

Engine & Cooling

Fuel

Ignition

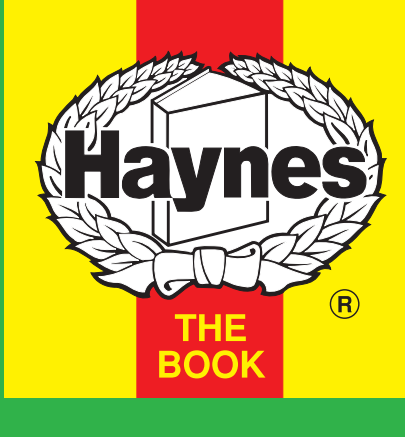
Electrical

Running gear

Torque settings

Capacities

Notes & 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.

MENU

HELP

Engine and cooling systemThema FL 16V CAT1992 to 1994

Type		834 F1.000 16V 112kW US83
Capacity (cm³) / number of cylinders		1995 / 4
Compression ratio / pressure	bar	10.35 / _
Oil pressure	bar	[3.4 to 4.9]
Oil temperature	°C	100
Valve clearance - inlet	mm	0.45±0.04
Valve clearance - exhaust	mm	0.50±0.04
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	81 to 85
Radiator cap pressure	bar	0.98

Fuel systemThema FL 16V CAT1992 to 1994

Idle speed - manual [auto]	rpm	800±50 [850±50]
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	_
HC @ idle speed [3000 rpm] - see page VI	ppm	_
CO2 @ idle speed [3000 rpm] - see page VI	%	≥12.0. Ex: ≥13.0
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Bosch
Type / ref		M1.7-Motronic 0 261 200 980
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	3.0
Octane rating	RON	95[U]

Ignition systemThema FL 16V CAT1992 to 1994

Type		Motronic Static
Ignition coil		Bosch 0 221 503 407 (4 output)
Primary resistance	ohms	0.45 to 0.55
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		_
Points gap (air gap)	mm	_
Dwell angle	° (%)	_
Condenser capacity	µF	_
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	7±1 BTDC @ 800±50 [850±50]
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		RN7YCC
Electrode gap	mm	0.85 to 0.95

Electrical systemThema FL 16V CAT1992 to 1994

Battery	V / CC / RC	12 / 320 / 60Ah
Alternator voltage / full load current / engine rpm		14.0 to 14.3 / 90, 115 / 3500
Starter motor current / voltage - cranking	A / V	360 to 380 / 8.2 to 8.5
- locked	A / V	680 to 730 / 4.8 to 5.2

Running gearThema FL 16V CAT1992 to 1994

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

Tyres		
Saloon	Size	185/65x14: 195/60x14
Estate / Van	Size	185/70x14: 195/65x14
Pressure - front / rear - Saloon	bar	2.2 / 2.2
- Estate / Van	bar	2.3 / 2.4

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	-1.0 to +1.0
Camber		-40' to 0 N/A
Castor		+2°30' to 3°10' N/A
King pin inclination		_

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	+1.0 to 4.0 ¹
Camber		-40' to 0 N/A

Torque wrench settingsThema FL 16V CAT1992 to 1994

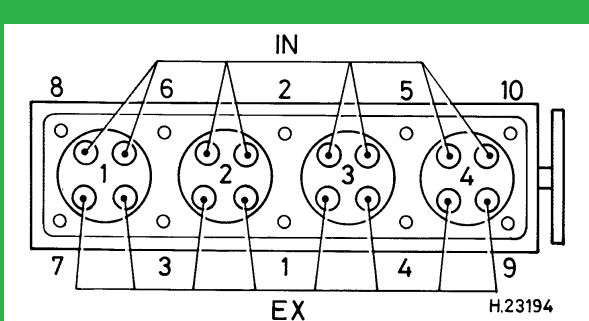
Cylinder head - stage 1	Nm	20
- stage 2	Nm	70
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90°
Big-end bearings	Nm	25 + 50°
Main bearings	Nm	20 ²
Clutch cover	Nm	20
Flywheel [driveplate]	Nm	142
Front hubs	Nm	360
Rear hubs	Nm	320
Wheel nuts / bolts	Nm	98
Spark plugs	Nm	37

CapacitiesThema FL 16V CAT1992 to 1994

Engine oil & filter	litres	5.5
Gearbox - 4-speed [5-speed]	litres	2.3
Automatic transmission - refill	litres	4.4
Final drive	litres	WT
Cooling system	litres	8.2
Fuel tank	litres	65

Notes and Illustrations

¹SW: +2.0 to 5.0
²Centre bearing: + 130°, others: + 90°



1995 cm³, 16V