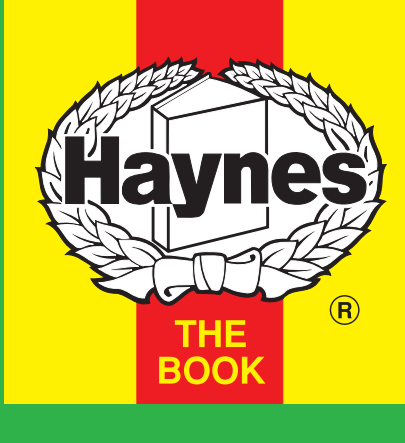




Automotive Technical

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 system

RAV 4 2.0i

1994 to 1997

Type	3S-FE DOHC 16V 96kW	
Capacity (cm ³) / number of cylinders	1998 / 4	
Compression ratio / pressure	bar	9.5 / ≥9.5
Oil pressure	bar	[2.5 to 5.0]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.19 to 0.29
- exhaust	mm	0.28 to 0.38
Firing order	1-3-4-2	
No 1 cylinder position	TBE	
Thermostat opening temperature	°C	80 to 84
Radiator cap pressure	bar	0.7 to 1.0

Fuel system

RAV 4 2.0i

1994 to 1997

Idle speed - manual [auto]	rpm	700±50 ¹
Fast idle speed - manual [auto]	rpm	—
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	_Toyota	
Type / ref	TCCS MPI	
Main jet / needle	—	
Injection pressure	bar	2.7 to 3.1
Pump pressure	bar	—
Octane rating	RON	95[U]

Ignition system

RAV 4 2.0i

1994 to 1997

Type	Electronic	
Ignition coil	—	
Primary resistance	ohms	0.36 to 0.65
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	10 BTDC @ 700±50
V = Vacuum NV = No Vacuum	—	
Total ignition advance	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	—
Spark plugs	NGK	
Type	BKR6EYA-11	
Electrode gap	mm	1.10

Electrical system

RAV 4 2.0i

1994 to 1997

Battery	V / CC / RC	12 /
Alternator voltage / full load current / engine rpm	14.3 to 14.7 / 70A	
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear

RAV 4 2.0i

1994 to 1997

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

Tyres		
Saloon	Size	215/70x16
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	1.8 / 1.8
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0.0±1.0
Camber	-15'±45'	
Castor	1°20'±45'	
King pin inclination	10°45'±45'	

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	3.0±2.0
Camber	-1°5'±45' 5dr: -0°55'±45'	

Torque wrench settings

RAV 4 2.0i

1994 to 1997

Cylinder head - stage 1	Nm	29
- stage 2	Nm	49
- stage 3	Nm	+90°
- stage 4	Nm	—
Big-end bearings	Nm	25 +90°
Main bearings	Nm	59
Clutch cover	Nm	19
Flywheel [driveplate]	Nm	88 [83]
Front hubs	Nm	216
Rear hubs	Nm	206
Wheel nuts / bolts	Nm	103
Spark plugs	Nm	18

Capacities

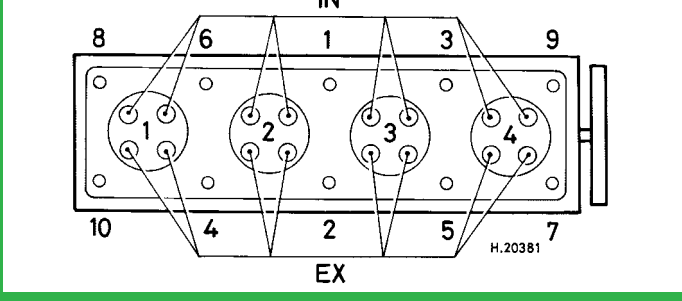
RAV 4 2.0i

1994 to 1997

Engine oil & filter	litres	3.9
Gearbox - 4-speed [5-speed]	litres	5.0
Automatic transmission - refill	litres	3.3
Final drive	litres	Rear: 0.9
Cooling system	litres	13.6
Fuel tank	litres	58

Notes and Illustrations

¹TE1 & E1 shorted



1998 cm³