1 9 7 9 VOLVO 242, 244, 245

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Dimensions and weights	242	244	245
Length	192.5" (489 cm)	192.5" (489 cm)	192.5" (489 cm)
Width	67.3" (171 cm)	67.3" (171 cm)	67.3" (171 cm)
Height, curb weight	56.3" (143 cm)	56.3" (143 cm)	57.5" (146 cm)
Wheelbase	104.0" (264 cm) ¹	104.0" (264 cm) ¹	104.3" (265 cm)
Ground clearance (full load)	4.7" (12 cm)	4.7" (12 cm)	4.7" (12 cm)
Track, front	56.3" (143 cm)	56.3" (143 cm)	56.3" (143 cm)
Track, rear	53.5" (136 cm)	53.5" (136 cm)	53.5" (136 cm)
Turning circle (between curbs)	32.2' (9.8 cm)	32.2' (9.8 cm)	32.2' (9.8 cm)
Curb weight (depending on type)	2841-2946 lbs (1290-1338 kg)	2889-3028 lbs (1312-1375 kg)	3065-3138 lbs (1392-1425 kg)
Gross vehicle weight (GVW)	4030 lbs (1830 kg)	4030 lbs (1830 kg)	4300 lbs (1950 kg)
Capacity weight	920 lbs (420 kg)	920 lbs (420 kg)	1120 lbs (520 kg)
Permissible axle weight, front	1885 lbs (855 kg)	1885 lbs (855 kg)	1885 lbs (855 kg)
Permissible axle weight, rear	2180 lbs (990 kg)	2180 lbs (990 kg)	2600 lbs (1180 kg)
Max. trailer weight	2000 lbs (908 kg)	2000 lbs (908 kg)	2000 lbs (908 kg)
Max. hitch load	200 lbs. (90 kg)	200 lbs. (90 kg)	200 lbs. (90 kg)

1) 104.3" (265 cm) for cars with power steering

Cargo Space	245
Length with rear seat up	44.5" (113 cm)
Length with rear seat down	74.0" (188 cm)
Maximum width	53.1" (135 cm)
Height	32.9" (84 cm)
Volume with rear seat up	41 cu. ft. (1.2 m3)
Volume with rear seat down	71 cu. ft. (2.0 m3)
Cargo opening, maximum width	45.7" (116 cm)
Cargo opening, maximum height	30.7" (78 cm)

Capacities

Fuel tank

15.8 US gals = 60 liters/13.2 Imp. gals.

Cooling system

9.9 US qts = 9.4 liters/8.9 Imp. qts.

(of which expression tank = 1 US gts/0)

(of which expansion tank = 1 US qts/0.5 Imp. qt. (0.6 liter))

Oil capacity:

- engine, oil change 3.5 US qts = 3.35 liters/3.0 Imp. qts. - engine, incl. oil filter 4.0 US qts = 3.85 liters/3.4 Imp. qts. transmission(M45) 0.8 US qts = 0.75 liters/0.7 Imp. qts. (M46) 2.4 US qts = 2.3 liters/2.2 Imp. qts. (BW 55) 7 US qts = 6.5 liters/5 Imp. qts. rear axle 1.7 US qts = 1.6 liters/1.4 Imp. qts. steering gear, power 0.8 US qts = 0.75 liters/0.7 Imp. qts.

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ENGINE

4-cylinder in-line liquid-cooled gasoline engine. Cylinder block in special cast iron. Bores directly in block.

Cylinder head in light-alloy. Separate inlet and exhaust passages. Single, overhead camshaft.

Engine lubrication is provided by a gear pump driven from the crankshaft. Full-flow type oil filter. Exhaust emission control accomplished by fuel injection. Exhaust Gas Recirculation (some models also equipped with Lambda-sond TM system and 3-way catalytic converter). Closed crankcase ventilation system and evaporative emission control system.

Type designation	B21 F	B21 A (Canada)
Output (SAE J 245) at/rpm	107 hp/5250*)	96 hp/5250
Max. torque (SAE J 245) at rpm	117 ft.Ibs.=158 Nm /2500**)	121 ft.Ibs.=163 Nm/2500
Number of cylinders	4	4
Bore	3.62" (92 mm)	3.62" (92 mm)
Stroke	3.15" (80 mm)	3.15" (80 mm)
Displacement	2.13 liters	2.13 liters
Valves	overhead	overhead
Valve clearance, inlet and exhaust at normal operating temp	0.012-0.020" (0.30-0.50 mm) 0.016-0.018" (0.40-0.45 mm)	

^{*)} Canada version 111 hp/5250 rpm

Cars with catalytic converter: 114 ft. lbs = 154 Nm/2500 rpm

Cooling system

Type: Positive pressure, closed system

Thermostat begins to open at 189°F (87°C) fully open at 207°F (97°C)
Fan belts, designation HC-38 X 925

Fuel System Fuel injection CI-system Carburetor Stromberg

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Ignition System

Firing order 1-3-4-2

Ignition setting, vacuum regulator disconnected, at 750 rpm

US (not Calif.) and Canada 10°+/-2° BTDC California models 8°+/-2° BTDC

Spark plugs Volvo Part No. 273589 (or equivalent)

Spark plug gap 0.7-0.8 mm (0.028-0.032")
Tightening torque 20-30 Nm (14.5-21.7 ft. lbs.)

Distributor, direction of rotation Clockwise

ELECTRICAL SYSTEM

12 V, negative ground.

^{**)} Canada version 120 ft. lbs = 162 Nm/4500 rpm

Voltage-controlled alternator.

Single-wire system with chassis and engine used as conductors.

Voltage 12 V

Battery: Tudor 6 EX 45 o.p.*

-Capacity 60 Ah
-Electrolyte, specific gravity 1.28
-Recharge at 1.21
Alternator, rated output 770 W
- max. current 55 A

* or corresponding

Lights, 12 V	US bulb No.	Power	Socket	No. of bulbs
Headlights, 242	7" Type 2	Sealed Beam		2
Headlights, inner -244/245	5 3/4" Type 1	Sealed Beam		2
Headlights, outer -244/245	5 3/4"" Type 2	Sealed Beam		2
Position Lights, front	67	5 W/4 cp	Ba 15s	2
Turn Signals, front	1073	21 W/32 cp	Ba 15s	2
Turn Signals, rear	1073	21 W/32 cp	Ba 15s	2
Tail lights	67	5 W/4 cp	Ba 15s	4(245:2)
Stop Lights	1073	21 W/32 cp	Ba 15s	2
Back-up Lights	1073	21 W/32 cp	Ba 15s	2
Side Marker Lights	57	4 W/2 cp	Ba 9s	2
The following bulbs may b	e obtained from	your nearest \	Volvo de	aler.
Rear ash tray Light		1.2 W	W1.8d	1
License Plate Light, 242, 24	44	4 W	Ba9s	2
License Plate Light, 245		5 W	S 8.5	2
Interior Light	10 W	S 8.5	1(245:2)	
Glove Box Light		2 W	Ba9s	1
Instrument Panel Light		2 W	Ba7s	3
Control Panel Light	1.2 W	W1.8d	3	
Shift positions, Auto Trans	1.2 W	W1.8d	1	
Trunk Light	15 W	S 8.5	1	
Warning Lamps				
Charging		1.2 W	W1.8 d	1
Turn Signals		1.2 W	W1.8 d	2
Brake Failure		1.2 W	W1.8 d	1
Parking Brake		1.2 W	W1.8 d	1
Headlights		1.2 W	W1.8 d	1
Oil Pressure		1.2 W	W1.8 d	1
Overdrive	1.2 W	W1.8 d	1	
Warning Flashers		1.2 W	W1.8 d	1
El. Heated Window		1.2 W	W1.8 d	1
EGR Reminder		1.2 W	W1.8 d	1
		2 W	Ba9s	2

Bulb Failure | | 1.2 W | | W1.8 d | 1

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Front End

Suspension is of the McPherson type with the shock absorber mounted in a strut in the coil spring.

Rack and pinion steering gear.

Power steering is optional (standard on 245 Wagon).

Safety steering column.

Front wheel alignment

The alignment specifications apply to an unloaded car but include fuel, coolant and spare wheel.

Toe-in: 3/16''=0.19+/-0.06'' (4.5 +/- 1.5 mm)manual steering

1/8"= 0.12+/- 0.06" (3.0 +/- 1.5 mm)power steering

Camber: 0° to $+1^{\circ}$ (Difference not to exceed $1/2^{\circ}$ between left and right side.)

Caster: not adjustable

POWER TRANSMISSION

Cable-operated clutch on the single, dry-plate type.

Floor-shift operated manual transmission has four synchromesh forward gears and one reverse.

Overdrive available on some models.

Optional automatic transmission.

Hypoid type final drive. Limited slip differential is optional.

Clutch

Clutch release arm play approx 1/8" (3mm)

Transmission

Tymo	designation:	M45 D	M46	AW 55
Type	designation.	W143 D	14140	BW55

Reduction ratios:

1st gear	3.71:1	3.71:1 2.45:1
2nd gear	2.16:1	2.16:1 1.45:1
3rd gear	1.37:1	1.37:1 1.00:1
4th gear	1.00:1	1.00:1 -
Overdrive	-	0.80:1 -
Reverse	3.68:1	3.68:1 2.21:1

Rear axle

Reduction ratio 3.91:1 3.91:1 3.73:1

Speeds in mph (km/h) at 1000 engine rpm

Transmission:	M45	M46
Rear axle ratio	3.91:1	3.91:1
1st gear	5.0(8.1)	5.0(8.1)
2nd gear	8.6(13.9)	8.6(13.9)
3rd gear	13.6(21.9)	13.6(21.9)
4th gear	18.7(30.0)	18.7(30.0)
Overdrive	-	23.3(37.5)
Reverse	5.1(8.2)	5.1(8.2)

Recommended max. and min. speeds, mph (km/h)

Rear axle ratio 1st gear		2nd gear	3rd gear	4th gear	
	3.91:1	-25(-40)	10-44(20-70)	20-70(30-110)	25*- (44-)*

^{*40} mph(*65km/h) with overdrive engaged

Tool kit

Wheel nut and spark plug wrench. 2 screwdrivers (1 Phillips, 1 standard)

Tommy bar.

2 open end wrenches.

Tires

Tire pressures

	Vehicle capacity	Tire	Recommended inflation pressure psi (kPa)						
Car model			Normal speed				>75 mph (120 km/h)		
Car moder	weight,	1116	1-3 persons		Fu		ıll load		
lbs (kgs)		Front	Rear	Front	Rear	Front	Rear		
242/244	920(420)	175 R 14	26(180)	27(190)	26(180)	32(230)	30(210)	36(250)	
242/244	920(420)	DR 78-14	26(180)	28(200)	26(180)	32(230)	26(180)	32(230)	
242 GT	920(420)	185/70 R 14	26(180)	27(180)	28(200)	32(230)	28(200)	32(230)	
245	1120(520)	185 R 14	27(190)	30(210)	28(200)	36(250)	28(200)	36(250)	
245	1120(520)	DR 78-14	26(180)	30(210)	26(180)	32(230)	*	*	
"Special Spare"		B 78-14	36(250)	36(250)	36(250)	36(250)	**	**	
* Max 75 mph (120 km/h) ** Max 50 mph (80 km/h)									

pg. 90 Volvo Service Manuals

Service Manuals for your Volvo are available for purchase. These are the same used by competent Volvo technicians. Each major system in the car is covered by an individual Manual. These are grouped into ten sections and placed into a five-binder system. (Note that Manuals and binders may be obtained separately or in preassembled sets.)

Major sections within the five-binder system include: 0-General Information; 1-Service and Maintenance Instruction; 2-Engine; 3-Electrical System: 4-Power Transmission: 5-Brakes: 6-Front End and Steering; 7-Frame Suspension and Wheels; 8-Body: 9-Accessories and Other Equipment.

A Service Manual Brochure and Order Form was placed in the car prior to delivery from the dealer to you. Complete ordering information is provided.

Please note that these manuals may be offered for sale by your Volvo dealer.

Prices charged by the dealer can vary from those listed in the brochure (according to federal law).

Additional copies of the Brochure and Order Form may be obtained from your Volvo dealer, or by mail directly from:

Volvo of America Corporation Rockleigh Industrial Park

Rockleigh, New Jersey 07647

Attention: Volvo Service Literature

Note that the above pertains to vehicles sold in the U.S.A. only.

