Haynes THE BOOK

Automotive Technical DATA BOOK

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Engine and cooling system

		Starion Turbo 1986 to 1989
Type		4G63T
Capacity (cm³) / number of cylinders		1997 / 4
Compression ratio / pressure	bar	7.6 / 8.5
Oil pressure	bar	0.8
Oil temperature	ºC	80
Valve clearance - inlet	mm	0.15 H
Valve clearance - exhaust	mm	0.25 H
Firing order		1-3-4-2
No 1 cylinder position		F
Thermostat opening temperature	ºC	88
Radiator cap pressure	bar	0.76 to 1.04

Fuel system

		Starion Turbo 1986 to 1989
Idle speed - manual [auto]	rpm	800±50
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	1.0 to 2.0
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Mikuni
Type / ref		ECI EFi + Turbo Intercooler
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	2.50 to 2.55
Octane rating	RON	97[L]

Ignition system

		Starion Turbo 1986 to 1989
Type		Electronic
Ignition coil		Diamond
Primary resistance	ohms	0.78
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Mitsubishi
Points gap (air gap)	mm	[0.80]
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		Clockwise
Ignition timing - basic [static	º Crankshaft @ rpm	13±1 BTDC @ 800
V = Vacuum NV = No Vacuum		NV
Total ignition advance	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	0 @ 1000
	º Crankshaft @ rpm	26 @ 3500
	º Crankshaft @ rpm	_
Vacuum range check	mbar	107 to 493
Maximum vacuum advance	º Crankshaft	19
Spark plugs		NGK/Champion
Type		BR7ES / RN4C
Electrode gap	mm	0.70 to 0.80

Electrical system

		Starion Turbo 1986 to 1989
Battery	V / CC / RC	12 / 60Ah
Alternator voltage / full load current / engine rpm		14.4 to 15.0 / _ / 3000
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	_

Running gear

		Starion Turbo 1986 to 1989
Brakes -		
Front (min. friction material thickness)	mm	1.0
Rear (min. friction material thickness)	mm	1.0
Tyres		
Saloon	Size	215/60x15:205/55x16:225/50x16
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.1 / 2.1
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	0±2.5
Camber		-40'±30'
Castor		+5°30'±30'
King pin inclination		_
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	0±1.0
Camber		-20'

Torque wrench settings

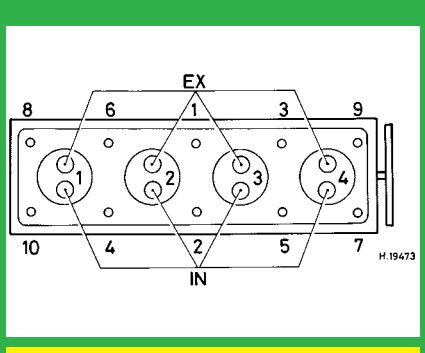
		Starion Turbo 1986 to 1989
Cylinder head - stage 1	Nm	35
- stage 2	Nm	90 to 100 C
Cylinder head - stage 3	Nm	100 to 110 H
- stage 4	Nm	_
Big-end bearings	Nm	50 to 53
Main bearings	Nm	50 to 55
Clutch cover	Nm	15 to 21
Flywheel [driveplate]	Nm	130 to 140
Front hubs	Nm	WSM
Rear hubs	Nm	_
Wheel nuts / bolts	Nm	69 to 79
Spark plugs	Nm	20 to 29

Capacities

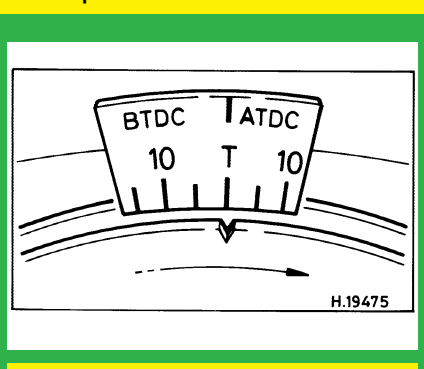
		Starion Turbo 1986 to 1989
Engine oil & filter	litres	4.2
Gearbox - 4-speed [5-speed]	litres	2.3
Automatic transmission - refill	litres	_
Final drive	litres	1.3
Cooling system	litres	8.2
Fuel tank	litres	75

Notes and Illustrations

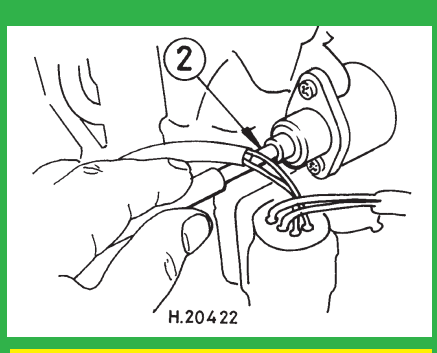
1: Idle speed 2: CO / Mixture



1997 cm³



1997 cm³



ECi / EFi, 1997 cm³