

Engine & Cooling

Fuel

Ignition

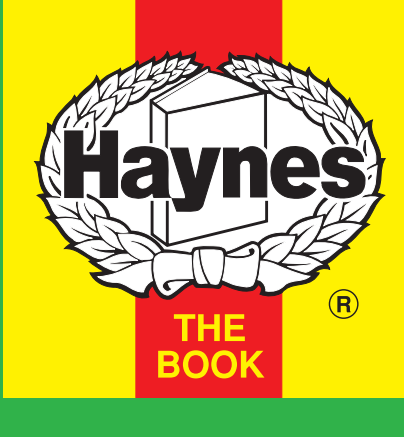
Electrical

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 systemMetro 1.01986 to 1988

Type		99HB88P, 87P, 89P, 94P, 95P ¹
Capacity (cm ³) / number of cylinders		998 / 4
Compression ratio / pressure	bar	9.6 / _
Oil pressure	bar	1.0 [4.1]
Oil temperature	°C	_
Valve clearance - inlet	mm	0.27 to 0.33
Valve clearance - exhaust	mm	0.27 to 0.33
Firing order		1-3-4-2
No 1 cylinder position		TCE
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	1.04

Fuel systemMetro 1.01986 to 1988

Idle speed - manual [auto]	rpm	830±50
Fast idle speed - manual [auto]	rpm	1250 to 1350
CO @ idle speed [3000 rpm] - see page VI	%	1.5 to 3.5
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		SU
Type / ref		HIF38
Main jet / needle		0.090 / ADP
Injection pressure	bar	_
Pump pressure	bar	0.4
Octane rating	RON	97[L]

Ignition systemMetro 1.01986 to 1988

Type		Contact breaker - CIS
Ignition coil		GCL 144
Primary resistance	ohms	1.3 to 1.5
Ballast resistor	ohms	1.3 to 1.5
Voltage - Tmnl 15(+) to earth	V	6.0 to 8.0
Distributor		Lucas/Ducellier
Points gap (air gap)	mm	0.38±0.03
Dwell angle	° (%)	L: 54±5 [D: 57±2.5]
Condenser capacity	µF	0.18 to 0.25
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	14 to 16 BTDC @ 1500
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Centrifugal check.	° Crankshaft @ rpm	4 to 8 @ 1000
	° Crankshaft @ rpm	14 to 18 @ 2800
	° Crankshaft @ rpm	20 to 24 @ 4800
Vacuum range check	mbar	33 to 372
Maximum vacuum advance	° Crankshaft	12 to 16
Spark plugs		Unipart/Champion
Type		GSP4382 / N12YC
Electrode gap	mm	0.65

Electrical systemMetro 1.01986 to 1988

Battery	V / CC / RC	12 / _
Alternator voltage / full load current / engine rpm		14.0 / _ / 3000
Starter motor current / voltage - cranking	A / V	75 / 12 (no load)
- locked	A / V	380 / 7.0

Running gearMetro 1.01986 to 1988

Brakes -		
Front (min. friction material thickness)	mm	3.0
Rear (min. friction material thickness)	mm	1.5

Tyres		
Saloon	Size	160/65x315
Estate / Van	Size	160/65x315
Pressure - front / rear - Saloon	bar	2.0 / 1.8
- Estate / Van	bar	2.0 / 2.2

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	[0 to -25']
Camber		0±30'
Castor		+2°6'±2°
King pin inclination		+10°38'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	[+10' to +50']
Camber		-1°±30'

Torque wrench settingsMetro 1.01986 to 1988

Cylinder head - stage 1	Nm	38
- stage 2	Nm	75
Cylinder head - stage 3	Nm	_
- stage 4	Nm	_
Big-end bearings	Nm	Bolts: 50. Nuts: 45
Main bearings	Nm	85
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	Centre bolt: 152
Front hubs	Nm	2 hole shaft: 271 ²
Rear hubs	Nm	88
Wheel nuts / bolts	Nm	57
Spark plugs	Nm	25

CapacitiesMetro 1.01986 to 1988

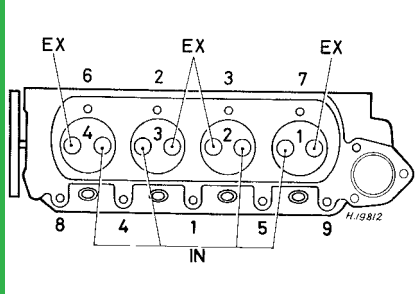
Engine oil & filter	litres	4.8
Gearbox - 4-speed [5-speed]	litres	With engine
Automatic transmission - refill	litres	_
Final drive	litres	With engine
Cooling system	litres	4.8
Fuel tank	litres	33

Notes and Illustrations

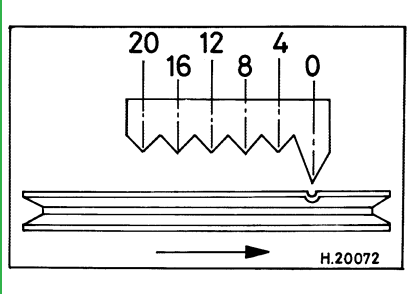
¹From 1987 MY: 99HD30 or 31P

²1 hole shaft: 262

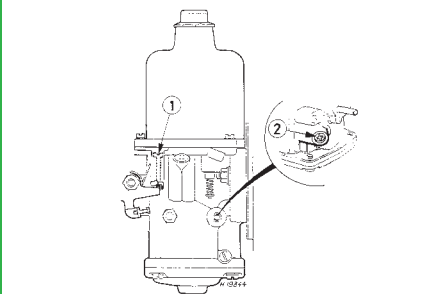
1: Idle speed2: CO / Mixture



998 cm³



998 cm³



SU HIF