

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 systemSunny GTi-R (N14)1991 to 1994

Type		SR20DET DOHC 16V 164kW US83
Capacity (cm³) / number of cylinders		1998 / 4
Compression ratio / pressure	bar	8.3 / ≥9.3
Oil pressure	bar	[3.4 to 4.4]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.30 to 0.35 H
Valve clearance - exhaust	mm	0.30 to 0.35 H
Firing order		1-3-4-2
No 1 cylinder position		TCE
Thermostat opening temperature	°C	76.5
Radiator cap pressure	bar	0.78 to 0.98

Fuel systemSunny GTi-R (N14)1991 to 1994

Idle speed - manual [auto]	rpm	925+25-75
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	0.7±0.5 N/A
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		Nissan
Type / ref		MPI & ECCS
Main jet / needle		—
Injection pressure	bar	2.5
Pump pressure	bar	2.9
Octane rating	RON	95[U]

Ignition systemSunny GTi-R (N14)1991 to 1994

Type		Computerized
Ignition coil		Hanshin SMC-200. Mitsu. F-097
Primary resistance	ohms	1.0
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	12.0
Distributor		Mitsubishi/Hitachi
Points gap (air gap)	mm	—
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	20±2 BTDC @ 925
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	—
Spark plugs		NGK
Type		PFR7B-9
Electrode gap	mm	N/A

Electrical systemSunny GTi-R (N14)1991 to 1994

Battery	V / CC / RC	12 / 60, 65Ah
Alternator voltage / full load current / engine rpm		14.1 to 14.7 / 77 / 2500
Starter motor current / voltage - cranking	A / V	50 to 75 / 11.0
- locked	A / V	—

Running gearSunny GTi-R (N14)1991 to 1994

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

Tyres		
Saloon	Size	195/55x14
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	2.1 / 2.1
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	+1.0 to 3.0
Camber		-40' to +50'
Castor		+30' to 2° N/A
King pin inclination		+12°15' to 13°45' N/A

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	-1.0 to +3.0
Camber		-55' to +35'

Torque wrench settingsSunny GTi-R (N14)1991 to 1994

Cylinder head - stage 1	Nm	39
- stage 2	Nm	113, loosen completely
Cylinder head - stage 3	Nm	36 to 42
- stage 4	Nm	+ 90 to 95°
Big-end bearings	Nm	20 + 60 to 65°
Main bearings	Nm	41 + 60 to 65°
Clutch cover	Nm	22 to 29
Flywheel [driveplate]	Nm	127 to 137
Front hubs	Nm	196 to 275
Rear hubs	Nm	196 to 275
Wheel nuts / bolts	Nm	98 to 118
Spark plugs	Nm	20 to 29

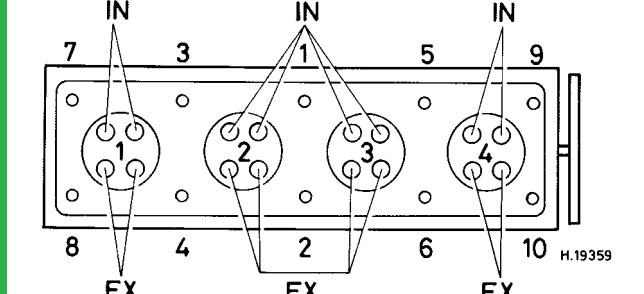
CapacitiesSunny GTi-R (N14)1991 to 1994

Engine oil & filter	litres	3.7
Gearbox - 4-speed [5-speed]	litres	4.2. Transfer: 1.5
Automatic transmission - refill	litres	—
Final drive	litres	1.0
Cooling system	litres	6.6
Fuel tank	litres	50

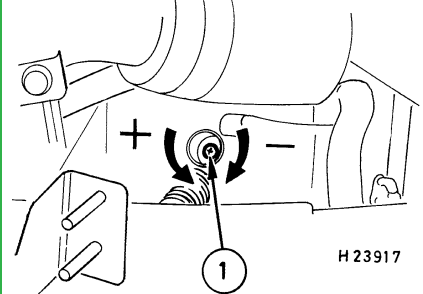
Notes and Illustrations



1: Idle speed 2: CO / Mixture



1998 cm³, 16V



MPI, GTi-R