

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 systemCharade 1.3i CAT (G102)1991 to 1993

Type		HC-E SOHC 16V 66kW
Capacity (cm³) / number of cylinders		1295 / 4
Compression ratio / pressure	bar	9.5 / ≥13.7
Oil pressure	bar	0.19 [4.4]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.25 H
Valve clearance - exhaust	mm	0.33 H
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	76 to 80
Radiator cap pressure	bar	0.75 to 1.05

Fuel systemCharade 1.3i CAT (G102)1991 to 1993

Idle speed - manual [auto]	rpm	850±50 [900±50]
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	≤0.5 [≤0.3]
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		—
Type / ref		EFI
Main jet / needle		—
Injection pressure	bar	2.3 to 2.8
Pump pressure	bar	2.5
Octane rating	RON	95[U]

Ignition systemCharade 1.3i CAT (G102)1991 to 1993

Type		Electronic
Ignition coil		Nippon Denso
Primary resistance	ohms	1.3 to 1.7
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Nippon Denso
Points gap (air gap)	mm	[0.20 to 0.40]
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	5±2 BTDC @ idle
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 to 2 @ 1200
	° Crankshaft @ rpm	13 to 16 @ 3000
	° Crankshaft @ rpm	23 to 27 @ 6000
Vacuum range check	mbar	105 to 560
Maximum vacuum advance	° Crankshaft	18 to 22
Spark plugs		NGK/Champion
Type		BKR6E-11 / RC9YC4
Electrode gap	mm	1.00 to 1.10

Electrical systemCharade 1.3i CAT (G102)1991 to 1993

Battery	V / CC / RC	12 / 36Ah
Alternator voltage / full load current / engine rpm		14.2 to 14.8 / 45, 50 / 3000
Starter motor current / voltage - cranking	A / V	50 / 11.5
- locked	A / V	—

Running gearCharade 1.3i CAT (G102)1991 to 1993

Brakes -		
Front (min. friction material thickness)	mm	1.5
Rear (min. friction material thickness)	mm	1.0

Tyres		
Saloon	Size	155x13: 165/70x13
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	1.8 / 1.8
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	+1.0±1.0
Camber		+20'±40'-20'
Castor		+2°55'±30'
King pin inclination		+12°±30'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	+5.0±3.0-1.0
Camber		-40'±35'

Torque wrench settingsCharade 1.3i CAT (G102)1991 to 1993

Cylinder head - stage 1	Nm	30
- stage 2	Nm	60
Cylinder head - stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	40
Main bearings	Nm	49
Clutch cover	Nm	19
Flywheel [driveplate]	Nm	88
Front hubs	Nm	190
Rear hubs	Nm	58 to 98
Wheel nuts / bolts	Nm	118
Spark plugs	Nm	15 to 21

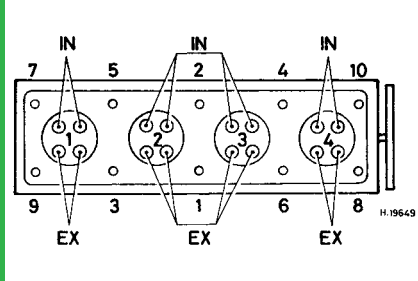
CapacitiesCharade 1.3i CAT (G102)1991 to 1993

Engine oil & filter	litres	3.5
Gearbox - 4-speed [5-speed]	litres	2.2
Automatic transmission - refill	litres	5.0
Final drive	litres	AT: 1.4
Cooling system	litres	5.2
Fuel tank	litres	40

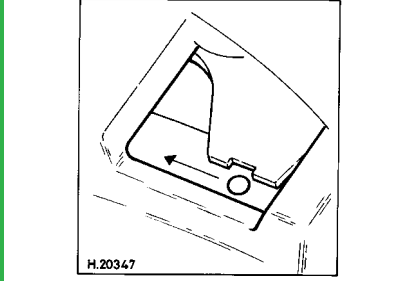
Notes and Illustrations



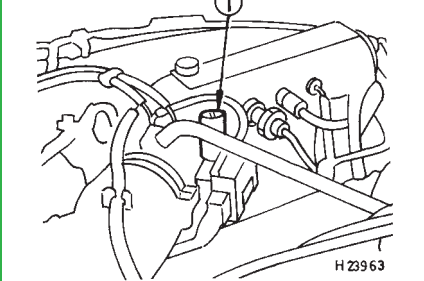
1: Idle speed 2: CO / Mixture



1295 cm³



1295 cm³, HC-E



EFI, 1295 cm³ HC-E