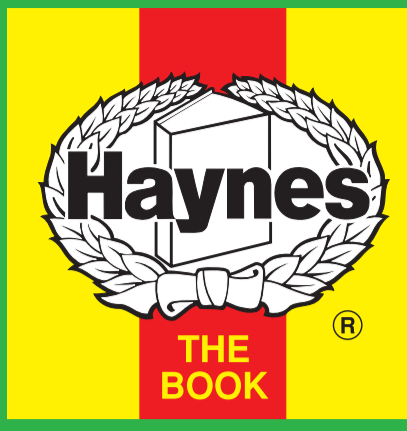


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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Automotive Technical DATA BOOK

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 Sierra & Sapphire 2.0i/4x4 1989 to 1992

Type		N9A. DOHC 8V 92kW 15.04
Capacity (cm ³) / number of cylinders		1998 / 4
Compression ratio / pressure	bar	10.3 / 11 to 13
Oil pressure	bar	1.0 [2.5]
Oil temperature	°C	80
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	85 to 89
Radiator cap pressure	bar	1.00 to 1.25

Fuel system Sierra & Sapphire 2.0i/4x4 1989 to 1992

Idle speed - manual [auto]	rpm	875±25
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
CO ₂ @ idle speed [3000 rpm] - see page VI	%	—
O ₂ @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Ford
Type / ref		EEC IV
Main jet / needle		—
Injection pressure	bar	2.5±0.2
Pump pressure	bar	≥3.0
Octane rating	RON	97[E 95 RON]

Ignition system Sierra & Sapphire 2.0i/4x4 1989 to 1992

Type		EEC IV
Ignition coil		High output
Primary resistance	ohms	0.72 to 0.88
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Bosch/Motorcraft
Points gap (air gap)	mm	—
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	[15 BTDC]
V = Vacuum NV = No Vacuum		—
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	EEC IV control
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	EEC IV control
Maximum vacuum advance	° Crankshaft	—
Spark plugs		Motorcraft/Champion
Type		AGPR22CD / RC7YCC
Electrode gap	mm	0.75

Electrical system Sierra & Sapphire 2.0i/4x4 1989 to 1992

Battery	V / CC / RC	12 / 200 / 70, 250 / 80
Alternator voltage / full load current / engine rpm		13.5 / _ / 3000
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear Sierra & Sapphire 2.0i/4x4 1989 to 1992

Brakes -		
Front (min. friction material thickness)	mm	1.5
Rear (min. friction material thickness)	mm	1.0

Tyres		
Saloon	Size	185/65x14: 195/65x14 ¹
Estate / Van	Size	185/65x14: 195/65x14 ¹
Pressure - front / rear - Saloon	bar	1.8 / 1.8 ²
- Estate / Van	bar	1.8 / 1.8 ²

Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	+2.0±1.0 ³
Camber		-21'±1°. Est: -19'±1° ⁴
Castor		+1°52'. Est: +1°50'+1°30'-1° ⁵
King pin inclination		—

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	—
Camber		—

Torque wrench settings Sierra & Sapphire 2.0i/4x4 1989 to 1992

Cylinder head - stage 1	Nm	25
- stage 2	Nm	55
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90° ⁶
Big-end bearings	Nm	6 to 8, THEN ⁷
Main bearings	Nm	90 to 104
Clutch cover	Nm	17 to 21
Flywheel [driveplate]	Nm	82 to 92
Front hubs	Nm	310 to 350 ⁸
Rear hubs	Nm	250 to 290
Wheel nuts / bolts	Nm	70 to 100
Spark plugs	Nm	17 to 33

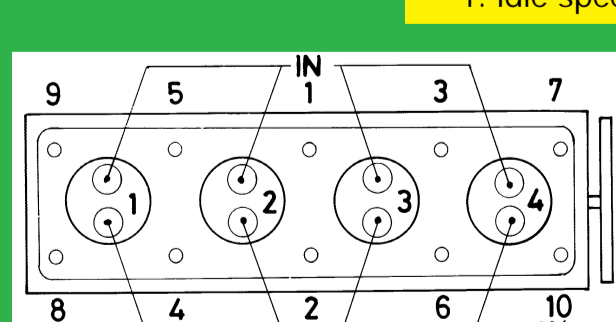
Capacities Sierra & Sapphire 2.0i/4x4 1989 to 1992

Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	1.2 ⁹
Automatic transmission - refill	litres	8.5
Final drive	litres	7: 0.9 ¹⁰⁰
Cooling system	litres	7.3
Fuel tank	litres	60

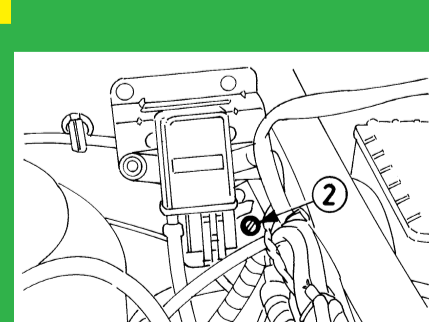
Notes and Illustrations

- ¹185/70x13: 195/60x14
- ²4x4: 2.0 / 2.0
- ³4x4: 0±1.0
- ⁴4x4: -1°17'±1°. Estate 4x4: -1°12'±1°
- ⁵4x4: +2°58'+1°30'-1°. Estate 4x4: +2°38'+1°30'-1°
- ⁶M8 bolts: 36 to 39 N
- ⁷15 to 20 + 85 to 95°
- ⁸4x4: 205 to 235
- ⁹4x4 transfer box: 0.5
- ¹⁰⁰7.5: 1.3. 4x4: Front: 1.0. Rear: 0.9

1: Idle speed 2: CO / Mixture



1998 cm³, DOHC 8V



EEC IV, not CAT