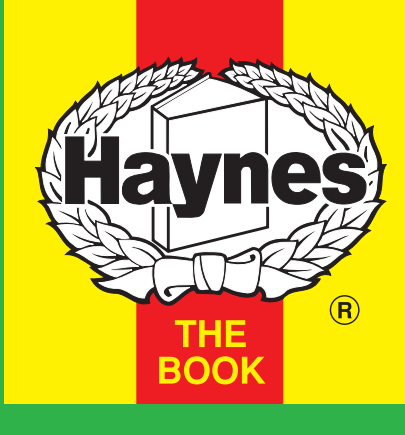




Automotive Technical

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

Astra-F 1.4i (MPI) CAT

1991 to 1997

Type		C14SE 8V 60kW 91/441/EEC
Capacity (cm³) / number of cylinders		1389 / 4
Compression ratio / pressure	bar	9.8 / _
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

Astra-F 1.4i (MPI) CAT

1991 to 1997

Idle speed - manual [auto]	rpm	820 to 980
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		GM
Type / ref		Rochester Multec-M MPI
Main jet / needle		_
Injection pressure	bar	3.0
Pump pressure	bar	3.0
Octane rating	RON	95[U]

Ignition system

Astra-F 1.4i (MPI) CAT

1991 to 1997

Type		Multec ¹
Ignition coil		Delco 3 474 233
Primary resistance	ohms	_
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	10 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
Type		WR7DC
Electrode gap	mm	0.70 to 0.80

Electrical system

Astra-F 1.4i (MPI) CAT

1991 to 1997

Battery	V / CC / RC	12 / 36, 44Ah
Alternator voltage / full load current / engine rpm		14.1 to 15.2 / 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

Astra-F 1.4i (MPI) CAT

1991 to 1997

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 ²
Estate / Van	Size	155x13: 175/70x13: 175/65x14 ²
Pressure - front / rear - Saloon	bar	1.9 / 1.6 (155x13: 2.1 / 1.8)
- Estate / Van	bar	2.1 / 1.9

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/A ³
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

Astra-F 1.4i (MPI) CAT

1991 to 1997

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 ⁵
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

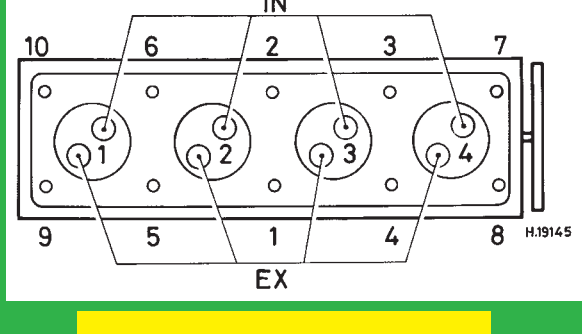
Astra-F 1.4i (MPI) CAT

1991 to 1997

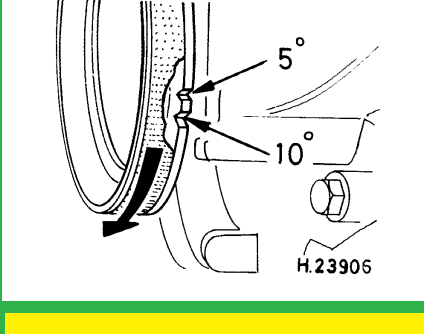
Engine oil & filter	litres	3.5
Gearbox - 4-speed [5-speed]	litres	1.6
Automatic transmission - refill	litres	3.0 to 3.5
Final drive	litres	WT
Cooling system	litres	5.8
Fuel tank	litres	52. Estate: 50

Notes and Illustrations

¹93 ►: DIS
²185/60x14: 195/60x14: 195/55x15
³Estate: +1°30'±1° L
⁵40mm bolt: 25 + 30°



1389 cm³, 8V



1389 cm³, 8V