

VAUXHALL/OPEL

Kadett/Astra 2.0i CAT¹

1986 to 1993

Engine & Cooling

Fuel

Ignition

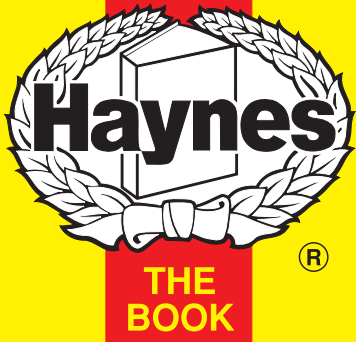
Electrical

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

Kadett/Astra 2.0i CAT¹

1986 to 1993

Type		C20NE SOHC. 85kW. US83
Capacity (cm ³) / number of cylinders		1998 / 4
Compression ratio / pressure	bar	9.2 / _
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	92
Radiator cap pressure	bar	1.2 to 1.5

Fuel system

Kadett/Astra 2.0i CAT¹

1986 to 1993

Idle speed - manual [auto]	rpm	720 to 880
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
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Bosch
Type / ref		Motronic ML4.1. 9.89 ►: M1.5
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	2.5±0.2
Octane rating	RON	95[U]

Ignition system

Kadett/Astra 2.0i CAT¹

1986 to 1993

Type		DME Motronic
Ignition coil		Bosch 90 240 252
Primary resistance	ohms	0.72
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Bosch
Points gap (air gap)	mm	_
Dwell angle	° (%)	Electronic control
Condenser capacity	µF	_
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	8 to 12 BTDC @ 720 to 880 N/A
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		Bosch/Champion
Type		WR8DC / RN7YCC
Electrode gap	mm	0.70 to 0.80

Electrical system

Kadett/Astra 2.0i CAT¹

1986 to 1993

Battery	V / CC / RC	12 / 175 / 130
Alternator voltage / full load current / engine rpm		14.5±0.25 / _ / 3500
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	475 to 600 / 3.5

Running gear

Kadett/Astra 2.0i CAT¹

1986 to 1993

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

Tyres		
Saloon	Size	175/70x13: 175/65x14 ²
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.1 / 1.9 ³
- Estate / Van	bar	_

Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	-2.0 to 0 L
Camber		-1°15' to +15'
Castor		+45' to 2°45'
King pin inclination		_

Rear suspension / wheel alignment

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

Torque wrench settings

Kadett/Astra 2.0i CAT¹

1986 to 1993

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° to 60°
Main bearings	Nm	50 + 40° to 50°
Clutch cover	Nm	15
Flywheel [driveplate]	Nm	65 + 30° to 45°
Front hubs	Nm	WSM
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	90
Spark plugs	Nm	25

Capacities

Kadett/Astra 2.0i CAT¹

1986 to 1993

Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	2.1
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	6.9
Fuel tank	litres	52

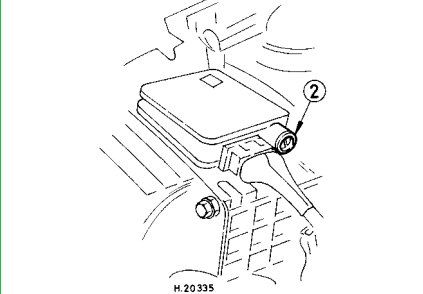
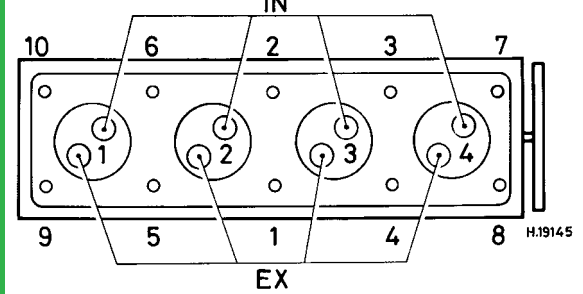
Notes and Illustrations

¹92 ►: Convertible only

²185/60x14: 185/55x15

³175/70x13: 2.0 / 1.8

1: Idle speed 2: CO / Mixture



1998 cm³, 8V

ML4.1-Motronic