

Engine & Cooling

Fuel

Ignition

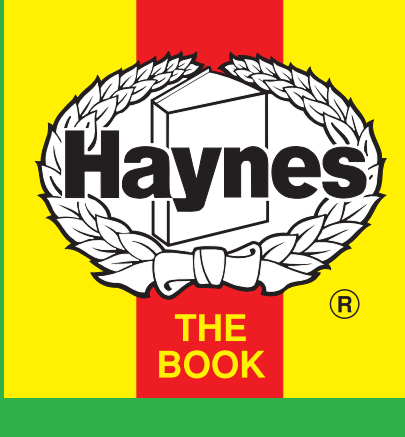
Electrical

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 systemMicra 1.2 CAT (K10)1989 to 1993

Type		MA12S SOHC 45kW
Capacity (cm³) / number of cylinders		1235 / 4
Compression ratio / pressure	bar	9.0 / ≥9.8
Oil pressure	bar	[2.9]
Oil temperature	°C	–
Valve clearance - inlet	mm	0.25 H
Valve clearance - exhaust	mm	0.30 H
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	0.88

Fuel systemMicra 1.2 CAT (K10)1989 to 1993

Idle speed - manual [auto]	rpm	800±50. A/C: 850±50
Fast idle speed - manual [auto]	rpm	2100 to 2900 [2400 to 3200]
CO @ idle speed [3000 rpm] - see page VI	%	≤0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO2 @ idle speed [3000 rpm] - see page VI	%	–
O2 @ idle speed [3000 rpm] - see page VI	%	–
Carburettor / fuel injection		Hitachi
Type / ref		DCZ306-91 [AT: -97]
Main jet / needle		91, 130
Injection pressure	bar	–
Pump pressure	bar	0.20 to 0.27
Octane rating	RON	91[U]

Ignition systemMicra 1.2 CAT (K10)1989 to 1993

Type		Electronic
Ignition coil		Mitsubishi. Hitachi
Primary resistance	ohms	1.0 to 1.2
Ballast resistor	ohms	–
Voltage - Tmnl 15(+) to earth	V	–
Distributor		Hitachi/Mitsubishi
Points gap (air gap)	mm	[0.30 to 0.45]
Dwell angle	° (%)	–
Condenser capacity	µF	–
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	2±1 ATDC @ 800
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	8±5 BTDC @ 800
	° Crankshaft @ rpm	–
	° Crankshaft @ rpm	–
Centrifugal check.	° Crankshaft @ rpm	0 to 1 @ 1000 to 1300
	° Crankshaft @ rpm	–
	° Crankshaft @ rpm	20 to 24 @ 4000
Vacuum range check	mbar	97 to 400
Maximum vacuum advance	° Crankshaft	12
Spark plugs		NGK/Champion
Type		BPR5ES-11 / RN9YC4
Electrode gap	mm	1.00 to 1.10

Electrical systemMicra 1.2 CAT (K10)1989 to 1993

Battery	V / CC / RC	12 / 45Ah
Alternator voltage / full load current / engine rpm		14.1 to 14.7 / 50 / 2500
Starter motor current / voltage - cranking	A / V	55 [AT: 65] / 11.5 (no load)
- locked	A / V	–

Running gearMicra 1.2 CAT (K10)1989 to 1993

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	1.5

Tyres		
Saloon	Size	155/70x13: 175/60x13
Estate / Van	Size	–
Pressure - front / rear - Saloon	bar	2.1 / 2.2
- Estate / Van	bar	–

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	+2.0 to 4.0
Camber		-25' to +1°5' N/A
Castor		+1°30' to 3° N/A
King pin inclination		+12°25' to 13°55' N/A

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	–
Camber		–

Torque wrench settingsMicra 1.2 CAT (K10)1989 to 1993

Cylinder head - stage 1	Nm	34 to 39
- stage 2	Nm	64 to 69
Cylinder head - stage 3	Nm	–
- stage 4	Nm	–
Big-end bearings	Nm	29 to 34
Main bearings	Nm	46 to 52 in stages
Clutch cover	Nm	22 to 29
Flywheel [driveplate]	Nm	59 to 69 [†]
Front hubs	Nm	147 to 206
Rear hubs	Nm	186 to 255
Wheel nuts / bolts	Nm	78 to 98
Spark plugs	Nm	25 to 29

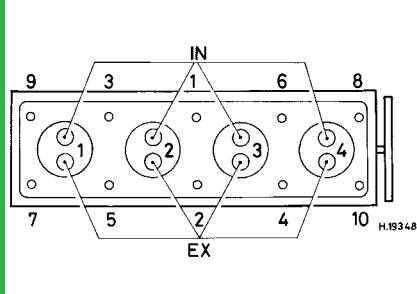
CapacitiesMicra 1.2 CAT (K10)1989 to 1993

Engine oil & filter	litres	2.8
Gearbox - 4-speed [5-speed]	litres	2.6
Automatic transmission - refill	litres	6.0
Final drive	litres	WT
Cooling system	litres	5.5
Fuel tank	litres	40

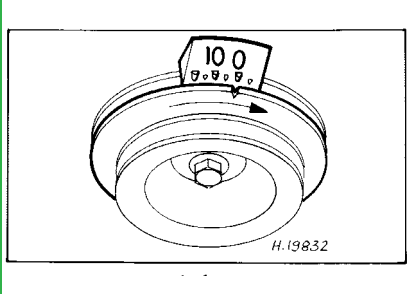
Notes and Illustrations

[†][69 to 78]

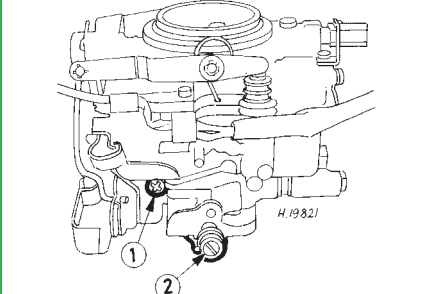
1: Idle speed 2: CO / Mixture



1235 cm³



1235 cm³



Hitachi DCZ