

Engine & Cooling

Fuel

Ignition

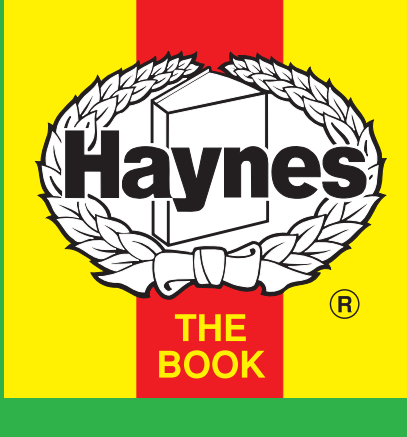
Electrical

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 systemUrvan 2.4i CAT (E24)1989 to 1994

Type		Z24i SOHC
Capacity (cm ³) / number of cylinders		2389 / 4
Compression ratio / pressure	bar	8.3 / ≥9.0
Oil pressure	bar	[3.2 to 4.6]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.30 H
Valve clearance - exhaust	mm	0.30 H
Firing order		1-3-4-2
No 1 cylinder position		TCE
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	0.78 to 0.98

Fuel systemUrvan 2.4i CAT (E24)1989 to 1994

Idle speed - manual [auto]	rpm	700±50
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	1.0 to 7.0 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		TBI ECCS
Main jet / needle		—
Injection pressure	bar	2.5
Pump pressure	bar	—
Octane rating	RON	90[U]

Ignition systemUrvan 2.4i CAT (E24)1989 to 1994

Type		Electronic
Ignition coil		2x CIT-72/106. STC-72/106
Primary resistance	ohms	0.84 to 1.02
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Mitsubishi
Points gap (air gap)	mm	[0.30 to 0.50]
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	3±2 BTDC @ 700±50
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 to 1 @ 1274 to 1320
	° Crankshaft @ rpm	12 to 15 @ 2650
	° Crankshaft @ rpm	17 to 21 @ 4200
Vacuum range check	mbar	133 to 307
Maximum vacuum advance	° Crankshaft	21
Spark plugs		NGK/Champion
Type		BPR5ES / RN9YC
Electrode gap	mm	0.80 to 0.90

Electrical systemUrvan 2.4i CAT (E24)1989 to 1994

Battery	V / CC / RC	12 / 55 or 60Ah
Alternator voltage / full load current / engine rpm		14.1 to 15.0 / 70 / 2500
Starter motor current / voltage - cranking	A / V	100 / 11.0 to 11.5
- locked	A / V	—

Running gearUrvan 2.4i CAT (E24)1989 to 1994

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	1.5

Tyres		
Saloon	Size	—
Estate / Van	Size	185x14
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	2.8 / 2.8

Front suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	0 to +2.0
Camber		-5' to +55'
Castor		+30' to 1°30'
King pin inclination		+8°35' to 9°35'

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	—
Camber		—

Torque wrench settingsUrvan 2.4i CAT (E24)1989 to 1994

Cylinder head - stage 1	Nm	29
- stage 2	Nm	78
Cylinder head - stage 3	Nm	Loosen, then 29
- stage 4	Nm	+ 90 to 95°
Big-end bearings	Nm	15 + 60°
Main bearings	Nm	44 to 54
Clutch cover	Nm	16 to 21
Flywheel [driveplate]	Nm	137 to 157
Front hubs	Nm	WSM
Rear hubs	Nm	—
Wheel nuts / bolts	Nm	118 to 147
Spark plugs	Nm	20 to 29

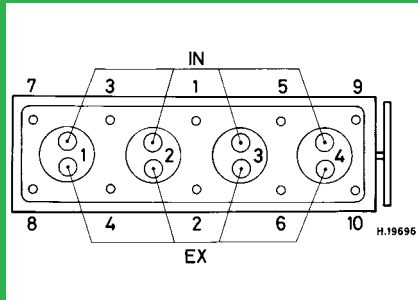
CapacitiesUrvan 2.4i CAT (E24)1989 to 1994

Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	7.0
Final drive	litres	2.0
Cooling system	litres	10.0 ¹
Fuel tank	litres	65

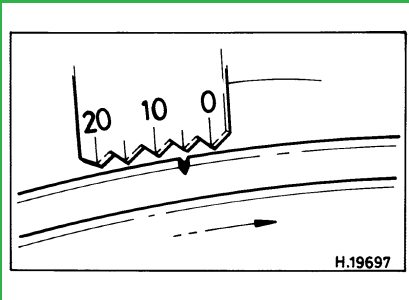
Notes and Illustrations

¹Rear heater: 12.0

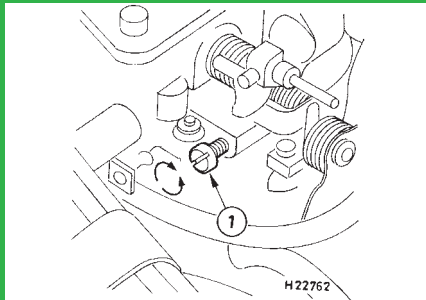
1: Idle speed 2: CO / Mixture



2389 cm³



2389 cm³



Nissan TBi ECCS