

Engine & Cooling

Fuel

Ignition

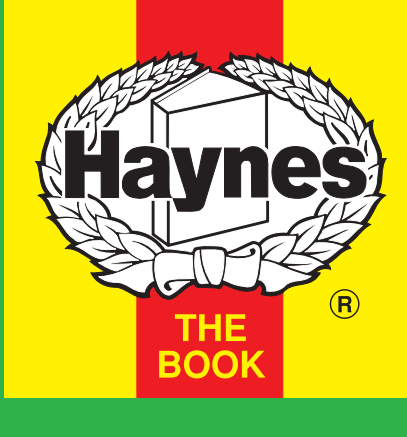
Electrical

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.

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HELP

Engine and cooling systemShuttle GL1987 to 1992

Type		D14A1 SOHC 16V
Capacity (cm³) / number of cylinders		1396 / 4
Compression ratio / pressure	bar	9.3 / ≥9.3
Oil pressure	bar	1.7 [5.1]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.17 to 0.22
Valve clearance - exhaust	mm	0.22 to 0.27
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	76 to 80
Radiator cap pressure	bar	0.76 to 1.04

Fuel systemShuttle GL1987 to 1992

Idle speed - manual [auto]	rpm	750±50 [700±50]
Fast idle speed - manual [auto]	rpm	1500 to 2500
CO @ idle speed [3000 rpm] - see page VI	%	≤1.0
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		Keihin
Type / ref		2x CV type
Main jet / needle		—
Injection pressure	bar	—
Pump pressure	bar	0.07 to 0.23
Octane rating	RON	91[E 91 RON]

Ignition systemShuttle GL1987 to 1992

Type		Electronic
Ignition coil		—
Primary resistance	ohms	0.3 to 0.5
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Hitachi
Points gap (air gap)	mm	—
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	18±2 BTDC @ idle
V = Vacuum NV = No Vacuum		V
Total ignition advance	° Crankshaft @ rpm	2 BTDC @ idle (NV)
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	—
Maximum vacuum advance	° Crankshaft	—
Spark plugs		NGK/Champion
Type		BCPR6E-11 / RC9YC
Electrode gap	mm	1.00 to 1.10

Electrical systemShuttle GL1987 to 1992

Battery	V / CC / RC	12 / 47Ah
Alternator voltage / full load current / engine rpm		13.9 to 15.1 / _ / 3000
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gearShuttle GL1987 to 1992

Brakes -		
Front (min. friction material thickness)	mm	1.6
Rear (min. friction material thickness)	mm	2.0

Tyres		
Saloon	Size	—
Estate / Van	Size	165/70x13
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	WSM

Front suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	0±3.0¹
Camber		+19'±1°
Castor		+2°58'±1°
King pin inclination		+7°14'

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	+2.0±2.0²
Camber		-23'±1°

Torque wrench settingsShuttle GL1987 to 1992

Cylinder head - stage 1	Nm	30 oiled
- stage 2	Nm	68
Cylinder head - stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	32
Main bearings	Nm	58 oiled
Clutch cover	Nm	26
Flywheel [driveplate]	Nm	120
Front hubs	Nm	185
Rear hubs	Nm	185
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	18

CapacitiesShuttle GL1987 to 1992

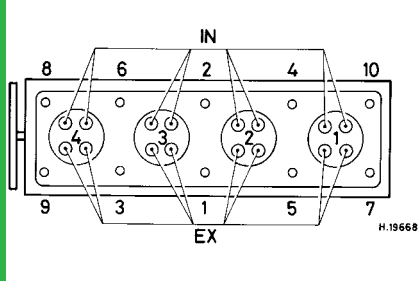
Engine oil & filter	litres	3.5
Gearbox - 4-speed [5-speed]	litres	1.8
Automatic transmission - refill	litres	2.4
Final drive	litres	WT
Cooling system	litres	5.4 [AT: 5.3]
Fuel tank	litres	45

Notes and Illustrations

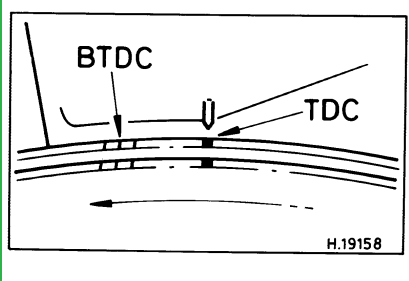
¹1989 ►: 0±2.0

²1989 ►: +2.0±2.0-1.0

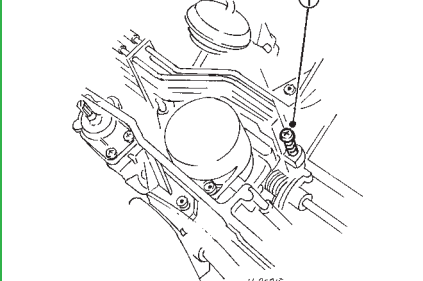
1: Idle speed2: CO / Mixture



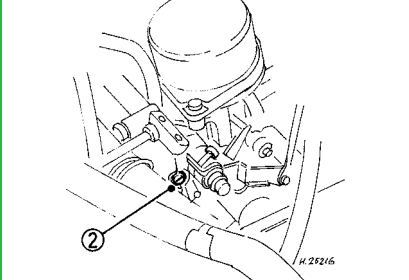
1396 cm³, SOHC 16V



1396 cm³, SOHC 16V



Keihin CV



Keihin CV