

F.I.A. Recognition No. **5286**
Group **1 - Touring**



ROYAL AUTOMOBILE CLUB

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

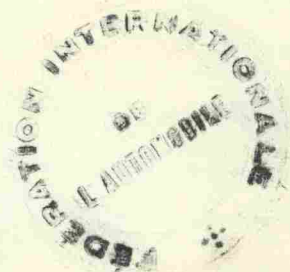
Form of recognition in accordance with appendix J to the International Sporting Code of the
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Manufacturer	Rover Company Limited	Cylinder-capacity	3531	cm. ³	215.5	in. ³
Serial No. of chassis/body	42000001	Model	3500	Manufacturer	Rover Co. Ltd.	
Serial No. of engine	42000001	Manufacturer	Rover Co. Ltd.			
Recognition is valid from	1st JANUARY APRIL 1969	List	69/2			
The manufacturing of the model described in this recognition form started on		1st January		19 68		
and the minimum production of		5,000		identical cars, in accordance with the specifications of		
this form was reached on		31st December		19 68		

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



F.I.A. Stamp



R.A.C. Stamp

B



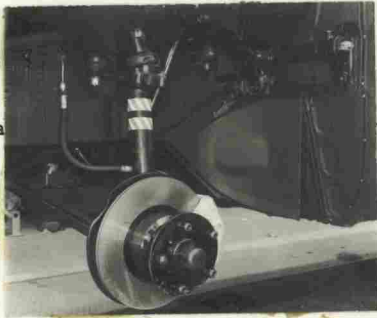
C



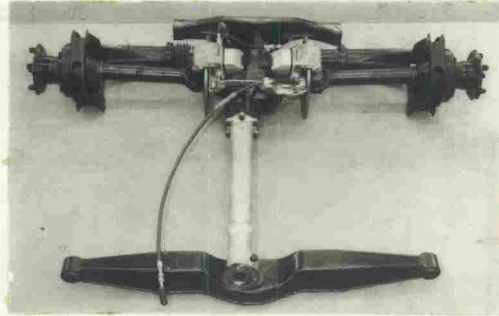
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front a

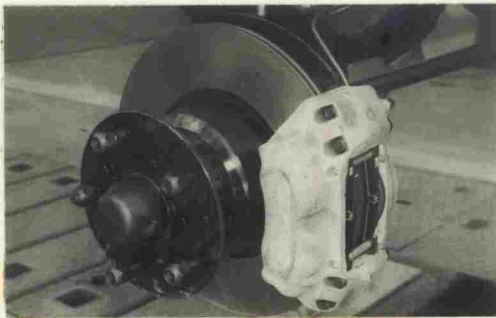
hout



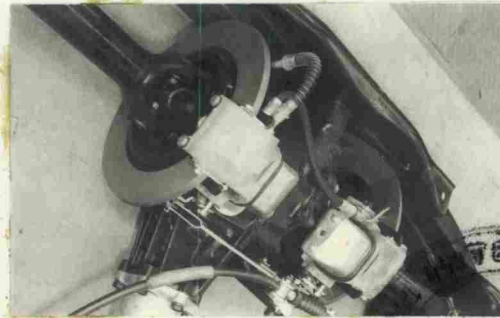
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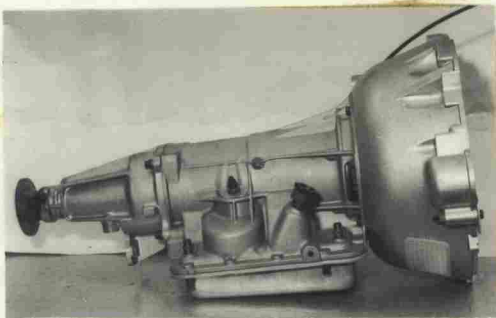
F



G



H

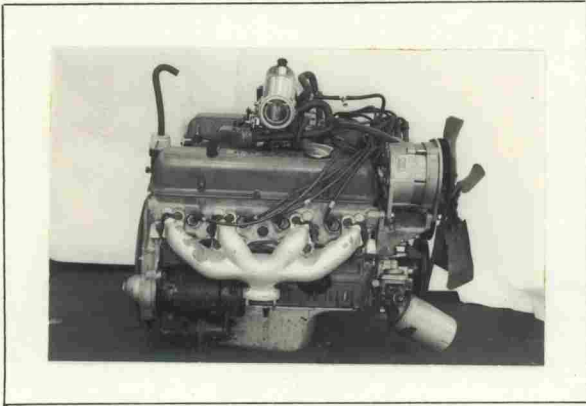


I



STAMP: BUREAU INTERNATIONAL DE RECHERCHES AUTOMOBILES

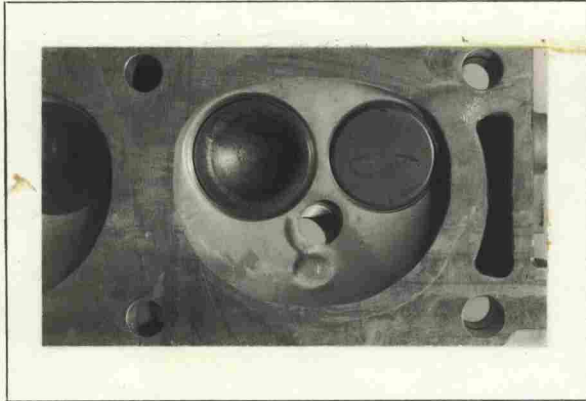
J



K



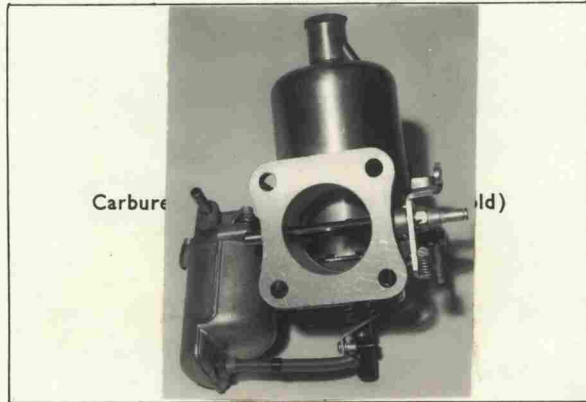
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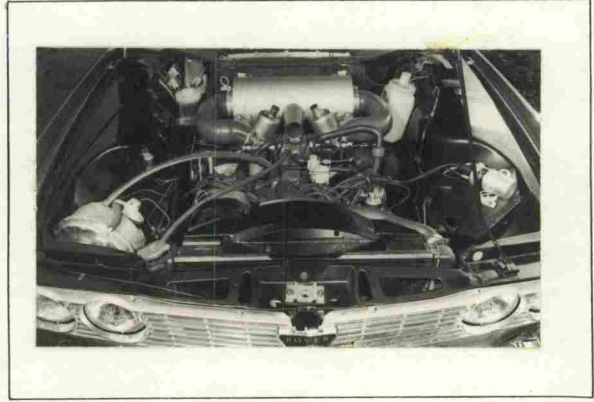
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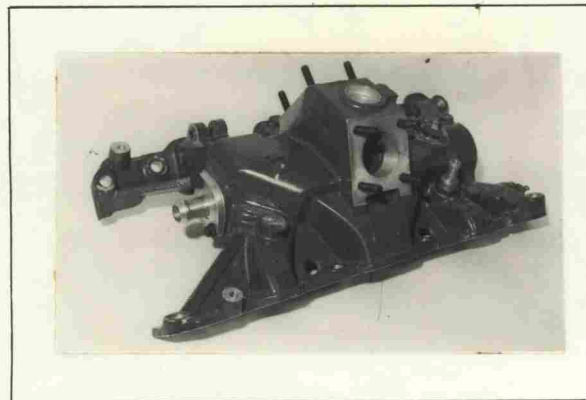
N



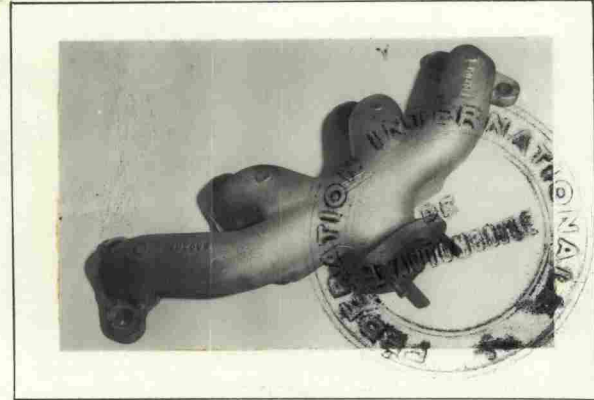
O



P



Q



Exhaust Outlet Flange
Cone diameter - 1.937+0.060

Make ROVER

Model 3500

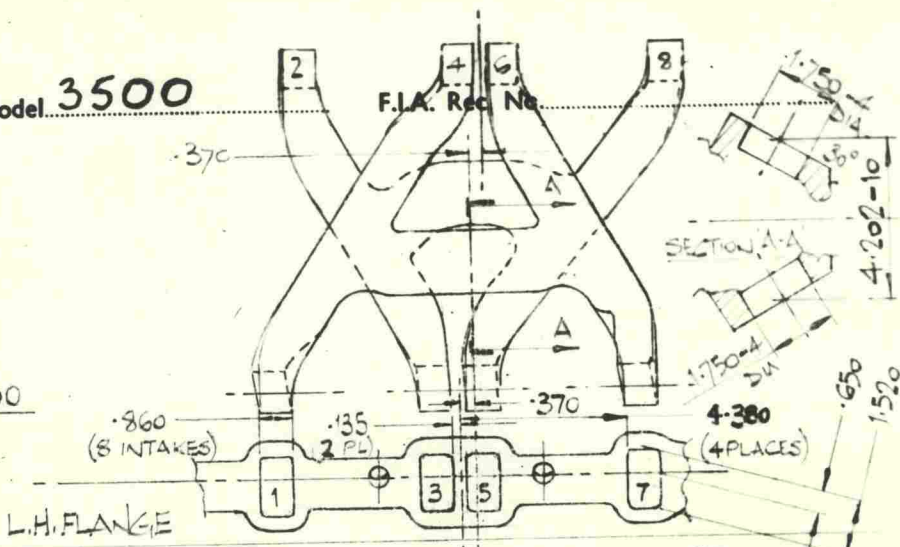
F.I.A. Rec No

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

GENERAL TOLERANCE — ± 0.060
UNLESS SPECIFIED

SCALE 1:5

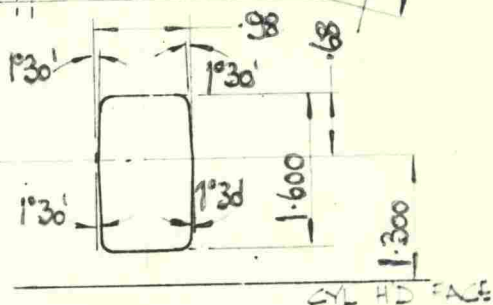
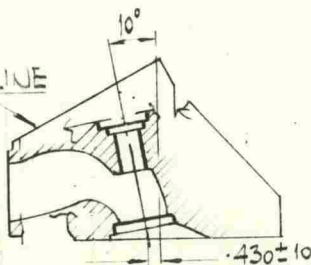
L.H. FLANGE



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

GENERAL OUTLINE

GENERAL TOL. ± 0.060
SCALE 1:5 & 1:2



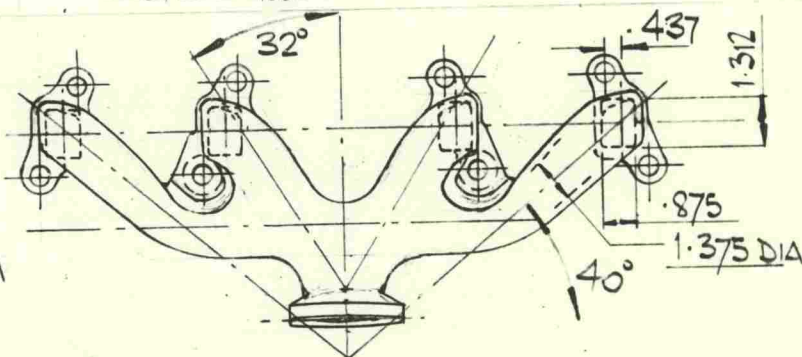
Drawing of exhaust manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.

L.H. DRAWN.

RH SYMMETRICAL OPPOSITE

GEN. TOL ± 0.060 OF TRUE FORM

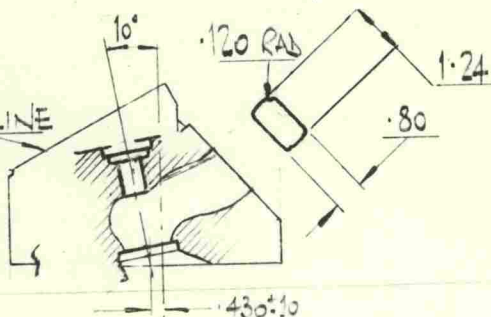
SCALE 1/5



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

GENERAL OUTLINE

GENERAL TOL. ± 0.060
SCALE 1:5



Make Rover

Model 3500

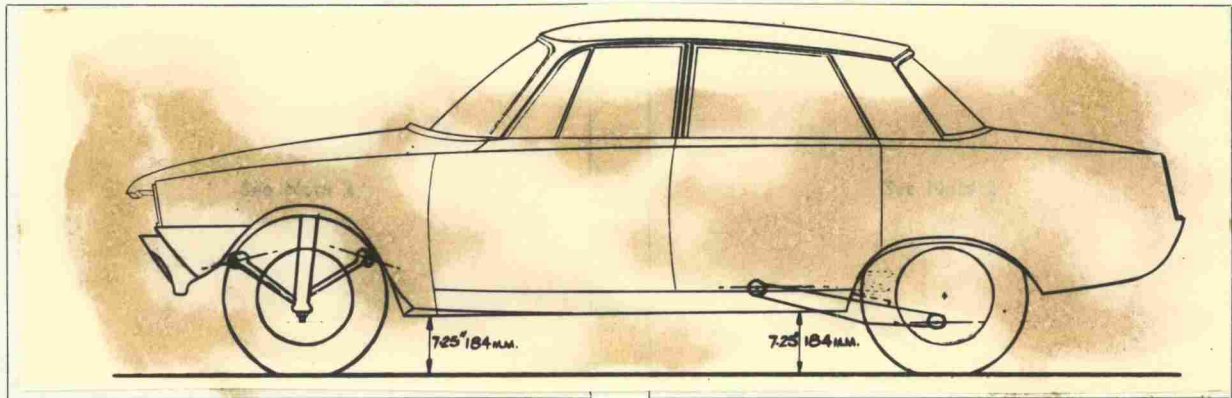
F.I.A. Rec. No.

NOTE 1.

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

CAPACITIES AND DIMENSIONS

1. Wheelbase		2630	mm.	103.375	inches
2. Front track	1350	mm.	53.375	inches	
					3. Rear track
				1315	mm. 51.75 inches



4. Overall length of the car		457	cm.	179.75	inches	
5. Overall width of the car		168	cm.	66.0	inches	
6. Overall height of the car		142	cm.	55.75	inches	
7. Capacity of fuel tank (reserve included)						
	68	ltrs.	18	gall. U.S.	15	gall. Imp.
8. Seating Capacity. Four						
9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools :						
	1279	kg.	2822	lbs.	25.2	cwts.

NOTE 2.

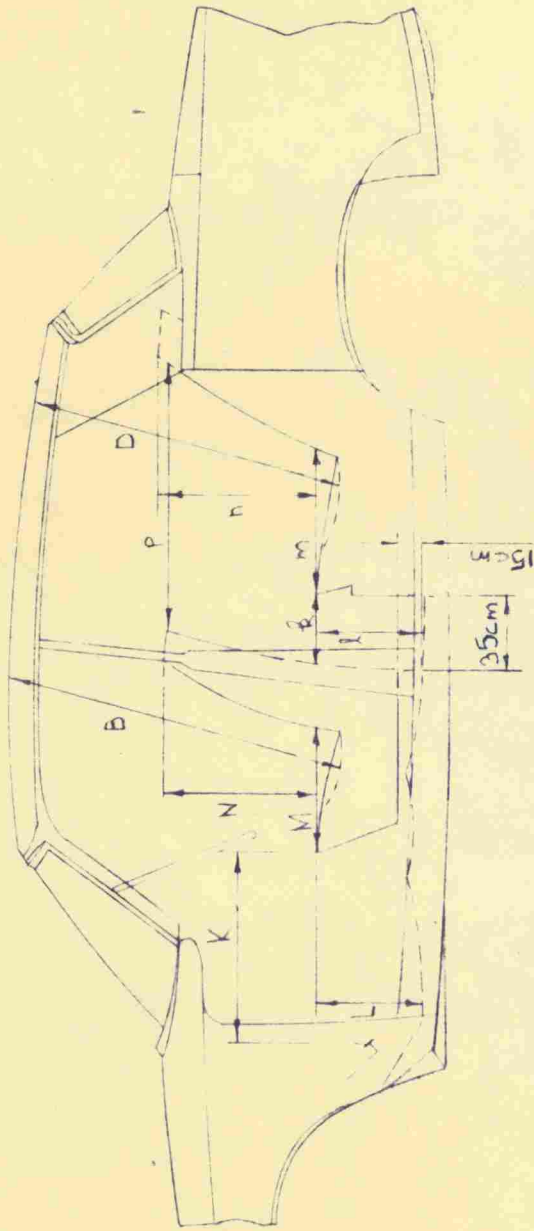
Differences in track caused by the use of other wheels with different rim widths must be stated when recognition is requested for the wheels concerned. Specify ground clearance in relation to the track and give drawing of two easily recognisable points at front and rear at which measurements are taken. 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	—	0.946	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.





DIM.	Cms.	DIM.	Cms.
K	50.5	L	37.4
#	25.4	l	38.2
M	42.6	P	76.4
m	48.8	B	94.22
N	38.8	□	89.1
n	40.8		

CHASSIS AND COACHWORK (Photographs A, B and C)

- 20. Chassis/body construction: ~~separate/unitary construction~~ ^{Base unit} Steel base unit with bolt-on skin panels.
- 21. ~~Unitary~~ construction, material(s) ^{Base unit} Welded steel.
- 22. Separate construction, Material(s) of chassis ---
- 23. Material(s) of coachwork Steel and aluminium alloy
- 24. Number of doors 4 Material(s) Steel
- 25. Material(s) of bonnet Aluminium alloy
- 26. Material(s) of boot lid Aluminium alloy
- 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 Glass
- 31. Sliding system of door windows Mechanical wind
- 32. Material(s) of rear-quarter light Glass

ACCESSORIES AND UPHOLSTERY

- 38. Interior heating : yes ~~yes~~
- 39. Air conditioning : ~~yes~~ no
- 40. Ventilation : yes ~~yes~~
- 41. Front seats, type of seat and upholstery Individual, leather.
- 42. Weight of front seat(s), complete with supports and rails, out of the car :

16.8 kg.	37 lbs.
----------	---------
- 43. Rear seats, type of seat and upholstery Individual, leather
- 44. Front bumper, material(s) Steel Weight 5.9 kg. 13 lbs.
- 45. Rear bumper, material(s) Steel Weight 5.5 kg. 12 lbs.

WHEELS

- 50. Type Pressed steel
- 51. Weight (per wheel, without tyre) 7.5 kg. 16.5 lbs.
- 52. Method of attachment Five studs
- 53. Rim diameter 356 mm. 14 ins. 54. Rim width 140 mm. 5.5 ins.

STEERING

- 60. Type Recirculating ball & nut.
- 61. Servo-assistance : ~~yes~~ no
- 62. Number of turns of steering wheel from lock to lock 4 $\frac{1}{2}$
- 63. In case of servo-assistance ---



Make Rover

Model 3500

F.I.A. Rec. No.

SUSPENSION

- 70. Front suspension (photograph D), type Independent: transverse bottom links & leading top links acting on horizontal springs.
- 71. Type of spring Helical coil.
- 72. Stabiliser (if fitted) Clamped to top links.
- 73. Number of shock absorbers Two
- 74. Type Hydraulic, telescopic.
- 78. Rear suspension (photograph E), type De Dion type incorporating sliding joint and Watts linkage.
- 79. Type of spring Helical coil
- 80. Stabiliser (if fitted) None.
- 81. Number of shock absorbers Two
- 82. Type Hydraulic, telescopic.

BRAKES (photographs F and G)

- 90. Method of operation Hydraulic.
- 91. Servo-assistance (if fitted), type Lockheed type 8 unit.
- 92. Number of hydraulic master cylinders One

93. Number of cylinders per wheel	<u>Three</u>	FRONT	<u>One</u>	REAR
94. Bore of wheel cylinder(s)	57.2 (1) mm.	2.25 (1) inches	19 mm.	0.750 inches
	40.4 (2) mm.	1.59 (2) inches		

Drum Brakes

95. Inside diameter	mm.	inches	mm.	inches
96. Length of brake linings	mm.	inches	mm.	inches
97. Width of brake linings	mm.	inches	mm.	inches
98. Number of shoes per brake				
99. Total area per brake	mm. ²	sq. in.	mm. ²	sq. in.

Disc Brakes

100. Outside diameter	275 mm.	10.82 inches	172 mm.	6.77 inches
101. Thickness of disc	12.7 mm.	0.50 inches	6 mm.	0.236 inches
102. Length of brake linings	85.6 mm.	3.37 inches	68 mm.	2.69 inches
103. Width of brake linings	50.8 mm.	2.0 inches	33.3 mm.	1.31 inches
104. Number of pads per brake		<u>Two</u>		<u>Two</u>
105. Total area per brake	8691 mm. ²	13.47 sq. in.	7439 mm. ²	11.53 sq. in.



ENGINE (photographs J and K)

- 130. Cycle Four stroke
- 131. Number of cylinders Eight
- 132. Cylinder Arrangement 90° V.
- 133. Bore 88.9 mm. 3.50 in.
- 134. Stroke 71.1 mm. 2.80 in.
- 135. Capacity per cylinder 441.4 cm.³ 26.72cu. in.
- 136. Total cylinder capacity 3531 cm.³ 215.5 cu. in.
- 137. Material(s) of cylinder block Aluminium alloy
- 138. Material(s) of sleeves (if fitted) Cast iron
- 139. Cylinder head, material(s) Aluminium alloy
- Number fitted Two
- 140. Number of inlet ports Eight
- 141. Number of exhaust ports Eight
- 142. Compression ratio 10.5:1
- 143. Volume of one combustion chamber 34.1 cm.³ 2.1 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 47.295 mm. 1.862 in.
- 147. Crankshaft: moulded/~~stamped~~
- 148. Type of crankshaft: integral/~~yes~~.....
- 149. Number of crankshaft main bearings Five
- 150. Material of bearing cap Cast iron
- 151. System of lubrication: ~~dry sump/oil in sump~~ Oil in sump.
- 152. Capacity, lubricant 5.7 ltrs. 10 pts. 6.0 quarts U.S.
- 153. Oil cooler: ~~yes~~/no
- 154. Method of engine cooling Liquid coolant
- 155. Capacity of cooling system 8.7 ltrs. 15.25 pts. 9.15 quarts U.S.
- 156. Cooling fan (if fitted) dia. 41.9 cm. 16.5 in.
- 157. Number of blades of cooling fan Five

Bearings

- 158. Crankshaft main, type Lead-bronze-indium. dia. 58.405 m.m. 2.2995 in.
- 159. Connecting rod big end, type Lead-bronze-indium dia. 50.806 m.m. 2.000 in.

Weights

- 160. ~~Flywheel (clean)~~ Driveplate with starter ring 3.4 kg. lbs.
- 161. Flywheel with clutch (all turning parts) N/A (no clutch) kg. lbs.
- 162. Crankshaft 17.5 kg. 38.5 lbs.
- 163. Connecting rod 0.5 kg. 1.08 lbs.
- 164. Piston with rings and pin 0.6 kg. 1.3 lbs.



FOUR STROKE ENGINES

170. Number of camshafts One 171. Location Cylinder block
 172. Type of camshaft drive Chain
 173. Type of valve operation Hydraulic tappet and pushrod

INLET (see page 4)*

180. Material(s) of inlet manifold Aluminium alloy
 181. Diameter of valves 38.10 mm. 1.50 ins.
 182. Max. valve lift 9.91 mm. 0.39 in. 183. Number of valve springs Two per valve
 184. Type of spring Coil 185. Number of valves per cylinder One
 186. Tappet clearance for checking timing (cold) Self-adjusting tappets mm. ins.
 187. Valves open at (with tolerance for tappet clearance indicated) 30° B.T.D.C.
 188. Valves close at (with tolerance for tappet clearance indicated) 75° 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 33.40 mm. 1.315 ins.
 197. Max. valve lift 9.91 mm. 0.39 in. 198. Number of valve springs Two per valve
 199. Type of spring Coil 200. Number of valves per cylinder One
 201. Tappet clearance for checking timing (cold) Self-adjusting tappets. mm. ins.
 202. Valves open at (with tolerance for tappet clearance indicated) 68° E.B.D.C.
 203. Valves close at (with tolerance for tappet clearance indicated) 37° A.T.D.C.

CARBURETION (photograph N)

210. Number of carburettors fitted Two 211. Type Constant vacuum
 212. Make S.U. 213. Model H.S.6.
 214. Number of mixture passages per carburettor One
 215. Flange hole diameter of exit port(s) of carburettor 44.5 mm. 1.75 ins.
 216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example : SUBJECTIVE)
34.3 mm. 1.35 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.



Make Rover

Model 3500

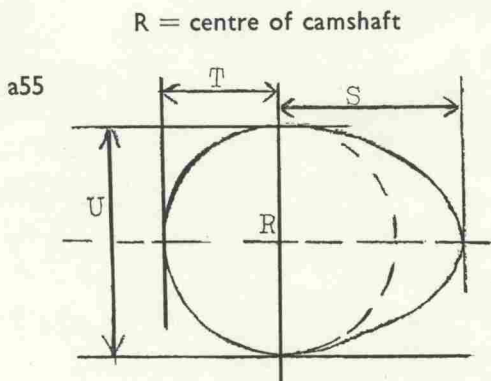
F.I.A. Rec. No.

ENGINE ACCESSORIES

- 230. Fuel pump : mechanical ~~and/or electrical~~
- 231. No. fitted One
- 232. Type of ignition system Coil, (ballasted)
- 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 boot
- 241. Voltage of battery 12 volts

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

- 250. Max. engine output 184 bhp (type of horsepower: Gross) at 5200 r.p.m.
- 251. Max. r.p.m. 5200 output at that figure 184 bhp (gross).
- 252. Max. torque 226 lbs. ft. at 3000 r.p.m.
- 253. Max. speed of the car 190 km./hour 118 miles/hour



Inlet cam

S = 20.128 mm.
 T = 13.761 mm.
 U = 27.521 mm.

Exhaust cam

S = 20.128 mm.
 T = 13.761 mm.
 U = 27.521 mm.



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 re

- A. Tachometer, part number 568012.
- B. Front seat headrests, part number 367910.
- C. Heated rear screen, part number 376102.
- D. Alternative wheels: part number 565621.
 - 50. Type: 'Rostyle', pressed steel.
 - 51. Weight: 8.6 kg., 19 lbs.
 - 54. Rim width: 127 mm., 5 in.

There is no change in track when using these wheels.



Normal manufacturer's tolerances for this model:

All machined surfaces	$\pm 0.75\%$
All non-machined surfaces	$\pm 2.0\%$
Weights of part-machined components	$\pm 2.5\%$
Weights of fully machined components	$\pm 1.25\%$





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

Manufacturer... Rover
Model... 3500S
F.I.A. Recognition No. 5286
Amendment No. 1/AV

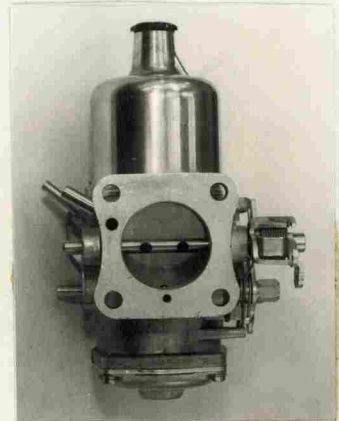
Amendment to Form of Recognition (For 3500S a variant of 3500)
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.

Reference No.

1

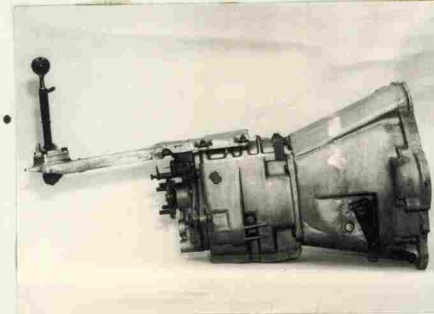
Carburettor change to model number HIF6.



2

Manual gearbox as per attached sheet.

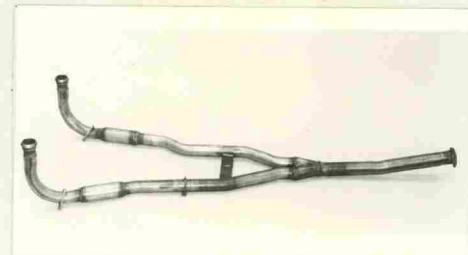
	<u>Ratio</u>	<u>No Teeth</u>	<u>Reverse</u>
1	3.625	$\frac{29}{20} \times \frac{30}{12}$	3.430 $\frac{29}{20} \times \frac{26}{11}$
2	2.133	$\frac{29}{20} \times \frac{25}{17}$	
3	1.391	$\frac{29}{20} \times \frac{24}{25}$	<u>4</u> 1.000 Direct



3

Exhaust down-pipe altered to suit manual gearbox.

Diameter of exhaust manifold outlet - Maximum 1.78"



Date amendment is valid from.....

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



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

Manufacturer..... ROVER
Model..... 3500S
F.I.A. Recognition No. 5286
Amendment No. **2/1E**

Amendment to Form of Recognition

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.

Reference No.

EVOLUTION GROUP 1

Change of Instrument Panel.



Change of
Bonnet and Grill.



Date amendment is valid from.....

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



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