

Engine & Cooling

Fuel

Ignition

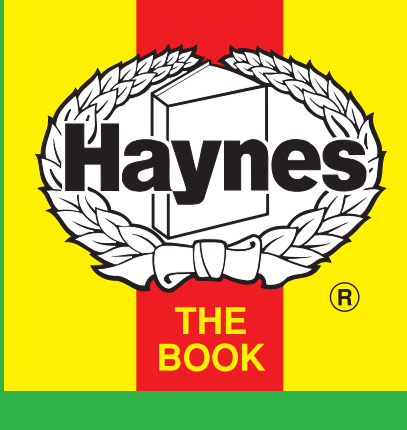
Electrical

Running gear

Torque settings

Capacities

Notes & Illustrations



Automotive Technical
DATA BOOK

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HELP

Engine and cooling systemCharade 1.3 (G102)1989 to 1992

Type		HC-C SOHC, 16 valve	56kW
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 1.3 (G102)1989 to 1992

Idle speed - manual [auto]	rpm	850±50 [900±50]	
Fast idle speed - manual [auto]	rpm	1800±50 [2200±50]	
CO @ idle speed [3000 rpm] - see page VI	%	1.5±0.5	
HC @ idle speed [3000 rpm] - see page VI	ppm	≤300	
CO2 @ idle speed [3000 rpm] - see page VI	%	—	
O2 @ idle speed [3000 rpm] - see page VI	%	—	
Carburettor / fuel injection		Aisan	
Type / ref		2V 28-32 downdraught	
Main jet / needle		100, 165	
Injection pressure	bar	—	
Pump pressure	bar	0.14 to 0.28	
Octane rating	RON	95[E 95 RON]	

Ignition systemCharade 1.3 (G102)1989 to 1992

Type		Contact breaker - CIS	
Ignition coil		Nippon Denso	
Primary resistance	ohms	1.3 to 1.7	
Ballast resistor	ohms	1.5 to 1.9	
Voltage - Tmnl 15(+) to earth	V	8.0	
Distributor		Nippon Denso	
Points gap (air gap)	mm	0.45	
Dwell angle	° (%)	52±3	
Condenser capacity	µF	0.25	
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 @ 800	
	° Crankshaft @ rpm	12 to 16 @ 3000	
	° Crankshaft @ rpm	27 to 31 @ 5600	
Vacuum range check	mbar	132 to 545 ¹	
Maximum vacuum advance	° Crankshaft	28 to 32 ²	
Spark plugs		NGK/Champion	
Type		BKR6E-11 / RC9YC4	
Electrode gap	mm	1.00 to 1.10	

Electrical systemCharade 1.3 (G102)1989 to 1992

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

Running gearCharade 1.3 (G102)1989 to 1992

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 1.3 (G102)1989 to 1992

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 1.3 (G102)1989 to 1992

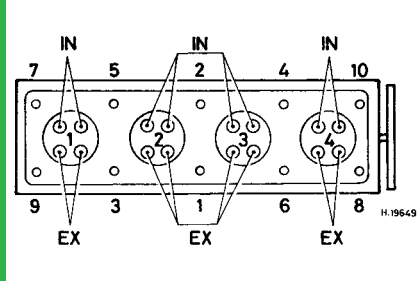
Engine oil & filter	litres	3.5	
Gearbox - 4-speed [5-speed]	litres	2.2	
Automatic transmission - refill	litres	5.0	
Final drive	litres	AT: 1.4	
Cooling system	litres	5.2	
Fuel tank	litres	37	

Notes and Illustrations

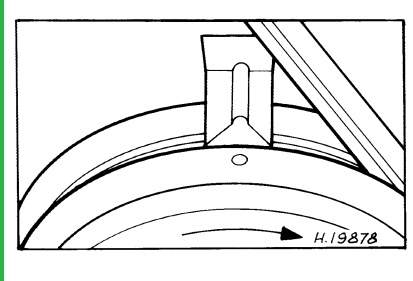
¹AT: 132 to 400

²AT: 18 to 22

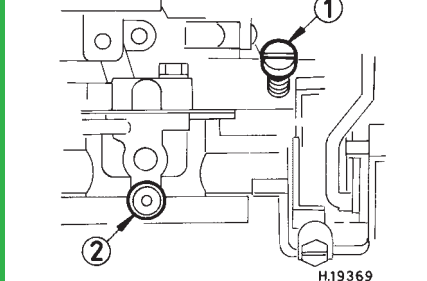
1: Idle speed 2: CO / Mixture



1295 cm³



1295 cm³, HC-C



Aisan-Kogyo 28-32