

F.I.A. Recognition No. 5095

Group 1



ROYAL AUTOMOBILE CLUB

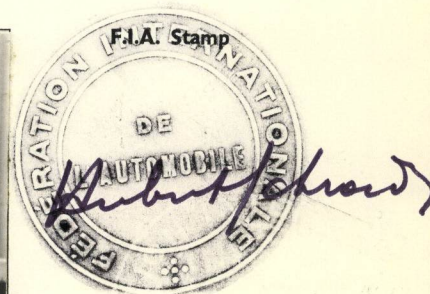
31, Belgrave Square, London, S.W.1

Form of recognition in accordance with appendix J to the International Sporting Code of the
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Manufacturer	Vauxhall Motors Limited	Cylinder-capacity	1057	cm. ³	64.5	in. ³
Serial No. of chassis/body	HAH 6501001	Model	Viva/Epic 'SL 90' (HAH 21)			
Serial No. of engine	21 HA 2001	Manufacturer	Vauxhall			
Recognition is valid from		Manufacturer	Vauxhall			
		List				

The manufacturing of the model described in this recognition form started on 1st October 1965
and the minimum production of 5,000 identical cars, in accordance with the specifications of
this form was reached on 10th March 1966.

Photograph A, ¾ view of car from front

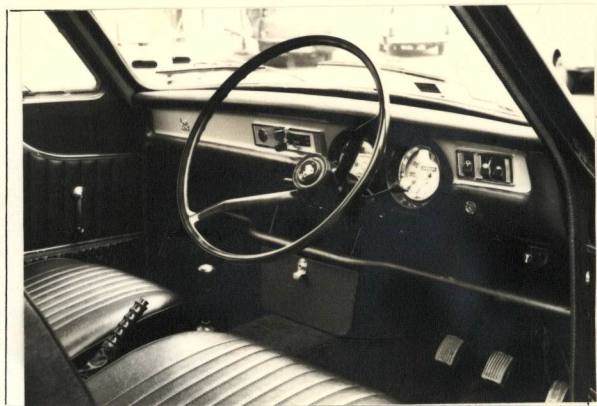


R.A.C. Stamp

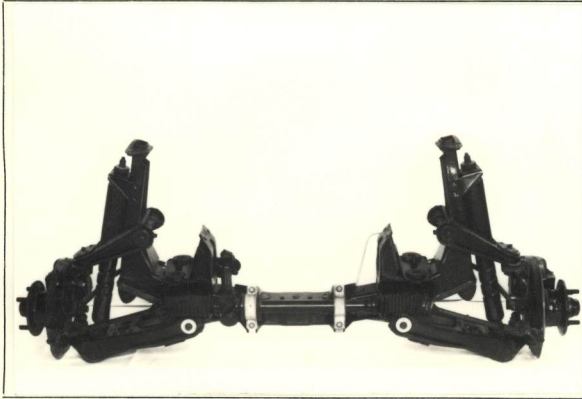
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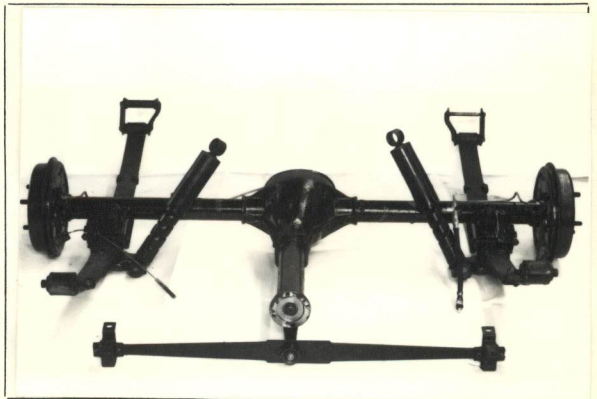
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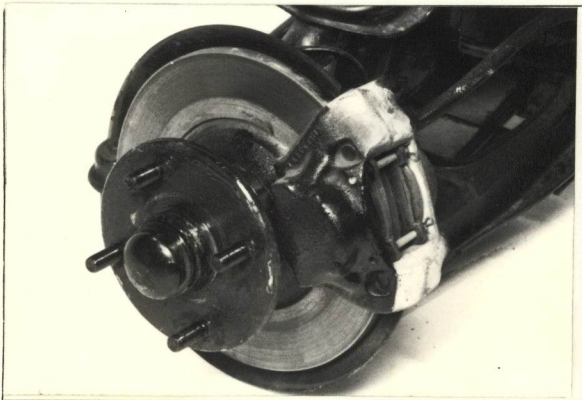
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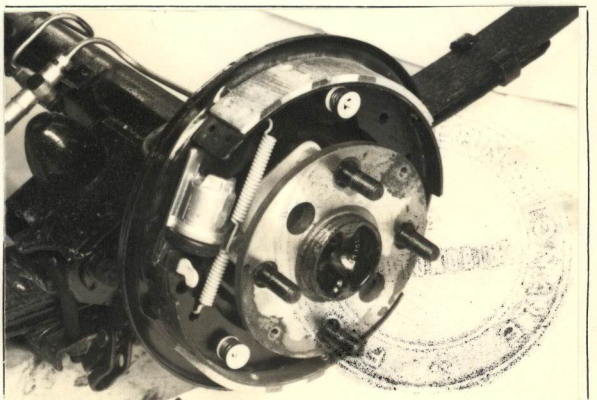
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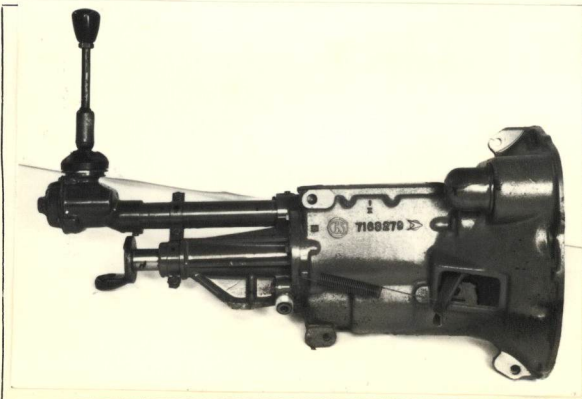
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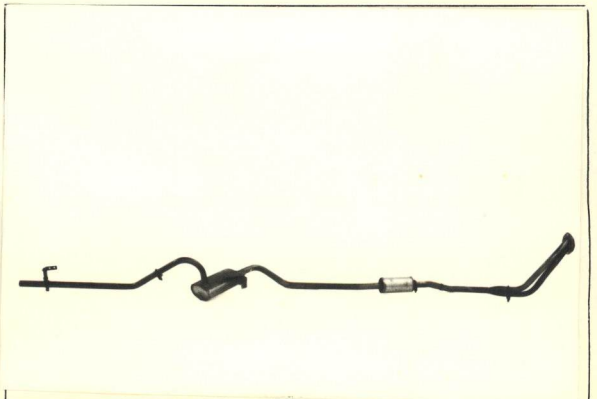
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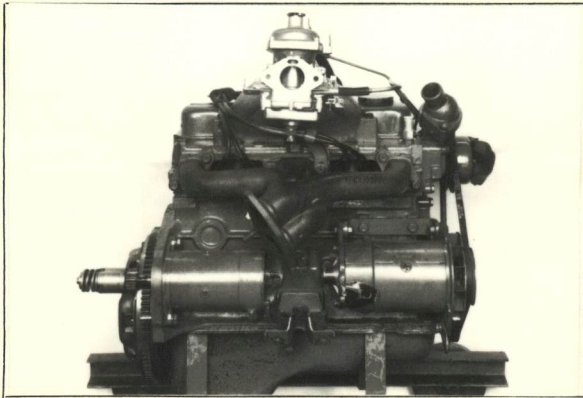
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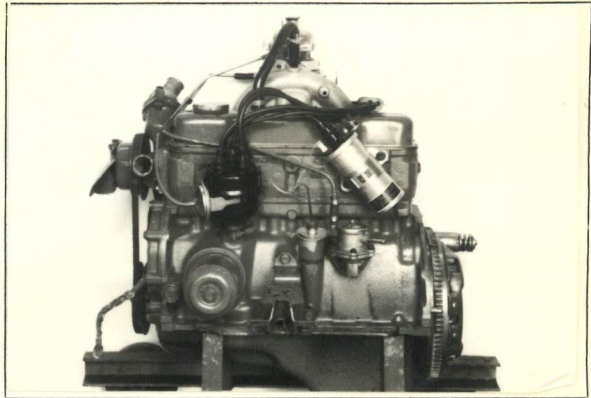
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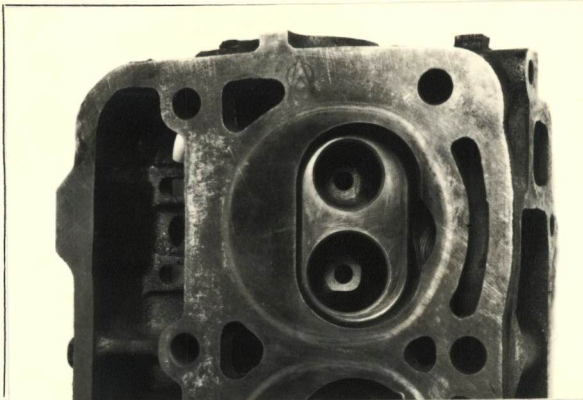
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K



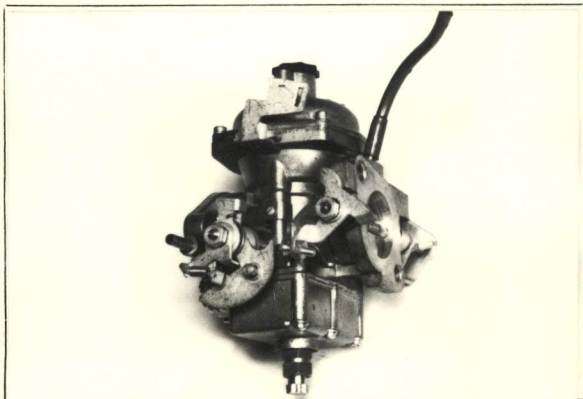
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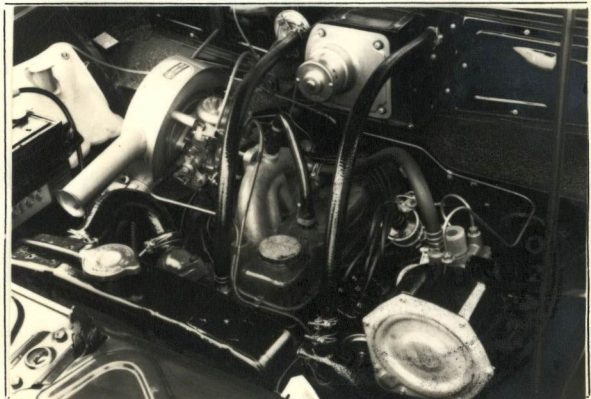
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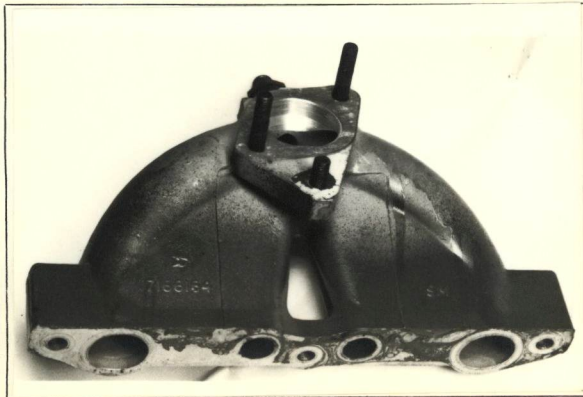
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O



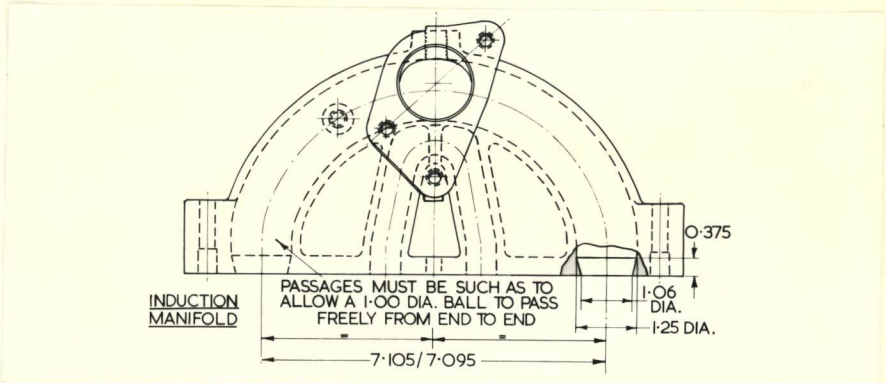
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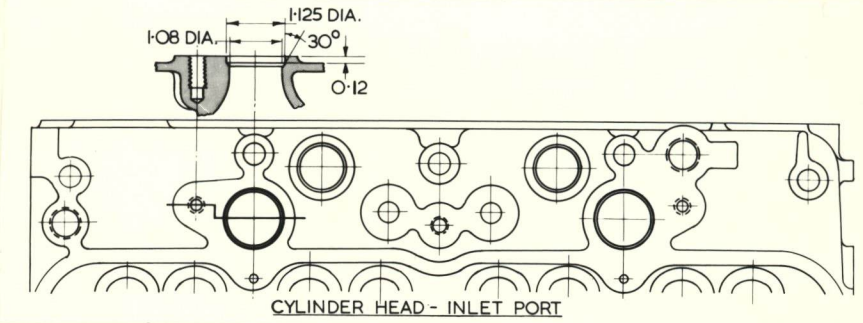
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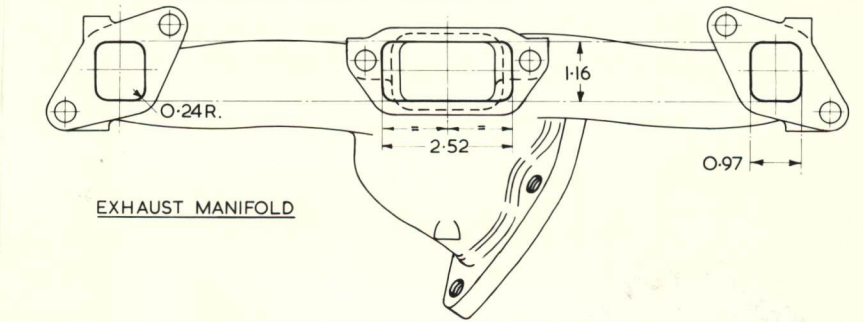
Drawing inlet manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



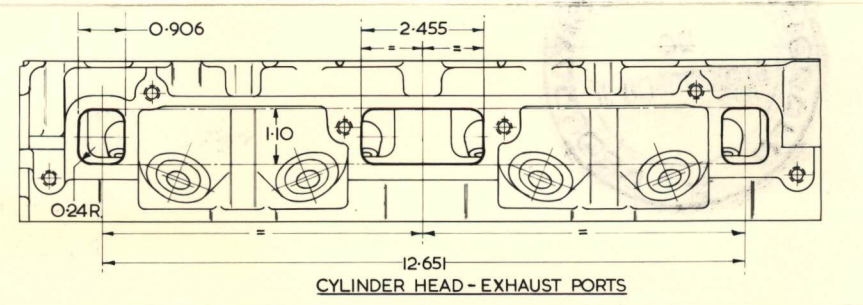
Drawing of entrance to inlet port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



Drawing of exhaust manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



Drawing of exit to exhaust port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



Allowable variation on dimensions is $\pm .25$ mm. $\pm .01$ in. unless otherwise specified.

NOTE 1.

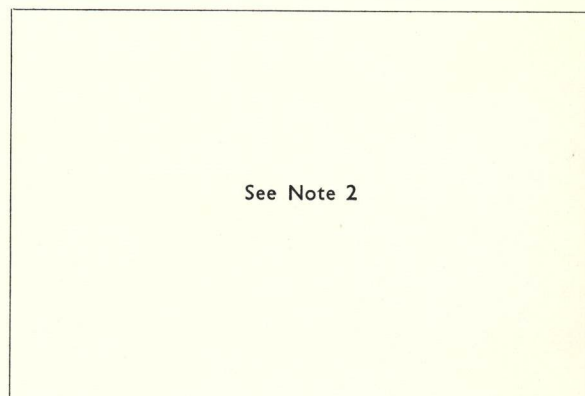
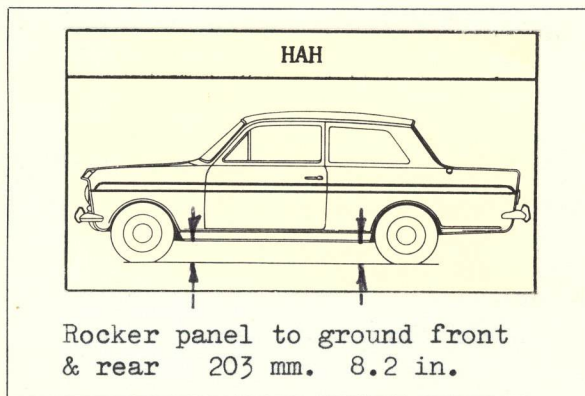
All dimensions must be given in two measuring systems, see Note 3.

CAPACITIES AND DIMENSIONS

- | | | | | |
|----------------|---------------|-----|------|--------|
| 1. Wheelbase | 2324 | mm. | 91.5 | inches |
| 2. Front track | | | | |
| | 3. Rear track | | | |

1219.2 mm. 48.00 inches

1213.9 mm. 48.50 inches



- | | | | | |
|--|-------|-------|-------|------------|
| 4. Overall length of the car | 397.5 | cm. | 156.5 | inches |
| 5. Overall width of the car | 150.9 | cm. | 59.4 | inches |
| 6. Overall height of the car | 135.4 | cm. | 53.3 | inches |
| 7. Capacity of fuel tank (reserve included) | | | | |
| | 38.28 | ltrs. | 8.53 | gall. U.S. |
| | | | 7.1 | gall. Imp. |
| 8. Seating Capacity. | | | | |
| 9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools : | | | | |
| | 734 | kg. | 1618 | lbs. |
| | | | 14.45 | cwts. |



NOTE 2.

Differences in track caused by the use of other wheels with different rim widths must be stated when recognition is requested for the wheels concerned. Specify ground clearance in relation to the track and give drawing of two easily recognisable points at front and rear at which measurements are taken. These ground clearance dimensions are only for information when checking the track and can in no way affect the eligibility of the car.

NOTE 3.

CONVERSION TABLE

1 inch/pouce	— 2.54	cm.	1 quart US	— 0.9464	ltrs.
1 foot/pied	— 30.4794	cm.	1 pint (pt)	— 0.568	ltrs.
1 sq. inch/pouce carre	— 6.452	cm. ²	1 gallon Imp.	— 4.546	ltrs.
1 cubic inch/pouce cube	— 16.387	cm. ³	1 gallon US	— 3.785	ltrs.
1 pound/livre (lb)	— 453.593	gr.	1 hundred weight (cwt.)	— 50.802	kg.

CHASSIS AND COACHWORK (Photographs A, B and C)

- 20. Chassis/body construction: ~~separate~~ unitary construction
- 21. Unitary construction, material(s) **Steel**
- 22. Separate construction, Material(s) of chassis **-**
- 23. Material(s) of coachwork **Steel**
- 24. Number of doors **2** Material(s) **Steel**
- 25. Material(s) of bonnet **Steel**
- 26. Material(s) of boot lid **Steel**
- 27. Material(s) of rear-window **Glass**
- 28. Material(s) of windscreen **Laminated or Toughened Glass**
- 29. Material(s) of front-door windows **Glass**
- 30. Material(s) of rear-door windows **None**
- 31. Sliding system of door windows **Gear Operated - Drop Glass**
- 32. Material(s) of rear-quarter light **Glass**

ACCESSORIES AND UPHOLSTERY

- 38. Interior heating : yes — ~~no~~
- 39. Air conditioning : ~~yes~~ — no **Blown, P.V.C.**
- 40. Ventilation : yes — ~~no~~
- 41. Front seats, type of seat and upholstery **Tubular Frame**
- 42. Weight of front seat(s), complete with supports and rails, out of the car :

11.23	kg.	24.75	lbs.
-------	-----	-------	------
- 43. Rear seats, type of seat and upholstery **Blown P.V.C. - Spring Case**
- 44. Front bumper, material(s) **Steel** Weight **2.85** kg. **6.29** lbs.
- 45. Rear bumper, material(s) **Steel** Weight **3.03** kg. **6.29** lbs.

WHEELS

- 50. Type **Disc**
- 51. Weight (per wheel, without tyre) **3.81** kg. **8.41** lbs.
- 52. Method of attachment **4 stud**
- 53. Rim diameter **304.8** mm. **12.0** ins. 54. Rim width **114.3** mm. **4.50** ins.

STEERING

- 60. Type **Rack and Pinion**
- 61. Servo-assistance : ~~yes~~ — no
- 62. Number of turns of steering wheel from lock to lock **3.14**
- 63. In case of servo-assistance



SUSPENSION

- 70. Front suspension (photograph D), type Independent - Wishbone
- 71. Type of spring Single Transverse
- 72. Stabiliser (if fitted) Not fitted
- 73. Number of shock absorbers Two
- 74. Type Double acting - Telescopic
- 78. Rear suspension (photograph E), type Beam axle
- 79. Type of spring Semi elliptical
- 80. Stabiliser (if fitted) Not fitted
- 81. Number of shock absorbers Two
- 82. Type Double acting-telescopic

BRAKES (photographs F and G)

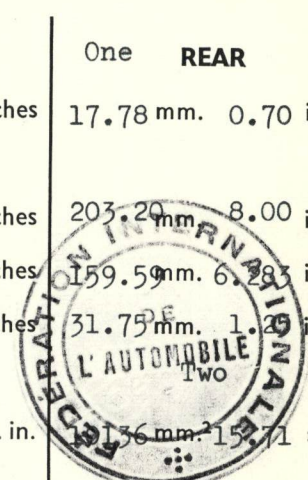
- 90. Method of operation Hydraulic
- 91. Servo-assistance (if fitted), type Suspended Vacuum
- 92. Number of hydraulic master cylinders One
- 93. Number of cylinders per wheel Two
- 94. Bore of wheel cylinder(s) 41.15 mm. 1.62 inches

Drum Brakes

- | | | FRONT | One REAR |
|-------------------------------|--|--------------------------|------------------------------------|
| 95. Inside diameter | | mm. inches | 203.20 mm. 8.00 inches |
| 96. Length of brake linings | | mm. inches | 159.5 mm. 6.283 inches |
| 97. Width of brake linings | | mm. inches | 31.75 mm. 1.25 inches |
| 98. Number of shoes per brake | | | Two |
| 99. Total area per brake | | mm. ² sq. in. | 156 mm. ² 15.71 sq. in. |

Disc Brakes

- | | | | |
|-------------------------------|--------|------------------------------|--------------------------|
| 100. Outside diameter | 211.33 | mm. 8.32 inches | mm. inches |
| 101. Thickness of disc | 9.525 | mm. 0.375 inches | mm. inches |
| 102. Length of brake linings | | mm. inches | mm. inches |
| 103. Width of brake linings | | mm. inches | mm. inches |
| 104. Number of pads per brake | | Two | |
| 105. Total area per brake | 3871.2 | mm. ² 6.0 sq. in. | mm. ² sq. in. |



ENGINE (photographs J and K)

- 130. Cycle 4 - Stroke
- 131. Number of cylinders Four
- 132. Cylinder Arrangement Vertical in Line
- 133. Bore 74.29 mm. 2.925 in.
- 134. Stroke 60.96 mm. 2.400 in.
- 135. Capacity per cylinder 263.7 - 265.2 cm.³ 16.09-16.18 cu. in.
- 136. Total cylinder capacity 1054.8 - 1060.8 cm.³ 64.37-64.73 cu. in.
- 137. Material(s) of cylinder block Cast Iron
- 138. Material(s) of sleeves (if fitted) Not Fitted
- 139. Cylinder head, material(s) Cast Iron
- Number fitted One
- 140. Number of inlet ports Two
- 141. Number of exhaust ports Three
- 142. Compression ratio 9:1
- 143. Volume of one combustion chamber 25.5 - 26.1 cm.³ 1.56-1.59 cu. in.
- 144. Piston, material Aluminium Alloy
- 145. Number of rings Three
- 146. Distance from gudgeon pin centre line to highest point of piston crown 37.59 mm. 1.48 in.
- 147. Crankshaft: ~~rounded~~/stamped
- 148. Type of crankshaft: integral/.....Yes
- 149. Number of crankshaft main bearings Three
- 150. Material of bearing cap Cast Iron
- 151. System of lubrication: ~~dry sump~~/oil in sump
- 152. Capacity, lubricant 3.124 ltrs. 5.5 pts. 2.96 quarts U.S.
- 153. Oil cooler: ~~yes~~/no
- 154. Method of engine cooling Water
- 155. Capacity of cooling system 6.44 ltrs. 11.34 pts. 6.81 quarts U.S.
- 156. Cooling fan (if fitted) dia. 27.94 cm. 11.0 in.
- 157. Number of blades of cooling fan Two

Bearings

- 158. Crankshaft main, type White Metal dia. 53.99/54.00 m.m. 2.1255/60 in.
- 159. Connecting rod big end, type Copper/Lead-Aluminium/Tin dia. 45.01/45.04 m.m. 1.7722/34 in.

Weights

- 160. Flywheel (clean) (With starter Ring) 7.35 kg. lbs.
- 161. Flywheel with clutch (all turning parts) 10.25 kg. lbs.
- 162. Crankshaft 10.61 kg. 23.52 lbs.
- 163. Connecting rod .51 kg. lbs.
- 164. Piston with rings and pin .42 kg. .93 lbs.



FOUR STROKE ENGINES

- 170. Number of camshafts One 171. Location Cylinder Head
- 172. Type of camshaft drive Endless Chain - At Front
- 173. Type of valve operation Push Rod

INLET (see page 4)*

- 180. Material(s) of inlet manifold Aluminium Alloy Casting
- 181. Diameter of valves 32.715 mm. 1.288 ins.
- 182. Max. valve lift 7.72 mm. .304 in. 183. Number of valve springs One
- 184. Type of spring Helical Coil 185. Number of valves per cylinder One
- 186. Tappet clearance for checking timing (cold) .15 mm. 0.006 ins.
- 187. Valves open at (with tolerance for tappet clearance indicated) 39° BTDC
- 188. Valves close at (with tolerance for tappet clearance indicated) 93° ABDC
- 189. Air filter, type Paper element

EXHAUST (see page 4)*

- 195. Material(s) of exhaust manifold Cast Iron
- 196. Diameter of valves 33.274 mm. 1.31 ins.
- 197. Max. valve lift 7.47 mm. .294 in. 198. Number of valve springs One
- 199. Type of spring Helical Coil 200. Number of valves per cylinder One
- 201. Tappet clearance for checking timing (cold) .25 mm. 0.010 ins.
- 202. Valves open at (with tolerance for tappet clearance indicated) 65° BBDC
- 203. Valves close at (with tolerance for tappet clearance indicated) 45° ATDC

CARBURETION (photograph N)

- 210. Number of carburettors fitted One 211. Type Variable Choke
- 212. Make Zenith/Stromberg 213. Model 150 - CD
- 214. Number of mixture passages per carburettor Single Venturi
- 215. Flange hole diameter of exit port(s) of carburettor 38.1 mm. 1.50 ins.
- 216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example : SU) 25.4 mm. ins.

INJECTION (if fitted)

- 220. Make of pump 221. Number of plungers
- 222. Model or type of pump 223. Total number of injectors
- 224. Location of injectors
- 225. Minimum diameter of inlet pipe mm. ins.

* For additional information concerning two-stroke engines and super-charged engines, see page 13.

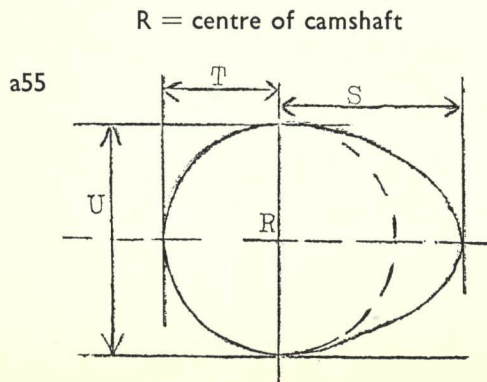


ENGINE ACCESSORIES

230. Fuel pump : mechanical ~~and/or electrical~~
231. No. fitted One
232. Type of ignition system Coil 233. No. of distributors One
234. No. of ignition coils One 235. No. of spark plugs per cylinder One
236. Generator, type : dynamo/~~alternator~~—number fitted One
237. Method of drive Belt
238. Voltage of generator 12 volts
239. Battery, number One
240. Location In Engine compartment
241. Voltage of battery 12 volts

ENGINE AND CAR PERFORMANCES (as declared by manufacturer in catalogue)

250. Max. engine output 60.0 (type of horsepower: ~~BHP~~ (Gross)) at 5.400 r.p.m.
251. Max. r.p.m. 6,800 output at that figure Not available for publication
252. Max. torque 65.1 lb/ft (Gross) at 3,200 r.p.m.
253. Max. speed of the car 131.2 km./hour 82 miles/hour



Inlet cam

S =	19.482	mm.	.767	inches
T =	13.995	mm.	.551	inches
U =	27.991	mm.	1.102	inches

Exhaust cam

S =	19.329	mm.	.761	inches
T =	13.995	mm.	.551	inches
U =	27.991	mm.	1.102	inches



IMPORTANT—The conformity of the car with the following items of the present recognition form is to be disregarded during the scrutineering, when the vehicle has been entered in group 2 (Touring cars) or 3 (Grand Touring cars) : 41, 72, 80, 91, 142, 143, 144, 145, 146, 153, 156, 157, 160, 161, 162, 163, 164, 182, 186, 187, 188, 189, 201, 202, 203, 212, 213, 215, 216 222, 225, 230, 250, 251, 252, 253, 255 photographs I, M and N and page 4.

During the scrutineering of cars entered in group 4 (Sportscars) only the following items of the present recognition form are to be taken into consideration : 1, 2, 3, 9, 20, 21, 22, 23, 24, 25, 26, 70, 71, 78, 79, 90, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 147, 148, 149, 150, 158, 159, 170, 171, 172, 173, 185, 200, 270, 271, 274, 275, 290, 291, 292 and photographs A, B, D, E, F, G, H, J, K and O.

The vehicle described in this form has been subject to the following amendments :

on.....19..... rec. no.....List..... on.....19..... rec. no.....List.....
on.....19..... rec. no.....List..... on.....19..... rec. no.....List.....
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on.....19..... rec. no.....List..... on.....19..... rec. no.....List.....
on.....19..... rec. no.....List..... on.....19..... rec. no.....List.....

Optional equipment affecting preceding information. This to be stated together with reference number.

Heavy duty suspension - Code 357

7164346 Front spring assembly.

7164332/3 Rear spring assembly. R/LH.

Group II Only Heavy duty wheels Code 396.

6390537 Wheel rim Dia. -304.8 mm. 12 ins.

Width -127 mm. 5 ins.

Heavy duty rear axle - Code 397.

7158146 Rear axle assembly.

