

VAUXHALL/OPEL

Astra-F 1.4

1991 to 1993

Engine & Cooling

Fuel

Ignition

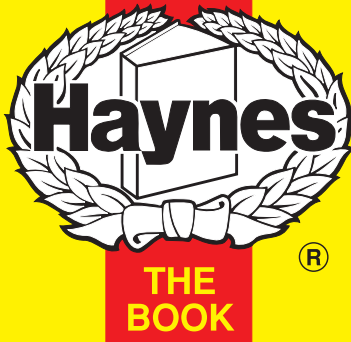
Electrical

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

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1991 to 1993

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	92
Radiator cap pressure	bar	1.2 to 1.5

Fuel system

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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	%	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		Pierburg
Type / ref		2E3 90 107 912
Main jet / needle		95, 110
Injection pressure	bar	_
Pump pressure	bar	0.25 to 0.36
Octane rating	RON	95[E 95 RON]

Ignition system

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Type		TI-i
Ignition coil		Delco 3 474 233
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		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	5 BTDC @ idle
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		WR7DC / RN7YC
Electrode gap	mm	0.70 to 0.80

Electrical system

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Battery	V / CC / RC	12 / 36, 44Ah
Alternator voltage / full load current / engine rpm		13.7 to 15.2 / 55, 70 / 3000
Starter motor current / voltage - cranking	A / V	35 to 55 / 10.6
- locked	A / V	360 to 440 / 7.8 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	155x13: 175/70x13: 175/65x14 ¹
Estate / Van	Size	155x13: 175/70x13: 175/65x14 ¹
Pressure - front / rear - Saloon	bar	1.9 / 1.6
- Estate / Van	bar	1.9 / 1.7

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	-2.5 to -0.5 L
Camber		-1°5'±45' N/A
Castor		+2°15'±1°N/A²
King pin inclination		_

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	-1.0 to +4.0
Camber		-1°40'±30' N/A

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	28³
Main bearings	Nm	50 + 45° to 60° 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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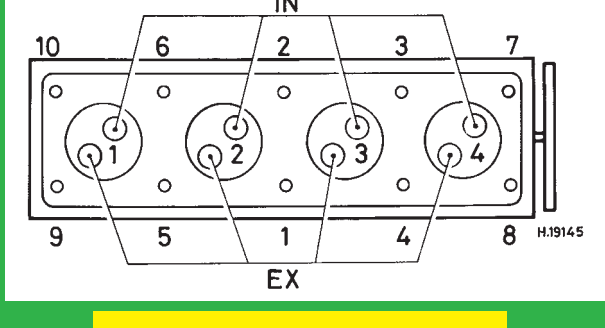
Engine oil & filter	litres	3.5
Gearbox - 4-speed [5-speed]	litres	1.6
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	5.8
Fuel tank	litres	52. Estate: 50

Notes and Illustrations

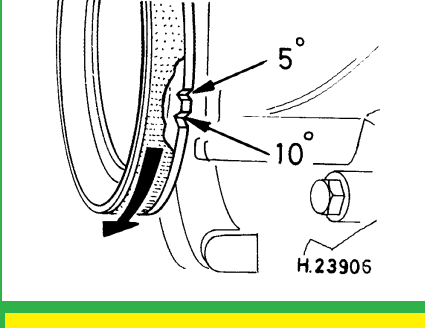
¹175/70x14: 185/60x14: 195/60x14. Van: 175/60x13

²Estate: +1°30'±1° L

³40mm bolt: 25 + 30°



1389 cm³, 8V



1389 cm³, 8V