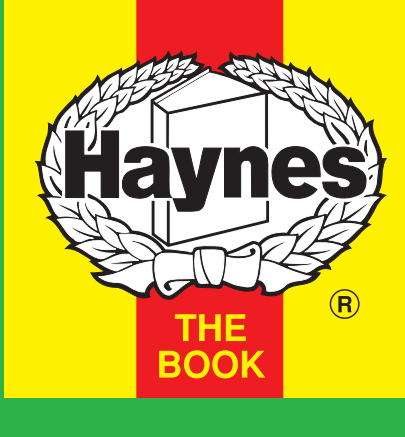


Engine & CoolingFuelIgnitionElectricalRunning gearTorque settingsCapacitiesNotes & Illustrations



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.

MENUHELP

Engine and cooling system

Alfa Sprint 1.51985 to 1988

Type		301.46
Capacity (cm³) / number of cylinders		1490 / 4
Compression ratio / pressure	bar	9.5 / 10.3
Oil pressure	bar	1.2 to 2.8
Oil temperature	°C	90
Valve clearance - inlet	mm	0.35 to 0.40
Valve clearance - exhaust	mm	0.45 to 0.50
Firing order		1-3-2-4
No 1 cylinder position		FR
Thermostat opening temperature	°C	84 to 88
Radiator cap pressure	bar	0.69

Fuel system

Alfa Sprint 1.51985 to 1988

Idle speed - manual [auto]	rpm	900 to 1000
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	—
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		Weber/Solex
Type / ref		W: 32DIR. S: C32EIES
Main jet / needle		W: 122, 130. S: 122.5, 137.5
Injection pressure	bar	—
Pump pressure	bar	0.18 to 0.30
Octane rating	RON	98[RA] ¹

Ignition system

Alfa Sprint 1.51985 to 1988

Type		Electronic
Ignition coil		Bosch.Ducellier.Marelli
Primary resistance	ohms	0.7 to 1.0 (typical)
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Bosch/Marelli ²
Points gap (air gap)	mm	[0.40 to 0.50]
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	8±1 BTDC @ 900 (1st mark)
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	36±1 BTDC @ 4500 (2nd mark)
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	—
Maximum vacuum advance	° Crankshaft	—
Spark plugs		Lodge/Champion
Type		25HL / N6YCC
Electrode gap	mm	Champion: 0.80

Electrical system

Alfa Sprint 1.51985 to 1988

Battery	V / CC / RC	12 / 36, 43Ah
Alternator voltage / full load current / engine rpm		14.0 / _ / 4000
Starter motor current / voltage - cranking	A / V	200 to 230 / 9.8 to 10.0
- locked	A / V	380 to 400 / 8.0

Running gear

Alfa Sprint 1.51985 to 1988

Brakes -		
Front (min. friction material thickness)	mm	7.0 with backing
Rear (min. friction material thickness)	mm	0.50

Tyres		
Saloon	Size	165/70x13: 185/60x14
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	1.8 / 1.6
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	-2.0±1.0
Camber		+1°28'±30'
Castor		+41'±30'
King pin inclination		—

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[0±25']
Camber		0±25'

Torque wrench settings

Alfa Sprint 1.51985 to 1988

Cylinder head - stage 1	Nm	29 oiled
- stage 2	Nm	58
Cylinder head - stage 3	Nm	81 to 87
- stage 4	Nm	No.7: 20 to 24
Big-end bearings	Nm	43 to 48
Main bearings	Nm	66 to 73 oiled
Clutch cover	Nm	15 to 23
Flywheel [driveplate]	Nm	94 to 105 oiled
Front hubs	Nm	WSM
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	64 to 78
Spark plugs	Nm	28

Capacities

Alfa Sprint 1.51985 to 1988

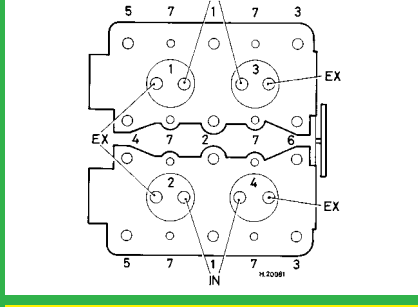
Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	3.4
Automatic transmission - refill	litres	—
Final drive	litres	WT
Cooling system	litres	7.3
Fuel tank	litres	50

Notes and Illustrations

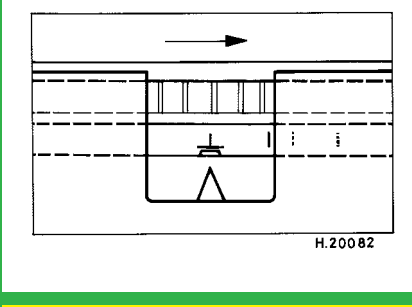
¹[E 95 RON]: ignition - 3°. [E 98 RON]

²& Ducellier

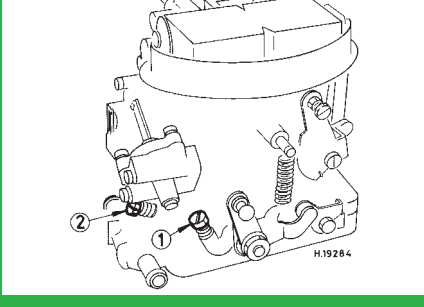
1: Idle speed2: CO / Mixture



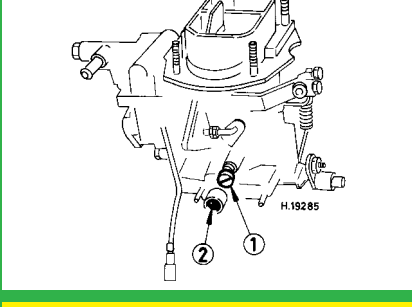
1490 cm³



1490 cm³



Weber 32 DIR



Solex C32 EIES