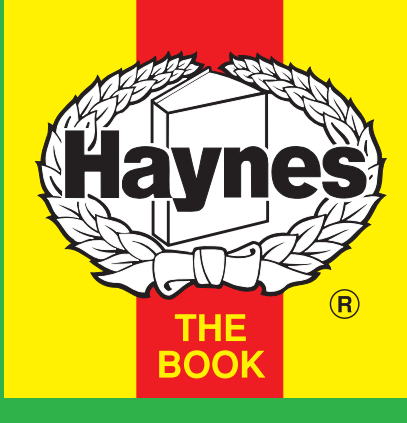


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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Automotive Technical
DATA BOOK

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 systemMetro 1.3 AT1989 to 1992

Type		12H E48
Capacity (cm ³) / number of cylinders		1275 / 4
Compression ratio / pressure	bar	9.4 / _
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 1.3 AT1989 to 1992

Idle speed - manual [auto]	rpm	[800±50]
Fast idle speed - manual [auto]	rpm	[1000±50]
CO @ idle speed [3000 rpm] - see page VI	%	1.5 to 3.0
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		HIF44
Main jet / needle		0.100 / BEJ
Injection pressure	bar	_
Pump pressure	bar	0.4
Octane rating	RON	97[E 95 RON]

Ignition systemMetro 1.3 AT1989 to 1992

Type		Electronic
Ignition coil		GCL 143
Primary resistance	ohms	0.78±0.08
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Lucas
Points gap (air gap)	mm	[0.20±0.05]
Dwell angle	° (%)	_
Condenser capacity	µF	_
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	5±1 BTDC @ 1500
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Centrifugal check.	° Crankshaft @ rpm	-1 to +4 @ 1000
	° Crankshaft @ rpm	6 to 10 @ 3000
	° Crankshaft @ rpm	17.5 to 22 @ 6500
Vacuum range check	mbar	102 to 406
Maximum vacuum advance	° Crankshaft	24
Spark plugs		Unipart/Champion
Type		GSP4362 / N9YC
Electrode gap	mm	0.85±0.05

Electrical systemMetro 1.3 AT1989 to 1992

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 1.3 AT1989 to 1992

Brakes -		
Front (min. friction material thickness)	mm	3.0
Rear (min. friction material thickness)	mm	1.6

Tyres		
Saloon	Size	160/65 R315
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.0 / 1.8
- Estate / Van	bar	_

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 1.3 AT1989 to 1992

Cylinder head - stage 1	Nm	38 lightly oiled
- 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	_
Flywheel [driveplate]	Nm	Centre bolt: 152
Front hubs	Nm	2 hole shaft: 271 ¹
Rear hubs	Nm	88
Wheel nuts / bolts	Nm	57
Spark plugs	Nm	25

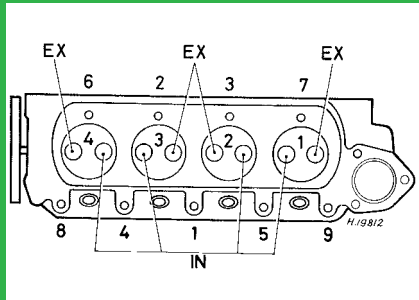
CapacitiesMetro 1.3 AT1989 to 1992

Engine oil & filter	litres	5.1
Gearbox - 4-speed [5-speed]	litres	_
Automatic transmission - refill	litres	With engine
Final drive	litres	With engine
Cooling system	litres	4.8
Fuel tank	litres	33

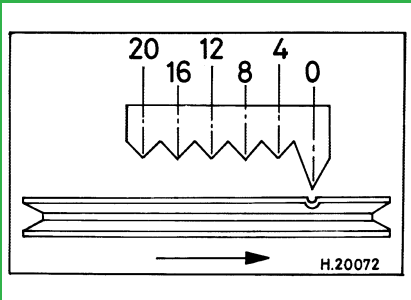
Notes and Illustrations

¹1 hole shaft: 262

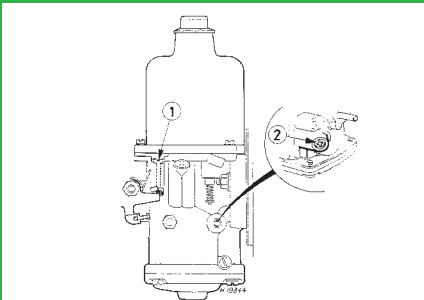
1: Idle speed2: CO / Mixture



1275 cm³



1275 cm³



SU HIF