Haynes THE BOOK

Automotive Technical DATA BOOK

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Engine and cooling system

		Alpine V6 Turbo CAT (D502) 1990 to 1992
Type		Z7U-7-34 149kW
Capacity (cm³) / number of cylinders		2458 / 6
Compression ratio / pressure	bar	8.0 / _
Oil pressure	bar	2.2 [4.4]
Oil temperature	ºC	80
Valve clearance - inlet	mm	0.10
Valve clearance - exhaust	mm	0.25
Firing order		1-6-3-5-2-4
No 1 cylinder position		RL
Thermostat opening temperature	ºC	82
Radiator cap pressure	bar	0.9

Fuel system

		Alpine V6 Turbo CAT (D502) 1990 to 1992
Idle speed - manual [auto]	rpm	750±50 N/A
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	≤0.5 N/A
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Renix
Type / ref		Bendix R electronic MPI
Main jet / needle		_
Injection pressure	bar	2.5±0.2
Pump pressure	bar	3.0±0.2
Octane rating	RON	95[U]

Ignition system

		Alpine V6 Turbo CAT (D502) 1990 to 1992
Type		Computerized
Ignition coil		Renix
Primary resistance	ohms	0.4 to 0.8
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Renix
Points gap (air gap)	mm	_
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		Clockwise
Ignition timing - basic [static	º Crankshaft @ rpm	Computer control
V = Vacuum NV = No Vacuum		_
Total ignition advance	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	º Crankshaft	_
Spark plugs		Eyquem/Champion
Type		805 LJSP / S6YC
Electrode gap	mm	0.65±0.05

Electrical system

		Alpine V6 Turbo CAT (D502) 1990 to 1992
Battery	V / CC / RC	12 / 50Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.8 / _ / 3000
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	_

Running gear

		Alpine V6 Turbo CAT (D502) 1990 to 1992
Brakes -		
Front (min. friction material thickness)	mm	6.0 with backing
Rear (min. friction material thickness)	mm	6.0 with backing
Tyres		
Saloon	Size	Ft 195/50x15. Rr 225/50x15[1]
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	Ft. Mich:1.8. Pir:2.0[2]
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	-2.0±1.0
Camber		-40'±20'
Castor		+5°±30'
King pin inclination		+7°35'
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+4.5±0.5
Camber		-2°20'±30'

Torque wrench settings

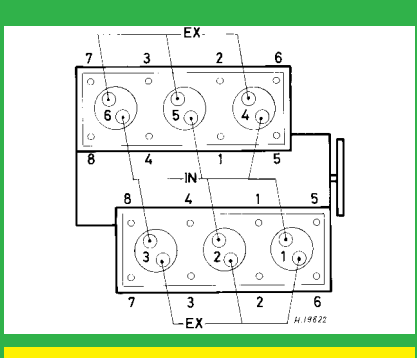
		Alpine V6 Turbo CAT (D502) 1990 to 1992
Cylinder head - stage 1	Nm	60, then slacken bolts
- stage 2	Nm	20 + 106°
Cylinder head - stage 3	Nm	Warm up engine, then cool
- stage 4	Nm	+ 45°
Big-end bearings	Nm	45
Main bearings	Nm	30 + 70°
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	45
Front hubs	Nm	160
Rear hubs	Nm	250
Wheel nuts / bolts	Nm	100
Spark plugs	Nm	_

Capacities

		Alpine V6 Turbo CAT (D502) 1990 to 1992
Engine oil & filter	litres	7.6
Gearbox - 4-speed [5-speed]	litres	3.0
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	15.0
Fuel tank	litres	73

Notes and Illustrations

[1]**Or 255/50x15**
[2]**Rear, 225: 2.5. 255: 2.4**



2458 cm³