

Engine & Cooling

Fuel

Ignition

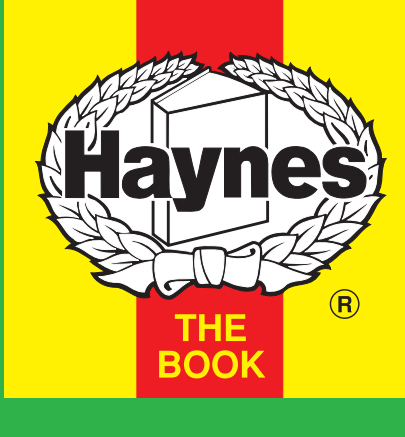
Electrical

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 system

Samara 1100 (2108) & CAT

1990 to 1997

Type		21081 SOHC
Capacity (cm ³) / number of cylinders		1099 / 4
Compression ratio / pressure	bar	9.0 / _
Oil pressure	bar	0.79 [4.5]
Oil temperature	°C	_
Valve clearance - inlet	mm	0.20±0.05
Valve clearance - exhaust	mm	0.35±0.05
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	85 to 90
Radiator cap pressure	bar	1.0

Fuel system

Samara 1100 (2108) & CAT

1990 to 1997

Idle speed - manual [auto]	rpm	750 to 800. CAT: 820 to 900
Fast idle speed - manual [auto]	rpm	2500
CO @ idle speed [3000 rpm] - see page VI	%	_
HC @ idle speed [3000 rpm] - see page VI	ppm	_
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Lada/_
Type / ref		2V: 21081/3-1107010-62
Main jet / needle		95, 97.5. CAT: 80, 97.5
Injection pressure	bar	_
Pump pressure	bar	0.21 to 0.30
Octane rating	RON	93[E 95 RON] ¹

Ignition system

Samara 1100 (2108) & CAT

1990 to 1997

Type		Electronic - Hall effect
Ignition coil		USSR
Primary resistance	ohms	0.45 to 0.60 or 0.8 to 1.0
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	Battery
Distributor		USSR ²
Points gap (air gap)	mm	_
Dwell angle	° (%)	_
Condenser capacity	µF	_
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	6±1 BTDC @ 850
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Centrifugal check.	° Crankshaft @ rpm	0 to 4 @ 800 to 1200
	° Crankshaft @ rpm	16 to 20 @ 3000
	° Crankshaft @ rpm	27 to 31 @ 5000
Vacuum range check	mbar	132 to 213
Maximum vacuum advance	° Crankshaft	8 to 12
Spark plugs		NGK/Champion
Type		BP5ES or BPR5ES / RN9YCC
Electrode gap	mm	0.70 to 0.80

Electrical system

Samara 1100 (2108) & CAT

1990 to 1997

Battery	V / CC / RC	12 / 55Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.5 / 55 / 2000
Starter motor current / voltage - cranking	A / V	140 / 9.6
- locked	A / V	500 / 7.0

Running gear

Samara 1100 (2108) & CAT

1990 to 1997

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

Tyres		
Saloon	Size	165x13: 165/70x13
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	1.9 / 1.9
- Estate / Van	bar	_

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	+3.0
Camber		+30'±30'
Castor		+1°30'±30'
King pin inclination		+12° to 13°

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

Torque wrench settings

Samara 1100 (2108) & CAT

1990 to 1997

Cylinder head - stage 1	Nm	20
- stage 2	Nm	70 to 85
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90°
Big-end bearings	Nm	60
Main bearings	Nm	69 to 84
Clutch cover	Nm	20 to 31
Flywheel [driveplate]	Nm	84
Front hubs	Nm	WSM
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	58 to 72
Spark plugs	Nm	31 to 39

Capacities

Samara 1100 (2108) & CAT

1990 to 1997

Engine oil & filter	litres	3.5
Gearbox - 4-speed [5-speed]	litres	3.0
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	7.8
Fuel tank	litres	43

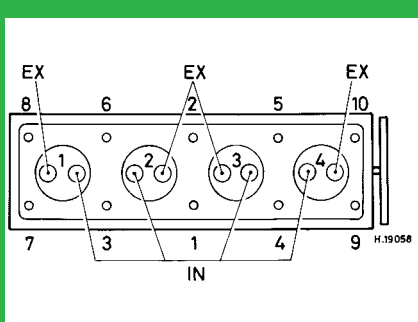
Notes and Illustrations

¹CAT: 95 [U]

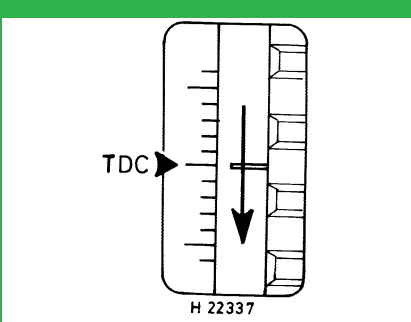
²Distributor type: 40.3706-10

1: Idle speed

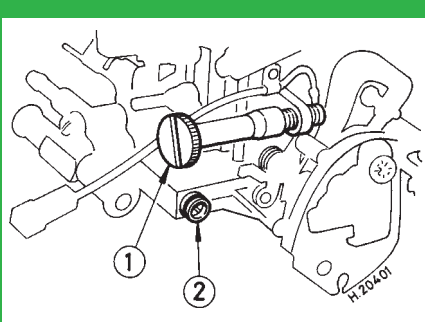
2: CO / Mixture



1099 cm³



1099 cm³



21081-1107010-62