VAUXHALL/OPEL

Ignition

Fuel

Engine &

Cooling

Carlton/Omega-A 24V Estate

Capacities

1990 to 1994

Torque

settings

Automotive Technical R **BOOK**

Electrical

Running

gear

data for this car. To return to this screen and make another choice, click anywhere on the data screen. **MENU HELP**

Click on one of the buttons above to view

Notes &

Illustrations

Engine and cooling system		Carlton/Omega-A 24V Estate 1990 to 1994		
Туре		C30SEJ DC	DHC 24V. 147k	(W. US83
Capacity (cm³) / number of cylinders	S	2969 / 6		
Compression ratio / pressure		r 10.0 / _		
Oil pressure		r [3.0 to 3.5]		
Oil temperature		80		
Valve clearance - inlet		n 0: Hyd.		
Valve clearance - exhaust		າ 0: Hyd.		
Firing order		1-5-3-6-2-4		
No 1 cylinder position		TCE	-	
Thermostat opening temperature		92±2 to 107	/	
Radiator cap pressure		r 1.2 to 1.5		
Fuel system		r <mark>lton/Omega-A 2</mark> 4	4V Estate	1990 to 1994
Idle speed - manual [auto]		570 to 730		
Fast idle speed - manual [auto]		<u> </u>		
CO @ idle speed [3000 rpm] - see page VI		≤0.4		
HC @ idle speed [3000 rpm] - see page VI		n ≤1200		
CO2 @ idle speed [3000 rpm] - see page VI		_		
O2 @ idle speed [3000 rpm] - see page VI				
Carburettor / fuel injection		Bosch	1 F luncali aa	un turn l
Type / ref Main int / peodle		MOTOUC M	1.5, knock co	ntroi
Main jet / needle Injection pressure	ba	2.3 to 2.7		
Pump pressure		r 3.0 to 3.5		
Octane rating	RON			
· ·				
Ignition system	Cai	rlton/Omega-A 24		1990 to 1994
Type		DME Motro		
Ignition coil		Bosch 1 22	7 020 009	
Primary resistance Ballast resistor	ohms			
	ohms \	_		
Voltage - Tmnl 15(+) to earth Distributor	\	Bosch		
Points gap (air gap)	mm			
Dwell angle	° (%	_	5 to 18]	
Condenser capacity	μF	_		
Rotation	μι	_		
Ignition timing - basic [static	° Crankshaft @ rpm		OC @ idle N/A	
V = Vacuum NV = No Vacuum		NV		
Total ignition advance	° Crankshaft @ rpm			
	° Crankshaft @ rpm			
Contrifugal chack	Crankshaft @ rpmCrankshaft @ rpm		control	
Centrifugal check.	° Crankshaft @ rpm	•	Ontio	
	° Crankshaft @ rpm			
Vacuum range check	mba		control	
Maximum vacuum advance	° Crankshaf	•		
Spark plugs	- Craritorial	Bosch/Chai	mpion	
Type		FR7DTC / F	•	
Electrode gap	mm	0.70 . 0.00		

Tyres Saloon Estate / Van Pressure - front / rear - Saloon

Running gear

Battery

Brakes -

Electrical system

Alternator voltage / full load current / engine rpm

Front (min. friction material thickness)

Rear (min. friction material thickness)

Starter motor current / voltage - cranking

- Estate / Van

- locked

mm Size Size

A/V

A/V

mm

bar

bar

V / CC / RC

7.0 with backing 195/65x15: 205/65x15 2.3 / 2.5

Carlton/Omega-A 24V Estate

12 / 44, 55 or 66Ah

75 / 11.5 (no load)

475 to 600 / 3.5

7.0 with backing

Carlton/Omega-A 24V Estate

13.8 to 14.8 / 90, 120 / 2000

1990 to 1994

1990 to 1994

1990 to 1994

1990 to 1994

Front suspension / wheel alignment Toe-in (+) / Toe-out (-) Camber Castor

Clutch cover

Front hubs

Rear hubs

Spark plugs

Final drive

Fuel tank

Capacities

Engine oil & filter

Cooling system

Gearbox - 4-speed [5-speed]

Automatic transmission - refill

Notes and Illustrations

¹A/C: 10.4 [AT + A/c: 10.2]

Wheel nuts / bolts

King pin inclination Rear suspension / wheel alignment Toe-in (+) / Toe-out (–) Camber

Torque wrench settings Cylinder head - stage 1 - stage 2

Cylinder head - stage 3 - stage 4 Big-end bearings Main bearings

Flywheel [driveplate]

mm [°] mm [°]

Nm

Nm

Nm

Nm

Nm

Nm

Nm

litres

litres

litres

litres

litres

litres

+1.0 to 4.0 -2°40' to -1°20' Carlton/Omega-A 24V Estate

60 N

320

90

25

5.5

1.9

2.6

1.1

70

ΕX

IN

12 H.20825

Carlton/Omega-A 24V Estate

[0 to +20'] L

-2°15' to -45' +4°15′ to 6°15′

 $+ 90^{\circ} + 10^{\circ}$ Wait 10 minutes $+ 30^{\circ} + 10^{\circ}$

Nm Nm 45 110 Nm 22 Nm Nm

 $55 + 30^{\circ} + 45^{\circ}$ **WSM**

10.0 [AT: 9.8]¹

2969 cm³, 24V

ΕX

IN

6

10