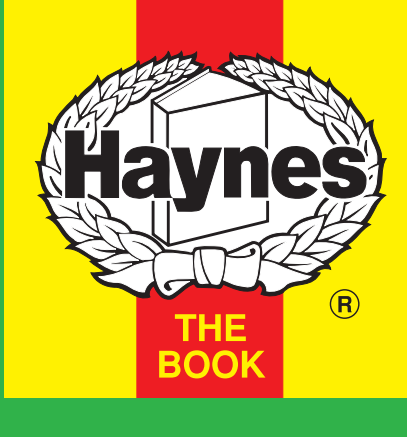


Engine & CoolingFuelIgnitionElectricalRunning gearTorque settingsCapacitiesNotes & Illustrations



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MENUHELP

Engine and cooling system

XJ-S V12 CAT

1989 to 1993

Type		V12 SOHC 24V 209kW
Capacity (cm³) / number of cylinders		5345 / 12
Compression ratio / pressure	bar	11.5 / 13.8
Oil pressure	bar	1.4
Oil temperature	°C	80
Valve clearance - inlet	mm	0.25 to 0.30
Valve clearance - exhaust	mm	0.25 to 0.30
Firing order		1-12-5-8-3-10-6-7-2-11-4-9
No 1 cylinder position		FR
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	1.0

Fuel system

XJ-S V12 CAT

1989 to 1993

Idle speed - manual [auto]	rpm	750±25
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	0.1 to 0.3
HC @ idle speed [3000 rpm] - see page VI	ppm	50
CO2 @ idle speed [3000 rpm] - see page VI	%	≥12.0
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Lucas
Type / ref		Digital P
Main jet / needle		—
Injection pressure	bar	2.5
Pump pressure	bar	2.5
Octane rating	RON	95[U]

Ignition system

XJ-S V12 CAT

1989 to 1993

Type		Computerized
Ignition coil		Marelli BAE 504DK
Primary resistance	ohms	0.45
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Marelli
Points gap (air gap)	mm	—
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	10 to 13 BTDC @ idle
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		NGK/Champion
Type		BR7EFS / RS5C
Electrode gap	mm	0.64

Electrical system

XJ-S V12 CAT

1989 to 1993

Battery	V / CC / RC	12 / 68Ah
Alternator voltage / full load current / engine rpm		13.8 to 15.0 / _ / 3000
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear

XJ-S V12 CAT

1989 to 1993

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

Tyres		
Saloon	Size	235/60x15
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	2.5 / 2.5
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0 to +1.6 ²
Camber		-30'±15'
Castor		+3°30'±15'
King pin inclination		+1°30'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0±0.8 ²
Camber		-45'±15'

Torque wrench settings

XJ-S V12 CAT

1989 to 1993

Cylinder head - stage 1	Nm	0.438 in. nut: 68
- stage 2	Nm	0.375 in. nut: 38
Cylinder head - stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	55
Main bearings	Nm	0.5 in. nut: 83 ¹
Clutch cover	Nm	—
Flywheel [driveplate]	Nm	88
Front hubs	Nm	WSM
Rear hubs	Nm	136 to 163
Wheel nuts / bolts	Nm	61
Spark plugs	Nm	—

Capacities

XJ-S V12 CAT

1989 to 1993

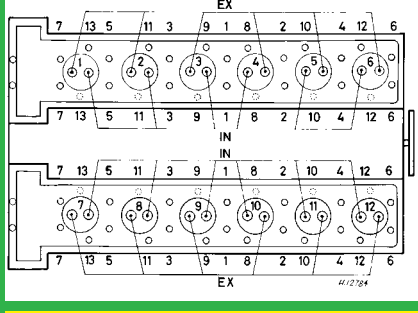
Engine oil & filter	litres	10.0
Gearbox - 4-speed [5-speed]	litres	—
Automatic transmission - refill	litres	9.1
Final drive	litres	1.6
Cooling system	litres	19.8
Fuel tank	litres	89. Convert: 82

Notes and Illustrations

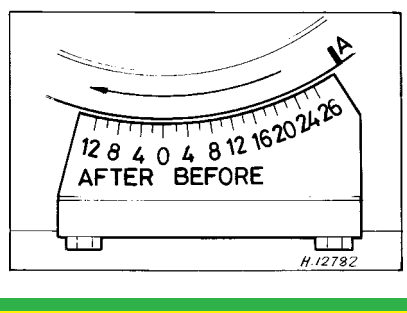
¹0.375 in. nut: 38

²L

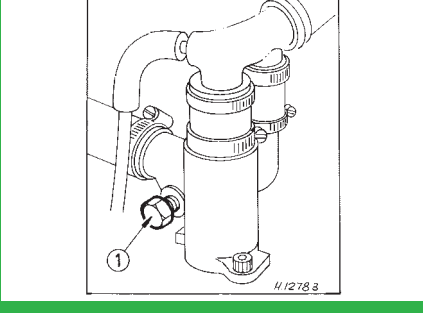
1: Idle speed 2: CO / Mixture



5345 cm³



5345 cm³



Lucas Digital P