

VAUXHALL/OPEL

Cavalier/Vectra-A 1.4

1988 to 1992

Engine & Cooling

Fuel

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Automotive Technical

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Engine and cooling system

Cavalier/Vectra-A 1.4

1988 to 1992

Type		14NV SOHC. 55kW. 15.04
Capacity (cm ³) / number of cylinders		1389 / 4
Compression ratio / pressure	bar	9.4 / _
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

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1988 to 1992

Idle speed - manual [auto]	rpm	900 to 950
Fast idle speed - manual [auto]	rpm	2200 to 2600
CO @ idle speed [3000 rpm] - see page VI	%	0.5 to 1.5
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		Pierburg
Type / ref		2E3 (90 107 560)
Main jet / needle		95, 110
Injection pressure	bar	_
Pump pressure	bar	0.25 to 0.33
Octane rating	RON	95[E 95 RON]

Ignition system

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1988 to 1992

Type		TI-i ¹
Ignition coil		Bosch
Primary resistance	ohms	_
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Bosch
Points gap (air gap)	mm	_
Dwell angle	° (%)	Electronic control
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	° Crankshaft @ rpm	5±2 BTDC @ 900 to 950
V = Vacuum NV = No Vacuum		NV
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		AC/Champion
Type		CR42CXLS / RN7YC
Electrode gap	mm	0.70 to 0.80

Electrical system

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1988 to 1992

Battery	V / CC / RC	12 / 175 / 60
Alternator voltage / full load current / engine rpm		13.6 to 14.0 / 55,70,90 / 3000
Starter motor current / voltage - cranking	A / V	35 to 70 / 10.6 to 11.5
- locked	A / V	360 to 650 / 5.6 to 8.6

Running gear

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1988 to 1992

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

Tyres		
Saloon	Size	165x13: 175/70x14: 195/60x14
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	89: 1.9 / 1.7 91: 1.8 / 1.6
- 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

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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 ²
Main bearings	Nm	50 + 45° +15° N
Clutch cover	Nm	15
Flywheel [driveplate]	Nm	35 + 30° +15° N
Front hubs	Nm	WSM
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	25

Capacities

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1988 to 1992

Engine oil & filter	litres	3.0
Gearbox - 4-speed [5-speed]	litres	1.6
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	5.6
Fuel tank	litres	61

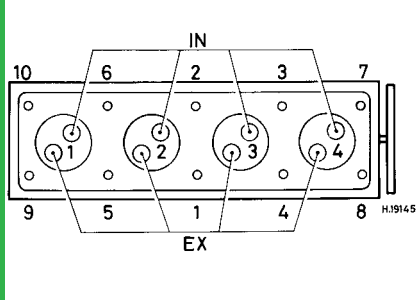
Notes and Illustrations

¹HEI

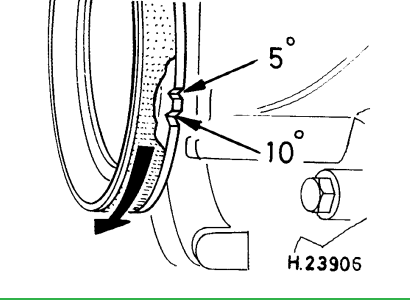
²40mm bolt: 28 +30° N

1: Idle speed

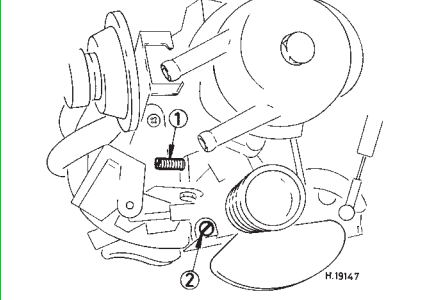
2: CO / Mixture



1389 cm³, SOHC 8V



1389 cm³, 8V



Pierburg 2E3