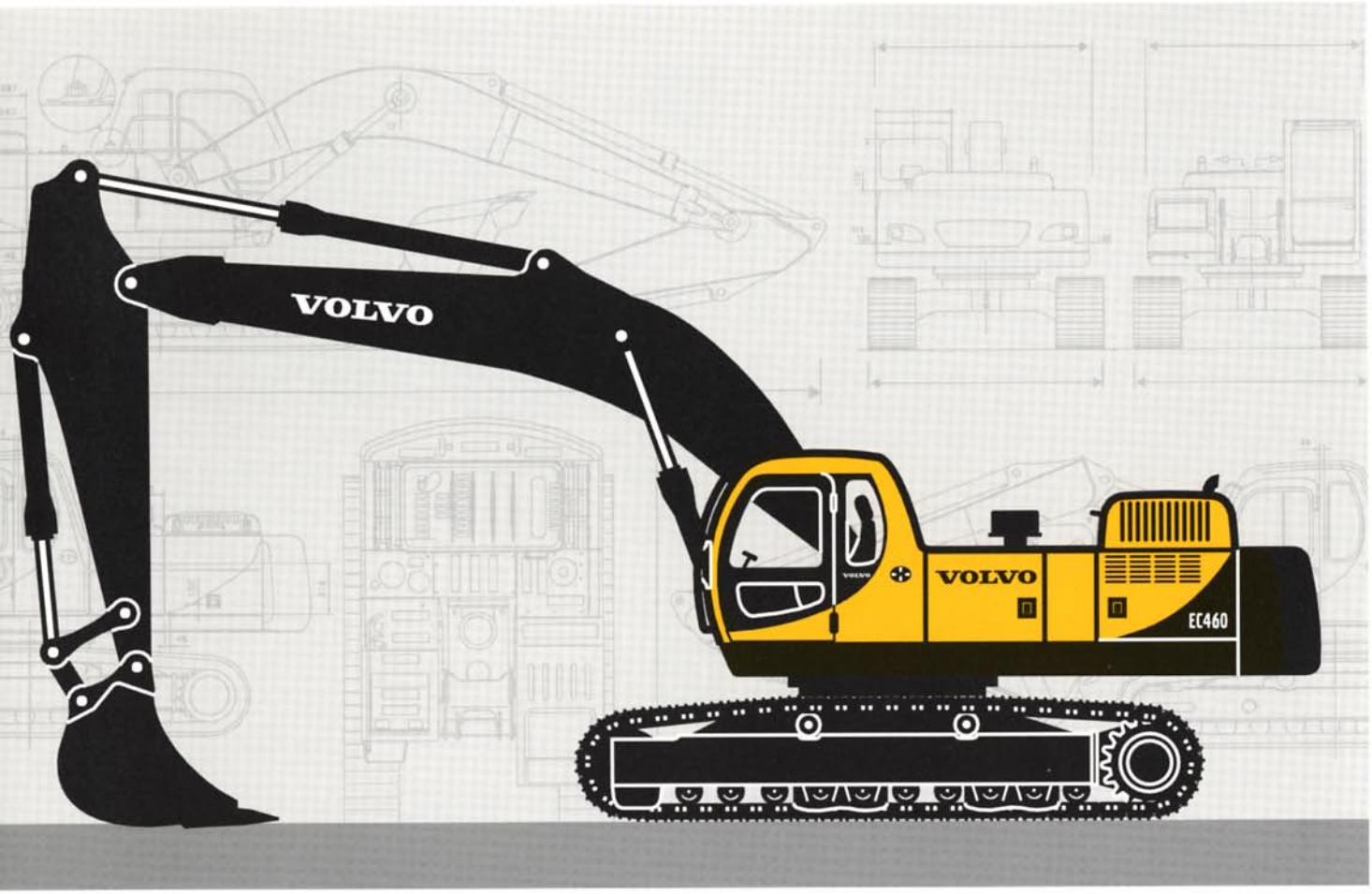
VOLVO EXCAVATOR

EC460



- **Engine power, gross:**
  239 kW **321 hp**
- **Operating weight:**
  44.3 ~ 46.0 t
  97,570 ~ 101,470 lb
- **Buckets (SAE):**
  1750 ~ 3850 l
  2.29 ~ 5.04 yd³

- Low-emission, turbocharged Cummins diesel engine with direct injection
- Integrated mode selection system and electronically controlled system (ACS)
- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by the "Automatic sensing work mode."
- Cab
  – Ergonomic environment
  – Low sound level
  – Filtered air
  – Hydraulic dampening mounts
- Strong attachment, produced by robotic welding
- High lifting, breakout and tearout forces for tough digging conditions
- Long undercarriage for good stability
- Prepared for a number of optional items

VOLVO

ENGINE

The engine is a low-emission, turbocharged, 4-stroke diesel engine with water cooling, direct injection and aftercooler, especially developed for excavator use.
The machine can work at any job site, contributing to good fuel economy, low sound level, less wear and a longer life.

Air filter: 3-stage, includes pre-cleaner

Automatic idling system: Reduces the engine speed to an idling speed when levers and pedals are not activated.

Maker	CUMMINS	
Model	M11-C	
Power output at	33 r/s	**2000 rpm**
Net (ISO 9249/DIN 6271)	221 kW	**296 hp**
Gross (SAE J1349)	239 kW	**321 hp**
Max. torque	1177 N·m at 1500 rpm	
	868 lb·ft at 1500 rpm	
No. of cylinders	6	
Displacement	10.8 l	**659 cu.in**
Bore	125 mm	**4.92"**
Stroke	147 mm	**5.79"**

ELECTRICAL SYSTEM

Well-protected electrical system with high capacity.
Double lock harness plugs are waterproof to ensure secure connections and prevent corrosion.
The relays and solenoid valves are shielded to prevent accidental damage or terminal contact.
The master switch, for disconnecting the battery, is standard.

ACS system, providing integrated mode selection functions and self-diagnostic mode, is standard.

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	200 Ah
Alternator	24 V / 50 A

SERVICE REFILL CAPACITIES

Fuel tank	665 l	**176 gal**
Hydraulic system, total	540 l	**143 gal**
Hydraulic tank	285 l	**75 gal**
Engine oil	34 l	**9 gal**
Engine coolant	49 l	**13 gal**
Swing reduction units	2 x 6.0 l	**2 x 1.6 gal**
Travel reduction units	2 x 5.0 l	**2 x 1.3 gal**

SWING SYSTEM

The superstructure is swung by the means of two axial piston motors and planetary reduction units. Automatic swing holding brakes and anti-rebound valves are standard.

Max. swing speed	8.0 rpm

UNDERCARRIAGE

The undercarriage has an X-shaped frame.
The greased and sealed track chain is standard.

No. of track pads	2 x 52
Link pitch	216 mm **8.5"**
Shoe width, triple grouser	600/700/750(Std.)/800/900 mm
	24"/28"/30"(Std.)**/32"/36"**
Shoe width, double grouser	600 mm **24"**
No. of lower track rollers	2 x 10
No. of upper rollers	2 x 2

DRIVE

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

Max. tractive effort	320.7 kN
	72,100 lb
Max. travel speed(1st/2nd)	2.8 / 4.3 km/h
	1.7/ 2.7 mph
Gradeability	35° **70 %**

HYDRAULIC SYSTEM

The hydraulic system, named "Automatic Sensing Work Mode," is designed for high productivity, high digging capacity, high maneuvering precision and good fuel economy.
The summation system, boom priority, arm priority, swing priority, and regeneration system of the arm flow are provided for the best operation.

The following important functions are included in the system.

Summation system: Providing full use of the pump oil flow.

Boom priority: Providing priority to the boom operation for fast raising during loading or deep excavation.

Arm priority: Providing priority to the arm operation for faster cycle times during leveling and for increased bucket filling factors while digging.
Swing priority: Providing priority to the swing operation for faster swing during simultaneous operations.

Regeneration system: Enhancing the cylinder life cycle, preventing cavitation and providing priority to other movements during simultaneous operations.

Power boost: All digging and lifting forces are increased.

Holding valves: Boom and arm holding valves are standard.

Power Max: All function speeds are increased.

Pumps
- Main pumps:
  - Type ..... 2 x variable displacement axial piston pumps
  - Maximum flow ..... 2 x 330 l/min **2 x 87 gpm**
- Pilot pump:
  - Type ..... Gear pump
  - Maximum flow ..... 30 l/min **7.9 gpm**

Hydraulic motors
- Travel ..... 2 x variable displacement axial piston motors
- Swing ..... 2 x fixed displacement piston motors with mechanical brakes

Relief valve setting
- Attachment ..... 31.4/34.3 MPa **4550/4980 psi**
- Travel circuit ..... 31.3 MPa **4550 psi**
- Swing circuit ..... 24.5 MPa **3560 psi**
- Pilot circuit ..... 3.9 MPa **570 psi**

Hydraulic cylinders
- Boom 2
  - bore × stroke ..... Ø 165 mm x 1590 mm **Ø 6.5" x 62.6"**
- Arm 1
  - bore × stroke ..... Ø 190 mm x 1880 mm **Ø 7.5" x 74.0"**
- Bucket 1
  - bore × stroke ..... Ø 165 mm x 1335 mm **Ø 6.5" x 52.6"**

CAB

Easily accessible cab with a wide door and lined with sound-absorbing material.
The cab, which is supported by hydraulic dampening mounts to reduce shock and vibration, has all-around visibility.
The front windshield can slide up into the ceiling, and the lower front glass can be removed.

Integrated air-conditioning and heating system:
The pressurized and filtered cab air is supplied by a 4-speed fan. The air is distributed via 8 vents.

Ergonomic operator's seat: The adjustable seat and control consoles move independently to accommodate the operator well. The seat has eight different adjustments and a seat belt to meet any operator's requirement.

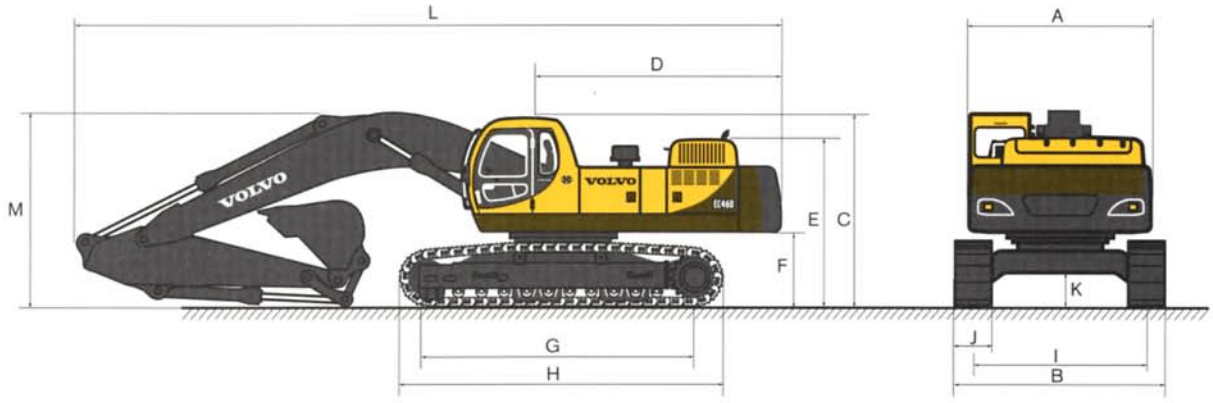
Sound level (Preliminary): According to the Directive 86/662/EEC.
- Exterior noise (ISO 6395)
  - mean value of L_{WA} (sound power level) 106 dB(A)
- Operator's position (ISO 6396)
  - with the door closed
  - mean value of L_{PA} (sound pressure level) 75 dB(A)

GROUND PRESSURE

• *Machine with Std. 7.0 m,* ***23' 0"*** *boom, Std. 3.35 m,* ***11' 0"*** *arm, 1730 kg,* ***3,810 lb*** *bucket and 9300 kg,* ***20,510 lb*** *counterweight.*

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm **24"**	44500 kg **98,120 lb**	77.5 kPa **11.2 psi**	3470 mm **11' 5"**
	700 mm **28"**	45000 kg **99,230 lb**	66.7 kPa **9.7 psi**	3570 mm **11' 9"**
	Std. 750 mm Std. **30"**	45240 kg **99,750 lb**	62.8 kPa **9.1 psi**	3620 mm **11' 11"**
	800 mm **32"**	45550 kg **100,330 lb**	58.8 kPa **8.5 psi**	3670 mm **12' 0"**
	900 mm **36"**	46020 kg **101,470 lb**	53.0 kPa **7.7 psi**	3770 mm **12' 4"**
Double grouser	600 mm **24"**	44250 kg **97,570 lb**	76.5 kPa **11.1 psi**	3470 mm **11' 5"**

DIMENSIONS

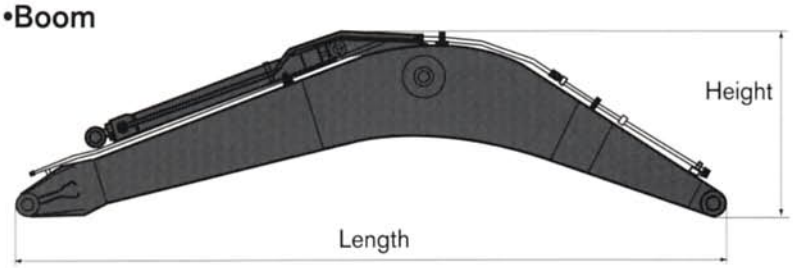


Boom / Arm	unit	6.3 m, 20' 8" / 2.55 m, 8' 4"	Std. 7.0 m, 23' 0" / 2.55 m, 8' 4"	Std. 7.0 m, 23' 0" / Std. 3.35 m, 11' 0"	Std. 7.0 m, 23' 0" / 3.9 m, 12' 10"	Std. 7.0 m, 23' 0" / 4.8 m, 15' 9"
A. Overall width of upper structure	mm, **ft-in**	2990, **9' 10"**	2990, **9' 10"**	2990, **9' 10"**	2990, **9' 10"**	2990, **9' 10"**
B. Overall width	mm, **ft-in**	3620, **11' 11"**	3620, **11' 11"**	3620, **11' 11"**	3620, **11' 11"**	3620, **11' 11"**
C. Overall height of cab	mm, **ft-in**	3230, **10' 7"**	3230, **10' 7"**	3230, **10' 7"**	3230, **10' 7"**	3230, **10' 7"**
D. Tail swing radius	mm, **ft-in**	3730, **12' 3"**	3730, **12' 3"**	3730, **12' 3"**	3730, **12' 3"**	3730, **12' 3"**
E. Overall height of engine hood	mm, **ft-in**	2850, **9' 4"**	2850, **9' 4"**	2850, **9' 4"**	2850, **9' 4"**	2850, **9' 4"**
F. Counterweight clearance*	mm, **ft-in**	1250, **4' 1"**	1250, **4' 1"**	1250, **4' 1"**	1250, **4' 1"**	1250, **4' 1"**
G. Tumbler length	mm, **ft-in**	4370, **14' 4"**	4370, **14' 4"**	4370, **14' 4"**	4370, **14' 4"**	4370, **14' 4"**
H. Track length	mm, **ft-in**	5370, **17' 7"**	5370, **17' 7"**	5370, **17' 7"**	5370, **17' 7"**	5370, **17' 7"**
I. Track gauge	mm, **ft-in**	2870, **9' 5"**	2870, **9' 5"**	2870, **9' 5"**	2870, **9' 5"**	2870, **9' 5"**
J. Shoe width-Std.	mm, **in**	750, **30"**	750, **30"**	750, **30"**	750, **30"**	750, **30"**
K. Min. ground clearance*	mm, **ft-in**	525, **1' 9"**	525, **1' 9"**	525, **1' 9"**	525, **1' 9"**	525, **1' 9"**
L. Overall length	mm, **ft-in**	11390, **37' 4"**	12090, **39' 8"**	12040, **39' 6"**	12090, **39' 8"**	11870, **38' 11"**
M. Overall height of boom	mm, **ft-in**	4120, **13' 6"**	3980, **13' 1"**	3650, **12' 0"**	3860, **12' 8"**	4790, **15' 9"**

* Without shoe grouser

DIMENSIONS

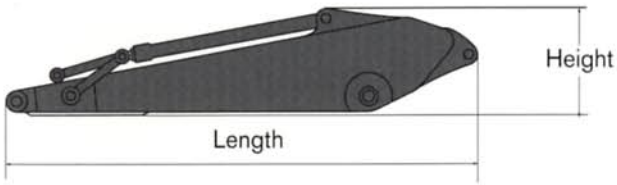
•Boom



Description	6.3 m, **20' 8"**	Std. 7.0 m, **23' 0"**
Length	6550 mm, **21' 6"**	7240 mm, **23' 9"**
Height	2000 mm, **6' 7"**	1840 mm, **6' 0"**
Width	960 mm, **3' 2"**	960 mm, **3' 2"**
Weight *	3870 kg, **8,530 lb**	3925 kg, **8,650 lb**

* Includes cylinder, piping and pin

•Arm



Description	2.55 m, **8' 4"**	Std. 3.35 m, **11' 0"**	3.9 m, **12' 10"**	4.8 m, **15' 9"**
Length	3620 mm, **11' 11"**	4555 mm, **14' 11"**	5115 mm, **16' 9"**	6080 mm, **19' 11"**
Height	1235 mm, **4' 1"**	1140 mm, **3' 9"**	1230 mm, **4' 0"**	1230 mm, **4' 0"**
Width	600 mm, **2' 0"**	600 mm, **2' 0"**	600 mm, **2' 0"**	600 mm, **2' 0"**
Weight *	2110 kg, **4,650 lb**	2365 kg, **5,210 lb**	2505 kg, **5,520 lb**	2905 kg, **6,410 lb**

* Includes cylinder, linkage and pins

BUCKET & ARM COMBINATION

Note: Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose.

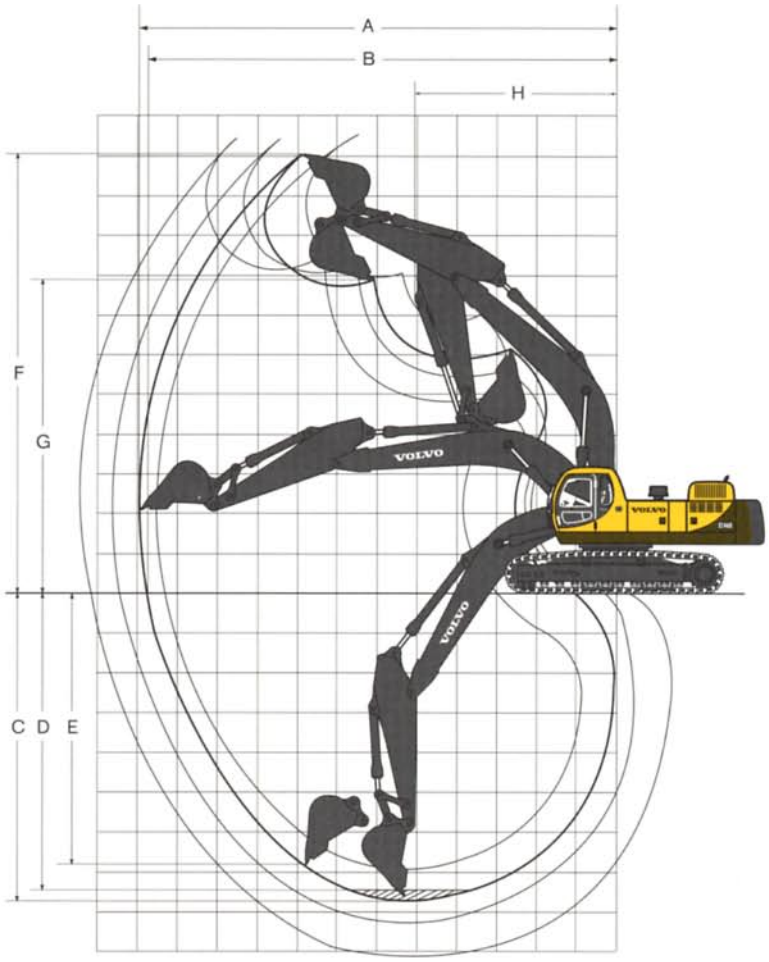
- Max. permitted **sizes for pin on buckets:**
  Counterweight: 9300 kg, **20,510 lb**

Boom	**unit**	6.3 m, **20' 8"**	Std. 7.0 m, **23' 0"**			
Arm		2.55 m, **8' 4"**	2.55 m, **8' 4"**	Std. 3.35 m, **11' 0"**	3.9 m, **12' 10"**	4.8 m, **15' 9"**
GP bucket 1.5 t/m³, **2,530 lb/yd³**	l, **yd³**	3850, **5.04**	3375, **4.41**	3075, **4.02**	2825, **3.70**	2475, **3.24**
GP bucket 1.8 t/m³, **3,030 lb/yd³**	l, **yd³**	3350, **4.38**	2950, **3.86**	2675, **3.50**	2475, **3.24**	2175, **2.84**
RB bucket 1.8 t/m³, **3,030 lb/yd³**	l, **yd³**	3100, **4.05**	2725, **3.56**	2475, **3.24**	2275, **2.98**	2000, **2.62**
RB bucket 2.0 t/m³, **3,370 lb/yd³**	l, **yd³**	2875, **3.76**	2525, **3.30**	2300, **3.01**	2125, **2.78**	1850, **2.42**

- Max. permitted **sizes for hook on buckets:**
  Counterweight: 9300 kg, **20,510 lb**

Boom	**unit**	6.3 m, **20' 8"**	Std. 7.0 m, **23' 0"**			
Arm		2.55 m, **8' 4"**	2.55 m, **8' 4"**	Std. 3.35 m, **11' 0"**	3.9 m, **12' 10"**	4.8 m, **15' 9"**
GP bucket 1.5 t/m³, **2,530 lb/yd³**	l, **yd³**	3700, **4.84**	3250, **4.25**	2925, **3.83**	2700, **3.53**	2350, **3.07**
GP bucket 1.8 t/m³, **3,030 lb/yd³**	l, **yd³**	3250, **4.25**	2825, **3.70**	2575, **3.37**	2350, **3.07**	2050, **2.68**
RB bucket 1.8 t/m³, **3,030 lb/yd³**	l, **yd³**	3000, **3.92**	2625, **3.43**	2375, **3.11**	2175, **2.84**	1900, **2.49**
RB bucket 2.0 t/m³, **3,370 lb/yd³**	l, **yd³**	2775, **3.63**	2425, **3.17**	2200, **2.88**	2025, **2.65**	1750, **2.29**

WORKING RANGES



• **Pin on bucket**

Boom	**unit**	6.3 m, **20' 8"**	Std. 7.0 m, **23' 0"**			
Arm		2.55 m, **8' 4"**	2.55 m, **8' 4"**	Std. 3.35m, **11' 0"**	3.9 m, **12' 10"**	4.8 m, **15' 9"**
A. Max. digging reach	mm, **ft-in**	10810, **35' 6"**	11520, **37' 10"**	12100, **39' 8"**	12630, **41' 5"**	13370, **43' 10"**
B. Max. digging reach on ground	mm, **ft-in**	10570, **34' 8"**	11290, **37' 0"**	11890, **39' 0"**	12420,**40' 9"**	13180, **43' 3"**
C. Max. digging depth	mm, **ft-in**	6320, **20' 9"**	6940, **22' 9"**	7740, **25' 5"**	8290, **27' 2"**	9190, **30' 2"**
D. Max. digging depth (8' level)	mm, **ft-in**	6140, **20' 2"**	6770, **22' 3"**	7590, **24' 11"**	8160, **26' 9"**	9080, **29' 9"**
E. Max. vertical wall digging depth	mm, **ft-in**	5130, **16' 10"**	5870, **19' 3"**	6920, **22' 8"**	7430, **24' 5"**	7920, **26' 0"**
F. Max. cutting height	mm, **ft-in**	11130, **36' 6"**	11570, **38' 0"**	11220, **36' 10"**	11480, **37' 8"**	11490, **37' 8"**
G. Max. dumping height	mm, **ft-in**	7500, **24' 7"**	7940, **26' 1"**	7790, **25' 7"**	8050, **26' 5"**	8140, **26' 8"**
H. Min. front swing radius	mm, **ft-in**	4450, **14' 7"**	5020, **16' 6"**	5050, **16' 7"**	4980, **16' 4"**	5090, **16' 8"**

• **Digging forces** with pin on bucket

Boom		**unit**	6.3 m,**20' 8"**	Std. 7.0 m, **23' 0"**			
Arm			2.55 m, **8' 4"**	2.55 m, **8' 4"**	Std. 3.35m, **11' 0"**	3.9 m, **12' 10"**	4.8 m, **15' 9"**
Bucket tip radius		mm, **in**	1850, **73"**	1850, **73"**	1850, **73"**	1850, **73"**	1850, **73"**
Breakout force-bucket (Normal / Power boost)	SAE	kN **lb**	218.8 / 239.3 **49,190 / 53,800**	218.8 / 239.3 **49,190 / 53,800**	218.8 / 239.3 **49,190 / 53,800**	218.8 / 239.3 **49,190 / 53,800**	218.8 / 239.3 **49,190 / 53,800**
Tearout force-arm (Normal / Power boost)	SAE	kN **lb**	227.4 / 248.7 **51,130 / 55,920**	227.4 / 248.7 **51,130 / 55,920**	188.5 / 206.1 **42,380 / 46,350**	170.2 / 186.2 **38,280 / 41,870**	155.6 / 170.2 **34,990 / 38,280**
Rotation angle, bucket		°	183°	183°	183°	183°	183°

LIFTING CAPACITY (At the arm end without bucket)

Note: For lift capacity including bucket, simply subtract actual weight of the pin on bucket or the bucket with quick coupler from the following values.

EC460 (Std. shoe 750 mm, **30"**, counterweight 9300 kg, **20,510 lb**)

Across under-carriage / Along under-carriage	Lifting hook related to ground level m / ft	4.5 m, 15'				6 m, 20'				7.5 m, 25'				9 m, 30'				Max.reach				Max. m / ft
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	
Boom 6.3 m 20' 8" + Arm 2.55 m 8' 4"	7.5 25'																	11.2	25,280	*12.2	*27,210	7.2 / 23.4
	6 20'					*13.2	*28,750	*13.2	*28,750	10.6	22,880	*12.3	*27,120					9.3	20,620	*11.2	*24,840	8.1 / 26.5
	4.5 15'	*19.2	*41,180	*19.2	*41,180	14.6	31,420	*14.9	*32,340	10.4	22,450	*13.0	*28,250					8.3	18,320	*10.8	*23,790	8.7 / 28.4
	3 10'					13.9	30,070	*16.9	*36,650	10.1	21,820	*13.9	*30,230					7.8	17,240	*10.8	*23,710	8.9 / 29.3
	1.5 5'					13.4	29,000	*18.5	*40,090	9.9	21,250	*14.8	*32,010					7.7	17,030	*11.1	*24,390	8.9 / 29.3
	0 0'	20.2	43,400	*20.7	*49,320	13.2	28,410	*19.2	*41,550	9.7	20,910	15.0	32,250					8.0	17,660	*11.7	*25,890	8.7 / 28.4
	-1.5 -5'	20.2	43,510	*24.7	*53,580	13.1	28,310	*18.7	*40,530	9.7	20,920	*14.5	*31,330					8.8	19,420	*12.7	*27,890	8.1 / 26.6
	-3 -10'	20.5	44,120	*21.9	*47,350	13.3	28,720	*16.7	*35,940									10.5	23,270	*12.3	*27,000	7.2 / 23.6
	-4.5 -15'																					
Boom 7.0 m 23' 0" + Arm 2.55 m 8' 4"	7.5 25'									10.7	23,040	*11.0	*24,330					9.4	20,990	*11.3	*25,050	8.1 / 26.3
	6 20'					*12.7	*27,450	*12.7	*27,450	10.6	22,760	*11.3	*24,770					8.0	17,720	*11.2	*24,590	8.9 / 29.1
	4.5 15'					14.2	30,640	*14.7	*31,690	10.2	22,090	*12.3	*26,690	7.8	16,720	*11.2	*24,460	7.2	15,990	10.9	24,130	9.4 / 30.8
	3 10'					13.5	29,140	*16.8	*36,240	9.9	21,330	*13.4	*29,030	7.6	16,410	11.5	24,860	6.9	15,140	10.4	22,930	9.6 / 31.6
	1.5 5'					13.0	28,090	*18.3	*39,520	9.6	20,700	*14.3	*31,020	7.5	16,100	11.4	24,530	6.8	14,970	10.3	22,740	9.6 / 31.6
	0 0'					12.8	27,600	*18.8	*40,800	9.4	20,320	14.7	31,620	7.4	15,950	11.3	24,370	7.0	15,430	10.7	23,510	9.4 / 30.8
	-1.5 -5'	*19.2	42,610	*19.2	*45,320	12.8	27,550	*18.5	*40,080	9.4	20,260	*14.6	31,540					7.6	16,730	11.6	*25,540	8.9 / 29.1
	-3 -10'	20.1	43,160	*21.8	*47,390	12.9	27,880	*17.1	*37,050	9.5	20,610	*13.3	*28,530					8.7	19,390	*11.5	*25,270	8.1 / 26.4
	-4.5 -15'	*18.1	*38,890	*18.1	*38,890	13.3	28,780	*14.0	*29,600									*10.7	*23,530	*10.7	*23,530	6.8 / 22.2
Boom 7.0 m 23' 0" + Arm 3.35 m 11' 0"	7.5 25'									*9.6	*21,170	*9.6	*21,170					*7.9	*17,490	*7.9	*17,490	8.8 / 28.6
	6 20'									*10.2	*22,290	*10.2	*22,290	8.0	17,150	*9.8	*21,540	7.2	16,040	*7.7	*16,920	9.5 / 31.2
	4.5 15'	*17.3	*36,960	*17.3	*36,960	*13.2	*28,570	*13.2	*28,570	10.3	22,300	*11.3	*24,500	7.8	16,830	*10.2	*22,360	6.6	14,560	*7.7	*16,910	10.0 / 32.8
	3 10'	20.7	44,740	*22.0	*47,120	13.7	29,510	*15.5	*33,450	9.9	21,420	*12.5	*27,140	7.6	16,380	*10.9	*23,710	6.3	13,790	*7.9	*17,370	10.2 / 33.5
	1.5 5'	*14.2	*34,160	*14.2	*34,160	13.1	28,160	*17.4	*37,520	9.6	20,640	*13.6	*29,570	7.4	15,950	11.3	24,410	6.2	13,570	*8.3	*18,300	10.2 / 33.6
	0 0'	*17.4	*40,630	*17.4	*40,630	12.7	27,370	*18.4	*39,840	9.3	20,100	*14.4	*31,210	7.3	15,650	11.2	24,080	6.3	13,870	*9.0	*19,910	10.0 / 32.8
	-1.5 -5'	19.4	41,740	*24.8	*53,920	12.6	27,090	*18.6	*40,230	9.2	19,870	14.5	31,150	7.2	15,570	11.1	23,990	6.7	14,820	*10.2	*22,580	9.5 / 31.2
	-3 -10'	19.6	42,140	*23.3	*50,540	12.6	27,220	*17.8	*38,550	9.3	19,970	*14.0	*30,270					7.6	16,760	*11.3	*24,900	8.8 / 28.7
	-4.5 -15'	20.0	43,000	*20.5	*44,120	12.9	27,800	*15.8	*33,920									9.3	20,750	*11.4	*25,090	7.7 / 24.9

Notes : 1. Machine in "Fine Mode-F" (Power Boost), for lift capacities.
2. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift 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 lift capacity including bucket, simply subtract actual weight of the pin on bucket or the bucket with quick coupler from the following values.

EC460 (Std. shoe 750 mm, **30"**, counterweight 9300 kg, **20,510 lb**)

Across under-carriage / Along under-carriage	Lifting hook related to ground level m / ft	4.5 m, 15'				6 m, 20'				7.5 m, 25'				9 m, 30'				Max.reach				Max. m / ft
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	
Boom 7.0 m 23' 0" + Arm 3.9 m 12' 10"	7.5 25'													8.2	17,440	*8.9	*17,480	*6.6	*14,490	*6.6	*14,490	9.4 / 30.6
	6 20'									*9.4	*20,580	*9.4	*20,580	8.1	17,330	*9.1	*19,920	*6.4	*14,050	*6.4	*14,050	10.1 / 33.0
	4.5 15'					*12.2	*26,310	*12.2	*26,310	10.4	22,490	*10.5	*22,920	7.9	16,920	*9.6	*21,030	6.1	13,380	*6.4	*14,040	10.5 / 34.5
	3 10'	*20.1	*43,200	*20.1	*43,200	13.8	29,860	*14.5	*31,390	10.0	21,540	*11.9	*25,730	7.6	16,410	*10.4	*22,580	5.8	12,710	*6.5	*14,350	10.8 / 35.3
	1.5 5'	*18.7	42,930	*18.7	*44,800	13.1	28,330	*16.6	*35,920	9.6	20,670	*13.1	*28,430	7.4	15,910	*11.1	*24,150	5.7	12,500	*6.9	*15,080	10.8 / 35.3
	0 0'	*18.8	41,670	*18.8	*43,610	12.7	27,330	*18.0	*38,900	9.3	20,020	*14.0	*30,440	7.2	15,520	11.1	23,960	5.8	12,730	*7.4	*16,280	10.5 / 34.6
	-1.5 -5'	19.2	41,350	*23.8	*54,410	12.5	26,870	*18.5	*40,010	9.1	19,670	14.4	30,960	7.1	15,330	11.0	23,750	6.1	13,490	*8.2	*18,240	10.1 / 33.1
	-3 -10'	19.3	41,570	*24.0	*52,060	12.5	26,860	*18.1	*39,150	9.1	19,640	*14.2	*30,760	7.1	15,440	11.1	23,870	6.8	15,030	*9.7	*21,450	9.4 / 30.7
	-4.5 -15'	19.7	42,270	*21.7	*46,910	12.6	27,260	*16.6	*35,780	9.3	20,020	*12.9	*27,550					8.1	18,030	*10.8	*23,850	8.3 / 27.2
	-6 -20'	*17.5	*37,170	*17.5	*37,170	13.1	*27,550	*13.1	*27,550									*10.6	*23,330	*10.6	*23,330	6.8 / 22.0
Boom 7.0 m 23' 0" + Arm 4.8 m 15' 9"	9 30'													*7.7	*14,940	*7.7	*14,940	*6.5	*14,370	*6.5	*14,370	9.3 / 30.2
	7.5 25'													*7.5	*16,680	*7.5	*16,680	*6.2	*13,670	*6.2	*13,670	10.2 / 33.4
	6 20'													*7.9	*17,320	*7.9	*17,320	5.8	12,870	*6.1	*13,400	10.9 / 35.6
	4.5 15'									*9.2	*20,040	*9.2	*20,040	7.9	17,010	*8.6	*18,700	5.3	11,830	*6.1	*13,480	11.3 / 37.0
	3 10'	*17.0	*36,440	*17.0	*36,400	*12.8	*27,550	*12.8	*27,550	10.1	21,710	*10.6	*23,070	7.6	16,380	*9.4	*20,480	5.1	11,240	*6.3	*13,870	11.5 / 37.7
	1.5 5'	20.3	43,730	*21.2	*45,790	13.3	28,570	*15.1	*32,690	9.6	20,660	*12.1	*26,130	7.3	15,760	*10.3	*22,350	5.0	11,020	*6.6	*14,600	11.5 / 37.7
	0 0'	19.3	41,550	*22.7	*51,500	12.6	27,200	*16.9	*36,600	9.2	19,810	*13.2	*28,670	7.1	15,240	11.0	23,700	5.1	11,150	*7.1	*15,740	11.3 / 37.1
	-1.5 -5'	18.9	40,630	*24.4	*53,680	12.3	26,420	*17.9	*38,810	8.9	19,250	*14.0	*30,290	6.9	14,890	10.8	23,320	5.3	11,680	*7.9	*17,540	10.9 / 35.7
	-3 -10'	18.8	40,490	*24.5	*53,100	12.1	26,140	*18.1	*39,160	8.8	19,030	14.1	30,300	6.9	14,790	10.8	23,200	5.8	12,790	9.0	19,930	10.2 / 33.5
	-4.5 -15'	19.0	40,910	*23.1	*49,880	12.2	26,300	*17.3	*37,420	8.9	19,150	*13.6	*29,240	6.9	15,040	*10.7	*22,730	6.7	14,860	*10.1	*22,300	9.3 / 30.3
	-6 -20'	19.5	41,890	*20.1	*43,180	12.5	26,950	*15.2	*32,580	9.1	19,790	*11.6	*24,310					8.5	19,050	*10.4	*22,950	8.0 / 25.8

Notes : 1. Machine in "Fine Mode-F" (Power Boost), for lift capacities.
2. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift 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.

STANDARD EQUIPMENT

Engine
Low-emission engine with air heater, complying with EPA (Environment Protection Association, USA) emission standards
2-stage air filter with indicator
Pre-cleaner
Electric engine shut-off
Fuel filter and water separator
Alternator, 50 AMP

Electronic control system
Advanced control system (ACS)
Integrated mode selection system
Self-diagnostic system
Machine status indication
Engine speed sensing power control
"Power Max" mode system
Automatic idling system
One-touch power boost
Automatic engine warm-up
Safety stop/start function
Adjustable monitor
Master disconnect switch
Engine restart prevention circuit
Powerful halogen lights:
- Frame mounted 2
- Boom mounted 4

Batteries, 2 x 12V/200Ah
Start motor, 24V/7.8kW
Travel alarm

Hydraulic system
Automatic sensing work mode
- Summation system
- Boom priority
- Arm priority
- Swing priority

Arm flow regeneration
Swing anti-rebound valves
Boom and arm holding valves
Pilot-operated, wrist control joysticks, with 3 switches ea.
Multi-stage filtering system
Cylinder cushions
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
- 9300 kg, **20,510 lbs**

Tool storage area
Punched metal anti-slip plates

Cab and interior
Air-conditioner
Heater
Hydraulic dampening cab mounts
Adjustable operator seat and control consoles
Flexible antenna
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
- Ashtray
- Cigar lighter
- Clear tinted roof hatch
- Door locks
- Fabric seat with heater
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass
- Sliding rear window
- Sun shield, front
- Windshield wiper with intermittent feature

Master ignition key
Stereo cassette radio (AM/FM)
Vandal guard preparation

Undercarriage
Hydraulic track adjusters
Greased and sealed track chain
Track guides

Track shoes
Std. track shoes 750 mm, **30"** with triple grousers

Attachment
Std. boom: 7.0 m, **23' 0"**
Std. arm: 3.35 m, **11' 0"**

OPTIONAL EQUIPMENT

Engine
Alternator, 70 AMP
Block and oil pan heater, 120V
Fuel warmer
Tropical kit
Fuel filler pump: 50 lpm (13.2 gpm), with automatic shut-off

Electronic control system
Pump flow control for hammer & shear
Extra work lights-4:
- Cab mounted-3, (front 2, rear 1)
- Counterweight mounted-1

Rotating warning beacon

Superstructure
Undercover (heavy duty), 4.5 mm, (.18")
Service walk
Counterweight removal system

Hydraulic system
Hydraulic piping
- Hammer & shear:
  1 pump flow
  2 pump flow
  Additional return filter
  Extra piping for slope & rotator
- Slope & rotator
- Grapple
- Oil leak line

Volvo quick coupler piping
Volvo hydraulic quick coupler-S3 size
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68

Cab and interior
Fabric seat
Fabric seat, with heater and air suspension
Control joystick, with 5 switches ea.
Falling object guard (FOG)
Cab mounted falling object protective structures (FOPS)
Rain shield, front
Safety screen for front window
Vandalism kit

Undercarriage
Full track guides
Undercover (heavy duty), 10 mm, (.39")

Track shoes
600 / 700 / 800 / 900 mm
24"/ 28"/ 32"/ 36"
track shoes with triple grousers
600 mm, **24"** track shoes with double grousers

Attachment
Boom: 6.0 m, **19' 8"** heavy duty
Arms: 2.55 m / 3.9 m / 4.8 m
8' 4" / 12' 10" / 15' 9"

Service
Tool kit

*Specifications may vary by the region without notice.

*Materials and specifications are subject to change without notice.

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 North America Inc.
One Volvo Drive, Asheville, N.C. 28803-3447
Tel: 828-650-2070, Fax: 828-650-2508

Ref. No. 22 1 435 1621
Printed in USA 01/01 – 5,0