

VOLVO BM 4600 C



Specification Volvo BM 4600 Compactor

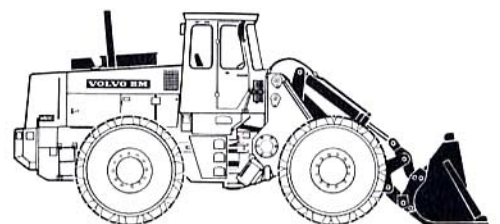
The high-capacity compactor

The Volvo BM 4600 Compactor is designed to level and compact refuse and waste collected from large urban areas.

The 4600 C is extremely versatile — it will move, break up and compact the waste — and then dig, carry and spread cover material when infill is complete. It has large all-welded compactor wheels, plus heavy duty underbody and side cover plates to protect vulnerable parts against damage.

This machine has a long wheelbase and uniform weight distribution for excellent stability. The loader unit combines large lifting and breakout forces with long reach.

The comfortable cab is safe and quiet with a high capacity heating and ventilation system providing supplies of filtered fresh air to create a superb working environment.





ENGINE

Volvo TD 100G. 6-cylinder, in-line, direct-injected, turbo charged, 4-stroke diesel engine with wet replaceable cylinder lining.

Flywheel rating	185 kW at 36.7 rps DIN 70020 (252 hp at 2200 rpm DIN)
Gross rating	194 kW at 36.7 rps SAE J 270 (264 hp at 2200 rpm SAE)
Max torque	962 Nm at 23.3 rps DIN 70020 (709 lbf ft at 1400 rpm DIN)
No of cylinders	6
Bore	120.65 mm (4.75 in)
Stroke	140 mm (5.5 in)
Displacement	9.6 litres (586 in ³)
Air cleaning in three stages	1. Cyclone precleaner with automatic ejection through the exhaust 2. Paper filter 3. Catch-all safety filter



ELECTRICAL SYSTEM

Battery	2 x 12 V (connected in series)
Voltage	24 V
Battery capacity	135 Ah
Alternator	1260 W (45 A)
Starter motor	4.5 kW (6 hp)
Central warning lamp for the following functions:	(For certain markets only) Engine oil pressure, brake pressure, parking brake, engine temperature, transmission temperature, transmission oil pressure.



TORQUE CONVERTER

Type	Single-stage, single-phase
Torque multiplication ratio	2.95:1



TRANSMISSION

Type	Power-shift
Designation	HT 170
Number of gears forward/reverse	3/3



AXLES

Volvo BM Heavy-duty design with planetary hub reductions.

Front axle:	Designation	Volvo BM AH 70
	Differential lock	100% lock-up (dog clutch)
Rear axle:	Designation	Volvo BM AH 70
	Oscillation	± 13° (430 mm)



BRAKES

Service brakes: Air over hydraulic operated disc brake.

Parking brake	Mechanically operated disc brake on output shaft
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WHEELS

Type	Trapezoidal pads	Knife wheel
	mm (ft in)	mm (ft in)
Drum width	750 (2'6")	750 (2'6")
Drum diameter	1400 (4'7")	1400 (4'7")
Pad height	135 (5.3")	168 (6.6")



STEERING

Flow amplified steering
Centre point frame articulation. Two double-acting hydraulic cylinders

Steering angle	± 37°
Turning radius	6.9 m (22 ft 7 in)
Steering cylinder, bore/stroke	110/423 mm (4.3/16.7 in)
Oil pump, type	Vane pump
Output at 10 MPA (1450 psi) and 2200 rpm (36.7 rps)	190 l/min (41.8 Imp gal/min)
Relief pressure	14 MPA (2030 psi)



HYDRAULIC SYSTEM

Pump, type: Vane pump

Output at 10 MPA (1450 psi) and 2200 rpm (36.7 rps)	380 l/min (83.6 Imp gal/min)
Relief pressure	17 MPA (2465 psi)
Oil filter:	Full-flow filtration through filter cartridge with magnetic core

Cylinders:	
Lift — bore/stroke	170/892 mm (6.7/35.1 in)
Tilt — bore/stroke	140/983 mm (5.3/38.7 in)

Control valve:
3-section valve, with built-in relief valve, lifting function has hold for lift and float position. Bucket positioner and boom kick out. The control valve is servo-assisted.

Raise	7.8 s
Lower	3 s
Dump	4 s



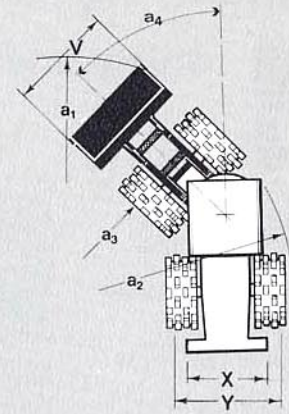
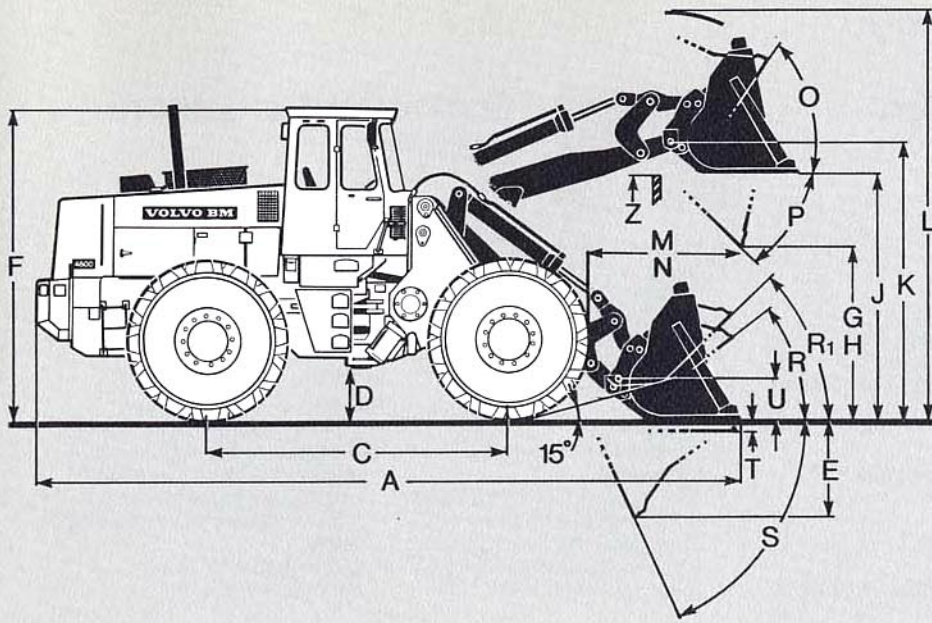
SERVICE REFILL

Capacities	Litres	Imp gal	US gal
Crankcase	31	6.82	8.19
Fuel tank	360	79.2	95.1
Cooling system	50	11	13.2
Hydraulic system, total	300	66	79.25
Hydraulic tank	210	46.2	55.5
Transmission and torque converter, total	40	8.8	10.56
Front axle differential and hubs	31	6.82	8.19
Rear axle differential and hubs	31	6.82	8.19
Dropbox	7	1.53	1.85



CAB

The all-welded ROPS safety cab has two lockable doors. The operator's station is ergonomically designed, with all controls and pedals located and designed for quick and easy operation. The operator's seat is fully adjustable. In its standard version, the cab is equipped with an efficient heating and ventilation system, with front and side window defrosters. The cab is mounted on the chassis via rubber pads, thereby minimizing the noise level inside the cab.

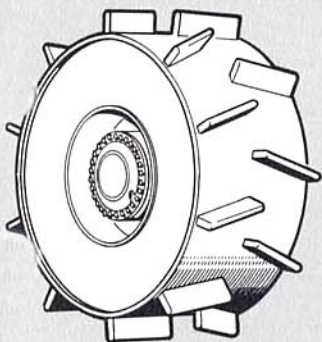


MACHINE DIMENSIONS

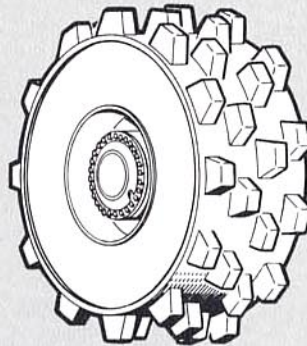
A = 8270 mm (27')	K = 3200 mm (10' 6")	S = 66°	Swept radius $a_1 = 7530$ mm (24' 8")
C = 3550 mm (11' 8")	L = 4600 mm (15' 1")	T = 50 mm (2")	Turning radius $a_2 = 6900$ mm (22' 7")
D = 520 mm (1' 8")	M = 1880 mm (6' 2")	U = 415 mm (1' 5")	Inner radius $a_3 = 3810$ mm (12' 6")
E = 1170 mm (3' 10")	N = 1880 mm (6' 2")	V = 3200 mm (10' 6")	Steering angle $a_4 = \pm 37^\circ$
F = 3550 mm (11' 8")	O = 55°	X = 2310 mm (7' 7")	
G = 2000 mm (6' 7")	P = 45°	Y = 3060 mm (10')	
H = 2000 mm (6' 7")	R = 38°	Z = 2800 mm (9' 2")	
J = 2900 mm (9' 6")	$R_1 = 44^\circ$ carry position		

Wherever applicable, specifications are in accordance with SAE Standard J 732 C and J 818a. The data apply to a machine equipped with a 3.8 m³ (5 yd³) bolted on straight-lip bucket without teeth, and compactor wheels with trapezoidal pads and cleaners.

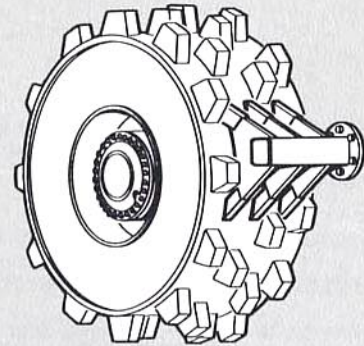
WHEELS



Knife-shaped pads
(99287)



Trapezoidal pads
(99286)



Cleaners for trapezoidal pads
(99303)

MACHINE CAPACITY

Working load, machine turned	kg (lb)	6900 (15212)	Weight distribution:	
Breakout force	kgf (lbf)	15800 (34832)	Front	kg (lb) 12440 (27425)
Machine weight	kg (lb)	26540 (58510)	Rear	kg (lb) 14100 (31085)

STANDARD EQUIPMENT



Safety and comfort

- ROPS cab
- Cab heating system with filtered intake air and defroster
- Safety glass, front windshield
- Tinted glass
- Ergonomically designed and adjustable operator's seat
- Rear-view mirrors, exterior, two
- Rear-view mirror, interior, one
- Lights:
 - Headlights high/low/asm
 - Parking lights
 - Working lights, front (2) halogen
 - Working lights, rear (2) halogen
 - Attachment lights
 - Side marker lights
- Brake lights
- Taillights
- Cab lighting
- Instrument lighting
- Mounting for seat belt
- Utility basket in cab
- Pressure gauge for air brake system
- Instrument panel with symbols
- Turn signal indicators
- Sun visor
- Safety start
- Hazard flashers
- Tool kit
- Windshield wipers, front and rear
- Horn
- Tyre inflation connection
- Ashtray
- Cigarette lighter
- Lifting lugs



Engine and electrical system

- Fuel gauge
 - Temperature gauge, engine
 - Temperature gauge, hydraulic transmission
 - Hour counter
 - Electrical outlet 24 V
 - Master switch, electrical system
 - Alternator
 - Air cleaner with ejector discharge
 - Pilot lamp for: working lights, front and rear, battery charging, high beam, turn signal indicators, engine oil pressure, transmission oil pressure, engine temperature, transmission temperature, fuel tank, differential lock, parking brake, low brake pressure, hazard flashers, air filter, hour meter.
- For certain markets only:**
- **Central warning light:** brake pressure, engine oil pressure, engine temperature, transmission oil pressure, transmission temperature, parking brake
 - **Warning-buzzer when parking brake is on**



Power transmission

- Full Power-Shift transmission
- Differential lock on front axle
- Transmission cut-out valve
- Single lever control



Hydraulic system

- Control valve (3 sections). Servo-operated
- Bucket position indicator
- Bucket positioner and boom kick-out
- Vane pumps

OPTIONAL EQUIPMENT

(Standard equipment on certain markets)

- Inspection lamp 24 V
- Electrical equipment, Norway
- Protective grilles for front lights
- Protective grilles for rear lights
- Speedometer
- Untinted windscreen and windows
- Seat belt
- FOPS roof
- Vent window, left-hand side
- Third hydraulic function
- Fourth and fifth hydraulic functions
- Extra fuel filter
- Tyre inflation kit
- Hydraulic attachment bracket
- ASS-94 equipment
- Cleaner
- Heating flange
- Lever lock
- Road-dependent emergency steering
- Air conditioning
- Heated operator's seat
- Rotating warning beacon
- Washers for front and rear windows
- Industrial tow hitch
- Dual brake pedals
- Electric engine heater
- Working lights, front (2) halogen
- Working lights, rear (2) halogen

Under our policy of continuous product 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 BM

VOLVO BM AB ESKILSTUNA SWEDEN

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ENGELSKA

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