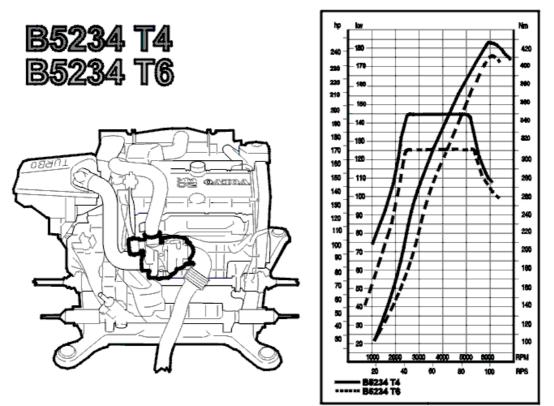
Turbocharged engines



S70/V70

20001658 © VOLVO

The Volvo S70/V70 engine program has been extended by more turbocharged variants.

The B5234T3 (all markets)

Replaces the B5234T4 and the B5234T5 fitted to the Volvo 850R.

B5234T3 has the following modifications compared to B5234T:

- New turbocharger (TC) with larger intake area.
- New reinforced pistons and piston ring package.
- Control module with new software.

Performance

Maximum torque is 330 Nm (243 lb.ft.) and is reached between 2700 - 5100 rpm. Maximum output is 176 kW (240 bhp) obtained at 5100 rpm.

B5204T3 (Italy, Taiwan)

The B5204T3 is the earlier B5204T with 154 kW (210 hp) and 300 Nm, with a new turbocharger (TC) which has been adapted to the 2 liter (122 cui) engine characteristics (the turbo cuts in at a lower engine speed (RPM)).

Performance

Maximum torque is 310 Nm (228 lb.ft.) and is

reached between 2700 -5100 rpm. Maximum output is 165 kW (225 hp) obtained at 5700 rpm.

B5234T2 (Thailand only)

The same engine as the B5234T3, but with another control module with adapted software giving less power.

Performance

Maximum torque is 330 Nm (243 lb.ft.)and is reached between 2700 - 4500 rpm (previously 300 Nm).

Maximum output is 160 kW (218 bhp) obtained at 5100 rpm.

B5204T2 (Norway, Finland, Italy, Taiwan)

Modifications from earlier versions:

- New pressure regulator with weaker springs (provides reduced torque » 10 Nm).
- New software in the control module (provides increased power ≈ 5 bhp).
- New ratio in final drive (manual = 4.25:1, automatic = 2.76:1).

Performance

Maximum torque is 220 Nm (162 lb.ft.) and is reached between 2100 -5400 rpm. Maximum output is 132 kW (180 bhp) obtained at 5700 rpm.

Common to 2.0 and 2.3 liter (122 and 140 cui) turbocharged engines

The following applies to all turbocharged engines and markets (from week 650):

- Engine management system, Motronic 4.4 with altitude sensor and outside temperature sensor as B5254T.
- (The outside temperature sensor has anew location beside the right air intake inside the bumper).
- EVAP system the same as the B5254T.
- Charge air cooler, the same as the B5254T (approximately 5 kPa (0.72 psi) less pressure above charge air cooler (CAC) compared to previously.)
- Turbocharger control valve (TCV), new version and location (function unchanged compared to previously).

2.3 liter (140 cui) turbo

"Non return" fuel injection system, as on the B5254T.

High-pressure turbocharger

All have the same sub-frame as the D5252T

and AWD (= reinforced mountings for the control arms).

Engine	B5234T3	B5204T3	B5234T2	B5204T2
Maximum power	176 kW (240 bhp)	165 kW (225 bhp)	160 kW (218 bhp)	132 kW (180 bhp)
	obtained at	obtained at	obtained at	obtained at
	5100 rpm	5700 rpm	5100 rpm	5700 rpm
Maximum torque	330 Nm (243 lb.ft.)	310 Nm (228 lb.ft.)	330 Nm (243	220 Nm (162 lb.ft.)
	and is reached	and is reached	lb.ft.) and is	and is reached
	between 2700-	between 2700-	reached between	between 2100-
	5100 rpm	5100 rpm	2700-4500 rpm	5400 rpm
Maximum boost	184 ± 10 kPa (1.45	195 ± 10 kPa (1.45	175 ± 10 kPa	147 ± 10 kPa (1.45
pressure	psi) at 5100 rpm	psi) at 3000 rpm	(1.45 psi) at	psi) at 6000 rpm
			3000 rpm	
Cylinder diameter	81 mm (3.19 inch)	81 mm (3.19 inch)	81 mm (3.19	81 mm (3.19 inch)
			inch)	
Cylinder stroke	90 mm (3.54 inch)	77 mm (3.03 inch)	90 mm (3.54	77 mm (3.03 inch)
			inch)	
Cylinder capacity	2319 cm³ (142	1984 cm³ (121	2319 cm³ (142	1984 cm³ (121
	inch ³)	inch ³)	inch³)	inch ³)
Compression	8.5:1	8.4:1	8.5:1	8.4:1
Engine	Motronic 4.4	Motronic 4.4	Motronic 4.4	Motronic 4.4
management				
system				

Summary of technical data: