

VOLVO EXCAVATOR

# EW170

"WITH NEW STANDARD FEATURES"  
APPLICABLE S/N: EW170-3031 AND ~



- **Engine power, gross:**  
119 kW 160 hp
- **Operating weight:**  
16.0 ~ 18.32 t  
35,270 ~ 40,390 lb
- **Buckets (SAE):**  
575 ~ 1825 l  
0.75 ~ 2.39 yd<sup>3</sup>
- Low-emission, turbocharged and aftercooled Cummins diesel engine with direct injection
- Integrated mode selection system and electronically controlled system (ACS)
- 2 variable displacement axial piston pumps. Independent and simultaneous movement of the attachment is controlled by the "Automatic sensing work mode systems."
- Cab
  - Computerized control and warning system
  - Ergonomic environment
  - Low sound level
  - Filtered air
  - Hydraulic dampening mounts
- The hydraulic dual brake system, with negative actuation of the parking brake, improves safety
- Hammer/Shear and Volvo quick coupler piping as **standard** equipment
- 2-piece boom available as **optional** equipment
- 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 are not activated.

Maker .....	CUMMINS	
Model .....	B5.9-C	
Power output at .....	32 r/s	1900 rpm
Net (ISO 9249/DIN 6271) ...	107 kW	143 hp
Gross (SAE J1349) .....	119 kW	160 hp
Max. torque .....	618 N·m at 1500 rpm	
	456 lb·ft at 1500 rpm	
No. of cylinders .....	6	
Displacement .....	5.9 l	360 cu.in
Bore .....	102 mm	4.02"
Stroke .....	120 mm	4.72"



## 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 .....	150 Ah
Alternator .....	24 V / 50 A



## SERVICE REFILL CAPACITIES

Fuel tank .....	295 l	78 gal
Hydraulic system, total .....	340 l	90 gal
Hydraulic tank .....	200 l	53 gal
Engine oil .....	24 l	6.3 gal
Engine coolant .....	26.5 l	7.0 gal
Swing reduction unit .....	6.0 l	1.6 gal
Transmission .....	3.8 l	1.0 gal
Axle (front) .....	13.7 l	3.6 gal
Axle (rear) .....	16.2 l	4.3 gal



## 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 <sub>WA</sub> (sound power level)	101 dB(A)
Operator's position (ISO 6396)	
with the door closed	
mean value of L <sub>PA</sub> (sound pressure level)	77 dB(A)



## UNDERCARRIAGE

**Drive train:** One variable piston motor, on the mid-mounted two-stage gearbox, provides power to front and rear axles, both equipped with planetary hub reductions.

**Lower frame:** All-welded torsion box frame.

**Tires:** Single or double tires available.

**Axle:** Full floating with planetary gears

**Steering:** Hydraulically actuated, open center, non reaction type

Double tires, <b>standard</b> .....	10.00-20 PR14	
Max tractive effort .....	104.5 kN	23,590 lb
Travel speed, 1st .....	8.6 km/h	5.3 mph
Travel speed, 2nd .....	32 km/h	19.9 mph
Min. turning radius,		
center of outer wheel .....	7.05 m	23' 2"
Gradeability .....	33° (63%)	
Oscillating angle, front axle .....	± 8°	



## BRAKES

Brake system corresponds ISO 3450

**Service brakes** consist of a dual circuit hydraulic system with multi wet discs.

**Parking brake** of multi disc type, with negative actuation, is activated in the transmission by hydraulic control.

**Auxiliary brake:** Either the front brake or rear brake system can be used in the event of a failure in either of the service brake systems.

**Working brake:** The service brake is activated as the working brake by locking the latch type foot pedal.



## 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 boom and arm flows 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.

### Pumps

#### Main pump:

Type ..... 2 x variable displacement axial piston pumps  
Maximum flow ..... 2 x 200 l/min **2 x 53 gpm**

#### Pilot pump:

Type ..... Gear pump  
Maximum flow ..... 18 l/min **4.8 gpm**

### Hydraulic motors

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

### Relief valve setting

Attachment ..... 31.4/34.3 MPa **4,550/4,980 psi**  
Travel circuit ..... 31.4 MPa **4,550 psi**  
Steering circuit ..... 14.7 MPa **2,130 psi**  
Swing circuit ..... 26.5 MPa **3,840 psi**  
Pilot circuit ..... 3.9 MPa **570 psi**

### Hydraulic cylinders

Monobloc boom ..... 2  
bore x stroke ..... Ø 115 mm x 1165 mm  
**Ø 4.5" x 45.9"**  
1st boom of 2-piece boom ... 2  
bore x stroke ..... Ø 120 mm x 920 mm  
**Ø 4.7" x 36.2"**  
2nd boom of 2-piece boom ... 1  
bore x stroke ..... Ø 160 mm x 810 mm  
**Ø 6.3" x 31.9"**

Arm ..... 1  
bore x stroke ..... Ø 120 mm x 1495 mm  
**Ø 4.7" x 58.9"**  
Bucket ..... 1  
bore x stroke ..... Ø 115 mm x 990 mm  
**Ø 4.5" x 39.0"**  
Dozer blade, front or rear ... 2  
bore x stroke ..... Ø 120 mm x 245 mm  
**Ø 4.7" x 9.6"**  
Outriggers, front or rear ..... 2  
bore x stroke ..... Ø 130 mm x 380 mm  
**Ø 5.1" x 15.0"**



## WEIGHTS

Machine with **std.** 5.2 m, **17' 1"** monobloc boom, **std.** 2.6 m, **8' 6"** arm, 780 l, **1.02 yd<sup>3</sup>** bucket and 2900 kg, **6,390 lb** counterweight.

#### Machine weight:

incl. **std.** front dozer blade and  
**std.** rear outriggers ..... 17800 kg  
**39,250 lb**

Machine with 4.97 m, **16' 4"** 2-piece boom, 2.3 m, **7' 7"** arm, 780 l, **1.02 yd<sup>3</sup>** bucket and 2900 kg, **6,390 lb** counterweight.

#### Machine weight:

incl. front outriggers and rear dozer blade ... 18320 kg  
**40,390 lb**



## SWING SYSTEM








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

Max. swing speed ..... 12.3 rpm








## BUCKET & ARM COMBINATION

- Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose  
 2. Front designated as end with steer axle.  
 3. Front dozer blade can not be used in combination with 2-piece boom assembly.

• Max. permitted sizes for pin on buckets with 2900 kg, 6,390 lb counterweight

Support condition		Description	unit	Std. 5.2 m, 17' 1" monobloc boom		4.97 m, 16' 4" 2-piece boom	
Front	Rear			Std. 2.6 m, 8' 6" Arm	3.1 m, 10' 2" Arm	2.3 m, 7' 7" Arm	2.6 m, 8' 6" Arm
	(Std.)	GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1650, 2.16	1500, 1.96	—	—
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1425, 1.86	1325, 1.73	—	—
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1325, 1.73	1200, 1.57	—	—
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1075, 1.41	975, 1.28	—	—
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	925, 1.21	850, 1.11	—	—
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	850, 1.11	775, 1.01	—	—
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	875, 1.14	800, 1.05	1000, 1.31	925, 1.21
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	750, 0.98	700, 0.92	875, 1.14	825, 1.08
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	700, 0.92	625, 0.82	800, 1.05	750, 0.98
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1075, 1.41	1000, 1.31	1225, 1.60	1150, 1.50
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	950, 1.24	875, 1.14	1075, 1.41	1000, 1.31
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	875, 1.14	800, 1.05	1000, 1.31	925, 1.21
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1250, 1.64	1125, 1.47	1400, 1.83	1325, 1.73
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1075, 1.41	1000, 1.31	1225, 1.60	1150, 1.50
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1000, 1.31	925, 1.21	1125, 1.47	1075, 1.41
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1450, 1.90	1325, 1.73	1625, 2.13	1525, 1.99
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1250, 1.64	1150, 1.50	1425, 1.86	1325, 1.73
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1150, 1.50	1075, 1.41	1300, 1.70	1225, 1.60
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1650, 2.16	1500, 1.96	1825, 2.39	1725, 2.26
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1425, 1.86	1325, 1.73	1600, 2.09	1525, 1.99
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1325, 1.73	1200, 1.57	1475, 1.93	1400, 1.83

• Max. permitted sizes for hook on buckets with 2900 kg, 6,390 lb counterweight

Support condition		Description	unit	Std. 5.2 m, 17' 1" monobloc boom		4.97 m, 16' 4" 2-piece boom	
Front	Rear			Std. 2.6 m, 8' 6" Arm	3.1 m, 10' 2" Arm	2.3 m, 7' 7" Arm	2.6 m, 8' 6" Arm
	(Std.)	GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1575, 2.06	1450, 1.90	—	—
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1375, 1.80	1250, 1.64	—	—
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1275, 1.67	1175, 1.54	—	—
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1000, 1.31	900, 1.18	—	—
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	875, 1.14	800, 1.05	—	—
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	800, 1.05	725, 0.95	—	—
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	800, 1.05	725, 0.95	925, 1.21	875, 1.14
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	700, 0.92	625, 0.82	800, 1.05	750, 0.98
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	650, 0.85	575, 0.75	750, 0.98	700, 0.92
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1025, 1.34	925, 1.21	1175, 1.54	1100, 1.44
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	900, 1.18	825, 1.08	1025, 1.34	950, 1.24
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	825, 1.08	750, 0.98	950, 1.24	875, 1.14
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1175, 1.54	1075, 1.41	1350, 1.77	1250, 1.64
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1025, 1.34	950, 1.24	1175, 1.54	1100, 1.44
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	950, 1.24	875, 1.14	1075, 1.41	1025, 1.34
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1375, 1.80	1250, 1.64	1550, 2.03	1475, 1.93
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1200, 1.57	1100, 1.44	1350, 1.77	1275, 1.67
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1125, 1.47	1025, 1.34	1250, 1.64	1175, 1.54
		GP bucket 1.5 t/m <sup>3</sup> , 2,530 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1575, 2.06	1450, 1.90	1775, 2.32	1675, 2.19
		GP bucket 1.8 t/m <sup>3</sup> , 3,030 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1375, 1.80	1250, 1.64	1550, 2.03	1450, 1.90
		GP bucket 2.0 t/m <sup>3</sup> , 3,370 lb/yd <sup>3</sup>	l, yd <sup>3</sup>	1275, 1.67	1175, 1.54	1425, 1.86	1350, 1.77

## DIMENSIONS

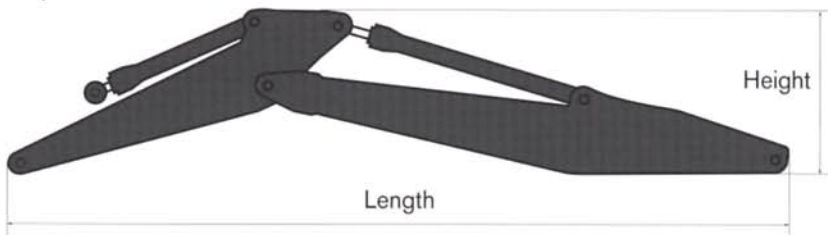
### • Monobloc boom



Description	Std. 5.2 m, 17' 1"
Length	5400 mm, 17' 9"
Height	1625 mm, 5' 4"
Width	564 mm, 1' 10"
Weight *	1320 kg, 2,910 lb

\* Includes cylinder, piping and pin

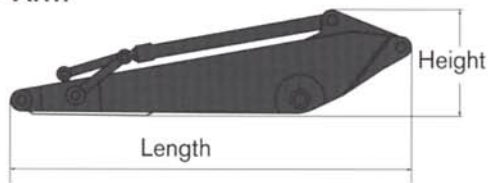
### • 2-piece boom



Description	4.97 m, 16' 4"
Length	5010 mm, 16' 5"
Height	1350 mm, 4' 5"
Width	564 mm, 1' 10"
Weight *	1630 kg, 3,590 lb

\* Includes cylinders, piping and pins

### • Arm

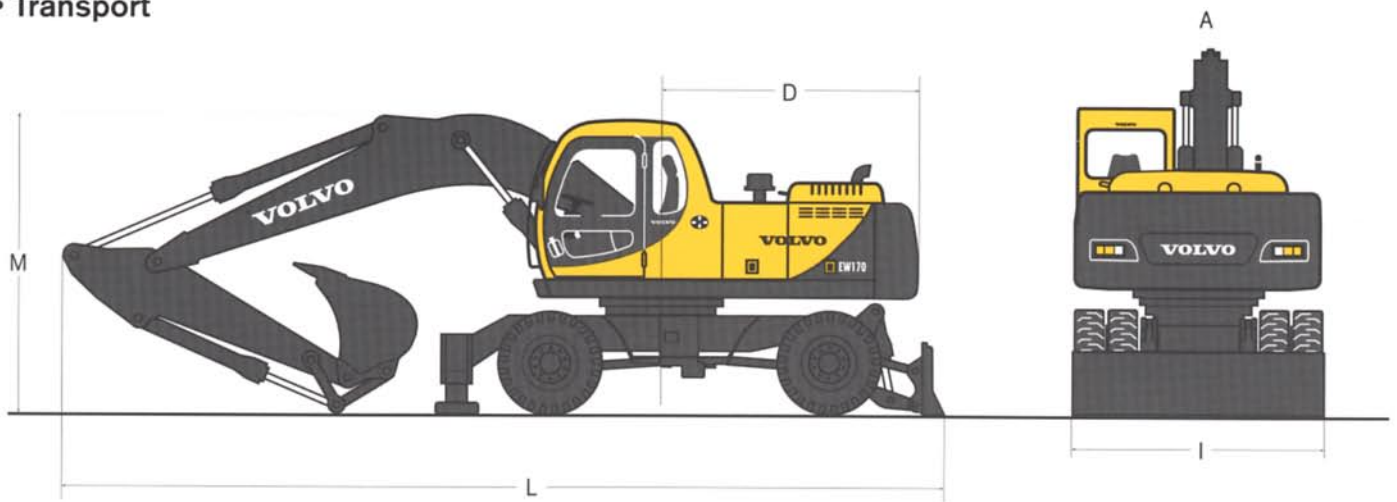


Description	2.3 m 7' 7"	Std. 2.6 m Std. 8' 6"	3.1 m 10' 2"
Length	3260 mm 10' 8"	3560 mm 11' 8"	4070 mm 13' 4"
Height	870 mm 2' 10"	870 mm 2' 10"	870 mm 2' 10"
Width	304 mm 1' 0"	304 mm 1' 0"	304 mm 1' 0"
Weight *	650 kg 1,430 lb	685 kg 1,510 lb	760 kg 1,675 lb

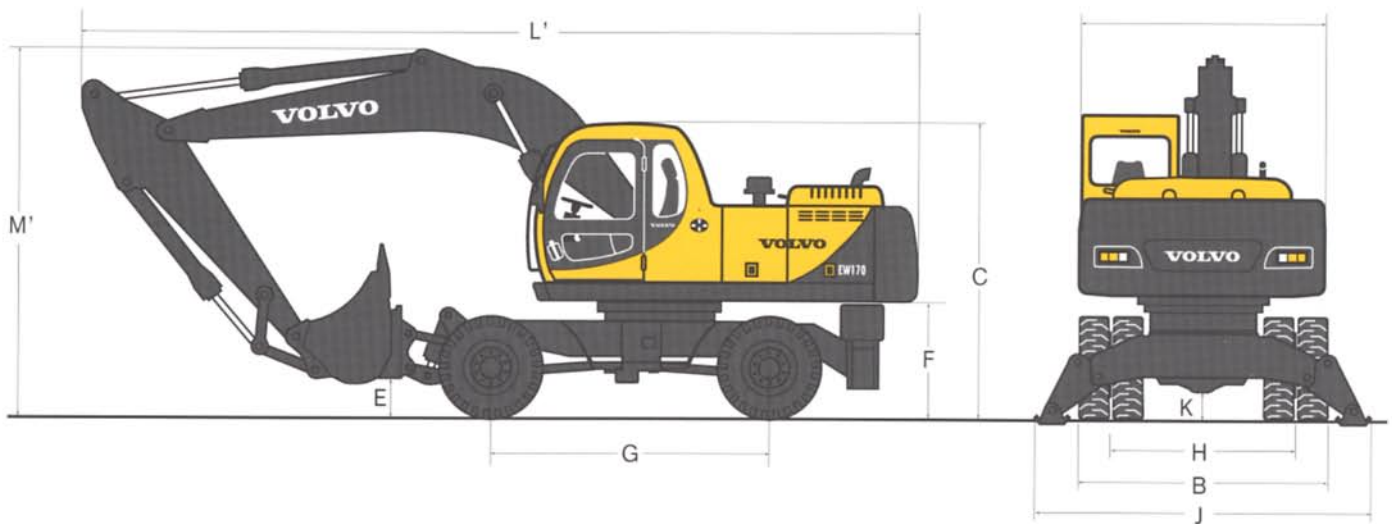
\* Includes cylinder, linkage and pins

# DIMENSIONS

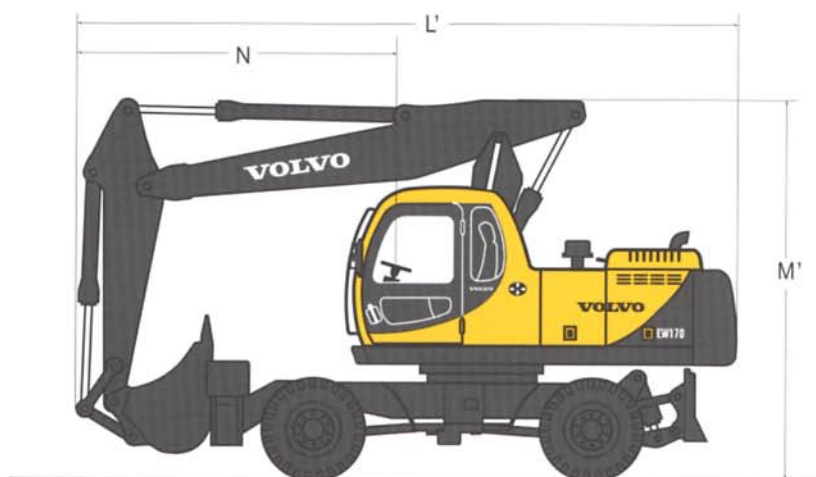
## • Transport



## • Travel (Monobloc boom)



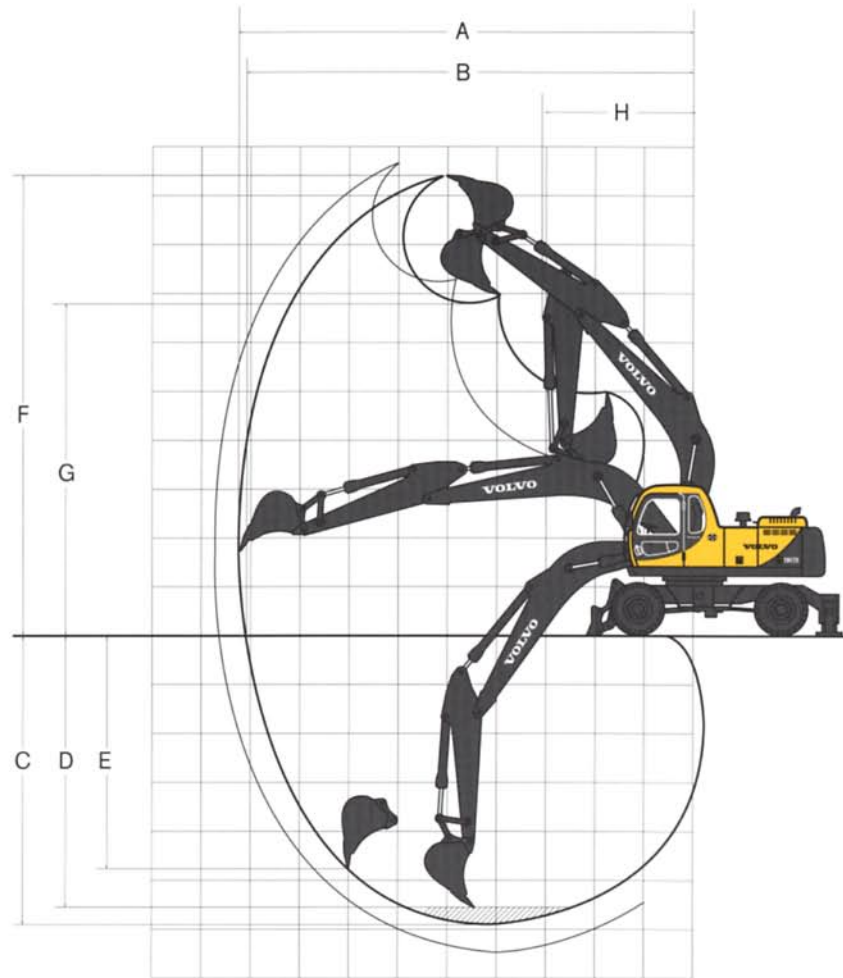
## • Travel (2-piece boom)



## DIMENSIONS

Description	unit	Std. 5.2 m, 17' 1" monobloc boom		4.97 m, 16' 4" 2-piece boom	
		Std. 2.6 m, 8' 6" Arm	3.1 m, 10' 2" Arm	2.3 m, 7' 7" Arm	2.6 m, 8' 6" Arm
A. Overall width of upper structure	mm, ft-in	2460, 8' 1"	2460, 8' 1"	2460, 8' 1"	2460, 8' 1"
B. Overall width	mm, ft-in	2495, 8' 2"	2495, 8' 2"	2495, 8' 2"	2495, 8' 2"
C. Overall height of cab	mm, ft-in	3090, 10' 2"	3090, 10' 2"	3090, 10' 2"	3090, 10' 2"
D. Tail swing radius	mm, ft-in	2600, 8' 6"	2600, 8' 6"	2600, 8' 6"	2600, 8' 6"
E. Dozer blade clearance	mm, in	400, 15.7"	400, 15.7"	400, 15.7"	400, 15.7"
F. Counterweight clearance	mm, ft-in	1250, 4' 1"	1250, 4' 1"	1250, 4' 1"	1250, 4' 1"
G. Wheel base	mm, ft-in	2800, 9' 2"	2800, 9' 2"	2800, 9' 2"	2800, 9' 2"
H. Tread	mm, ft-in	1874, 6' 2"	1874, 6' 2"	1874, 6' 2"	1874, 6' 2"
I. Dozer blade width, down, front or rear	mm, ft-in	2495, 8' 2"	2495, 8' 2"	2495, 8' 2"	2495, 8' 2"
J. Outrigger width, front or rear	mm, ft-in	3390, 11' 1"	3390, 11' 1"	3390, 11' 1"	3390, 11' 1"
K. Min. ground clearance	mm, in	320, 13"	320, 13"	320, 13"	320, 13"
L. Overall length	mm, ft-in	9160, 30' 1"	9205, 30' 2"	8990, 29' 6"	8980, 29' 6"
L'. Overall length	mm, ft-in	8700, 28' 7"	8430, 27' 8"	6900, 22' 8"	6900, 22' 8"
M. Overall height of boom	mm, ft-in	3100, 10' 2"	3460, 11' 4"	3340, 10' 11"	3380, 11' 1"
M'. Overall height of boom	mm, ft-in	3990, 13' 1"	4510, 14' 10"	3995, 13' 1"	4100, 13' 5"
N. Front overhang	mm, ft-in	–	–	3455, 11' 4"	3470, 11' 5"

## WORKING RANGES



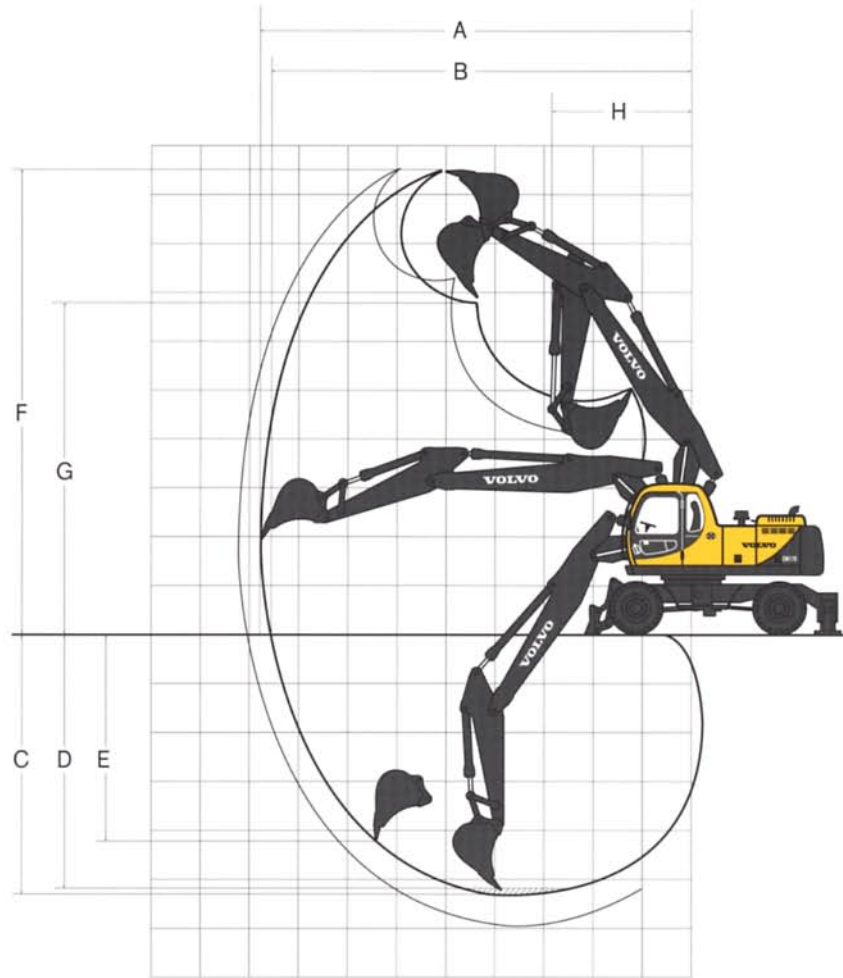
• Std. 5.2 m, 17' 1" monobloc boom with pin on bucket

Description	unit	Std. 2.6 m, 8' 6" Arm	3.1 m, 10' 2" Arm
A. Max. digging reach	mm, ft-in	9170, 30' 1"	9600, 31' 6"
B. Max. digging reach on ground	mm, ft-in	8960, 29' 5"	9400, 30' 10"
C. Max. digging depth	mm, ft-in	5900, 19' 4"	6400, 21' 0"
D. Max. digging depth (8' level)	mm, ft-in	5680, 18' 8"	6200, 20' 4"
E. Max. vertical wall digging depth	mm, ft-in	4790, 15' 9"	5120, 16' 10"
F. Max. cutting height	mm, ft-in	9420, 30' 11"	9590, 31' 6"
G. Max. dumping height	mm, ft-in	6680, 21' 11"	6870, 22' 6"
H. Min. front swing radius	mm, ft-in	3080, 10' 1"	3080, 10' 1"

Digging forces with pin on bucket:		unit	Std. 2.6 m, 8' 6" Arm	3.1 m, 10' 2" Arm
Bucket tip radius		mm, in	1420, 56"	1420, 56"
Breakout force – bucket (Normal / Power boost)	SAE	kN	103.5 / 113.2	103.5 / 113.2
		lb	23,370 / 25,350	23,370 / 25,350
Tearout force – arm (Normal / Power boost)	SAE	kN	78.6 / 85.9	69.7 / 76.2
		lb	17,640 / 19,400	15,650 / 17,200
Rotation angle, bucket		°	177°	177°



## WORKING RANGES



• 4.97 m, 16' 4" 2-piece boom with pin on bucket












Description	unit	2.3 m, 7' 7" Arm	2.6 m, 8' 6" Arm
A. Max. digging reach	mm, ft-in	8760, 28' 9"	9040, 29' 8"
B. Max. digging reach on ground	mm, ft-in	8540, 28' 0"	8830, 29' 0"
C. Max. digging depth	mm, ft-in	5260, 17' 3"	5560, 18' 3"
D. Max. digging depth (8' level)	mm, ft-in	5160, 16' 11"	5460, 17' 11"
E. Max. vertical wall digging depth	mm, ft-in	4200, 13' 9"	4490, 14' 9"
F. Max. cutting height	mm, ft-in	9610, 31' 6"	9830, 32' 3"
G. Max. dumping height	mm, ft-in	6800, 22' 4"	7010, 23' 0"
H. Min. front swing radius	mm, ft-in	2860, 9' 5"	2940, 9' 8"

Digging forces with pin on bucket:		unit	2.3 m, 7' 7" Arm	2.6 m, 8' 6" Arm
Bucket tip radius		mm, in	1420, 56"	1420, 56"
Breakout force – bucket (Normal / Power boost)	SAE	kN	103.5 / 113.2	103.5 / 113.2
		lb	23,370 / 25,350	23,370 / 25,350
Tearout force – arm (Normal / Power boost)	SAE	kN	85.1 / 93.0	78.6 / 85.9
		lb	19,110 / 20,900	17,640 / 19,400
Rotation angle, bucket		°	177°	177°

## 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.

### EW170 (Std. 5.2 m, 17' 1" monobloc boom + Std. 2.6 m, 8' 6" arm)












	Lifting hook related to ground level m / ft	3 m, 10'		4.5 m, 15'		6 m, 20'		7.5 m, 25'		Max.reach												
																Max. m / ft						
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb							
 (Std.)	6 20'							*3.9	*8,550	*3.9	*8,550					*3.6	*7,880	*3.6	*7,880	6.5 / 21.3		
	4.5 15'					*4.5	*9,650	*4.5	*9,650	*4.2	*9,100	*4.2	*9,100					*3.5	*7,660	*3.5	*7,660	7.3 / 23.8
	3 10'					*6.0	*12,980	*6.0	*12,980	*4.9	10,480	*4.9	*10,540	3.5	7,450	*4.4	*8,420	3.3	7,380	*3.6	*7,860	7.7 / 25.1
	1.5 5'					7.2	15,520	*7.6	*16,390	4.7	10,110	*5.6	*12,210	3.4	7,300	*4.8	*10,230	3.2	7,140	*3.8	*8,450	7.7 / 25.4
	0 0'	*5.8	*13,330	*5.8	*13,330	7.0	15,060	*8.6	*18,520	4.6	9,850	*6.2	*13,510					3.3	7,370	*4.4	*9,610	7.5 / 24.6
	-1.5 -5'	*10.4	*23,670	*10.4	*23,670	7.0	14,950	*8.8	*19,120	4.5	9,770	*6.5	*13,970					3.7	8,230	*5.4	*11,880	6.9 / 22.7
	-3 -10'	*12.3	*26,530	*12.3	*26,530	7.0	15,120	*8.3	*17,950									4.7	10,480	*6.0	*13,280	5.9 / 19.3
	6 20'							2.9	6,230	*3.9	*8,550					2.5	5,580	*3.6	*7,880	6.5 / 21.3		
	4.5 15'					4.4	9,460	*4.5	*9,650	2.8	6,070	*4.2	*9,100					2.0	4,520	*3.5	*7,660	7.3 / 23.8
	3 10'					4.0	8,710	*6.0	*12,980	2.7	5,760	*4.9	*10,540	1.9	4,060	3.6	7,650	1.8	4,020	3.4	7,590	7.7 / 25.1
	1.5 5'					3.7	8,010	*7.6	*16,390	2.5	5,430	4.9	10,500	1.8	3,930	3.5	7,500	1.7	3,840	3.3	7,330	7.7 / 25.4
	0 0'	*5.8	*13,330	*5.8	*13,330	3.5	7,630	7.4	15,980	2.4	5,200	4.8	10,230					1.8	3,930	3.4	7,580	7.5 / 24.6
	-1.5 -5'	6.3	13,560	*10.4	*23,670	3.5	7,530	7.4	15,850	2.4	5,130	4.7	10,150					2.0	4,370	3.8	8,500	6.9 / 22.7
	-3 -10'	6.4	13,880	*12.3	*26,530	3.6	7,670	7.5	16,040									2.5	5,540	4.9	10,910	5.9 / 19.3
	6 20'							2.9	6,190	*3.9	*8,550					2.5	5,550	*3.6	*7,880	6.5 / 21.3		
	4.5 15'					4.4	9,400	*4.5	*9,650	2.8	6,030	*4.2	*9,100					2.0	4,490	*3.5	*7,660	7.3 / 23.8
	3 10'					4.0	8,660	*6.0	*12,980	2.7	5,720	*4.9	*10,540	1.9	4,030	3.8	8,120	1.8	3,990	*3.6	*7,860	7.7 / 25.1
	1.5 5'					3.7	7,960	*7.6	*16,390	2.5	5,390	5.2	11,140	1.8	3,900	3.7	7,980	1.7	3,810	3.5	7,800	7.7 / 25.4
	0 0'	*5.8	*13,330	*5.8	*13,330	3.5	7,570	7.9	16,950	2.4	5,160	5.0	10,870					1.8	3,900	3.7	8,060	7.5 / 24.6
	-1.5 -5'	6.3	13,470	*10.4	*23,670	3.5	7,470	7.8	16,830	2.4	5,090	5.0	10,780					2.0	4,340	4.1	9,030	6.9 / 22.7
	-3 -10'	6.4	13,780	*12.3	*26,530	3.5	7,620	7.9	17,010									2.5	5,500	5.2	11,580	5.9 / 19.3

- Notes :
- Machine in "Fine Mode-F" (Power Boost), for lift capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
  - Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
  - 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.

### EW170 (Std. 5.2 m, 17' 1" monobloc boom + Std. 2.6 m, 8' 6" arm)


















 Across undercarriage  Along undercarriage	Lifting hook related to ground level m / ft	3 m, 10'		4.5 m, 15'		6 m, 20'		7.5 m, 25'		Max.reach										
														Max.						
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	m / ft				
	6 20'					3.3	7,090	*3.9	*8,550			2.8	6,360	*3.6	*7,880	6.5 / 21.3				
	4.5 15'			*4.5	*9,650	*4.5	*9,650	3.2	6,930	*4.2	*9,100			2.3	5,180	*3.5	*7,660	7.3 / 23.8		
	3 10'			4.6	10,040	*6.0	*12,980	3.1	6,600	*4.9	*10,540	2.2	4,670	*4.4	*8,420	2.1	4,630	*3.6	*7,860	7.7 / 25.1
	1.5 5'			4.3	9,310	*7.6	*16,390	2.9	6,260	*5.6	*12,210	2.1	4,540	*4.8	*10,230	2.0	4,440	*3.8	*8,450	7.7 / 25.4
	0 0'	*5.8	*13,330	*5.8	*13,330	4.1	8,910	*8.6	*18,520	2.8	6,030	*6.2	*13,510			2.1	4,550	*4.4	*9,610	7.5 / 24.6
	-1.5 -5'	7.6	16,240	*10.4	*23,670	4.1	8,810	*8.8	*19,120	2.8	5,950	*6.5	*13,970			2.3	5,070	5.4	11,880	6.9 / 22.7
	-3 -10'	7.7	16,580	*12.3	*26,530	4.2	8,960	*8.3	*17,950						2.9	6,420	*6.0	*13,280	5.9 / 19.3	
	6 20'							*3.9	*8,550	*3.9	*8,550			*3.6	*7,880	*3.6	*7,880	6.5 / 21.3		
	4.5 15'			*4.5	*9,650	*4.5	*9,650	*4.2	*9,100	*4.2	*9,100			3.3	7,220	*3.5	*7,660	7.3 / 23.8		
	3 10'			*6.0	*12,980	*6.0	*12,980	4.3	9,230	*4.9	*10,540	3.1	6,570	*4.4	*8,420	2.9	6,510	*3.6	*7,860	7.7 / 25.1
	1.5 5'			6.2	13,430	*7.6	*16,390	4.1	8,870	*5.6	*12,210	3.0	6,430	*4.8	*10,230	2.9	6,290	*3.8	*8,450	7.7 / 25.4
	0 0'	*5.8	*13,330	*5.8	*13,330	6.0	13,000	*8.6	*18,520	4.0	8,620	*6.2	*13,510			2.9	6,480	*4.4	*9,610	7.5 / 24.6
	-1.5 -5'	*10.4	*23,670	*10.4	*23,670	6.0	12,880	*8.8	*19,120	4.0	8,540	*6.5	*13,970			3.3	7,220	*5.4	*11,880	6.9 / 22.7
	-3 -10'	12.0	25,690	*12.3	*26,530	6.1	13,050	*8.3	*17,950						4.1	9,160	*6.0	*13,280	5.9 / 19.3	
	6 20'							*3.9	*8,550	*3.9	*8,550			*3.6	*7,880	*3.6	*7,880	6.5 / 21.3		
	4.5 15'			*4.5	*9,650	*4.5	*9,650	*4.2	*9,100	*4.2	*9,100			*3.5	*7,660	*3.5	*7,660	7.3 / 23.8		
	3 10'			*6.0	*12,980	*6.0	*12,980	*4.9	10,490	*4.9	*10,540	3.5	7,450	*4.4	*8,420	3.3	7,380	*3.6	*7,860	7.7 / 25.1
	1.5 5'			7.2	15,530	*7.6	*16,390	4.7	10,120	*5.6	*12,210	3.4	7,300	*4.8	*10,230	3.2	7,140	*3.8	*8,450	7.7 / 25.4
	0 0'	*5.8	*13,330	*5.8	*13,330	7.0	15,070	*8.6	*18,520	4.6	9,860	*6.2	*13,510			3.3	7,370	*4.4	*9,610	7.5 / 24.6
	-1.5 -5'	*10.4	*23,670	*10.4	*23,670	7.0	14,950	*8.8	*19,120	4.5	9,780	*6.5	*13,970			3.7	8,240	*5.4	*11,880	6.9 / 22.7
	-3 -10'	*12.3	*26,530	*12.3	*26,530	7.0	15,120	*8.3	*17,950						4.7	10,480	*6.0	*13,280	5.9 / 19.3	

- Notes :
- Machine in "Fine Mode-F" (Power Boost), for lift capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
  - Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
  - 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.

### EW170 (Std. 5.2 m, 17' 1" monobloc boom + 3.1 m, 10' 2" arm)













 Across undercarriage  Along undercarriage	Lifting hook related to ground level m / ft	3 m, 10'		4.5 m, 15'		6 m, 20'		7.5 m, 25'		Max.reach												
		 		 		 		 		 		 		Max. m / ft								
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb		t	lb						
 (Std.)	6 20'							*3.3	*7,370	*3.3	*7,370					*2.9	*6,360	*2.9	*6,360	7.0 / 22.9		
	4.5 15'							*3.7	*8,120	*3.7	*8,120	3.5	*7,000	*3.6	*7,000	*2.8	*6,230	*2.8	*6,230	7.7 / 25.3		
	3 10'	*8.1	*17,170	*8.1	*17,170	*5.4	*11,570	*5.4	*11,570	*4.4	*9,670	*4.4	*9,670	3.5	7,460	*4.1	*8,960	*2.9	*6,390	*2.9	*6,390	8.1 / 26.6
	1.5 5'	*5.7	*13,570	*5.7	*13,570	*7.1	*15,220	*7.1	*15,220	4.7	10,130	*5.3	*11,480	3.4	7,270	*4.5	*9,840	3.0	6,560	*3.1	*6,850	8.2 / 26.8
	0 0'	*6.5	*14,930	*6.5	*14,930	7.0	15,040	*8.2	*17,820	4.6	9,810	*6.0	*13,000	3.3	7,130	*4.9	*10,620	3.1	6,730	*3.5	*7,750	7.9 / 26.1
	-1.5 -5'	*9.7	*22,110	*9.7	*22,110	6.9	14,820	*8.7	*18,930	4.5	9,660	*6.4	*13,810					3.3	7,400	*4.3	*9,420	7.4 / 24.3
	-3 -10'	*12.8	*27,760	*12.8	*27,760	6.9	14,890	*8.5	*18,440	4.5	9,730	*6.2	*13,320					4.1	9,050	*5.6	*12,360	6.5 / 21.1
 Front	6 20'							3.0	6,340	*3.3	*7,370					2.2	4,960	*2.9	*6,360	7.0 / 22.9		
	4.5 15'							2.9	6,140	*3.7	*8,120	2.0	4,200	*3.6	*7,000	1.8	4,090	*2.8	*6,230	7.7 / 25.3		
	3 10'	7.4	16,030	*8.1	*17,170	4.1	8,880	*5.4	*11,570	2.7	5,800	*4.4	*9,670	1.9	4,070	3.6	7,670	1.7	3,660	*2.9	*6,390	8.1 / 26.6
	1.5 5'	*5.7	*13,570	*5.7	*13,570	3.7	8,090	*7.1	*15,220	2.5	5,430	4.9	10,520	1.8	3,890	3.5	7,480	1.6	3,490	3.1	6,720	8.2 / 26.8
	0 0'	6.2	13,360	*6.5	*14,930	3.5	7,590	7.4	15,960	2.4	5,140	4.7	10,190	1.7	3,760	3.4	7,330	1.6	3,540	3.1	6,900	7.9 / 26.1
	-1.5 -5'	6.2	13,300	*9.7	*22,110	3.4	7,400	7.3	15,730	2.3	5,010	4.7	10,040					1.8	3,880	3.4	7,610	7.4 / 24.3
	-3 -10'	6.3	13,540	*12.8	*27,760	3.5	7,470	7.4	15,810	2.4	5,080	4.7	10,120					2.1	4,750	4.2	9,380	6.5 / 21.1
 Rear	6 20'							*2.5	5,430	*2.5	*5,580					1.8	4,020	*2.4	*5,310	7.0 / 22.9		
	4.5 15'							2.5	5,280	*2.9	*6,300	1.6	3,290	*2.9	*6,020	1.4	3,180	*2.4	*5,230	7.7 / 25.3		
	3 10'	*6.9	*14,640	*6.9	*14,640	3.8	8,090	*4.4	*9,490	2.3	4,960	*3.6	*7,710	1.5	3,190	*3.2	*7,010	1.3	2,760	*2.5	*5,450	8.1 / 26.6
	1.5 5'	*5.1	*12,280	*5.1	*12,280	3.4	7,300	*5.9	*12,760	2.1	4,600	*4.3	*9,340	1.4	3,030	3.3	7,130	1.2	2,600	*2.7	*5,960	8.2 / 26.8
	0 0'	5.8	12,500	*6.0	*13,730	3.2	6,780	*7.0	*15,090	2.0	4,320	4.7	10,060	1.4	2,900	3.3	6,980	1.2	2,680	3.0	6,520	7.9 / 26.1
	-1.5 -5'	5.8	12,460	*9.2	*20,880	3.1	6,590	*7.4	15,980	2.0	4,190	4.6	9,910					1.4	3,030	3.3	7,290	7.4 / 24.3
	-3 -10'	5.9	12,740	*11.1	*24,060	3.1	6,670	*7.2	*15,650	2.0	4,250	4.6	9,980					1.8	3,920	4.1	9,190	6.5 / 21.1

- Notes :
- Machine in "Fine Mode-F" (Power Boost), for lift capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
  - Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
  - 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.

### EW170 (Std. 5.2 m, 17' 1" monobloc boom + 3.1 m, 10' 2" arm)













 Across undercarriage  Along undercarriage	Lifting hook related to ground level m / ft	3 m, 10'		4.5 m, 15'		6 m, 20'		7.5 m, 25'		Max.reach												
																Max. m / ft						
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb							
	6 20'							*2.5	*5,580	*2.5	*5,580					2.1	4,760	*2.4	*5,310	7.0 / 22.9		
	4.5 15'							2.9	6,180	*2.9	*6,300	1.9	3,930	*2.9	*6,020	1.7	3,810	*2.4	*5,230	7.7 / 25.3		
	3 10'	*6.9	*14,640	*6.9	*14,640	4.4	9,480	*4.4	*9,490	2.7	5,850	*3.6	*7,710	1.8	3,830	*3.2	*7,010	1.5	3,360	*2.5	*5,450	8.1 / 26.6
	1.5 5'	*5.1	*12,280	*5.1	*12,280	4.0	8,670	*5.9	*12,760	2.6	5,480	*4.3	*9,340	1.7	3,670	*3.6	*7,820	1.4	3,190	*2.7	*5,960	8.2 / 26.8
	0 0'	*6.0	*13,730	*6.0	*13,730	3.8	8,130	*7.0	*15,090	2.4	5,190	*4.9	*10,710	1.7	3,540	*3.9	*8,520	1.5	3,280	*3.1	*6,920	7.9 / 26.1
	-1.5 -5'	7.1	15,230	*9.2	*20,880	3.7	7,930	*7.4	*16,080	2.4	5,060	*5.3	*11,440					1.7	3,700	*3.9	*8,670	7.4 / 24.3
	-3 -10'	7.2	15,530	*11.1	*24,060	3.7	8,010	*7.2	*15,650	2.4	5,130	*5.1	*10,990					2.1	4,730	*4.6	*10,120	6.5 / 21.1
	6 20'							*2.5	*5,580	*2.5	*5,580					*2.4	*5,310	*2.4	*5,310	7.0 / 22.9		
	4.5 15'							*2.9	*6,300	*2.9	*6,300	2.7	5,840	*2.9	*6,020	*2.4	*5,230	*2.4	*5,230	7.7 / 25.3		
	3 10'	*6.9	*14,640	*6.9	*14,640	*4.4	*9,490	*4.4	*9,490	*3.6	*7,710	*3.6	*7,710	2.7	5,740	*3.2	*7,010	2.3	5,100	*2.5	*5,450	8.1 / 26.6
	1.5 5'	*5.1	*12,280	*5.1	*12,280	*5.9	*12,760	*5.9	*12,760	3.8	8,100	*4.3	*9,340	2.6	5,570	*3.6	*7,820	2.2	4,910	*2.7	*5,960	8.2 / 26.8
	0 0'	*6.0	*13,730	*6.0	*13,730	5.7	12,240	*7.0	*15,090	3.6	7,800	*4.9	*10,710	2.5	5,430	*3.9	*8,520	2.3	5,070	*3.1	*6,920	7.9 / 26.1
	-1.5 -5'	*9.2	*20,880	*9.2	*20,880	5.6	12,020	*7.4	*16,080	3.6	7,650	*5.3	*11,440					2.6	5,670	*3.9	*8,670	7.4 / 24.3
	-3 -10'	*11.1	*24,060	*11.1	*24,060	5.6	12,110	*7.2	*15,650	3.6	7,720	*5.1	*10,990					3.2	7,130	*4.6	*10,120	6.5 / 21.1
	6 20'							*2.5	*5,580	*2.5	*5,580					*2.4	*5,310	*2.4	*5,310	7.0 / 22.9		
	4.5 15'							*2.9	*6,300	*2.9	*6,300	*2.9	*6,020	*2.9	*6,020	*2.4	*5,230	*2.4	*5,230	7.7 / 25.3		
	3 10'	*6.9	*14,640	*6.9	*14,640	*4.4	*9,490	*4.4	*9,490	*3.6	*7,710	*3.6	*7,710	3.1	6,620	*3.2	*7,010	*2.5	*5,450	*2.5	*5,450	8.1 / 26.6
	1.5 5'	*5.1	*12,280	*5.1	*12,280	*5.9	*12,760	*5.9	*12,760	*4.3	*9,340	*4.3	*9,340	3.0	6,450	*3.6	*7,820	2.6	5,710	*2.7	*5,960	8.2 / 26.8
	0 0'	*6.0	*13,730	*6.0	*13,730	6.7	14,320	*7.0	*15,090	4.2	9,040	*4.9	*10,710	2.9	6,310	*3.9	*8,520	2.7	5,890	*3.1	*6,920	7.9 / 26.1
	-1.5 -5'	*9.2	*20,880	*9.2	*20,880	6.6	14,100	*7.4	*16,080	4.1	8,890	*5.3	*11,440					3.0	6,580	*3.9	*8,670	7.4 / 24.3
	-3 -10'	*11.1	*24,060	*11.1	*24,060	6.6	14,190	*7.2	*15,650	4.2	8,970	*5.1	*10,990					3.7	8,270	*4.6	*10,120	6.5 / 21.1

- Notes :
- Machine in "Fine Mode-F" (Power Boost), for lift capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
  - Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
  - 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.

### EW170 (4.97 m, 16' 4" 2-piece boom + 2.3 m, 7' 7" arm)













 Across undercarriage  Along undercarriage	Lifting hook related to ground level m/ft	3 m, 10'		4.5 m, 15'		6 m, 20'		7.5 m, 25'		Max.reach										
														Max. m / ft						
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb					
 Front      Rear	7.5 25'													*4.2	*9,170	*4.2	*9,170	4.6 / 14.7		
	6 20'			*3.6	*7,940	*3.6	*7,940							2.9	6,460	*3.9	*8,680	6.1 / 19.6		
	4.5 15'	*5.1	*10,780	*5.1	*10,780	*4.5	9,670	*4.5	*9,700	2.9	6,220	*4.4	*9,630							
	3 10'					4.2	8,980	*6.1	*13,210	2.8	5,940	*5.1	*11,060			2.1	4,530	*3.7	*8,230	7.3 / 23.8
	1.5 5'					3.8	8,320	*7.9	*17,080	2.6	5,640	5.4	11,530			2.0	4,330	*4.0	*8,720	7.3 / 24.0
	0 0'	*6.1	13,980	*6.1	*14,180	3.7	7,940	8.2	17,560	2.5	5,430	5.2	11,270			2.0	4,450	4.1	9,100	7.1 / 23.2
	-1.5 -5'	6.5	14,030	*12.2	*28,020	3.6	7,840	8.1	17,340	2.5	5,370	5.2	11,220			2.3	5,020	4.7	10,370	6.5 / 21.2
	 Front      Rear	7.5 25'													*4.2	*9,170	*4.2	*9,170	4.6 / 14.7	
6 20'				*3.6	*7,940	*3.6	*7,940							3.3	7,400	*3.9	*8,680	6.1 / 19.6		
4.5 15'		*5.1	*10,780	*5.1	*10,780	*4.5	*9,700	*4.5	*9,700	3.3	7,130	*4.4	*9,630			2.7	5,900	*3.7	*8,200	6.9 / 22.4
3 10'						4.8	10,390	*6.1	*13,210	3.2	6,850	*5.1	*11,060			2.4	5,240	*3.7	*8,230	7.3 / 23.8
1.5 5'						4.5	9,700	*7.9	*17,080	3.0	6,540	*6.0	*12,960			2.3	5,020	*4.0	*8,720	7.3 / 24.0
0 0'		*6.1	*14,180	*6.1	*14,180	4.3	9,310	*9.2	*19,910	2.9	6,320	*6.8	*14,680			2.3	5,170	*4.4	*9,790	7.1 / 23.2
-1.5 -5'		7.9	16,880	*12.2	*28,020	4.3	9,210	*9.8	*21,310	2.9	6,260	6.9	14,930			2.6	5,840	*5.4	*12,040	6.5 / 21.2
 Front      Rear		7.5 25'													*4.2	*9,170	*4.2	*9,170	4.6 / 14.7	
	6 20'			*3.6	*7,940	*3.6	*7,940								*3.9	*8,680	*3.9	*8,680	6.1 / 19.6	
	4.5 15'	*5.1	*10,780	*5.1	*10,780	*4.5	*9,700	*4.5	*9,700	*4.4	*9,630	*4.4	*9,630			3.7	8,170	*3.7	*8,200	6.9 / 22.4
	3 10'					*6.1	*13,210	*6.1	*13,210	4.4	9,520	*5.1	*11,060			3.3	7,310	*3.7	*8,230	7.3 / 23.8
	1.5 5'					6.5	13,910	*7.9	*17,080	4.3	9,190	*6.0	*12,960			3.2	7,050	*4.0	*8,720	7.3 / 24.0
	0 0'	*6.1	*14,180	*6.1	*14,180	6.3	13,480	*9.2	*19,910	4.2	8,960	*6.8	*14,680			3.3	7,300	*4.4	*9,790	7.1 / 23.2
	-1.5 -5'	12.2	26,140	*12.2	*28,020	6.2	13,370	*9.8	*21,310	4.1	8,900	*7.2	*15,680			3.7	8,270	*5.4	*12,040	6.5 / 21.2
	 Front      Rear	7.5 25'													*4.2	*9,170	*4.2	*9,170	4.6 / 14.7	
6 20'				*3.6	*7,940	*3.6	*7,940								*3.9	*8,680	*3.9	*8,680	6.1 / 19.6	
4.5 15'		*5.1	*10,780	*5.1	*10,780	*4.5	*9,700	*4.5	*9,700	*4.4	*9,630	*4.4	*9,630			*3.7	*8,200	*3.7	*8,200	6.9 / 22.4
3 10'						*6.1	*13,210	*6.1	*13,210	5.0	10,810	*5.1	*11,060			3.7	*8,230	*3.7	*8,230	7.3 / 23.8
1.5 5'						7.5	16,050	*7.9	*17,080	4.9	10,470	*6.0	*12,960			3.6	8,000	*4.0	*8,720	7.3 / 24.0
0 0'		*6.1	*14,180	*6.1	*14,180	7.3	15,600	*9.2	*19,910	4.7	10,220	*6.8	*14,680			3.8	8,300	*4.4	*9,790	7.1 / 23.2
-1.5 -5'		*12.2	*28,020	*12.2	*28,020	7.2	15,490	*9.8	*21,310	4.7	10,170	*7.2	*15,680			4.3	9,430	*5.4	*12,040	6.5 / 21.2

- Notes :
- Machine in "Fine Mode-F" (Power Boost), for lift capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
  - Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
  - 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.

### EW170 (4.97 m, 16' 4" 2-piece boom + 2.6 m, 8' 6" arm)

 Across undercarriage  Along undercarriage	Lifting hook related to ground level m/ft	3 m, 10'		4.5 m, 15'		6 m, 20'		7.5 m, 25'		Max.reach								
														Max.				
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	m / ft		
	7.5 25'					*3.4	*7,770	*3.4	*7,770					3.8	*8,630	*3.9	*8,630	5.1 / 16.2
	6 20'					*3.2	*7,000	*3.2	*7,000	3.0	6,370	*3.8	*8,640	2.6	5,940	*3.4	*7,490	6.4 / 20.8
	4.5 15'					*4.1	*8,800	*4.1	*8,800	2.9	6,270	*4.1	*8,940	2.2	4,800	*3.2	*7,110	7.2 / 23.4
	3 10'					4.2	9,080	*5.7	*12,320	2.8	5,980	*4.8	*10,470	1.9	4,270	*3.2	*7,120	7.5 / 24.7
	1.5 5'					3.9	8,380	*7.6	*16,310	2.6	5,650	5.4	11,550	1.9	4,080	*3.4	*7,530	7.6 / 25.0
	0 0'	*6.5	13,960	*6.5	*14,920	3.7	7,940	8.2	17,580	2.5	5,410	5.2	11,260	1.9	4,170	*3.8	*8,360	7.4 / 24.2
	-1.5 -5'	6.5	13,940	*11.4	*26,000	3.6	7,790	8.1	17,380	2.5	5,320	5.2	11,150	2.1	4,650	4.4	9,610	6.8 / 22.2
		7.5 25'					*3.4	*7,770	*3.4	*7,770					*3.9	*8,630	*3.9	*8,630
6 20'						*3.2	*7,000	*3.2	*7,000	3.4	7,290	*3.8	*8,640	3.0	6,800	*3.4	*7,490	6.4 / 20.8
4.5 15'						*4.1	*8,800	*4.1	*8,800	3.3	7,180	*4.1	*8,940	2.5	5,520	*3.2	*7,110	7.2 / 23.4
3 10'						4.9	10,500	*5.7	*12,320	3.2	6,880	*4.8	*10,470	2.2	4,930	*3.2	*7,120	7.5 / 24.7
1.5 5'						4.5	9,770	*7.6	*16,310	3.0	6,550	*5.7	*12,460	2.1	4,730	*3.4	*7,530	7.6 / 25.0
0 0'		*6.5	*14,920	*6.5	*14,920	4.3	9,320	*9.0	*19,400	2.9	6,300	*6.6	*14,300	2.2	4,860	*3.8	*8,360	7.4 / 24.2
-1.5 -5'		7.8	16,790	*11.4	*26,000	4.3	9,160	*9.7	*21,100	2.9	6,200	6.9	14,870	2.5	5,420	*4.6	*10,080	6.8 / 22.2
		7.5 25'					*3.4	*7,770	*3.4	*7,770					*3.9	*8,630	*3.9	*8,630
	6 20'					*3.2	*7,000	*3.2	*7,000	*3.8	*8,640	*3.8	*8,640	*3.4	*7,490	*3.4	*7,490	6.4 / 20.8
	4.5 15'					*4.1	*8,800	*4.1	*8,800	*4.1	*8,940	*4.1	*8,940	*3.2	*7,110	*3.2	*7,110	7.2 / 23.4
	3 10'					*5.7	*12,320	*5.7	*12,320	4.4	9,560	*4.8	*10,470	3.1	6,890	*3.2	*7,120	7.5 / 24.7
	1.5 5'					6.5	13,990	*7.6	*16,310	4.3	9,210	*5.7	*12,460	3.0	6,660	*3.4	*7,530	7.6 / 25.0
	0 0'	*6.5	*14,920	*6.5	*14,920	6.3	13,490	*9.0	*19,400	4.2	8,940	*6.6	*14,300	3.1	6,870	*3.8	*8,360	7.4 / 24.2
	-1.5 -5'	*11.4	*26,000	*11.4	*26,000	6.2	13,320	*9.7	*21,100	4.1	8,840	*7.1	*15,510	3.5	7,690	*4.6	*10,080	6.8 / 22.2
		7.5 25'					*3.4	*7,770	*3.4	*7,770					*3.9	*8,630	*3.9	*8,630
6 20'						*3.2	*7,000	*3.2	*7,000	*3.8	*8,640	*3.8	*8,640	*3.4	*7,490	*3.4	*7,490	6.4 / 20.8
4.5 15'						*4.1	*8,800	*4.1	*8,800	*4.1	*8,940	*4.1	*8,940	*3.2	*7,110	*3.2	*7,110	7.2 / 23.4
3 10'						*5.7	*12,320	*5.7	*12,320	*4.8	*10,470	*4.8	*10,470	*3.2	*7,120	*3.2	*7,120	7.5 / 24.7
1.5 5'						7.5	16,140	*7.6	*16,310	4.9	10,490	*5.7	*12,460	*3.4	*7,530	*3.4	*7,530	7.6 / 25.0
0 0'		*6.5	*14,920	*6.5	*14,920	7.3	15,620	*9.0	*19,400	4.7	10,210	*6.6	*14,300	3.5	7,810	*3.8	*8,360	7.4 / 24.2
-1.5 -5'		*11.4	*26,000	*11.4	*26,000	7.2	15,440	*9.7	*21,100	4.7	10,110	*7.1	*15,510	4.0	8,750	*4.6	*10,080	6.8 / 22.2

- Notes :
- Machine in "Fine Mode-F" (Power Boost), for lift capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
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  - Contains metric and U.S. measurement charts.

## STANDARD EQUIPMENT

### Engine

Low-emission engine with air heater, complying with EPA (Environmental Protection Agency, USA) emission standards  
2-stage air filter with indicator  
Air pre-cleaner  
Alternator, 50AMP  
Electric engine shut-off  
Fuel filter and water separator

### Electronic control system

Advanced control system (ACS)  
Integrated mode selection system  
Self-diagnostic system  
Machine status indication  
Engine speed sensing power control  
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 2  
Batteries, 2 x 12V/150Ah  
Starting motor, 24V/7.5kW  
Air conditioner and heater

### Hydraulic system

Automatic sensing work mode  
- Summation system  
- Boom priority  
- Arm priority  
- Swing priority  
Pilot-operated wrist control joysticks, with 3 switches ea.  
Boom and arm flow regeneration  
Swing anti-rebound valve  
Boom and arm holding valves  
Multi-stage filtering system  
**Hammer/shear piping, with one pump flow**  
**Volvo quick coupler piping**

Cylinder cushions  
Cylinder contamination seals  
Auxiliary hydraulic valve  
Hydraulic oil, ISO VG 46  
**Superstructure**  
Access way with handrail  
Tool storage box, locking  
Punched metal anti-slip plates  
Counterweight, 2900 kg, **6390 lb**

### Cab and interior

Hydraulic dampening cab mounts  
Tiltable and telescopic steering column  
Adjustable operator seat and control console  
Fabric seat, with heater  
Flexible antenna  
Hydraulic safety lock lever  
Cab, all-weather sound suppressed, includes:  
- Ashtray  
- Cigar lighter

- Door locks
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass
- Sliding rear window
- Clear tinted roof hatch
- Windshield wiper with intermittent feature
- Stereo cassette radio (AM/FM)

Sun shield, front

### Attachment

Boom: 5.2 m, **17' 1"** monobloc (std.)  
Arm: 2.6 m, **8' 6"** (std.)

### Undercarriage

Double tires, 10.00-20 PR14, with stone protection rings (std.)  
Front equipment: dozer blade (std.)  
Rear equipment: outriggers (std.)

## OPTIONAL EQUIPMENT

### Engine

Alternator, 70AMP  
Block and oil pan heater: 110V  
Fuel warmer  
Tropical kit  
Fuel filler pump: 35 lpm, **9 gpm**

### Electronic control system

Extra work lights 4:  
- Cab mounted 3, (front 2, rear 1)  
- Counterweight-mounted 1  
Rotating warning beacon

### Hydraulic system

Hydraulic piping  
- Hammer/shear, with 2-pump flow  
- Grapple  
- Rotate/slope  
Hydraulic oil, ISO VG 32  
Hydraulic oil, ISO VG 68  
Wrist control joysticks, with 5 switches ea.

### Cab and interior

Falling object guard (FOG)  
Cab-mounted falling object protective structures (FOPS)  
Safety screens for front window  
Anti-vandalism kit  
Fabric seat  
Fabric seat, with heater and air suspension  
Rain shield, front

### Attachments

Arm: 2.3 m, **7' 7"**  
3.1 m, **10' 2"**  
Boom: 4.97 m, **16' 4"** 2-piece  
Volvo quick coupler - S1 size

### Undercarriage

Single tires, 18.00 x 22.5  
Double tires, without stone protection rings, 10.00-20 PR14  
Front equipment: outriggers, clamshell rest, 4 outriggers  
Rear equipment: dozer blade

### Service

Tool kit

\*Specifications may vary by the region without notice.

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\*Materials and specifications are subject to change without notice.

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# VOLVO

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