

Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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Engine and cooling system Cavalier/Vectra-A 1.6i 1993 to 1995

Type		X16SZ SOHC. 52kW 94/12/EC
Capacity (cm ³) / number of cylinders		1598 / 4
Compression ratio / pressure	bar	10.0 / _
Oil pressure	bar	1.5
Oil temperature	°C	≥80
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	91 to 107
Radiator cap pressure	bar	1.20 to 1.35

Fuel system Cavalier/Vectra-A 1.6i 1993 to 1995

Idle speed - manual [auto]	rpm	770 to 930
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	1.5±0.5 WSM
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO ₂ @ idle speed [3000 rpm] - see page VI	%	_
O ₂ @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		GM
Type / ref		Rochester Multec-ZE CFI
Main jet / needle		_
Injection pressure	bar	0.76
Pump pressure	bar	_
Octane rating	RON	95[U]

Ignition system Cavalier/Vectra-A 1.6i 1993 to 1995

Type		Multec-DIS
Ignition coil		Dual spark
Primary resistance	ohms	0.56±0.05
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		_
Points gap (air gap)	mm	_
Dwell angle	° (%)	Electronic control
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	° Crankshaft @ rpm	N/A
V = Vacuum NV = No Vacuum		_
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		Bosch/Champion
Type		WR7DC / RN7YC
Electrode gap	mm	0.70 to 0.80

Electrical system Cavalier/Vectra-A 1.6i 1993 to 1995

Battery	V / CC / RC	12 / 210 / 65
Alternator voltage / full load current / engine rpm		14.1 to 14.9 / 70 / 4000
Starter motor current / voltage - cranking	A / V	75 / 11.5 no load
- locked	A / V	430 to 600 / 3.5

Running gear Cavalier/Vectra-A 1.6i 1993 to 1995

Brakes -		
Front (min. friction material thickness)	mm	7.0 with backing
Rear (min. friction material thickness)	mm	0.5 above rivets

Tyres		
Saloon	Size	175/70x14: 195/60x14:195/60x14
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.0 / 1.8
- Estate / Van	bar	_

Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	[-15'±10']
Camber		-40'±45' L
Castor		+2°±1° L
King pin inclination		_

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	[-10'+30'-20']
Camber		-1°40'±30'

Torque wrench settings Cavalier/Vectra-A 1.6i 1993 to 1995

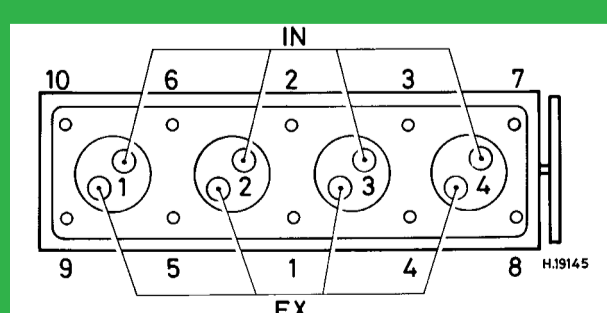
Cylinder head - stage 1	Nm	25 N
- stage 2	Nm	+ 60°
Cylinder head - stage 3	Nm	+ 60°
- stage 4	Nm	+ 60°
Big-end bearings	Nm	28 ¹
Main bearings	Nm	50 + 45° +15° N
Clutch cover	Nm	15
Flywheel [driveplate]	Nm	35 + 30° +15° N [60]
Front hubs	Nm	WSM
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	25

Capacities Cavalier/Vectra-A 1.6i 1993 to 1995

Engine oil & filter	litres	3.5
Gearbox - 4-speed [5-speed]	litres	1.6
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	5.8 [AT: 5.6]
Fuel tank	litres	61

Notes and Illustrations

¹40mm bolt: 28 +30° N



1598 cm³, 8V