

F.I.A. Recognition No. 555

Group 3



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

Rootes Group.	Cylinder-capacity <u>1724</u> cm. ³ <u>105.2</u> in. ³
Manufacturer <u>Sunbeam Talbot Limited.</u>	Model <u>Sunbeam Alpine V and G.T.</u>
Serial No. of chassis/body <u>395000001</u>	Manufacturer <u>Rootes Group.</u>
Serial No. of engine <u>395000001</u>	Manufacturer <u>Rootes Group.</u>
Recognition is valid from <u>11th Jan. 1967</u>	List <u>15/2</u>
The manufacturing of the model described in this recognition form started on <u>10th August 1965</u>	
and the minimum production of <u>500</u> identical cars, in accordance with the specifications of	
this form was reached on <u>25th October 1965</u>	

Photograph A, 3/4 view of car from front



F.I.A. Stamp

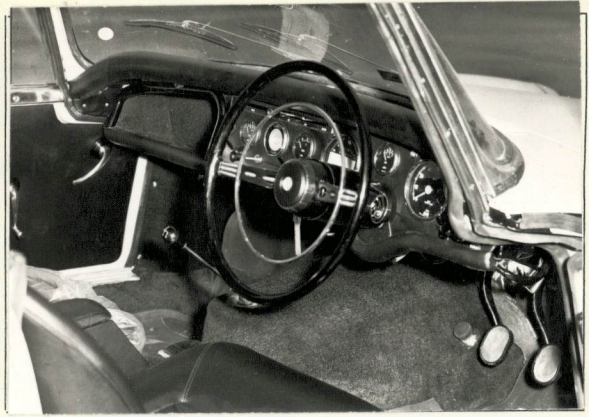


R.A.C. Stamp

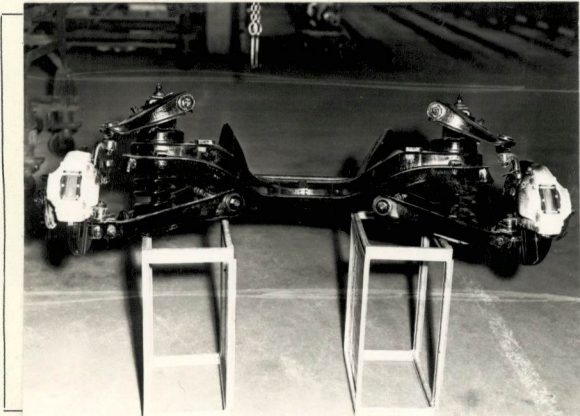
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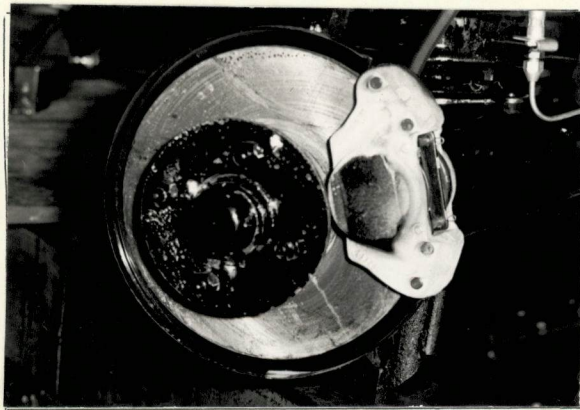
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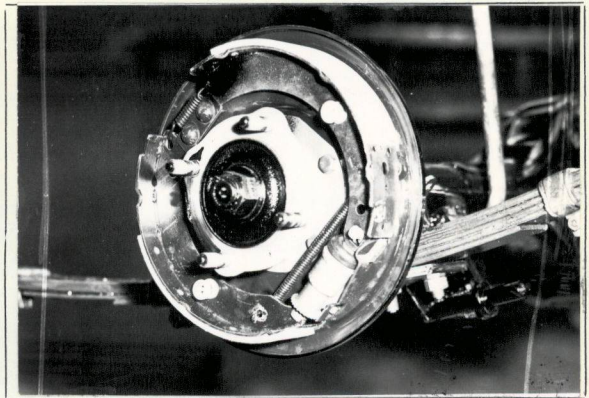
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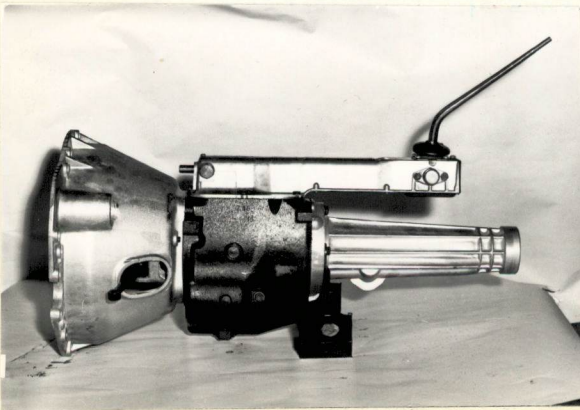
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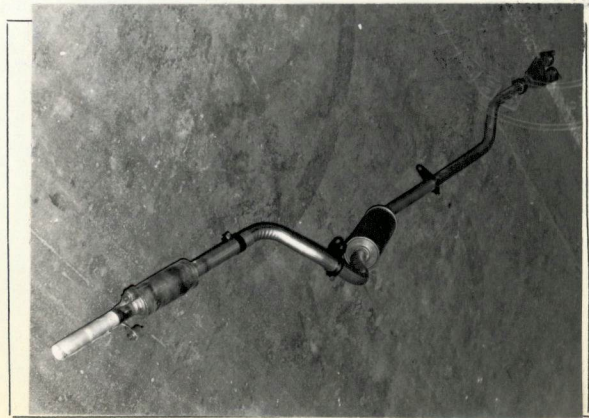
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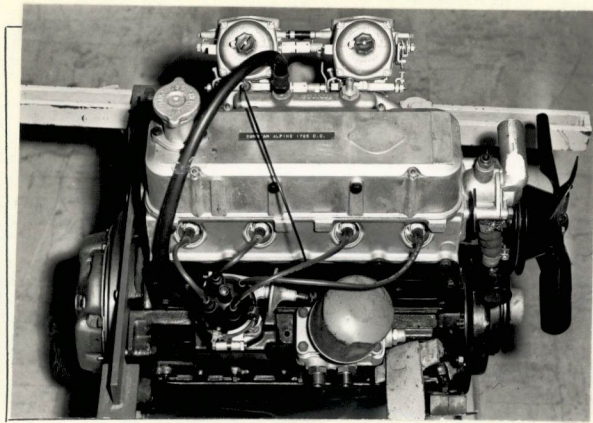


I

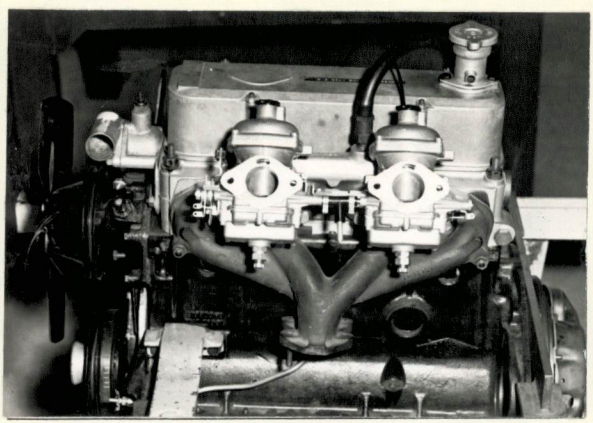


NATIONAL
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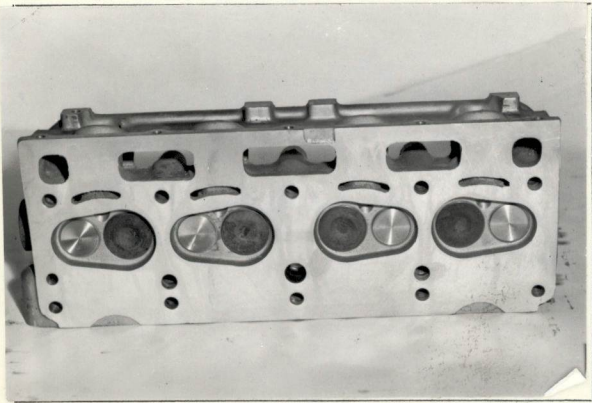
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K



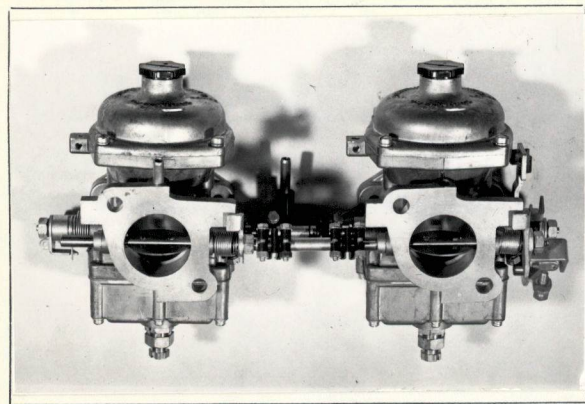
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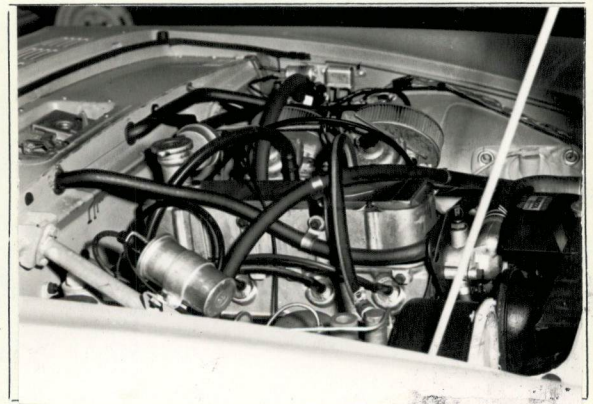
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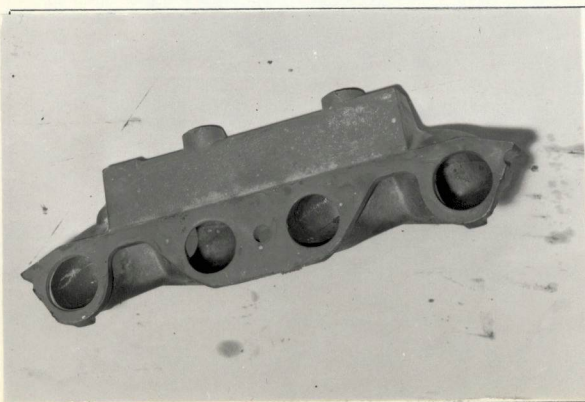
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O



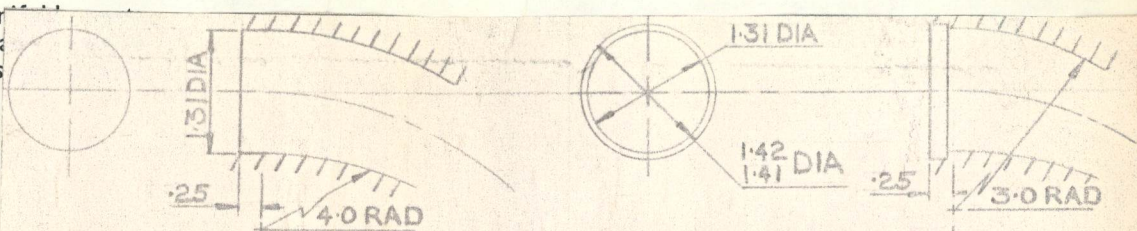
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Q

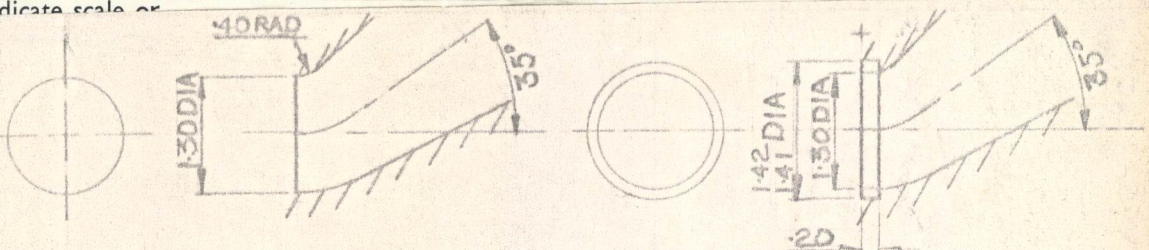


Drawing inlet manifold side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



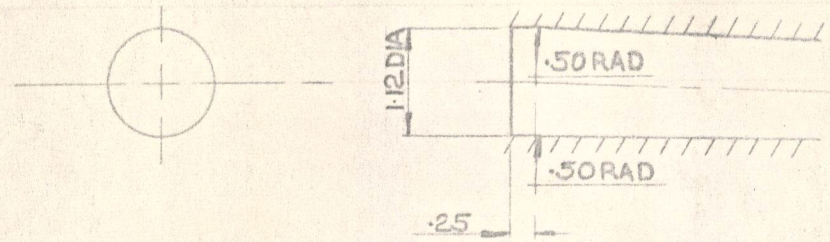
INLET PORTS 2 & 3 INLET PORTS 1 & 4
CYLINDER HEAD INLET PORTS - ALPINE & RAPIER

Drawing of entrance of cylinderhead. Indicate scale or dimensions and tolerance.



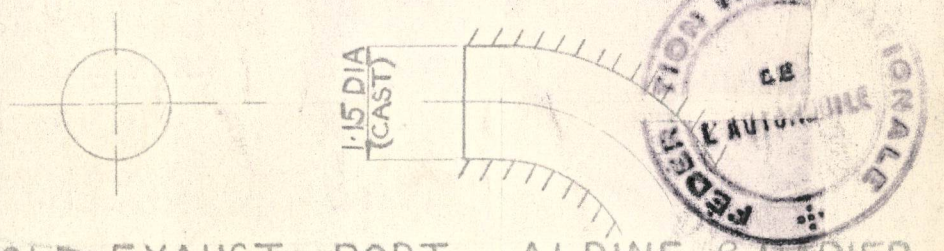
INLET PORTS 2 & 3 INLET PORTS 1 & 4
MANIFOLD INLET PORTS - ALPINE

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



CYLINDER HEAD EXHAUST PORTS - ALPINE & RAPIER

Drawing of exit of cylinderhead. Indicate scale or dimensions and tolerance.



MANIFOLD EXHAUST PORT - ALPINE & RAPIER

LIMITS ± .010 ON ALL DIMENSIONS

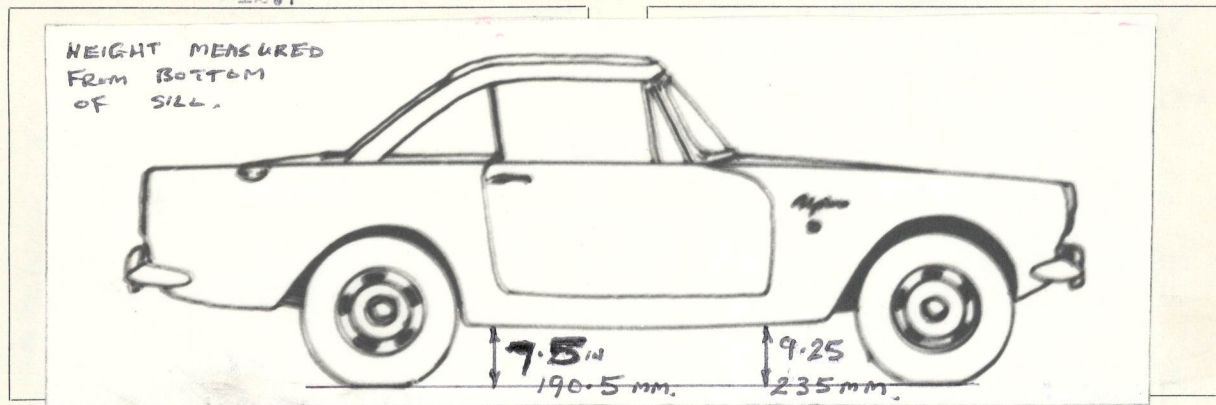
NOTE 1.

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

CAPACITIES AND DIMENSIONS

- | | | | | |
|----------------|---------------|-----|----|--------|
| 1. Wheelbase | 2184 | mm. | 86 | inches |
| 2. Front track | | | | |
| | 3. Rear track | | | |

1314 \pm 12.7 mm. 51.75 \pm 0.5 inches 1235 \pm 12.7 mm. 48.62 \pm 0.5 inches



- | | | | | |
|---|-------|-----|------|--------|
| 4. Overall length of the car | 396.2 | cm. | 156 | inches |
| 5. Overall width of the car | 153.7 | cm. | 60.5 | inches |
| 6. Overall height of the car (Soft top) | 132.0 | cm. | 52 | inches |
| 7. Capacity of fuel tank (reserve included) | | | | |

51.14 ltrs. 13.5 gall. U.S. 11.25 gall. Imp.

- | | | | | |
|--|---|--|--|--|
| 8. Seating Capacity. | 2 | | | |
| 9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools : | | | | |

Soft top without overdrive. 949 kg. 2092 lbs. 18 cwt. 2 qtrs. 20 lbs.

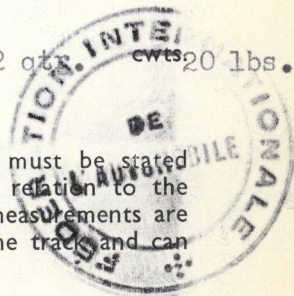
NOTE 2.

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 with Fibre hood,
- 22. Separate construction, Material(s) of chassis -
- 23. Material(s) of coachwork -
- 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 I.C.I. "Vybak"
- 28. Material(s) of windscreen Safety Glass, Zone Toughened or Laminated.
- 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 (Hard top only)

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 Ambla
(Reclining)
- 42. Weight of front seat(s), complete with supports and rails, out of the car :
(one seat). 11.34 kg. 25 lbs.
- 43. Rear seats, type of seat and upholstery Ambla.
- 44. Front bumper, material(s) Steel. Weight 4.2 kg. 9.25 lbs.
- 45. Rear bumper, material(s) Steel. Weight 4.2 kg. 9.5 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 3.5
- 63. In case of servo-assistance -



SUSPENSION

- 70. Front suspension (photograph D), type Independent Wishbone.
- 71. Type of spring Coil.
- 72. Stabiliser (if fitted) Transverse Torsion.
- 73. Number of shock absorbers 2
- 74. Type Telescopic.
- 78. Rear suspension (photograph E), type Live 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 Girling Vacuum.
- 92. Number of hydraulic master cylinders 1

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

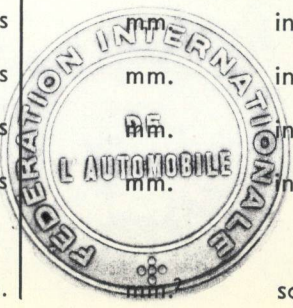
Drum Brakes

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

Disc Brakes

100. Outside diameter	250	mm.	9.85	inches	mm.	inches
101. Thickness of disc	12.7	mm.	0.50	inches	mm.	inches
102. Length of brake linings	73.66	mm.	2.9	inches	mm.	inches
103. Width of brake linings	53.64	mm.	2.1	inches	mm.	inches
	52	mm.	2.05	inches	mm.	inches
104. Number of pads per brake			2			
105. Total area per brake	67.1	mm. ²	10.4	sq. in.	mm. ²	sq. in.

Taper.



ENGINE (photographs J and K)

- 130. Cycle 4 Stroke.
- 131. Number of cylinders 4
- 132. Cylinder Arrangement In line vertical.
- 133. Bore 81.5 mm. 3.21 in.
- 134. Stroke 82.5 mm. 3.25 in.
- 135. Capacity per cylinder 431 cm.³ 26.3 cu. in.
- 136. Total cylinder capacity 1724 cm.³ 105.2 cu. in.
- 137. Material(s) of cylinder block Cast iron.
- 138. Material(s) of sleeves (if fitted) -
- 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 Nominal.
- 143. Volume of one combustion chamber 38 cm.³ 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 46.99 mm. 1.850 in.
- 147. Crankshaft : moulded/~~stamped~~
- 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. 3.175 cm. 12.5 in.
- 157. Number of blades of cooling fan 4

Bearings

- 158. Crankshaft main, type Shell dia. 60.32 m.m. 2.375 in.
- 159. Connecting rod big end, type Shell dia. 55.97 m.m. 2.205 in.

Weights

- 160. Flywheel (clean) 10.036 kg. 22.12 lbs.
- 161. Flywheel with clutch (all turning parts) 14.90 kg. 32.86 lbs.
- 162. Crankshaft 15.40 kg. 34 lbs.
- 163. Connecting rod 0.737 kg. 1.62 lbs.
- 164. Piston with rings and pin 0.613 kg. 1.352 lbs.



FOUR STROKE ENGINES

- 170. Number of camshafts 1 171. Location Right hand side of 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
- 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)*

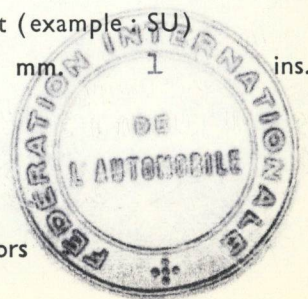
- 195. Material(s) of exhaust manifold Cast iron.
- 196. Diameter of valves 30.53 - 30.63 mm 1.202 - 1.206 ins.
- 197. Max. valve lift 10.26 mm 0.404 in. 198. Number of valve springs 2
- 199. Type of spring Coil. 200. Number of valves per cylinder 1
- 201. Tappet clearance for checking timing (cold) .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 2 211. Type Horizontal.
- 212. Make Zenith Stromberg. 213. Model C.D. 150.
- 214. Number of mixture passages per carburettor 1
- 215. Flange hole diameter of exit port(s) of carburettor 38.1 mm 1.5 ins.
- 216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example: SU) 25.4 mm 1 ins.

INJECTION (if fitted) NIL.

- 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 1
- 232. Type of ignition system Coil.
- 233. No. of distributors 1.
- 234. No. of ignition coils 1
- 235. No. of spark plugs per cylinder 1
- 236. Generator, type : ~~dynamo~~/alternator—number fitted 1.
- 237. Method of drive Belt.
- 238. Voltage of generator 12 volts
- 239. Battery, number 1
- 240. Location Under Rear Seat Platform.
- 241. Voltage of battery 12 volts

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

- 250. Max. engine output 100 (type of horsepower: B.H.P.) at 5500 r.p.m.
- 251. Max. r.p.m. 6450 output at that figure Not available.
- 252. Max. torque 110.2 lb.ft. at 3700 r.p.m.
- 253. Max. speed of the car 160 km./hour 100 miles/hour

Exhaust Cam 3.

S = 21.45 ⁺ 0.08 mm. 0.8444 ⁺ 0.003 ins.
 T = 13.87 mm. 0.546 inches
 U = 27.98 ⁺ 0.0 mm. 1.1017 ⁺ 0.002 ins.

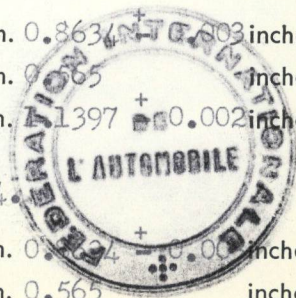
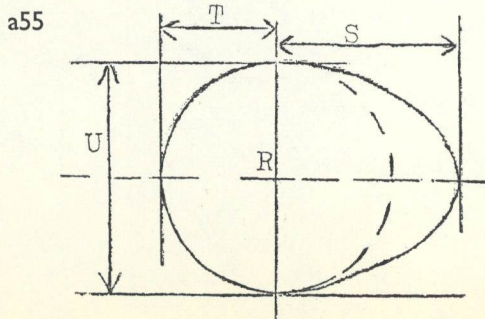
Inlet cam

S = 21.93 ⁺ 0.08 mm. 0.8634 ⁺ 0.003 inches
 T = 14.35 mm. 0.565 inches
 U = 28.95 ⁺ 0.05 mm. 1.1397 ⁺ 0.002 inches

Exhaust cam 1, 2 and 4.

S = 21.93 ⁺ 0.08 mm. 0.8634 ⁺ 0.003 inches
 T = 14.35 mm. 0.565 inches
 U = 28.95 ⁺ 0.05 mm. 1.1397 ⁺ 0.002 inches

R = centre of camshaft



DRIVE TRAIN

CLUTCH

260. Type of clutch Diaphragm. 261. No. of plates 1
262. Dia. of clutch plates 19.1 cm. 7.52 ins.
263. Dia. of linings, inside 30.0 cm. 5.12 ins.
- outside 19.1 cm. 7.52 ins.
264. Method of operating clutch Hydraulic.

GEAR BOX (photograph H)

270. Manual type, make Rootes. Method of operation Manual.
271. No. of gear-box ratios forward 4 272. Synchronized forward ratios 4
273. Location of gear-shift Centre Floor.
274. Automatic, make nil. type -
275. No. of forward ratios - 276. Location of gear shift -

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth
1	3.122	37 16						
2	1.993	31 21						
3	1.296	24 25						
4	1.00	20 27						
5								
6								
reverse	3.323	32 13						

278. Overdrive, type Laycock Epicyclic Optional.
279. Forward gears on which overdrive can be selected 3 and 4
280. Overdrive ratio 0.803 : 1

FINAL DRIVE

290. Type of final drive Hypoid. 291. Type of differential Be Gear.
292. Type of limited slip differential (if fitted) -
293. Final drive ratio 3.89 : 1 Number of teeth 35 - 9



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 Alpine V and G.T.
 F.I.A. Recognition No.
 Amendment No. 1

Amendment to Form of Recognition

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.

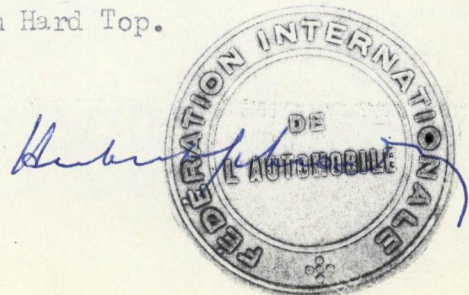
Reference No.

The following variants are available:

Detachable Hard Top and Grand Touring 2 seater Coupés of similar outward appearance.



Photograph A with Hard Top.



Date amendment is valid from..... 1st Jan. 1967

Stamp of F.I.A./R.A.C.



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

Manufacturer Rootes Group
 Model Sunbeam Alpine V and G.T.
 F.I.A. Recognition No. _____
 Amendment No. 2

Amendment to Form of Recognition

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No. Reference No.



Photograph B with Hard Top.

9. Weights.

Hard Top Tourer.	981 kgs.	2163 lbs.	19 cwts.	17 str.	7 lbs.
Grand Touring Coupé.	966 kgs.	2130 lbs.	18 cwts.	2 qtr	2 lbs.

Date amendment is valid from 1st Jan 1967.





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

Manufacturer.....Rootes Group.....
Model.....Sunbeam Alpine V and G.T.....
F.I.A. Recognition No.
Amendment No.4.....

Amendment to Form of Recognition

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.

Reference No.

OPTIONAL EQUIPMENT - GROUP 3.

Wheels.

- | | | | |
|-----|------------------------------|--|-------------------|
| 50. | <u>Type:</u> | Wire Spoke. | Part No. 1201361. |
| 51. | <u>Weight:</u> | (Per wheel without tyre) | 5½ kgs. 12 lbs. |
| 52. | <u>Method of attachment:</u> | Splined Centre Lock, Eared or non Eared cap. | |
| 53. | <u>Rim diameter:</u> | 330.2 mm. | 13 ins. |
| 54. | <u>Rim Width:</u> | 114.3 mm. | 4.5 ins. |

Date amendment is valid from

1st Jan 1967.



Stamp of F.I.A./R.A.C.