

Engine & Cooling

Fuel

Ignition

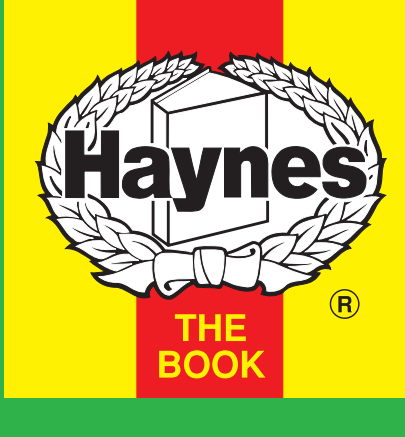
Electrical

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 systemCabstar (F22)1982 to 1993

Type		Z20S SOHC 67kW
Capacity (cm ³) / number of cylinders		1952 / 4
Compression ratio / pressure	bar	8.5 / ≥8.8
Oil pressure	bar	[2.9]
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		F
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	0.88

Fuel systemCabstar (F22)1982 to 1993

Idle speed - manual [auto]	rpm	650±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
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Nikki
Type / ref		213304-F8 / F81
Main jet / needle		112, 175
Injection pressure	bar	—
Pump pressure	bar	0.21 to 0.27
Octane rating	RON	88[L]

Ignition systemCabstar (F22)1982 to 1993

Type		Contact breaker - CIS ¹
Ignition coil		Hanshin HP5-13E25
Primary resistance	ohms	1.4 to 1.7
Ballast resistor	ohms	1.6
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Mitsubishi
Points gap (air gap)	mm	0.45 to 0.55
Dwell angle	° (%)	49 to 55
Condenser capacity	µF	0.20 to 0.24
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	4±1 BTDC @ 650±50
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 @ 1600
	° Crankshaft @ rpm	12 @ 2800
	° Crankshaft @ rpm	18 @ 4000
Vacuum range check	mbar	200 to 360
Maximum vacuum advance	° Crankshaft	15
Spark plugs		NGK/Champion
Type		BPR5ES / RN9YC
Electrode gap	mm	0.80 to 0.90

Electrical systemCabstar (F22)1982 to 1993

Battery	V / CC / RC	12 / 60Ah
Alternator voltage / full load current / engine rpm		14.1 to 15.0 / 35, 50 / 2500
Starter motor current / voltage - cranking	A / V	60 to 100 / 11.0 to 11.5
- locked	A / V	—

Running gearCabstar (F22)1982 to 1993

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

Tyres		
Saloon	Size	—
Estate / Van	Size	155x12:7.00x15:6.70x15:6.00x15
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	Refer to manufacturer / ohb

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0 to +2.0
Camber		-25' to +35'
Castor		+30' to 1°30' ²
King pin inclination		+8°55' to 9°55'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	—
Camber		—

Torque wrench settingsCabstar (F22)1982 to 1993

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	45 to 54 ³
Main bearings	Nm	44 to 54
Clutch cover	Nm	22 to 29
Flywheel [driveplate]	Nm	137 to 157
Front hubs	Nm	34 to 39
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	118 to 147 ⁴
Spark plugs	Nm	20 to 29

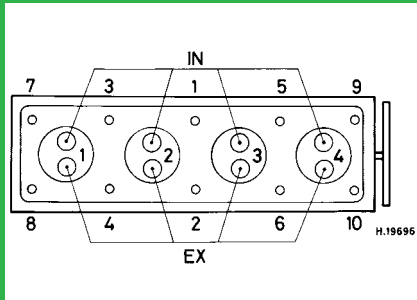
CapacitiesCabstar (F22)1982 to 1993

Engine oil & filter	litres	4.1
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	—
Final drive	litres	1.3 or 2.0
Cooling system	litres	8.8 ⁵
Fuel tank	litres	65

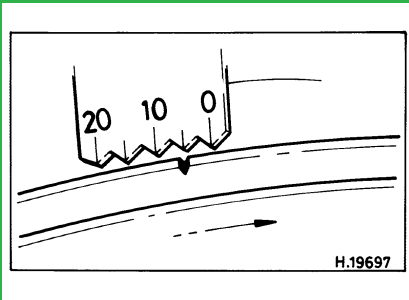
Notes and Illustrations

- ¹92 ►: Electronic
- ²Twin rear tyre: +15' to -1°15'
- ³86 ►: 37 to 45
- ⁴Twin rear tyre: 216 to 255
- ⁵Rear heater: 9.3

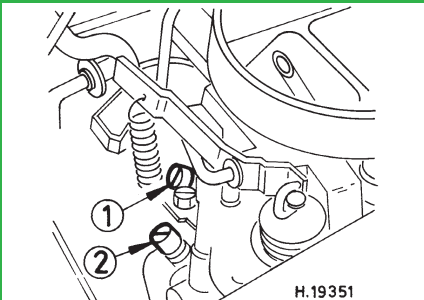
1: Idle speed 2: CO / Mixture



1952 cm³



1952 cm³



Nikki 213304