VAUXHALL/OPEL

Cavalier/Vectra-A 1.8i CAT

1990 to 1995

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Automotive Technical DATA BOOK

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Engine and cooling system

Cavalier/Vectra-A 1.8i CAT 1990 to 1995

Type		C18NZ SOHC. 66kW 91/441/EEC
Capacity (cm³) / number of cylinders		1796 / 4
Compression ratio / pressure	bar	9.2 / _
Oil pressure	bar	1.5
Oil temperature	ºC	≥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	ºC	91 to 107
Radiator cap pressure	bar	1.20 to 1.35

Fuel system

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Idle speed - manual [auto]	rpm	800 to 960 [750 to 910]
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	[≤0.3]
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		GM
Type / ref		Multec-ZE CFI
Main jet / needle		_
Injection pressure	bar	0.76
Pump pressure	bar	_
Octane rating	RON	95[U][1]

Ignition system

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Type		Multec-MSTS-i
Ignition coil		Bosch
Primary resistance	ohms	_
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Bosch
Points gap (air gap)	mm	_
Dwell angle	º (%)	Electronic control
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	º Crankshaft @ rpm	10 BTDC @ idle N/A
V = Vacuum NV = No Vacuum		NV
Total ignition advance	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	º Crankshaft	_
Spark plugs		Bosch/Champion
Type		WR8DC / RN7YCC
Electrode gap	mm	0.70 to 0.80

Electrical system

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Battery	V / CC / RC	12 / 210 / 65
Alternator voltage / full load current / engine rpm		13.6 to 14.0 / 70, 90 / 3000
Starter motor current / voltage - cranking	A / V	35 to 80 / 10.6 to 11.5
- locked	A / V	350 to 820 / 4.5 to 8.6

Running gear

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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: 195/60x14:195/60x15
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.0 / 1.8: 2.2 / 2.0
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[-15'±10']
Camber		-40'±45' L
Castor		+2°±1° L
King pin inclination		_
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[-10'+30'-20']
Camber		-1°40'±30'

Torque wrench settings

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Cylinder head - stage 1	Nm	25 N
- stage 2	Nm	+90°
Cylinder head - stage 3	Nm	+90°
- stage 4	Nm	+90°
Big-end bearings	Nm	35 + 45° +15° N
Main bearings	Nm	50 + 45° +15° N
Clutch cover	Nm	15
Flywheel [driveplate]	Nm	65 + 30° +15° N [60]
Front hubs	Nm	WSM
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	25

Capacities

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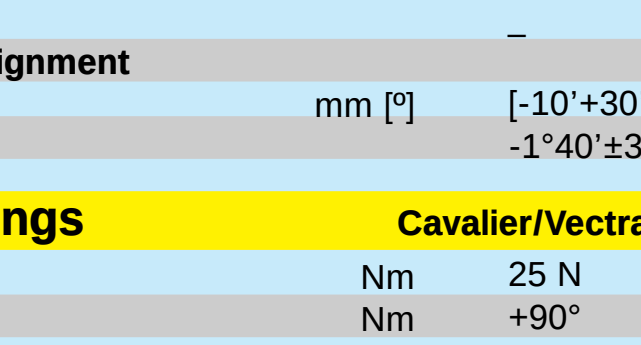
Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	1.9
Automatic transmission - refill	litres	3.0 to 3.5
Final drive	litres	WT
Cooling system	litres	7.2 [AT: 7.1]
Fuel tank	litres	61

Notes and Illustrations

[1] **[E 91 RON]: reset coding plug to 91**



1796 cm³, 8V