

VOLVO EXCAVATOR

EC160B LC



- **Engine power, gross:**
90 kW 121 hp
- **Operating weight:**
16.5 ~ 19.2 t
36,340 ~ 42,340 lb
- **Buckets (SAE):**
775 ~ 1,175 l
1.01 ~ 1.54 yd³
- Turbocharged Volvo diesel engine with direct injection and charged air cooler meets EPA Tier 2 emission standards

- Contronics, Volvo's advanced mode selection system and electronically-controlled system
- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by "Automatic Sensing Work Mode"
- Cab
 - Ergonomic environment for easier operator use
 - Low sound level
 - Filtered air
- Hydraulic dampening mounts
- Fabric seat with heater and air suspension
- Strong digging equipment produced by robotic welding
- High lifting, breakout and tearout forces for tough digging conditions
- Long undercarriage for excellent stability
- Auxiliary hydraulic valve is standard
- Prepared for a number of optional items

VOLVO



ENGINE

The engine is a turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that easily meets EPA Tier 2 emission standards. The engine has been developed especially for excavator use, providing good fuel economy, low noise levels and a long service life.

Air Filter: 3-stage

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:

Make	VOLVO
Model	D6D EBE2
Power output at	32 r/s 1,900 rpm
Net (ISO 9249/ SAE J1349)	81 kW 109 hp
Gross (SAE J1995)	90 kW 121 hp
Max. torque at 1,450 rpm	542 N·m 400 lb·ft
No. of cylinders	6
Displacement	5.7 l 348 cu.in
Bore	98 mm 3.86"
Stroke	126 mm 4.96"



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. drawbar pull (tractive effort)	145 kN 32,600 lb
Max. travel speed	3.0/5.6 km/h 1.9/3.5 mph
Gradeability	35° 70%



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.

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

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 7.5"
Shoe width, triple grouser	500/600(Std.)/700/800/900 mm 20"/24"(Std.)/28"/32"/36"
No. of bottom track rollers	2 x 7
No. of top rollers	2 x 2



SERVICE REFILL CAPACITIES

Fuel tank	260 l	69 gal
Hydraulic system, total	245 l	65 gal
Hydraulic tank	120 l	32 gal
Engine oil	25 l	7 gal
Engine coolant	22 l	6 gal
Swing reduction unit	2.6 l	0.7 gal
Travel reduction unit	2 x 5.8 l	2 x 1.5 gal



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 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 **2 x 38 gpm**

Pilot pump:

Type Gear pump
Maximum flow 1 x 19 l/min **5.0 gpm**

Hydraulic motors:

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

Relief valve setting:

Implement	32.4/34.3 Mpa	4,690/4,980 psi
Travel circuit	34.3 Mpa	4,980 psi
Swing circuit	26.5 Mpa	3,840 psi
Pilot circuit	3.9 Mpa	570 psi

Hydraulic cylinders:

Boom	2
Bore x Stroke ..	Ø115 x 1,165 mm Ø 4.5" x 45.9"
Arm	1
Bore x Stroke ..	Ø120 x 1,345 mm Ø 4.7" x 53.0"
Bucket	1
Bore x Stroke ..	Ø105 x 1,000 mm Ø 4.1" x 39.4"



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:

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

- LC undercarriage with Std. 5.2 m, 17' 1" boom, Std. 2.6 m, 8' 6" arm, 470 kg, 1,040 lb bucket and 2,850 kg, 6,280 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm 20"	16,480 kg 36,340 lb	46.7 kPa 6.8 psi	2,490 mm 8' 2"
	Std. 600 mm 24"	16,700 kg 36,820 lb	39.5 kPa 5.7 psi	2,590 mm 8' 6"
	700 mm 28"	16,910 kg 37,290 lb	34.3 kPa 5.0 psi	2,690 mm 8' 10"
	800 mm 32"	17,130 kg 37,770 lb	30.4 kPa 4.4 psi	2,790 mm 9' 2"
	900 mm 36"	17,570 kg 38,740 lb	27.7 kPa 4.0 psi	2,990 mm 9' 10"

- LC undercarriage with Std. 5.2 m, 17' 1" boom, Std. 2.6 m, 8' 6" arm, 470 kg, 1,040 lb bucket and 3,350 kg, 7,390 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm 20"	16,980 kg 37,440 lb	48.2 kPa 7.0 psi	2,490 mm 8' 2"
	Std. 600 mm 24"	17,200 kg 37,930 lb	40.7 kPa 6.0 psi	2,590 mm 8' 6"
	700 mm 28"	17,410 kg 38,390 lb	35.3 kPa 5.1 psi	2,690 mm 8' 10"
	800 mm 32"	17,630 kg 38,880 lb	31.3 kPa 4.6 psi	2,790 mm 9' 2"
	900 mm 36"	18,070 kg 39,850 lb	28.5 kPa 4.1 psi	2,990 mm 9' 10"

- LC undercarriage dozer blade with Std. 5.2 m, 17' 1" boom, Std. 2.6 m, 8' 6" arm, 470 kg, 1,040 lb bucket and 2,850 kg, 6,280 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm 20"	17,610 kg 38,830 lb	49.9 kPa 7.3 psi	2,490 mm 8' 2"
	Std. 600 mm 24"	17,830 kg 39,320 lb	42.1 kPa 6.1 psi	2,590 mm 8' 6"
	700 mm 28"	18,040 kg 39,780 lb	36.5 kPa 5.3 psi	2,690 mm 8' 10"
	800 mm 32"	18,260 kg 40,260 lb	32.4 kPa 4.7 psi	2,790 mm 9' 2"
	900 mm 36"	18,700 kg 41,230 lb	29.5 kPa 4.3 psi	2,990 mm 9' 10"

- LC undercarriage dozer blade with Std. 5.2 m, 17' 1" boom, Std. 2.6 m, 8' 6" arm, 470 kg, 1,040 lb bucket and 3,350 kg, 7,390 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm 20"	18,110 kg 39,930 lb	51.4 kPa 7.4 psi	2,490 mm 8' 2"
	Std. 600 mm 24"	18,330 kg 40,420 lb	43.3 kPa 6.3 psi	2,590 mm 8' 6"
	700 mm 28"	18,540 kg 40,880 lb	37.6 kPa 5.4 psi	2,690 mm 8' 10"
	800 mm 32"	18,760 kg 41,370 lb	33.3 kPa 4.8 psi	2,790 mm 9' 2"
	900 mm 36"	19,200 kg 42,340 lb	30.3 kPa 4.4 psi	2,990 mm 9' 10"

MAX. PERMITTED BUCKETS

*Note: 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.*

- LC undercarriage, max. permitted **sizes for pin-on buckets:** Counterweight 2,850 kg, **6,280 lb**

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l, yd ³	1,075, 1.41	1,025, 1.34	925, 1.21
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l, yd ³	950, 1.24	900, 1.18	825, 1.08

- LC undercarriage, max. permitted **sizes for S6 quick-coupler buckets:** Counterweight 2,850 kg, **6,280 lb**

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l, yd ³	1,050, 1.37	975, 1.28	900, 1.18
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l, yd ³	900, 1.18	850, 1.11	775, 1.01

- LC undercarriage, max. permitted **sizes for S1 quick-coupler buckets:** Counterweight 2,850 kg, **6,280 lb**

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l, yd ³	1,025, 1.34	875, 1.14	825, 1.08
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l, yd ³	950, 1.24	825, 1.08	775, 1.01

- LC undercarriage, max. permitted **sizes for pin-on buckets:** Counterweight 3,350 kg, **7,390 lb**

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l, yd ³	1,175, 1.54	1,100, 1.44	1,025, 1.34
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l, yd ³	1,025, 1.34	975, 1.28	900, 1.18

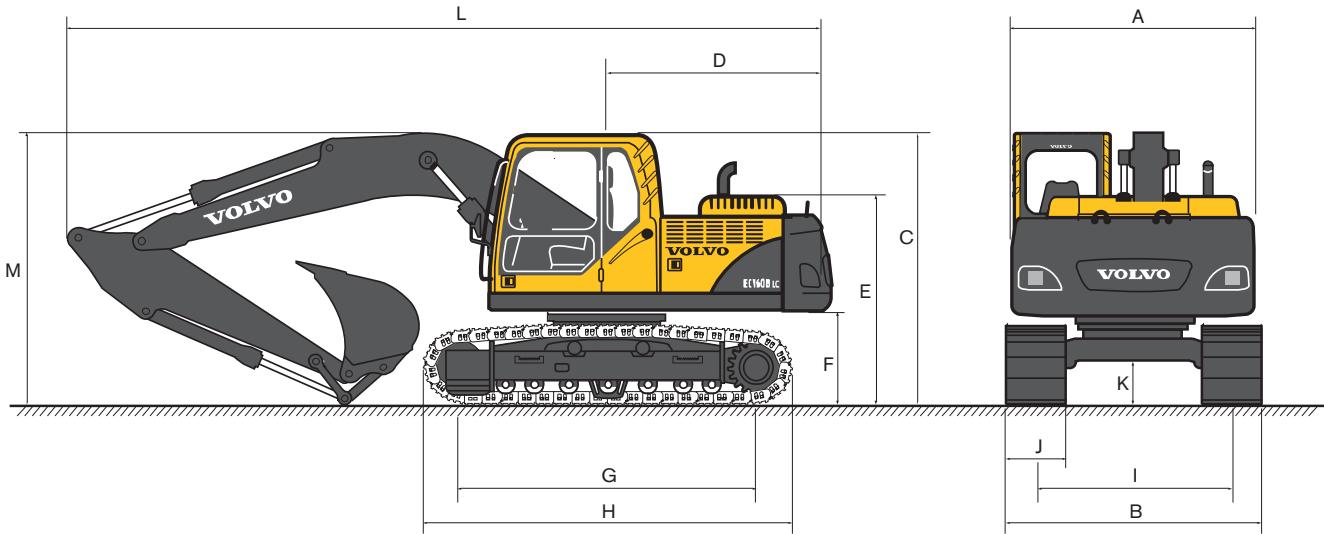
- LC undercarriage, max. permitted **sizes for S6 quick-coupler buckets:** Counterweight 3,350 kg, **7,390 lb**

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l, yd ³	1,125, 1.47	1,075, 1.41	975, 1.28
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l, yd ³	1,000, 1.31	925, 1.21	850, 1.11

- LC undercarriage, max. permitted **sizes for S1 quick-coupler buckets:** Counterweight 3,350 kg, **7,390 lb**

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l, yd ³	1,100, 1.44	975, 1.28	900, 1.18
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l, yd ³	1,050, 1.37	900, 1.18	850, 1.11

DIMENSIONS

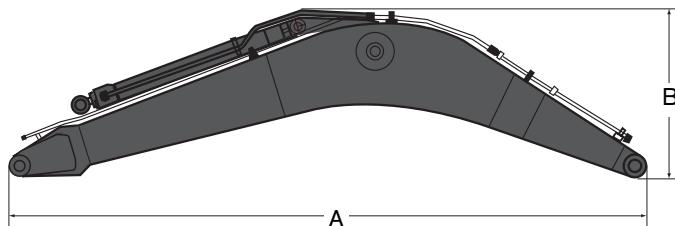


Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6m, 8' 6"	3.0 m, 9' 10"
A. Overall width of superstructure	mm, ft-in	2,450, 8' 0"	2,450, 8' 0"	2,450, 8' 0"
B. Overall width	mm, ft-in	2,590, 8' 6"	2,590, 8' 6"	2,590, 8' 6"
C. Overall height of cab	mm, ft-in	2,900, 9' 6"	2,900, 9' 6"	2,900, 9' 6"
D. Tail swing radius	mm, ft-in	2,450, 8' 0"	2,450, 8' 0"	2,450, 8' 0"
E. Overall height of engine hood	mm, ft-in	2,190, 7' 2"	2,190, 7' 2"	2,190, 7' 2"
F. Counterweight clearance *	mm, ft-in	1,010, 3' 4"	1,010, 3' 4"	1,010, 3' 4"
G. Tumbler length	mm, ft-in	3,180, 10' 5"	3,180, 10' 5"	3,180, 10' 5"
H. Track length	mm, ft-in	3,980, 13' 1"	3,980, 13' 1"	3,980, 13' 1"
I. Track gauge	mm, ft-in	1,990, 6' 6"	1,990, 6' 6"	1,990, 6' 6"
J. Shoe width	mm, in	600, 24"	600, 24"	600, 24"
K. Min. ground clearance *	mm, ft-in	460, 1' 6"	460, 1' 6"	460, 1' 6"
L. Overall length	mm, ft-in	8,780, 28' 10"	8,670, 28' 5"	8,710, 28' 7"
M. Overall height of boom	mm, ft-in	2,980, 9' 9"	2,900, 9' 6"	3,020, 9' 11"

* Without shoe grouser

DIMENSIONS

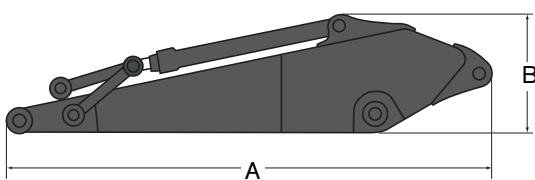
• Boom



Description	5.2 m, 17' 1"
A. Length	5,400 mm, 17' 9"
B. Height	1,640 mm, 5' 5"
Width	565 mm, 1' 10"
Weight	1,350 kg, 2,980 lb

* Includes cylinder, pin and piping

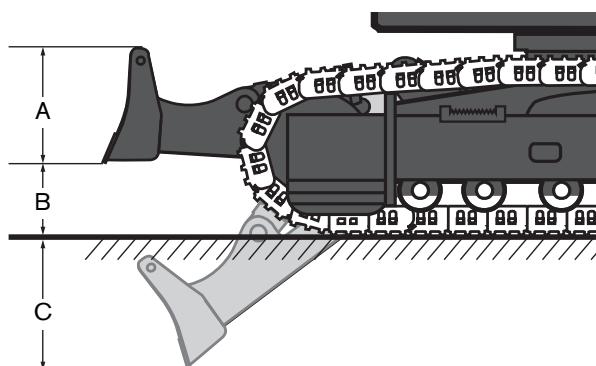
• Arm



Description	2.3 m, 7' 7"	Std. 2.6 m, 8' 6"	3.0 m, 9' 10"
A. Length	3,240 mm, 10' 8"	3,500 mm, 11' 6"	3,900 mm, 12' 10"
B. Height	855 mm, 2' 10"	855 mm, 2' 10"	845 mm, 2' 9"
Width	395 mm, 1' 4"	395 mm, 1' 4"	395 mm, 1' 4"
Weight	760 kg, 1,680 lb	775 kg, 1,710 lb	840 kg, 1,850 lb

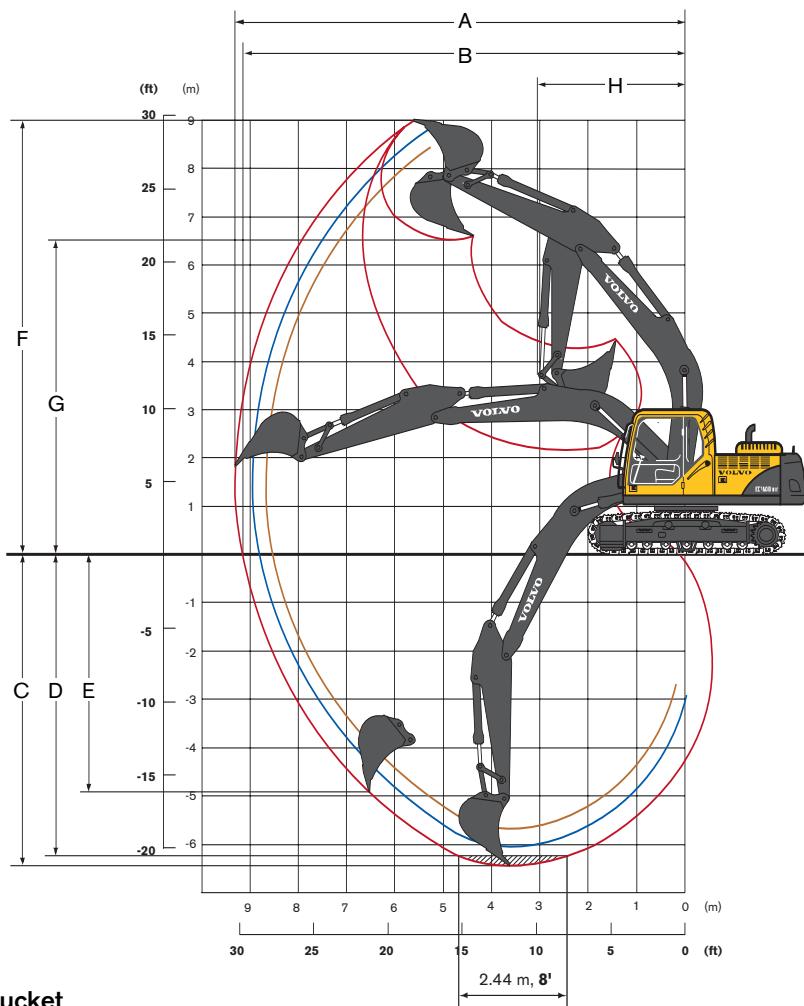
* Includes cylinder, piping and linkage

• Front dozer blade



Description	Measurement
A. Height	516 mm, 1' 8"
Width	2,590 mm, 8' 6"
Weight	575 kg, 1,270 lb
B. Lift height	710 mm, 2' 4"
C. Digging depth	607 mm, 2' 0"

WORKING RANGES & DIGGING FORCES



- Machine with pin-on bucket

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6m, 8' 6"	3.0 m, 9' 10"
A. Max. digging reach	mm, ft-in	8,650, 28' 5"	8,970, 29' 5"	9,340, 30' 8"
B. Max. digging reach on ground	mm, ft-in	8,490, 27' 10"	8,810, 28' 11"	9,180, 30' 1"
C. Max. digging depth	mm, ft-in	5,740, 18' 10"	6,040, 19' 10"	6,440, 21' 2"
D. Max. digging depth (8' level)	mm, ft-in	5,430, 17' 10"	5,770, 18' 11"	6,200, 20' 4"
E. Max. vertical wall digging depth	mm, ft-in	4,070, 13' 4"	4,540, 14' 11"	4,960, 16' 3"
F. Max. cutting height	mm, ft-in	8,530, 28' 0"	8,790, 28' 10"	9,000, 29' 6"
G. Max. dumping height	mm, ft-in	6,110, 20' 1"	6,340, 20' 10"	6,540, 21' 5"
H. Min. front swing radius	mm, ft-in	3,070, 10' 1"	3,070, 10' 1"	3,070, 10' 1"

- Digging forces with pin-on bucket

Boom	Unit	Std. 5.2 m, 17' 1"		
Arm		2.3 m, 7' 7"	Std. 2.6m, 8' 6"	3.0 m, 9' 10"
Bucket tip radius	mm, in	1,315, 52"	1,315, 52"	1,315, 52"
Breakout force – bucket (Normal/Power boost)	SAE	kN lb	99.2/105.2 22,310/23,660	99.2/105.2 22,310/23,660
Tearout force – arm (Normal/Power boost)	SAE	kN lb	84.9/90.1 19,100/20,260	75.5/80.0 16,980/17,990
Rotation angle, bucket	deg	174	174	174

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin-on bucket or the bucket with quickcoupler from the following values.

EC160B LC (Std. shoe 600 mm, 24", counterweight 2,850 kg, 6,280 lb)

 Across under-carriage  Along under-carriage	Lifting hook related to ground level	1.5 m, 5'		3.0 m, 10'		4.5 m, 15'		6.0 m, 20'		Max. reach					
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	Max. m/ft	
Std. boom 5.2 m 17' 1" + Arm 2.3 m 7' 7"	7.5 25'														
	6.0 20'												*4.2	*9,270	
	4.5 15'							*4.7	*10,120	*4.7	*10,120	*4.4	*9,600	3.2	6,780
	3.0 10'							*6.2	*13,310	4.6	9,870	4.9	10,450	3.0	6,500
	1.5 5'							7.2	15,590	4.2	9,170	4.7	10,090	2.9	6,180
	0 0'							7.0	15,130	4.1	8,770	4.6	9,840	2.8	5,950
	-1.5 -5'					*9.8	*22,470	7.5	16,020	7.0	15,020	4.0	8,680	4.5	9,760
	-3.0 -10'					*12.2	*26,350	7.6	16,340	7.1	15,190	4.1	8,830		
Std. boom 5.2 m 17' 1" + Std. Arm 2.6 m 8' 6"	-4.5 -15'														
	7.5 25'													*3.9	*8,530
	6.0 20'													*3.8	*8,480
	4.5 15'							*4.3	*9,330	*4.3	*9,330	*4.1	*9,030	3.2	6,960
	3.0 10'					*9.1	*19,320	8.5	18,270	*5.8	*12,520	4.6	10,000	*4.8	*10,390
	1.5 5'							7.3	15,700	4.3	9,250	4.7	10,130	2.9	6,210
	0 0'					*5.1	*11,800	*5.1	*11,800	7.1	15,160	4.1	8,790	4.6	9,840
	-1.5 -5'	*5.3	*11,770	*5.3	*11,770	*9.0	*20,530	7.4	15,910	7.0	14,980	4.0	8,640	4.5	9,720
Std. boom 5.2 m 17' 1" + Arm 3.0 m 9' 10"	-3.0 -10'	*9.4	*21,110	*9.4	*21,110	*12.6	*27,270	7.5	16,180	7.0	15,100	4.1	8,740		
	-4.5 -15'					*10.1	*21,570	7.8	16,840					*7.0	*15,460
	7.5 25'													*3.6	*7,810
	6.0 20'													*3.2	*7,170
	4.5 15'													*3.8	*8,220
	3.0 10'					*7.7	*16,360	*7.7	*16,360	*5.3	*11,370	4.7	10,130	*4.4	*9,660
	1.5 5'					*5.1	*12,390	*5.1	*12,390	*7.0	*15,050	4.3	9,310	4.7	10,130
	0 0'					*5.6	*12,810	*5.6	*12,810	7.0	15,140	4.1	8,760	4.6	9,800

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.

5. Contains metric and U.S. measurement charts.

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin-on bucket or the bucket with quickcoupler from the following values.

EC160B LC (Std. shoe 600 mm, 24", counterweight 3,350 kg, 7,390 lb)

	Lifting hook related to ground level	1.5 m, 5'		3.0 m, 10'		4.5 m, 15'		6.0 m, 20'		Max. reach				
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	m / ft
Std. boom 5.2 m 17' 1" + Arm 2.3 m 7' 7"	7.5 25'													
	6.0 20'													
	4.5 15'							*4.7 *10,120	*4.7 *10,120	*4.4 *9,600	3.4 7,290	4.4 *9,700	2.8 6,230	6.8 / 22.1
	3.0 10'							*6.2 *13,310	4.9 10,610	*5.0 *10,830	3.3 7,010	3.9 8,590	2.5 5,440	7.2 / 23.6
	1.5 5'							7.7 16,600	4.6 9,910	5.0 10,760	3.1 6,690	3.7 8,200	2.3 5,150	7.3 / 24.1
	0 0'							7.5 16,140	4.4 9,510	4.9 10,500	3.0 6,460	3.8 8,400	2.4 5,230	7.1 / 23.4
	-1.5 -5'					*9.8 *22,470	8.1 17,340	7.5 16,020	4.4 9,420	4.8 10,430	3.0 6,390	4.2 9,380	2.6 5,800	6.6 / 21.6
	-3.0 -10'					*12.2 *26,350	8.2 17,650	7.5 16,200	4.4 9,560			5.4 12,120	3.3 7,390	5.6 / 18.2
	-4.5 -15'													
Std. boom 5.2 m 17' 1" + Std. Arm 2.6 m 8' 6"	7.5 25'													
	6.0 20'													
	4.5 15'							*4.3 *9,330	*4.3 *9,330	*4.1 *9,030	3.4 7,360	*3.8 *8,290	2.6 5,790	7.1 / 23.2
	3.0 10'					*9.1 *19,320	9.1 *19,320	*5.8 *12,520	5.0 10,740	*4.8 *10,390	3.3 7,060	3.7 8,070	2.3 5,110	7.5 / 24.7
	1.5 5'							*7.4 *16,040	4.6 9,990	5.0 10,800	3.1 6,720	3.5 7,720	2.2 4,850	7.7 / 25.1
	0 0'					*5.1 *11,800	*5.1 *11,800	7.5 16,160	4.4 9,530	4.9 10,510	3.0 6,470	3.6 7,880	2.2 4,910	7.5 / 24.5
	-1.5 -5'	*5.3 *11,770	*5.3 *11,770	*9.0 *20,530	8.0 17,220	7.4 15,990	4.4 9,380	4.8 10,390	2.9 6,360	3.9 8,700	2.4 5,390	6.9 / 22.7		
	-3.0 -10'	*9.4 *21,110	*9.4 *21,110	*12.6 *27,270	8.1 17,500	7.5 16,100	4.4 9,480			4.9 10,850	3.0 6,660	6.0 / 19.5		
	-4.5 -15'					*10.1 *21,570	8.4 18,150					*7.0 *15,460	4.8 11,030	4.4 / 13.9
Std. boom 5.2 m 17' 1" + Arm 3.0 m 9' 10"	7.5 25'													
	6.0 20'													
	4.5 15'													
	3.0 10'					*7.7 *16,360	*7.7 *16,360	*5.3 *11,370	5.0 10,860	*4.4 *9,660	3.3 7,090	*3.3 *7,200	2.1 4,720	7.9 / 25.9
	1.5 5'					*5.1 *12,390	*5.1 *12,390	*7.0 *15,050	4.7 10,050	5.0 10,800	3.1 6,710	3.2 7,160	2.0 4,480	8.0 / 26.3
	0 0'					*5.6 *12,810	*5.6 *12,810	7.5 16,140	4.4 9,500	4.9 10,460	3.0 6,410	3.3 7,280	2.1 4,520	7.8 / 25.7
	-1.5 -5'	*4.8 *10,750	*4.8 *10,750	*8.4 *19,210	7.9 16,990	7.4 15,880	4.3 9,270	4.8 10,290	2.9 6,260	3.6 7,940	2.2 4,900	7.3 / 24.1		
	-3.0 -10'	*8.2 *18,350	*8.2 *18,350	*13.0 *28,140	8.0 17,200	7.4 15,920	4.3 9,310	4.8 10,330	2.9 6,300	4.3 9,600	2.7 5,890	6.5 / 21.1		
	-4.5 -15'					*11.0 *23,620	8.3 17,760	*7.4 *15,750	4.5 9,650			6.5 *14,430	3.9 8,810	5.0 / 16.0

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.

5. Contains metric and U.S. measurement charts.

NOTES

STANDARD EQUIPMENT

Engine

Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA (Environment Protection Agency) Tier 2 emission standards
3-stage air filter with indicator
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Coolant filter
Alternator, 80 A

Electric/Electronic control system

Contronics
– Advanced mode control system
– Self-diagnostic system
Machine status indication
Engine speed sensing power control
Automatic idling system
One-touch power boost
Safety stop/start function
Travel alarm
Adjustable monitor
Master switch
Engine restart prevention circuit

High-capacity halogen lights:

- Frame-mounted 2
- Boom-mounted 2

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
- Hammer & shear:

1 pump flow

2 switch control

- Quickcoupler piping

Boom and arm regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Pump flow control for hammer & shear

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Straight travel circuit

Automatic two-speed travel motors

Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail
Full height counterweight
3,350 kg, **7,390 lb**

Punched metal anti-slip plates
Undercover (heavy-duty 4,5 mm, **0.18"**)

Cab and interior

Fabric seat with heater and air suspension

Pilot-operated wrist control joysticks with 3 switches each

Heater & air-conditioner, automatic

Hydraulic dampening cab mounts

Adjustable operator seat and joystick control console

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
- Sun shield, front, roof, rear
- Windshield wiper with intermittent feature
- Stereo cassette radio
- Anti-vandalism kit assembly preparation
- Master ignition key

Undercarriage

Hydraulic track adjusters
Greased and sealed track chain
Track guards
Undercover (4,5 mm, **0.18"**)

Track shoes

Track shoes 600 mm, **24"** with triple grousers

Digging equipment

Boom: 5.2 m, **17' 1"**
Arm: 2.6 m, **8' 6"**

OPTIONAL EQUIPMENT (*Standard in certain markets*)

Engine

Block heater: 120 V
Diesel coolant heater
Tropical cooling kit
Fuel filler pump: 50 l/min, **13.2 gpm** with automatic shut-off

Electric

Extra lamps:
– Cab-mounted 3 (front 2, rear 1)
– Counterweight-mounted 1

Overload warning device
Rotating warning beacon

Hydraulic system

Hose rupture valve: boom, arm

Hydraulic piping

- Hammer & shear:

2 pump flow

Pedal control

Additional return filter

Extra piping for slope & rotator

- Slope & rotator

- Oil leak (drain) line

Volvo hydraulic quickcoupler, S1, S6 size

Hydraulic oil, ISO VG 32

Hydraulic oil, ISO VG 68

Hydraulic oil, biodegradable 32

Hydraulic oil, biodegradable 46

Boom floating function

Superstructure

Full height counterweight

2,850 kg, **6,280 lb**

Cab and interior

Fabric seat

Fabric seat with heater

Control joystick with semi-long levers

Control joystick with 5 switches each

Pilot control pattern change

Air-conditioner, manual

Falling object guard (FOG)

Cab-mounted falling object protective structures (FOPS)

Sunlight protection, roof (steel)

Rain shield, front

Safety screen for front window

Lower wiper

Anti-vandalism kit

Track shoes

500/700/800/900 mm

20"/28"/32"/36" track shoes with triple grousers

Undercarriage

Front dozer blade
Undercover (heavy-duty 10 mm, **0.39"**)

Digging equipment

Arm: 2.3 m, **7' 7"**
3.0 m, 9' 10"

Service

Hand lamp
Spare parts
Tool kit, full scale

All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Construction Equipment

Volvo Construction Equipment North America, Inc.

One Volvo Drive, Asheville, NC 28803-3447

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