

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 systemLegacy 1.8 & CAT1989 to 1992

Type		SOHC 16 valve
Capacity (cm ³) / number of cylinders		1820 / 4
Compression ratio / pressure	bar	9.7 / ≥7.9
Oil pressure	bar	1.0 [2.9]
Oil temperature	°C	80
Valve clearance - inlet	mm	0: Hyd.
- exhaust	mm	0: Hyd.
Firing order		1-3-2-4
No 1 cylinder position		FR
Thermostat opening temperature	°C	76 to 80
Radiator cap pressure	bar	0.88

Fuel systemLegacy 1.8 & CAT1989 to 1992

Idle speed - manual [auto]	rpm	800±50
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	1.0±0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO ₂ @ idle speed [3000 rpm] - see page VI	%	—
O ₂ @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Hitachi
Type / ref		DCY340-X528 [AT: -X530]
Main jet / needle		101, 155
Injection pressure	bar	—
Pump pressure	bar	0.18 to 0.24
Octane rating	RON	90[E 91 RON] ¹

Ignition systemLegacy 1.8 & CAT1989 to 1992

Type		Electronic
Ignition coil		Diamond Electric E-083
Primary resistance	ohms	1.4 to 1.7
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Mitsubishi
Points gap (air gap)	mm	[0.25]
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	4±2 BTDC @ 800±50
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	20±5 BTDC @ 800
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 @ 900
	° Crankshaft @ rpm	20 @ 2800
	° Crankshaft @ rpm	25 @ 6400
Vacuum range check	mbar	166 to 467
Maximum vacuum advance	° Crankshaft	24
Spark plugs		NGK/Champion
Type		BKR6E / RC7YCC
Electrode gap	mm	0.80

Electrical systemLegacy 1.8 & CAT1989 to 1992

Battery	V / CC / RC	12 / 356 / 99 [/ 490 / 111]
Alternator voltage / full load current / engine rpm		14.1 to 14.8 / _ / 3000
Starter motor current / voltage - cranking	A / V	370 / 8.0
- locked	A / V	735 / 4.0

Running gearLegacy 1.8 & CAT1989 to 1992

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

Tyres		
Saloon	Size	185/70x14: 175/70x14
Estate / Van	Size	185/70x14: 175/70x14
Pressure - front / rear - Saloon	bar	2.1 / 2.0
- Estate / Van	bar	2.1 / 2.0

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0±3.0
Camber		0
Castor		+3°. Estate: +2°45'
King pin inclination		+14°5'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0±3.0
Camber		-30'. Estate: -20'

Torque wrench settingsLegacy 1.8 & CAT1989 to 1992

Cylinder head - stage 1	Nm	69
- stage 2	Nm	- 180°
- stage 3	Nm	²
- stage 4	Nm	+ 80 to 90°
Big-end bearings	Nm	43 to 46
Main bearings	Nm	WSM
Clutch cover	Nm	14 to 17
Flywheel [driveplate]	Nm	78 to 84
Front hubs	Nm	167 to 206
Rear hubs	Nm	167 to 206
Wheel nuts / bolts	Nm	78 to 98
Spark plugs	Nm	—

CapacitiesLegacy 1.8 & CAT1989 to 1992

Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	3.5
Automatic transmission - refill	litres	8.3
Final drive	litres	AT: 1.4 ³
Cooling system	litres	6.4
Fuel tank	litres	60

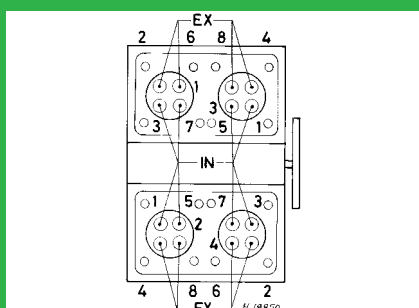
Notes and Illustrations

¹CAT: [U]

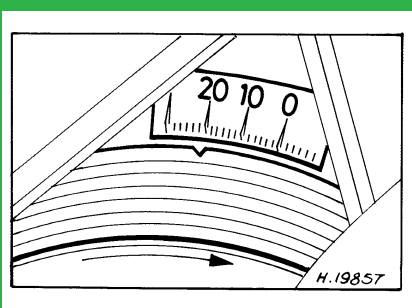
²Stage 3: Tighten bolts 1 and 2 to 34, and bolts 3 to 6 to 20. Tighten all bolts + 80 to 90° and then stage 4

³Rear: 0.8

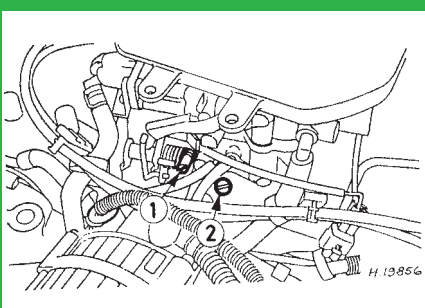
1: Idle speed2: CO / Mixture



1820 cm³



1820 cm³



Hitachi DCY