460	2,200	6,030
Boom 4.6 m + Arm 2.1 m + Shoe 700 mm + Counterweight 2,450 kg	6.0 m kg					*3,330	*3,330					*3,510	*3,510	4,880
	4.5 m kg					*3,480	*3,480					*3,570	2,680	5,970
	3.0 m kg			*6,230	*6,230	*4,330	4,000	*3,760	2,610			3,450	2,290	6,530
	1.5 m kg					*5,390	3,780	3,850	2,530			3,260	2,150	6,710
	0 m kg			*5,180	*5,180	5,780	3,650	3,780	2,470			3,350	2,200	6,530
	-1.5 m kg	*4,800	*4,800	*9,460	6,640	5,740	3,610					3,790	2,470	5,970
	-3.0 m kg			*8,230	6,760	*5,480	3,680					*4,850	3,290	4,900
Boom 4.6 m + Arm 2.5 m + Shoe 700 mm + Counterweight 2,450 kg	6.0 m kg					*2,830	*2,830					*3,190	3,170	5,390
	4.5 m kg					*3,070	*3,070	*3,180	2,680			*3,080	2,410	6,380
	3.0 m kg			*5,300	*5,300	*3,940	*3,940	*3,480	2,610			*3,090	2,090	6,910
	1.5 m kg			*6,300	*6,300	*5,060	3,780	3,830	2,510			2,990	1,970	7,080
	0 m kg			*5,770	*5,770	5,750	3,620	3,750	2,430			3,060	2,000	6,910
	-1.5 m kg	*4,400	*4,400	*9,280	6,530	5,680	3,560	3,710	2,400			3,400	2,210	6,390
	-3.0 m kg	*8,600	*8,600	*8,670	6,630	5,730	3,590					4,370	2,820	5,400
Boom 4.6 m + Arm 3.0 m + Shoe 700 mm + Counterweight 2,450 kg	6.0 m kg							*2,790	2,690			*2,720	2,670	6,020
	4.5 m kg							*2,760	2,690			*2,550	2,110	6,920
	3.0 m kg					*3,420	*3,420	*3,120	2,610			*2,540	1,850	7,410
	1.5 m kg			*7,290	6,970	*4,600	3,800	*3,660	2,500	2,720	1,780	*2,670	1,750	7,570
	0 m kg			*6,230	*6,230	*5,600	3,590	3,710	2,400			2,730	1,770	7,410
	-1.5 m kg	*3,800	*3,800	*8,380	6,430	5,620	3,490	3,660	2,340			2,980	1,930	6,930
	-3.0 m kg	*7,040	*7,040	*9,060	6,490	5,630	3,500	3,690	2,370			3,660	2,350	6,030

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.

• EC140B LCM 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 4.6 m + Arm 2.1 m + Shoe 700 mm + Counterweight 2,450 kg	7.5 m kg												*5,360	*5,360	2,900
	6.0 m kg			*4,610	*4,610	*4,330	4,260						*3,820	3,540	5,010
	4.5 m kg			*5,230	*5,230	*4,460	4,210	*3,920	2,660				*3,430	2,600	6,070
	3.0 m kg					*5,160	4,010	3,960	2,610				*3,360	2,230	6,620
	1.5 m kg					*5,920	3,780	3,860	2,520				3,200	2,100	6,800
	0 m kg					5,790	3,630	3,780	2,450				3,280	2,140	6,630
	-1.5 m kg			*8,320	6,600	5,740	3,590	3,780	2,450				3,710	2,410	6,080
2-piece boom 4.6 m + Arm 2.5 m + Shoe 700 mm + Counterweight 2,450 kg	7.5 m kg			*4,700	*4,700								*3,990	*3,990	3,740
	6.0 m kg			*3,990	*3,990	*3,890	*3,890						*3,080	3,050	5,530
	4.5 m kg			*3,960	*3,960	*4,100	*4,100	*3,780	2,680				*2,810	2,330	6,500
	3.0 m kg			*6,830	*6,830	*4,830	4,040	3,960	2,610				*2,750	2,030	7,020
	1.5 m kg					*5,680	3,780	3,850	2,500				*2,850	1,910	7,180
	0 m kg			*5,230	*5,230	5,760	3,600	3,750	2,420				2,990	1,940	7,020
	-1.5 m kg			*8,760	6,490	5,680	3,530	3,720	2,390				3,330	2,150	6,510
2-piece boom 4.6 m + Arm 3.0 m + Shoe 700 mm + Counterweight 2,450 kg	7.5 m kg			*3,750	*3,750	*3,450	*3,450						*3,100	*3,100	4,640
	6.0 m kg					*3,370	*3,370	*3,010	2,700				*2,530	*2,530	6,160
	4.5 m kg			*2,850	*2,850	*3,600	*3,600	*3,430	2,710				*2,330	2,040	7,050
	3.0 m kg					*4,390	4,090	*3,720	2,620	*2,430	1,810		*2,280	1,790	7,520
	1.5 m kg					5,330	3,800	3,840	2,490	2,730	1,770		*2,350	1,700	7,680
	0 m kg					5,750	3,580	3,720	2,380	2,690	1,730		*2,530	1,720	7,530
	-1.5 m kg	*3,460	*3,460	*7,910	6,390	5,620	3,470	3,660	2,330				2,920	1,880	7,050

- 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.

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke diesel engine with direct injection
Air filter with indicator
Air intake heater
Electric engine shut-off
Alternator, 80 A
Fuel filler pump: 35 l/min

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/2 x 100 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 safety lock 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
– Safety glass
– Windshield wiper with intermittent feature
Master key

Undercarriage

Hydraulic track adjusters
Greased and sealed track chain
Track guards

OPTIONAL EQUIPMENT

Engine

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

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
Hydraulic piping:
– Hammer & shear
1 and 2 pump flow
Pump flow control for hammer & shears
Additional return filter
Extra piping for slope & rotator
1 switch control
2 switch control
Pedal control
– Slope & rotator

– Grapple
– Oil leak (drain) line
– Quick fit piping
Volvo hydraulic quick fit (S6)
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 46
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46

Superstructure

Undercover: 2.3 mm/HD 4.5 mm
Counterweight: 2,100 kg/2,450 kg

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/HD 10 mm
Front dozer blade (for LC prime only)

Track shoes

LC prime: 500/600/700/750 mm
with triple grousers
LCM prime: 600/700/800/900 mm
with triple grousers

Digging equipment

Boom: 4.6 m monoblock
4.6 m 2-piece
Arm: 2.1 m/2.5 m/3.0 m

Service

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

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

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. And we're proud of what makes Volvo different.

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
www.volvoce.com

Ref. No 30B1005668 English (International)
2011.02 EXC
Volvo, Global Marketing