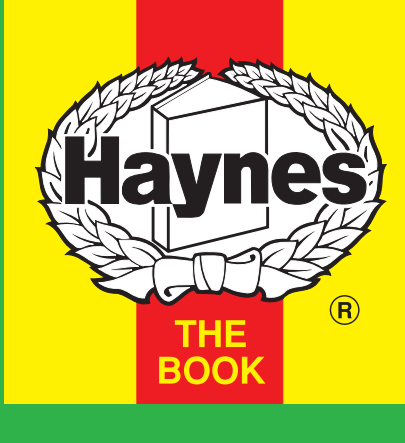




Automotive Technical

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

Starlet 1.3i

1993 to 1996

Type		2E-E SOHC 12V 55kW
Capacity (cm ³) / number of cylinders		1296 / 4
Compression ratio / pressure	bar	9.5 / 13.0
Oil pressure	bar	[2.5 to 4.9]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.20 H
- exhaust	mm	0.20 H
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	80 to 84
Radiator cap pressure	bar	0.75 to 1.00

Fuel system

Starlet 1.3i

1993 to 1996

Idle speed - manual [auto]	rpm	800±50
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	≤100
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		— Toyota
Type / ref		MPI
Main jet / needle		—
Injection pressure	bar	2.7 to 3.1
Pump pressure	bar	—
Octane rating	RON	95[U]

Ignition system

Starlet 1.3i

1993 to 1996

Type		Electronic
Ignition coil		—
Primary resistance	ohms	1.3 to 1.5
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		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	10 BTDC @ 800±50
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° 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		BPR5EY
Electrode gap	mm	0.80

Electrical system

Starlet 1.3i

1993 to 1996

Battery	V / CC / RC	12 / 40Ah
Alternator voltage / full load current / engine rpm		13.5 to 15.1 / 40 / 3000
Starter motor current / voltage - cranking	A / V	50 / 11 (no load)
- locked	A / V	—

Running gear

Starlet 1.3i

1993 to 1996

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

Tyres		
Saloon	Size	165/70x13:145x13
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	1.9 / 1.9: 2.2 / 2.2
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	1.0±1.0
Camber		-15'±30'
Castor		1°25'±30'
King pin inclination		12°±30'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	3.0±4.0
Camber		—

Torque wrench settings

Starlet 1.3i

1993 to 1996

Cylinder head - stage 1	Nm	29
- stage 2	Nm	49
- stage 3	Nm	+90°
- stage 4	Nm	—
Big-end bearings	Nm	39
Main bearings	Nm	57
Clutch cover	Nm	19
Flywheel [driveplate]	Nm	83
Front hubs	Nm	186
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	103
Spark plugs	Nm	18

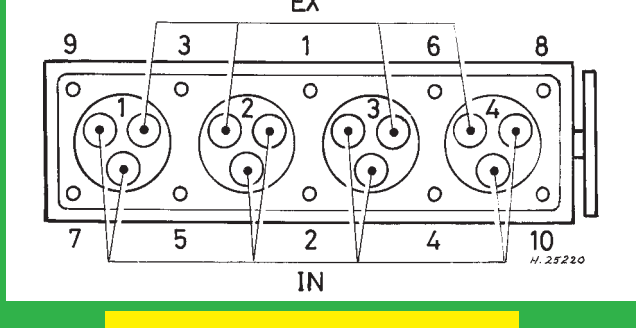
Capacities

Starlet 1.3i

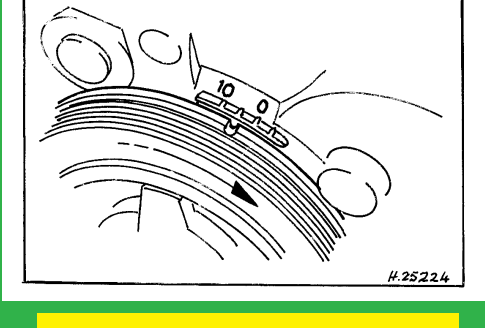
1993 to 1996

Engine oil & filter	litres	3.2
Gearbox - 4-speed [5-speed]	litres	2.4
Automatic transmission - refill	litres	2.2
Final drive	litres	AT: 1.4
Cooling system	litres	4.8
Fuel tank	litres	40

Notes and Illustrations



1296 cm³



1296 cm³