

F.I.A. Recognition No. 1458

Group 2



# ROYAL AUTOMOBILE CLUB

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

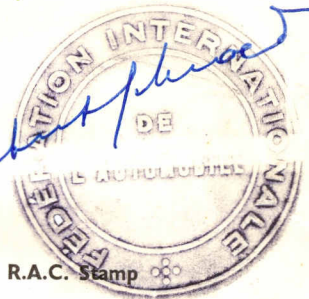
Form of recognition in accordance with appendix J to the International Sporting Code of the  
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

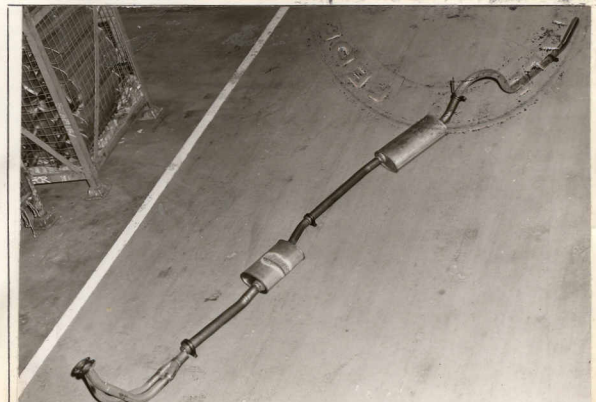
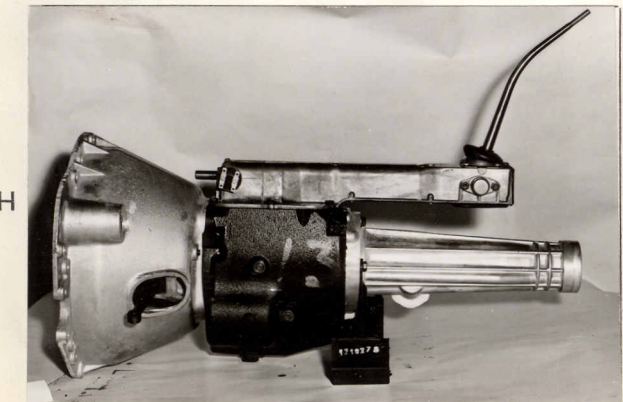
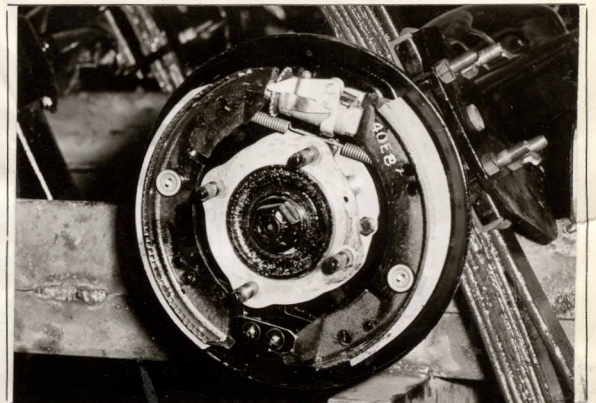
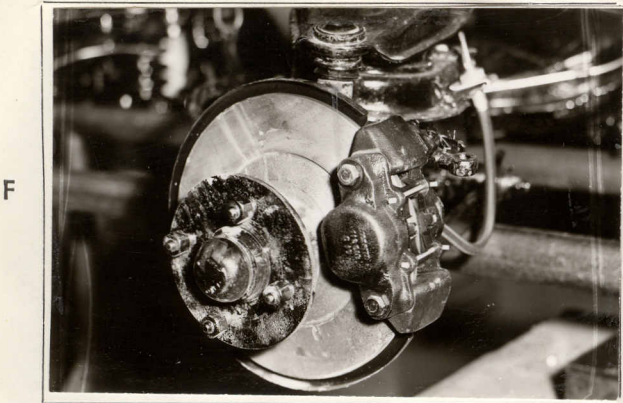
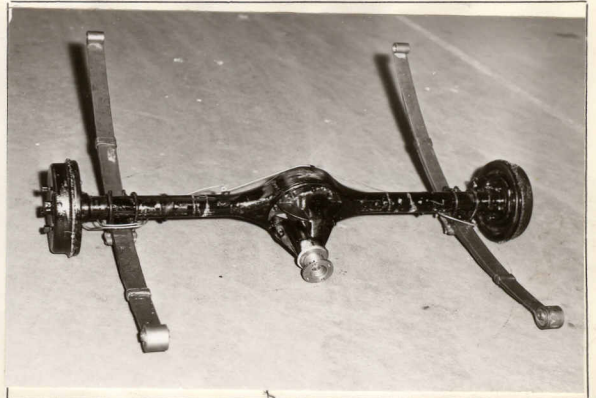
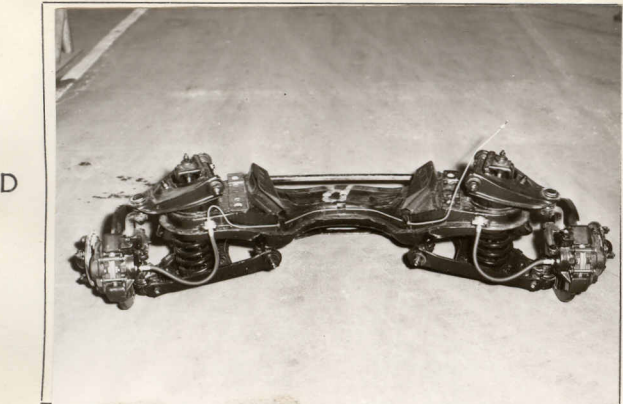
Manufacturer Rootes Group. Cylinder-capacity 1724 cm.<sup>3</sup> 105.2 in.<sup>3</sup>  
Manufacturer Sunbeam Talbot Limited. Model Sunbeam Rapier Series V  
Serial No. of chassis/body 325000001 Manufacturer Rootes Group.  
Serial No. of engine 325000001 Manufacturer Rootes Group.  
Recognition is valid from 11 Jan 1966 List 15/2  
The manufacturing of the model described in this recognition form started on August 10th 1965  
and the minimum production of 1,000 identical cars, in accordance with the specifications of  
this form was reached on January 12th 1966

Photograph A,  $\frac{3}{4}$  view of car from front

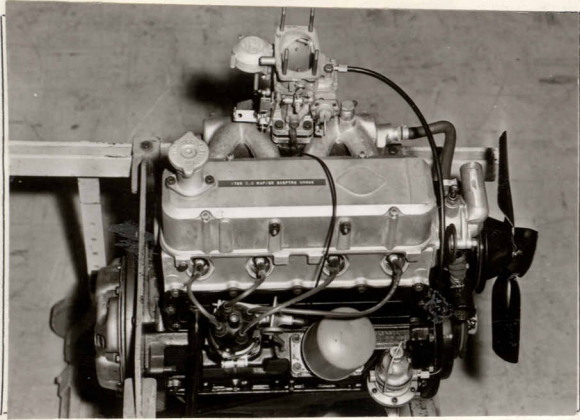


F.I.A. Stamp

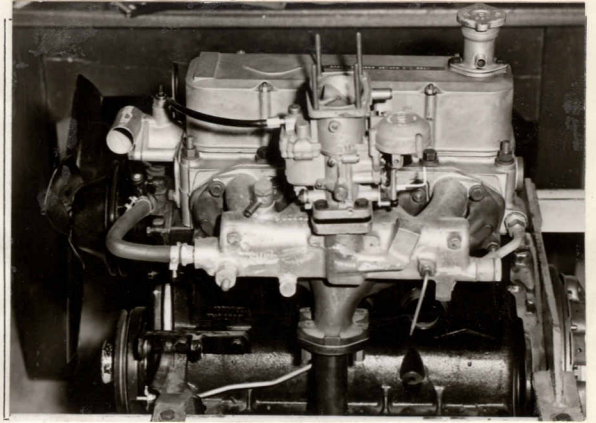




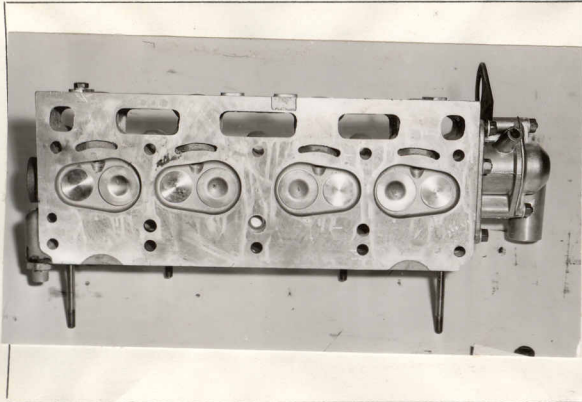
J



K



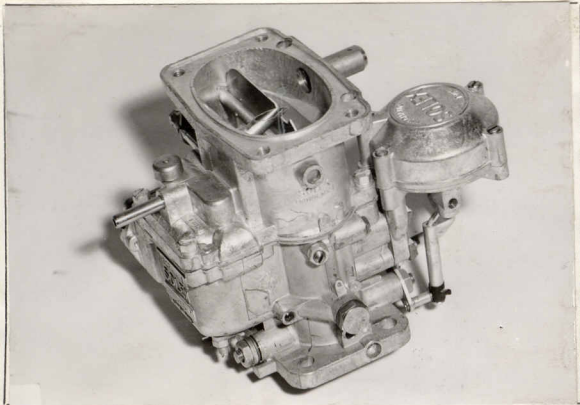
L



M



N



O



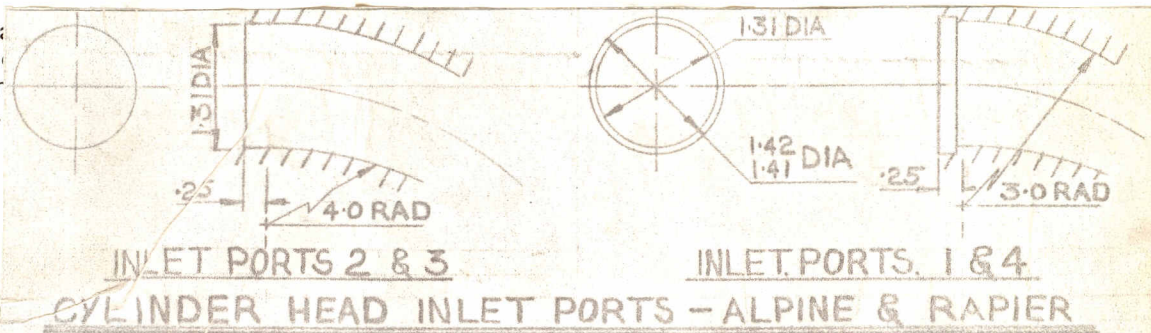
P



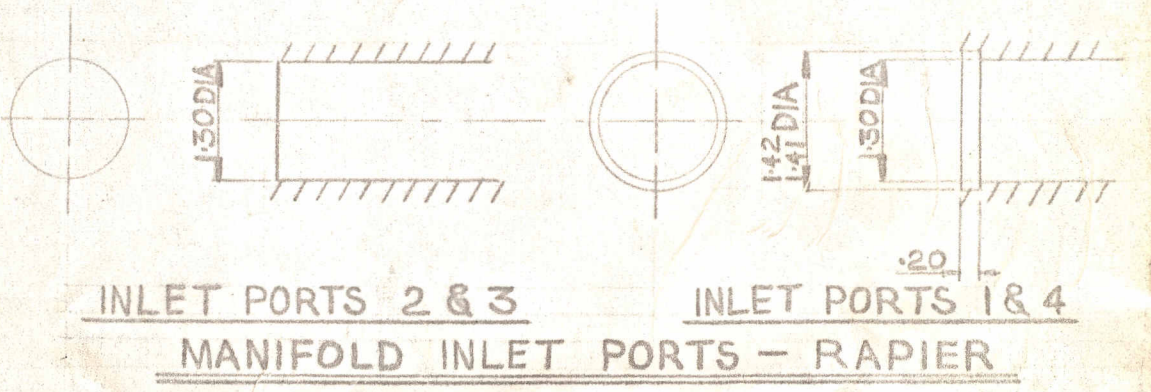
Q



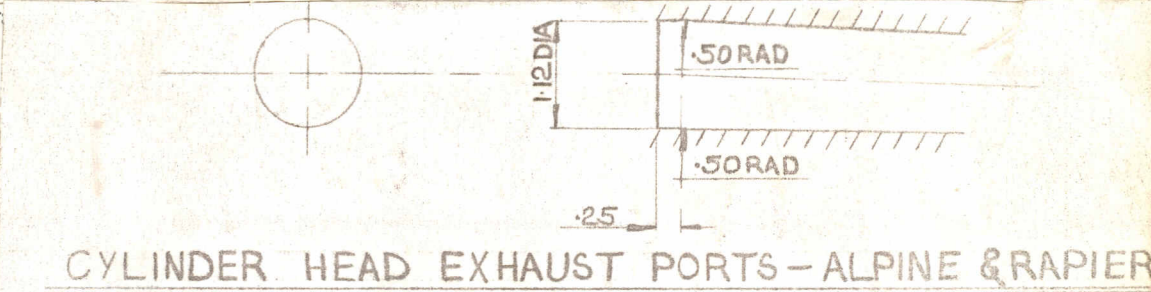
Drawing inlet ma side of cylinderh scale or dimensiono facturing tolerance.



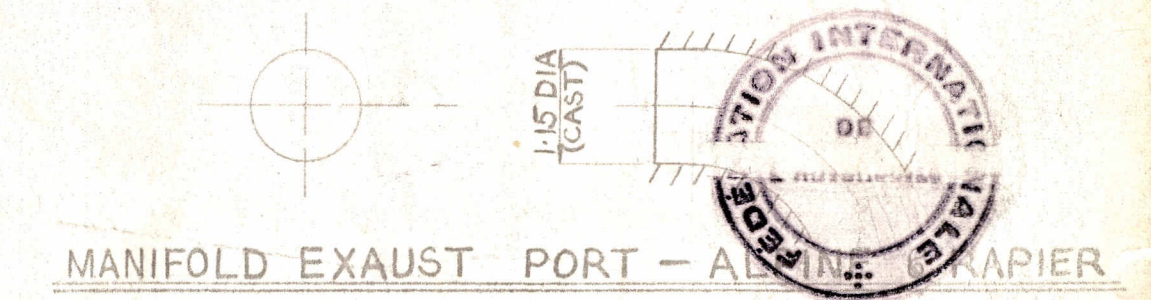
Drawing of entranc of cylinderhead. In dimensions and tolerance.



Drawing of exha ports, side of cylin cate scale or di manufacturing toler



Drawing of exit to of cylinderhead. In dimensions and tolerance.



LIMITS — ± .010 ON ALL DIMENSIONS

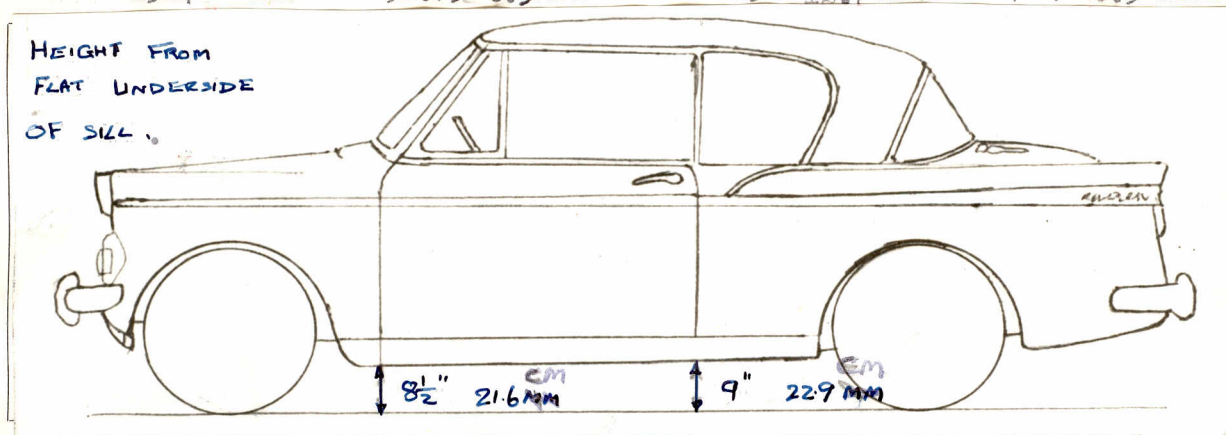
**NOTE 1.**

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

**CAPACITIES AND DIMENSIONS**

- |                |               |     |    |        |
|----------------|---------------|-----|----|--------|
| 1. Wheelbase   | 2558          | mm. | 96 | inches |
| 2. Front track |               |     |    |        |
|                | 3. Rear track |     |    |        |

1314<sup>+12.7</sup> mm.      51.75<sup>+0.5</sup> inches      1232<sup>+12.7</sup> mm.      48.5<sup>+0.5</sup> inches



- |                              |       |     |        |        |
|------------------------------|-------|-----|--------|--------|
| 4. Overall length of the car | 414.6 | cm. | 163.25 | inches |
| 5. Overall width of the car  | 154.3 | cm. | 60.75  | inches |
| 6. Overall height of the car | 145.4 | cm. | 57.25  | inches |

- |   |      |       |    |            |    |            |
|---|------|-------|----|------------|----|------------|
| 7. Capacity of fuel tank (reserve included) | 45.4 | ltrs. | 12 | gall. U.S. | 10 | gall. Imp. |
|---|------|-------|----|------------|----|------------|

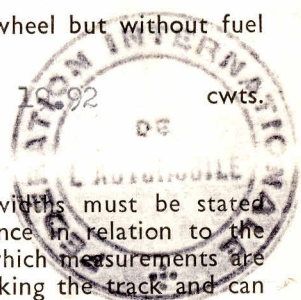
8. Seating Capacity.      4

9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools :

1012      kg.      2231      lbs.      18.92      cwt.

**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. <sup>2</sup>	1 gallon Imp.	— 4.546	ltrs.
1 cubic inch/pouce cube	— 16.387	cm. <sup>3</sup>	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)**

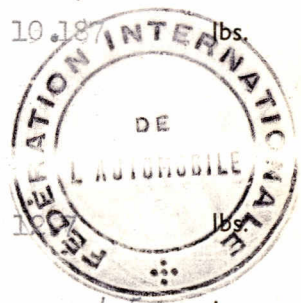
- 20. Chassis/body construction: ~~separate~~/unitary construction
- 21. Unitary construction, material(s) Steel.
- 22. Separate construction, Material(s) of chassis -
- 23. Material(s) of coachwork Steel.
- 24. Number of doors 2 Material(s) Steel.
- 25. Material(s) of bonnet Steel.
- 26. Material(s) of boot lid Steel.
- 27. Material(s) of rear-window Safety Glass
- 28. Material(s) of windscreen Zone Toughened Glass.
- 29. Material(s) of front-door windows Safety Glass.
- 30. Material(s) of rear-door windows nil.
- 31. Sliding system of door windows Vertical Winding.
- 32. Material(s) of rear-quarter light Safety Glass.

**ACCESSORIES AND UPHOLSTERY**

- 38. Interior heating : yes — no
- 39. Air conditioning : yes — no
- 40. Ventilation : yes — no
- 41. Front seats, type of seat and upholstery Reclining  
Ambla.
- 42. Weight of front seat(s), complete with supports and rails, out of the car :  
( 1 seat.) 15.85 kg. 35 lbs.
- 43. Rear seats, type of seat and upholstery Ambla - Plastic Foam Underlay.
- 44. Front bumper, material(s) Steel. Weight 4.65 kg. 10.25 lbs.
- 45. Rear bumper, material(s) Steel. Weight 4.62 kg. 10.18 lbs.

**WHEELS**

- 50. Type Ventilated Steel Disc.
- 51. Weight (per wheel, without tyre) 5.76 kg. 12.7 lbs.
- 52. Method of attachment 4 Stud.
- 53. Rim diameter 330.2 mm. 13 ins. 54. Rim width 114.2 mm. 4.5 ins.



**STEERING**

- 60. Type Recirculating Ball.
- 61. Servo-assistance : ~~yes~~ — no
- 62. Number of turns of steering wheel from lock to lock 3.6
- 63. In case of servo-assistance -

Make Sunbeam

Model Rapier V.

F.I.A. Rec. No. 1458

**SUSPENSION**

- 70. Front suspension (photograph D), type Independent Wishbone.
- 71. Type of spring Coil.
- 72. Stabiliser (if fitted) Front Transverse Torsion.
- 73. Number of shock absorbers 2
- 74. Type Telescopic.
- 78. Rear suspension (photograph E), type Orthodox live beam axle.
- 79. Type of spring Semi Elliptic Leaf.
- 80. Stabiliser (if fitted) nil.
- 81. Number of shock absorbers 2
- 82. Type Telescopic.

**BRAKES** (photographs F and G)

- 90. Method of operation Hydraulic.
- 91. Servo-assistance (if fitted), type Lockheed vacuum Servo.
- 92. Number of hydraulic master cylinders 1

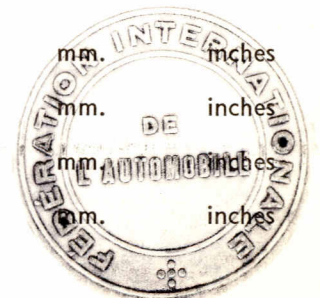
	<b>FRONT</b>	<b>REAR</b>
93. Number of cylinders per wheel	<u>2</u>	<u>1</u>
94. Bore of wheel cylinder(s)	<u>54</u> mm. <u>2.125</u> inches	<u>19</u> mm. <u>0.75</u> inches

**Drum Brakes**

95. Inside diameter	mm.	inches	<u>229</u> mm.	<u>9</u> inches
96. Length of brake linings	mm.	inches	<u>218</u> mm.	<u>8.6</u> inches
97. Width of brake linings	mm.	inches	<u>44.4</u> mm.	<u>1.75</u> inches
98. Number of shoes per brake			<u>2</u>	
99. Total area per brake	mm. <sup>2</sup>	sq. in.	<u>195</u> mm. <sup>2</sup>	<u>30.2</u> sq. in.

**Disc Brakes**

100. Outside diameter	<u>261.6</u> mm.	<u>10.3</u> inches
101. Thickness of disc	<u>8.63</u> mm.	<u>0.34</u> inches
102. Length of brake linings	<u>78.7</u> mm.	<u>3.1</u> inches
103. Width of brake linings	<u>49.2</u> mm.	<u>1.94</u> inches
104. Number of pads per brake	<u>2</u>	
105. Total area per brake	<u>64.5</u> mm. <sup>2</sup>	<u>10</u> sq. in.



**ENGINE** (photographs J and K)

130. Cycle 4 Stroke. 131. Number of cylinders 4
132. Cylinder Arrangement Vertical in line.
133. Bore 81.5 mm. 3.21 in. 134. Stroke 82.5 mm. 3.25 in.
135. Capacity per cylinder 431 cm.<sup>3</sup> 26.3 cu. in.
136. Total cylinder capacity 1724 cm.<sup>3</sup> 105.2 cu. in.
137. Material(s) of cylinder block cast iron. 138. Material(s) of sleeves (if fitted) nil.
139. Cylinder head, material(s) Aluminium. Number fitted 1
140. Number of inlet ports 4 141. Number of exhaust ports 4
142. Compression ratio 9.2 : 1
143. Volume of one combustion chamber 38 cm.<sup>3</sup> 2.28 cu. in.
144. Piston, material Aluminium. 145. Number of rings 3.
146. Distance from gudgeon pin centre line to highest point of piston crown 47 mm. 1.850 in.
147. Crankshaft : moulded/~~stamped~~ cast. 148. Type of crankshaft: integral/~~yes~~.....
149. Number of crankshaft main bearings 5.
150. Material of bearing cap cast iron.
151. System of lubrication : ~~dry sump~~/oil in sump
152. Capacity, lubricant 4.25 ltrs. 7.5 pts. 4.5 quarts U.S.
153. Oil cooler : yes/no 154. Method of engine cooling Water.
155. Capacity of cooling system 7.1 ltrs. 12.5 pts. 7.5 quarts U.S.
156. Cooling fan (if fitted) dia. 368.3 cm. 14.5 in.
157. Number of blades of cooling fan 4

**Bearings**

158. Crankshaft main, type Shell. dia. 60.325 m.m. 2.375 in.
159. Connecting rod big end, type Shell. dia. 55.975 m.m. 2.205 in.

**Weights**

160. Flywheel (clean) 10.036 kg. 22.125 lbs.
161. Flywheel with clutch (all turning parts) 14.904 kg. 32.858 lbs.
162. Crankshaft 15.4 kg. 34 lbs. 163. Connecting rod 0.737kg. 1.62 lbs.
164. Piston with rings and pin 0.425 kg. 0.973 lbs.





**FOUR STROKE ENGINES**

- 170. Number of camshafts 1
- 171. Location Right hand side of cylinder block.
- 172. Type of camshaft drive Single Stage Chain.
- 173. Type of valve operation Push rod and rocker arm.

**INLET** (see page 4)\*

- 180. Material(s) of inlet manifold Cast iron.
- 181. Diameter of valves 38.12 - 38.22 mm. 1.501 - 1.505 ins.
- 182. Max. valve lift 10.31 mm. 0.406 in.
- 183. Number of valve springs 2
- 184. Type of spring Coil.
- 185. Number of valves per cylinder 1
- 186. Tappet clearance for checking timing (cold) 0.305 mm. 0.012 ins.
- 187. Valves open at (with tolerance for tappet clearance indicated) 29° B.T.D.C.
- 188. Valves close at (with tolerance for tappet clearance indicated) 63° A.B.D.C.
- 189. Air filter, type Paper Element.

**EXHAUST** (see page 4)\*

- 195. Material(s) of exhaust manifold Cast iron.
- 196. Diameter of valves 30.53 - 30.63 mm. 1.202 - 1.206 ins.
- 197. Max. valve lift 10.26 mm. 0.404 in.
- 198. Number of valve springs 2
- 199. Type of spring Coil.
- 200. Number of valves per cylinder 1
- 201. Tappet clearance for checking timing (cold) 0.356 mm. 0.014 ins.
- 202. Valves open at (with tolerance for tappet clearance indicated) 69° B.B.D.C.
- 203. Valves close at (with tolerance for tappet clearance indicated) 23° A.T.D.C.

**CARBURETION** (photograph N)

- 210. Number of carburettors fitted 1
- 211. Type Downdraft.
- 212. Make Solex.
- 213. Model 32 Pias (Double choke.)
- 214. Number of mixture passages per carburettor 2
- 215. Flange hole diameter of exit port(s) of carburettor 32 mm. 1.26 ins.
- 216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example : SU)
  - Choke. Primary 24 mm. 0.945 ins.
  - Secondary 26 mm. ins.

**INJECTION** (if fitted)

- 220. Make of pump nil.
- 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.





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





**MOTOR SPORT DIVISION**  
**The Royal Automobile Club,**  
**31 Belgrave Square, London, S.W.1**

Manufacturer... Rootes Group...  
 Model... Sunbeam Rapier Series V.  
 F.I.A. Recognition No. 1458  
 Amendment No. 1

*Amendment to Form of Recognition*

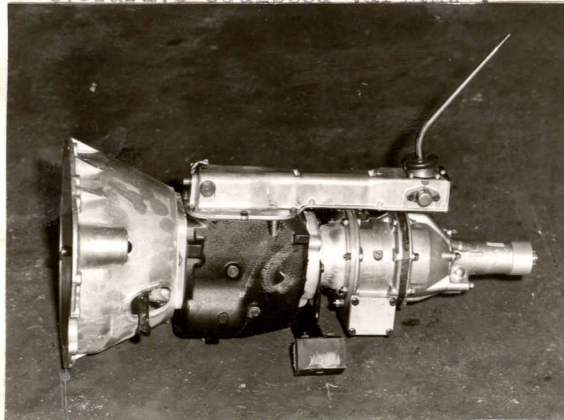
**FEDERATION INTERNATIONALE DE L'AUTOMOBILE**

No.                      Reference No.

OPTIONAL EQUIPMENT - GROUP 2.

1.                      278.

Overdrive equipped variant :



Photograph H  
 Overdrive Gearbox.

2.                      293.

Final drive ratio on cars fitted with overdrive: 4.22 : 1  
 Number of teeth:    38 - 9

3.                      9.

Weight :    Total weight of the car with normal equipment, water,  
 oil and spare wheel but without fuel or repair tools.

Overdrive variant:

1021 kgs.                      2251 lbs.                      20.10 cwts.

4.                      7.

Long range fuel tank. Part No. RG 0410.  
 Capacity of tank (reserve included).

90 litres.                      24 galls Imp.                      20 galls Imp.

Date amendment is valid from

*1st Jan. 1967.*

