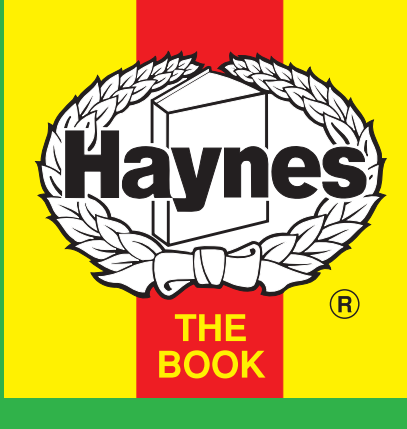


Engine & CoolingFuelIgnitionElectricalRunning gearTorque settingsCapacitiesNotes & Illustrations



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.

MENUHELP

Engine and cooling system

XJ6 & Sovereign 3.2 CAT

1990 to 1994

Type		AJ-6 DOHC 24V 149kW
Capacity (cm ³) / number of cylinders		3239 / 6
Compression ratio / pressure	bar	9.75 / ≥11.0
Oil pressure	bar	2.1
Oil temperature	°C	80
Valve clearance - inlet	mm	0.30 to 0.36
Valve clearance - exhaust	mm	0.30 to 0.36
Firing order		1-5-3-6-2-4
No 1 cylinder position		TCE
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	1.0

Fuel system

XJ6 & Sovereign 3.2 CAT

1990 to 1994

Idle speed - manual [auto]	rpm	800±50 [700±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	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Lucas
Type / ref		EFI 15CU
Main jet / needle		—
Injection pressure	bar	3.0 above manifold pres.
Pump pressure	bar	3.0
Octane rating	RON	95[U]

Ignition system

XJ6 & Sovereign 3.2 CAT

1990 to 1994

Type		Computerized
Ignition coil		Bosch yellow label
Primary resistance	ohms	0.45 to 0.55
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Lucas
Points gap (air gap)	mm	[0.8±0.4]
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	N/A
V = Vacuum NV = No Vacuum		—
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		Champion
Type		RC9YC
Electrode gap	mm	0.90

Electrical system

XJ6 & Sovereign 3.2 CAT

1990 to 1994

Battery	V / CC / RC	12 / 72Ah
Alternator voltage / full load current / engine rpm		13.8 to 15.0 / 120 / 3000
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	365 / 12

Running gear

XJ6 & Sovereign 3.2 CAT

1990 to 1994

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

Tyres		
Saloon	Size	225/65x15:225/55x16:220/65x390
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	2.2 / 2.3
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0 to +1.6
Camber		0 to -30’
Castor		+3°30’ to 4°30’
King pin inclination		+8°30’

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0 to +1.6
Camber		-30’ to -1°

Torque wrench settings

XJ6 & Sovereign 3.2 CAT

1990 to 1994

Cylinder head - stage 1	Nm	59 to 61
- stage 2	Nm	+ 90°
Cylinder head - stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	52 to 55
Main bearings	Nm	136 to 142
Clutch cover	Nm	23 to 27
Flywheel [driveplate]	Nm	98 [59 to 72]
Front hubs	Nm	WSM
Rear hubs	Nm	—
Wheel nuts / bolts	Nm	82. Alloy: 102
Spark plugs	Nm	27

Capacities

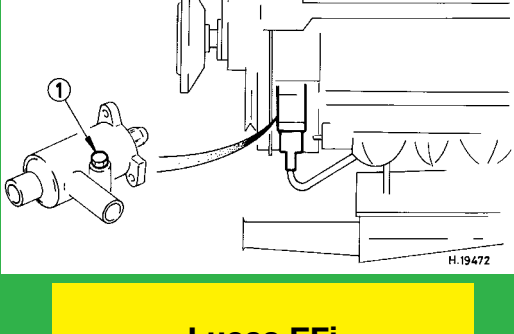
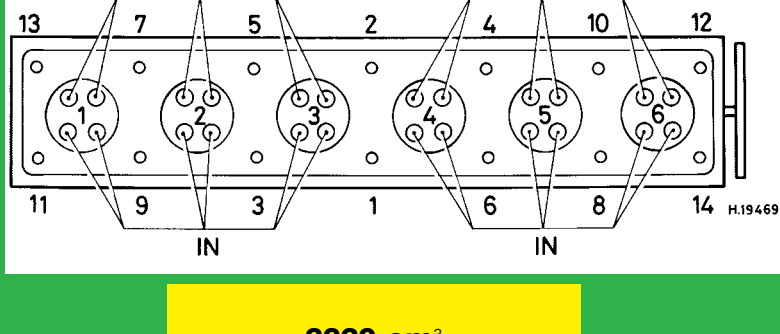
XJ6 & Sovereign 3.2 CAT

1990 to 1994

Engine oil & filter	litres	8.0
Gearbox - 4-speed [5-speed]	litres	1.4
Automatic transmission - refill	litres	3.0
Final drive	litres	2.1
Cooling system	litres	12.3
Fuel tank	litres	86.4

Notes and Illustrations

1: Idle speed2: CO / Mixture



3239 cm³

Lucas EFI