

Manufacturers Reference No. for Application

VM 63/1



F.I.A. Recognition No.

1041

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

*Form of Recognition in accordance with
Appendix J to the
International Sporting Code.*

Manufacturer VAUXHALL MOTORS LIMITED

Model VAUXHALL VELOX/CRESTA Year of Manufacture 1962

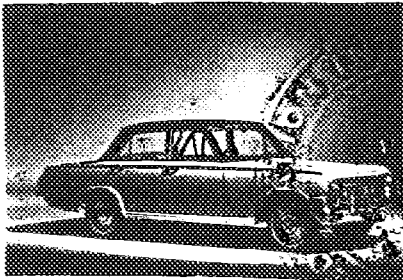
Serial No. of Chassis PB 3001001 Onwards

Engine PB 2001 Onwards

Type of Coachwork FOUR DOOR SALOON

Recognition is valid from 9/5/63 In category TOURING

Photograph to be affixed here $\frac{3}{4}$ view of car from front right.



Hubert Christ

Stamp of F.I.A./R.A.C. to be affixed here.

Form: R.F.I.A.

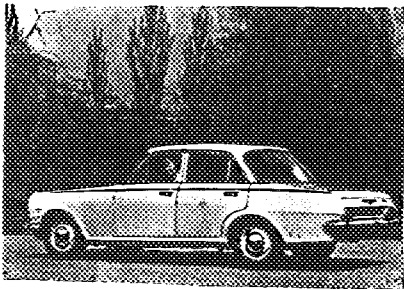
General description of car:

*Specify here material/s of
chassis/body construction*

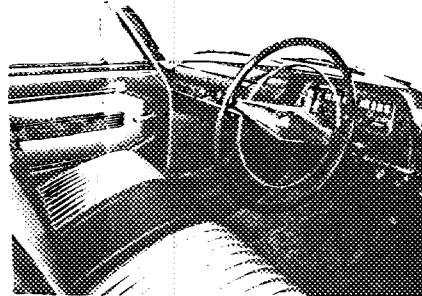
SHEET METAL - INTEGRAL

Photographs to be affixed below.

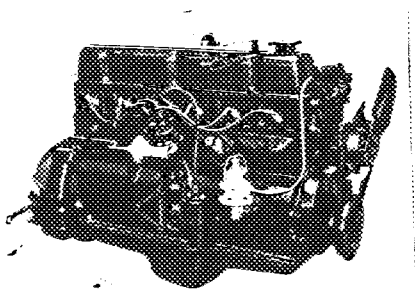
¾ view of car from rear left.



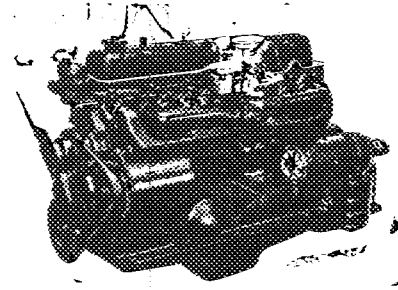
Interior view of car through driver's door.



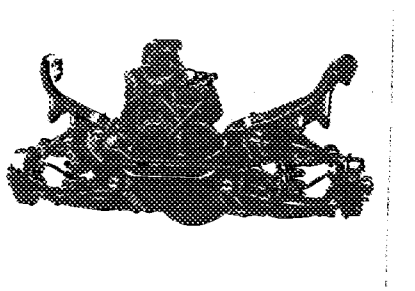
Engine unit with accessories from right.



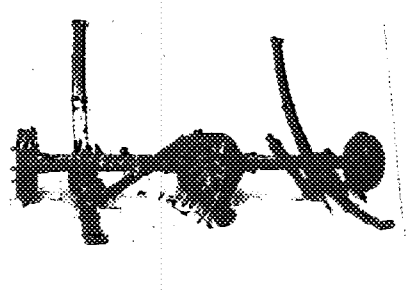
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).

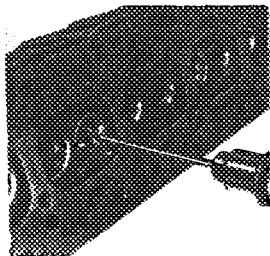


ENGINE

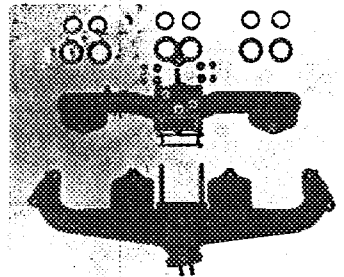
in line Yes
 No. of cylinders 6 in V -
 opposed -
 Cycle 4 - stroke Firing order 1 - 5 - 3 - 6 - 2 - 4
 Capacity 2651 c.c. Bore 82.55 m.m. Stroke 82.55 m.m.
 Maximum rebore .060 Resultant capacity 2750 c.c.
 Material of cylinder block Chromium Cast Iron Material of sleeves, if fitted -
 Distance from crankshaft centre line to top face of block at centre line of cylinders 228.6 m.m.
 Material of cylinder head Cast iron Volume of one combustion chamber 58.12 c.c.
 Compression ratio 8.5:1
 Material of piston Aluminium alloy No. of piston rings 3
 Distance from gudgeon pin centre line to highest point of piston crown 44.4 m.m.
 Bearings { Crankshaft main bearings: Type White metal Dia. 63.5 m.m.
 Connecting rod big end: Type Copper lead or Aluminium tin Dia. 52.4 m.m.
 Flywheel Assy. 10.50 kg.
 Crankshaft Assy. 30.52 kg.
 Weights { Connecting rod Assy. .74 kg.
 Piston with rings .448 kg.
 Gudgeon pin .144 kg.
 No. of valves per cylinder 2 Method of valve operation Pushrod
 No. of camshafts 1 Location of camshafts Cylinder block
 Type of camshaft drive Chain at front
 Diameter of valves: Inlet 41.35 m.m. Exhaust 36.4 m.m.
 Diameter of port at valve seat: Approx. throat dia. Inlet 34.9 m.m. Exhaust 30.8 m.m.
 Tappet clearance for checking timing: Inlet 0.33 m.m. Exhaust 0.33 m.m.
 Valves open: Inlet 14.5° B.T.D.C. Exhaust 61.5° B.B.D.C.
 Valves close: Inlet 76.2° A.B.D.C. Exhaust 33.4° A.T.D.C.
 Maximum valve lift: Inlet 6.35 m.m. Exhaust 5.91 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 127.5° Exhaust 132.5°
 ¾ Maximum lift: Inlet 81.5° Exhaust 82.5°
 Valve springs: Inlet Helical coil Exhaust Helical coil
 Type Helical coil No. per valve One
 Carburettor: Type Downdraft No. fitted one
 (up or down draft, horizontal)
 Make Zenith Model 42 VNT
 Flange hole diameter 42 m.m. Choke diameter 33 m.m.
 Main jet identification No. 120 or 127) 120)
 Compensating 100 or 103) 120) Code 249
 Secondary 70 None) None)

Air filter: Type Oil wetted - Domestic No. fitted One
Paper element Export
 Inlet manifold:
 Diameter of flange hole at carburettor 42.1 m.m.
 Diameter of flange hole at port 36.6 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.



Exhaust manifold:
 Diameter of flange hole at port 28.6 x 38.2 m.m.
 Diameter of flange hole at connection to silencer inlet pipe ~~48.4~~ 48.4 m.m.

Photograph of piston showing crown to be affixed here.



Photograph of exhaust manifold to be affixed here.

(see photograph above)

ENGINE ACCESSORIES

Make of fuel pump AC Delco No. fitted One
 Method of operation Mechanical from Camshaft
 Type of ignition system Coil coil or magneto
 Make of ignition AC Delco Model 7952589
 Method of advance and retard Centrifugal and vacuum
 Make of ignition coil AC Delco Model Oil filled
 No. of ignition coils One Voltage 12v
 Make of dynamo Lucas Model C 40-1
 Voltage of dynamo 12v Maximum output 22 amps.
 Make of starter motor Lucas Model M 418G
 Battery: No. fitted One Voltage 12 Capacity 57 amp. hour
 Oil Cooler (if fitted) type - Capacity - pints

Make Vauxhall Model PB F.I.A. Recognition No. _____
 Manufacturers Reference No. of Application VM 63/1

TRANSMISSION

Make of clutch Borg & Beck Type Dry
 Diameter of clutch plate 8.5" No. of plates 1 - Diaphragm
 Method of operating clutch Mechanical through hydraulic slave cylinder
 Make of gearbox Vauxhall Type 3 speed synchromesh
 No. of gearbox ratios 3 forward and 1 reverse
 Method of operating gearshift Manual
 Location of gearshift Steering column
 Is overdrive fitted? Optional
 Method of controlling overdrive, if fitted Electrical switch on facia

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	2.866	$\frac{22}{17} \times \frac{31}{14}$						
2.	1.635	$\frac{22}{17} \times \frac{24}{19}$						
3.	1.0	Direct						
\times								
Reverse	3.050	$\frac{22}{17} \times \frac{33}{14}$						
5.								

Type of final drive Hotchkiss
 Type of differential Hypoid bevel
 Final drive ratio 3.7:1 Alternatives 3.9:1
 No. of teeth 10/37 10/39
 Overdrive ratio, if fitted 0.778:1

WHEELS

Type Disc Weight 6.35 kg.
 Method of attachment 5 stud
 Rim diameter 355 m.m. Rim width 114.3 m.m.
 Tyre size: Front 5.90 - 14 Rear 5.90 - 14

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? Yes
 Type of servo, if fitted Suspended vacuum
 No. of hydraulic master cylinders One Bore 22.2 m.m.

	Front	Rear
No. of wheel cylinders	Two	One per brake
Bore of wheel cylinders	53.9 m.m.	19.0 m.m.
Inside diameter of brake drums	N.A. m.m.	228.6 m.m.
No. of shoes per brake	N.A.	Two
Outside diameter of brake discs	266.70 m.m.	N.A. m.m.
No. of pads per brake	2	
Dimensions of brake linings per shoe or pad (if all shoes or pads in each brake are not of same dimensions, specify each)		

	Front	Rear
Length	m.m.	218 m.m.
	m.m.	m.m.
Width	m.m.	44.5 m.m.
Total area per brake	6450 m.m. ²	19400 m.m. ²

SUSPENSION

	Front	Rear
Type	Independent Wishbone	Beam axle
Type of spring	Coil	Semi-Elliptic leaf
Is stabiliser fitted?	Yes	
Type of shock absorber	Double acting	Telescopic
No. of shock absorbers	2	2

STEERING

Type of steering gear	Burman Recirculating Ball
Turning circle of car	11.12 m., approx.
No. of turns of steering wheel from lock to lock	3.8

CAPACITIES AND DIMENSIONS

Fuel tank	49.1 litres	Sump	5.41 litres	
Radiator	10.37 litres			
Overall length of car	461.8 cm.	Overall width of car	178.5 cm.	
Overall height of car, unladen (with hood up, if appropriate)	143.3 cm.			
Distance from floor to top of windscreen:				
Highest point				
	112.1 cm.	Lowest point	105.1 cm.	
Width of windscreen:				
	Maximum width	142.57 cm.	Minimum width	130.18 cm.
*Interior width of car	147.65 cm.			
No. of seats	4			
Track: Front	139.2 cm.	Rear	142.7 cm.	
Wheelbase	273 cm.	Ground clearance	165 m.m.	

*(To be measured at the immediate rear of the steering wheel, and the width quoted to be maintained in a vertical plane of not less than 25 cms.)

Overall weight with water, oil and spare wheel, but without fuel	1128 kgs. Velox
	1146 kgs. Cresta

Additional information for cars fitted with two-cycle engines

System of cylinder scavenging.....

Type of lubrication.....

Size of inlet port:

Length measured around cylinder wall..... m.m.

Height..... m.m. Area..... m.m.²

Size of exhaust port:

Length measured around cylinder wall..... m.m.

Height..... m.m. Area..... m.m.²

Size of transfer port:

Length measured around cylinder wall..... m.m.

Height..... m.m. Area..... m.m.²

Size of piston port:

Length measured around piston..... m.m.

Height..... m.m. Area..... m.m.²

Method of pre-compression.....

Bore and stroke of pre-compression cylinder, if fitted..... m.m.

Distance from top of cylinder block to lowest point of inlet port..... m.m.

Distance from top of cylinder block to highest point of exhaust port..... m.m.

Distance from top of cylinder block to highest point of transfer port..... m.m.

Drawing of cylinder ports.

Supercharger, if fitted

Make..... Model or Type No.....

Type of drive..... Ratio of drive.....

Fuel injection, if fitted

Make of pump..... Model or Type No.....

Make of injectors..... Model or Type No.....

Location of injectors.....

Optional equipment affecting preceding information:—

HYDRAMATIC TRANSMISSION

	<u>Ratio</u>
1st	3.03 to 3.64:1
2nd	1.58:1
Top	Direct
Reverse	2.516 to 3.57:1

FRONT BRAKES - DRUM (PBS EXPORT)

No. of Wheel Cylinders	2 per Brake
Bore of Wheel Cylinders	20.3 m.m.
Inside dia. of Drum	254
No. of Shoes per Brake	2

DIMENSIONS

Lenght	244m.m.
Width	57m.m.
Total Area/Brake	27800 m.m. ²

