

Engine & Cooling

Fuel

Ignition

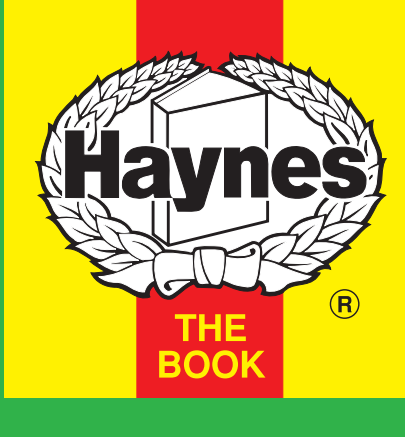
Electrical

Running gear

Torque settings

Capacities

Notes & Illustrations



Automotive Technical
DATA BOOK

Click on one of the buttons above to view data for this car. To return to this screen and make another choice, click anywhere on the data screen.

MENU

HELP

Engine and cooling systemVitara1988 to 1994

Type	SOHC 55kW G16A	
Capacity (cm³) / number of cylinders	1590 / 4	
Compression ratio / pressure	bar	8.9 / ≥11.7
Oil pressure	bar	[3.6 to 4.4]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.13 to 0.18
- exhaust	mm	0.16 to 0.20
Firing order	1-3-4-2	
No 1 cylinder position	TBE	
Thermostat opening temperature	°C	82 or 88
Radiator cap pressure	bar	0.90

Fuel systemVitara1988 to 1994

Idle speed - manual [auto]	rpm	790 to 810
Fast idle speed - manual [auto]	rpm	3500 to 4500
CO @ idle speed [3000 rpm] - see page VI	%	≤0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection	Aisan	
Type / ref	2V	
Main jet / needle	—	
Injection pressure	bar	—
Pump pressure	bar	0.20 to 0.30
Octane rating	RON	91[E 91 RON]

Ignition systemVitara1988 to 1994

Type	Electronic	
Ignition coil	—	
Primary resistance	ohms	1.35 to 1.65
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor	—	
Points gap (air gap)	mm	[0.20 to 0.40]
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation	—	
Ignition timing - basic [static	° Crankshaft @ rpm	8 BTDC @ 800±50
V = Vacuum NV = No Vacuum	V	
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	—
Maximum vacuum advance	° Crankshaft	—
Spark plugs	NGK/Champion	
Type	BP6ES or BPR6ES / N9YC	
Electrode gap	mm	0.70 to 0.80

Electrical systemVitara1988 to 1994

Battery	V / CC / RC	12 / 36 or 50Ah
Alternator voltage / full load current / engine rpm	14.4 to 15.0 / _ / 3000	
Starter motor current / voltage - cranking	A / V	300 / 7.7 or 150 / 9.0
- locked	A / V	980 / 4.4 or 380 to 500 / 5.0

Running gearVitara1988 to 1994

Brakes -		
Front (min. friction material thickness)	mm	3.0
Rear (min. friction material thickness)	mm	1.0

Tyres		
Saloon	Size	—
Estate / Van	Size	195x15
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	1.6 / 1.6

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	+2.0 to +6.0
Camber	+30'±1°	
Castor	+1°30'±1°	
King pin inclination	—	

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	—
Camber	—	

Torque wrench settingsVitara1988 to 1994

Cylinder head - stage 1	Nm	70 to 75
- stage 2	Nm	—
- stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	33 to 37
Main bearings	Nm	50 to 57
Clutch cover	Nm	18 to 28
Flywheel [driveplate]	Nm	75 to 80
Front hubs	Nm	120 to 170
Rear hubs	Nm	—
Wheel nuts / bolts	Nm	50 to 80
Spark plugs	Nm	25 to 30

CapacitiesVitara1988 to 1994

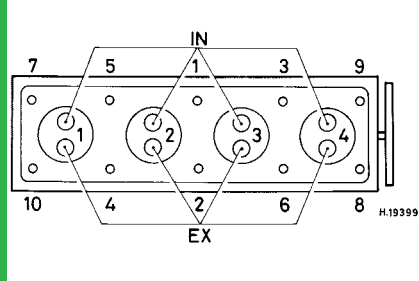
Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	1.5 ¹
Automatic transmission - refill	litres	2.0
Final drive	litres	Front: 1.0 ²
Cooling system	litres	5.3
Fuel tank	litres	42

Notes and Illustrations

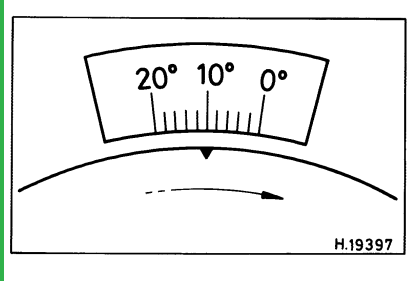
¹Transfer box: 1.7

²Rear: 2.2

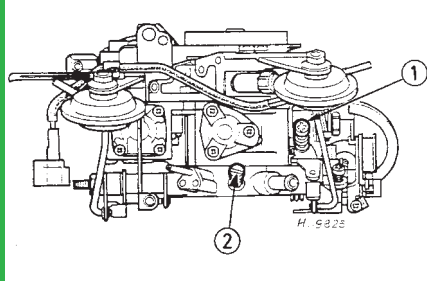
1: Idle speed 2: CO / Mixture



1590 cm³, 8V



1590 cm³, 8V



Aisan 2V