

F.I.A. Recognition No. 5230

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 Rootes Motors Ltd.      Cylinder-capacity 1724 cm.<sup>3</sup> 105.2 in.<sup>3</sup>  
 Model Humber Sceptre  
 Serial No. of chassis/body B.111000100      Manufacturer Rootes Motors Ltd.,  
 Serial No. of engine B.111000100      Manufacturer Rootes Motors Ltd.,  
 Recognition is valid from 1st May '68      List 1968/6  
 The manufacturing of the model described in this recognition form started on 16th May, 1967.  
 and the minimum production of 5,000 identical cars, in accordance with the specifications of  
 this form was reached on 8th March, 1968.

Photograph A, ¾ view of car from front



F.I.A. Stamp



R.A.C. Stamp



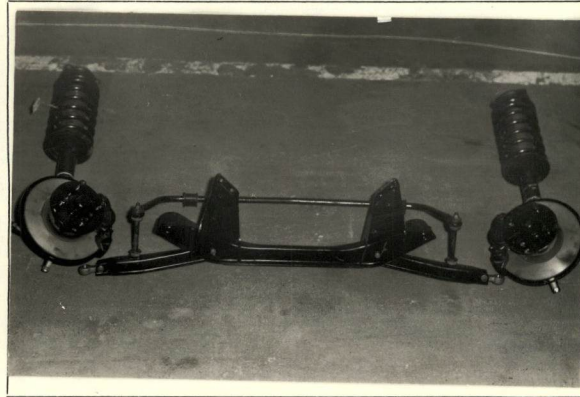
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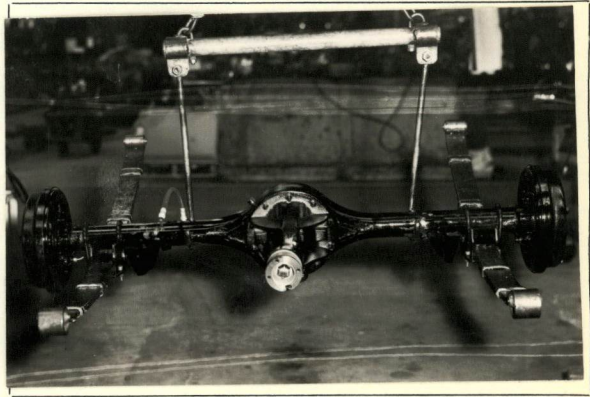
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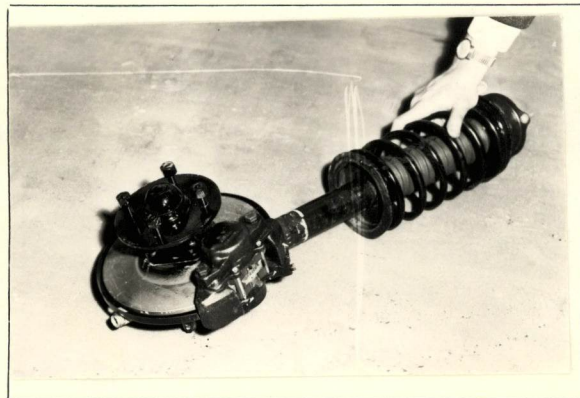
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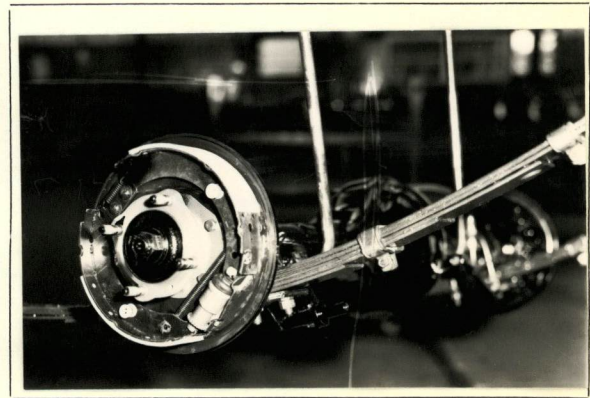
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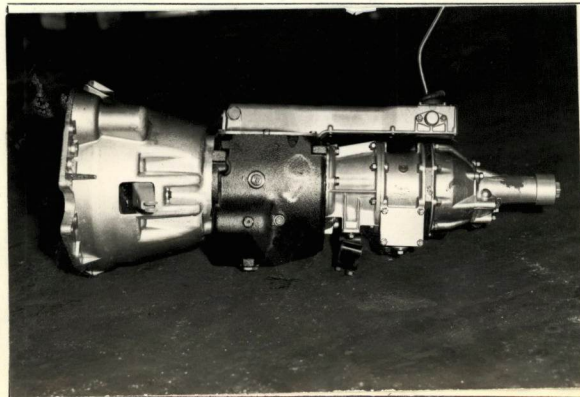
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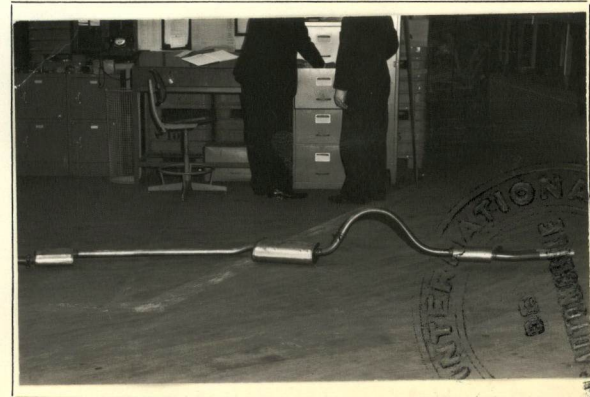
G



H



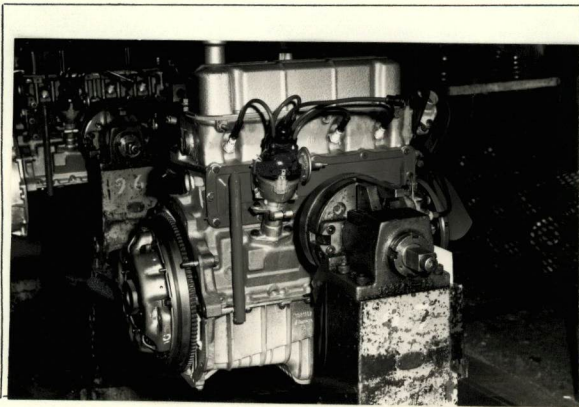
I



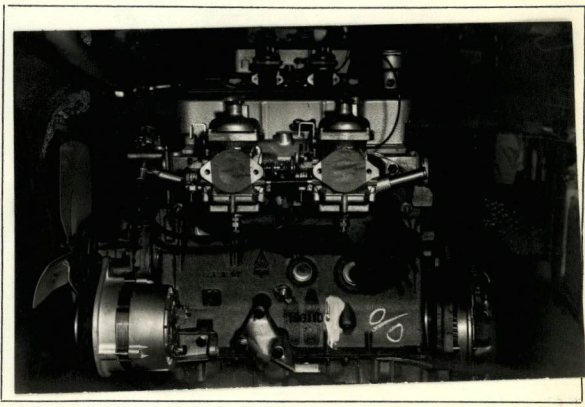
FEDERAL BUREAU OF INVESTIGATION  
UNITED STATES DEPARTMENT OF JUSTICE  
WASHINGTON, D.C. 20535



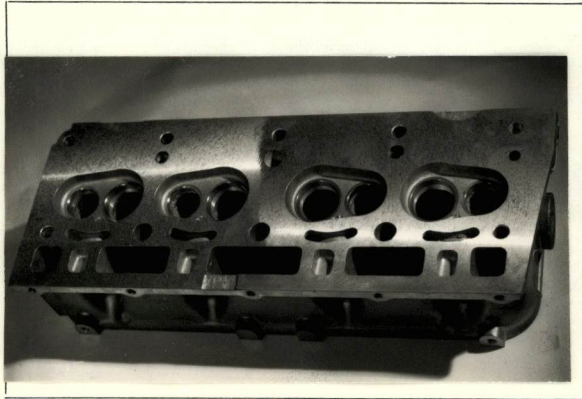
J



K



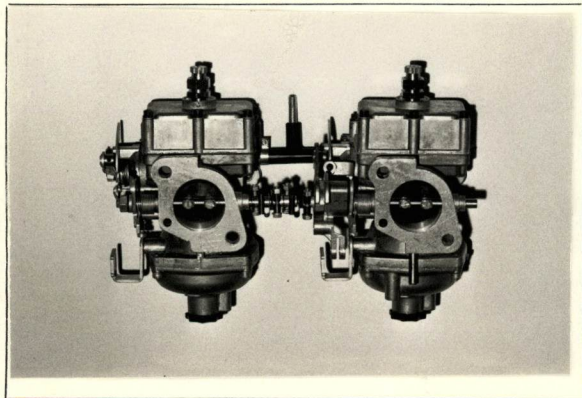
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M



N



O



P

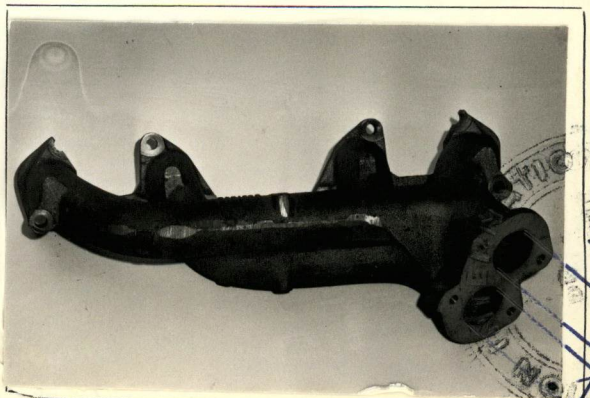
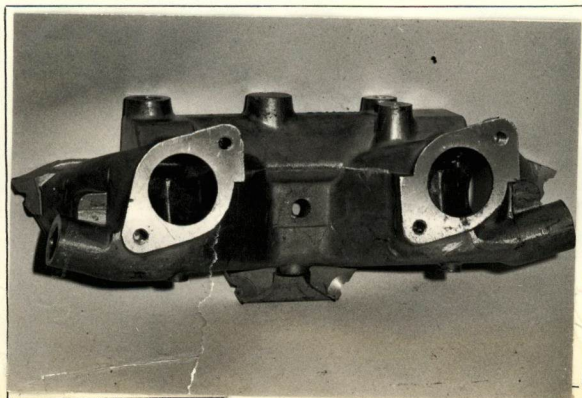


EXHIBIT  
O  
Both  
1-4 ins  
35 mm  
1-2 ins

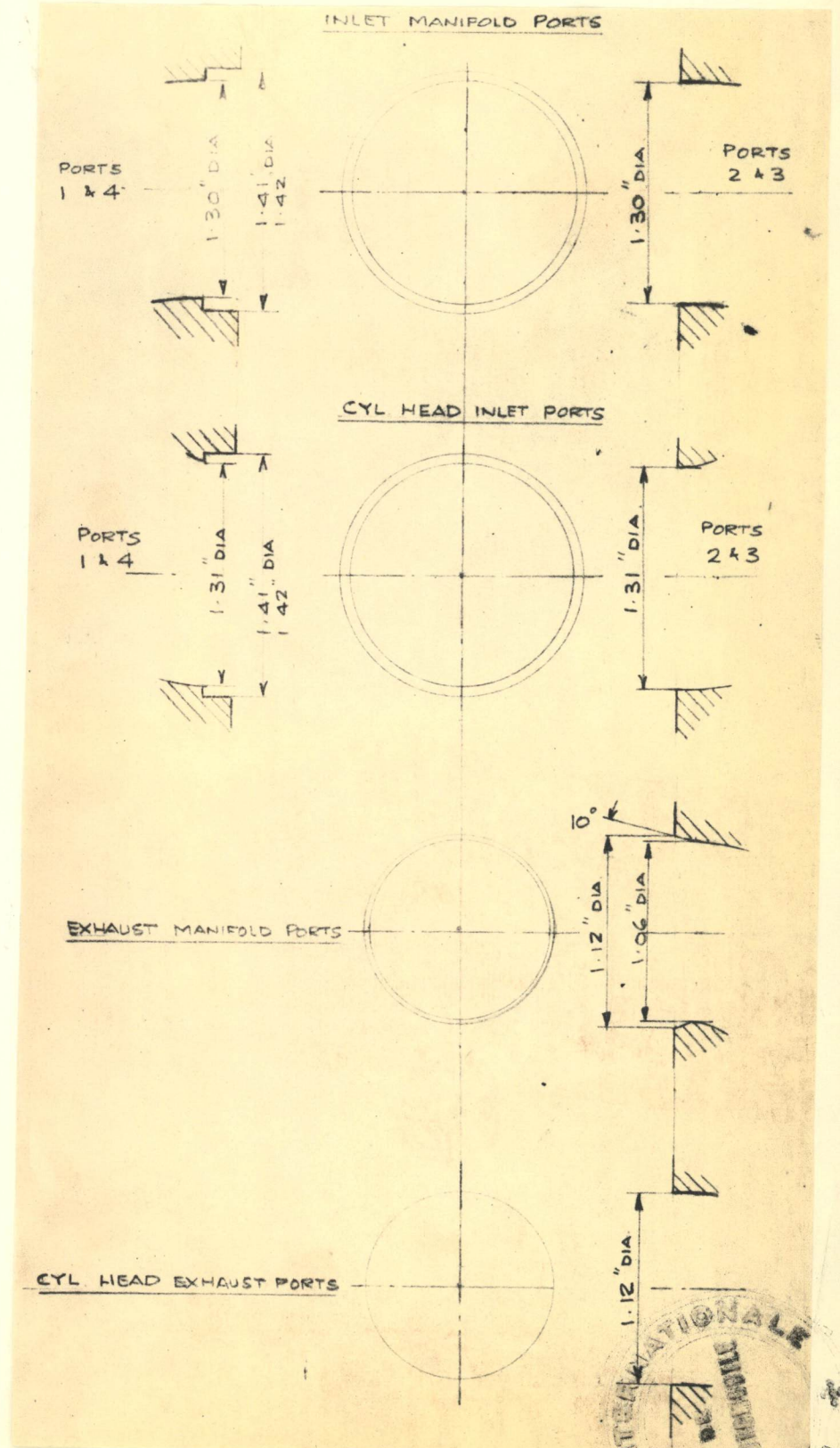


Drawing inlet manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.

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.

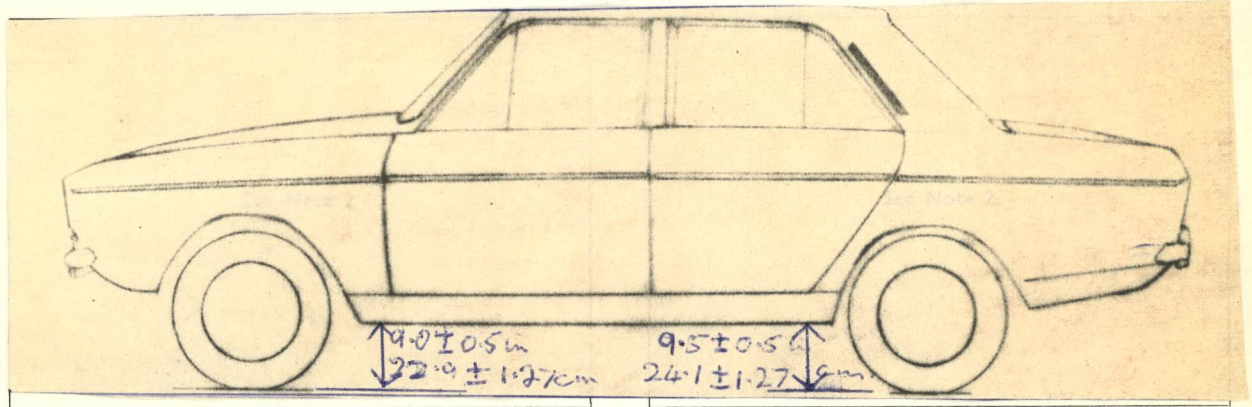


**NOTE 1.**

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

**CAPACITIES AND DIMENSIONS**

- |                |             |     |          |        |
|----------------|-------------|-----|----------|--------|
| 1. Wheelbase   | 2502        | mm. | 98.5     | inches |
| 2. Front track | 1321 ± 12.7 | mm. | 52 ± 0.5 | inches |
| 3. Rear track  | 1321 ± 12.7 | mm. | 52 ± 0.5 | inches |



- |  |       |       |       |            |       |            |
|--|-------|-------|-------|------------|-------|------------|
| 4. Overall length of the car   | 430.5 | cm.   | 169.5 | inches     |       |            |
| 5. Overall width of the car  | 164.5 | cm.   | 64.76 | inches     |       |            |
| 6. Overall height of the car   | 142.2 | cm.   | 56    | inches     |       |            |
| 7. Capacity of fuel tank (reserve included)  | 45    | ltrs. | 12    | gall. U.S. | 10    | gall. Imp. |
| 8. Seating Capacity.   | 4/5   |       |       |            |       |            |
| 9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools : | 955   | kg.   | 2103  | lbs.       | 18.78 | 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. <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 4 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 Safety glass
- 29. Material(s) of front-door windows Safety glass
- 30. Material(s) of rear-door windows Safety glass
- 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 Ambla.
- 42. Weight of front seat(s), complete with supports and rails, out of the car : plastic foam underlay  

(one seat)	12.15	kg.	27	lbs.
------------	-------	-----	----	------
- 43. Rear seats, type of seat and upholstery Ambla, plastic foam underlay
- 44. Front bumper, material(s) Steel Weight 2.5 kg. 5.5 lbs.
- 45. Rear bumper, material(s) Steel Weight 2.5 kg. 5.609 lbs.

**WHEELS**

- 50. Type Pressed steel ventilated disc
- 51. Weight (per wheel, without tyre) 5.9 kg. 13 lbs.
- 52. Method of attachment 4 stud
- 53. Rim diameter 330.2 mm. 13 ins. 54. Rim width 114.3 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 3.3
- 63. In case of servo-assistance -



**SUSPENSION**

- |   |                             |
|---|-----------------------------|
| 70. Front suspension (photograph D), type | Independent Armstrong strut |
| 71. Type of spring                        | Coil                        |
| 72. Stabiliser (if fitted)                | Bar and brake reaction rod  |
| 73. Number of shock absorbers 2           | 74. Type Telescopic         |
| 78. Rear suspension (photograph E), type  | Rigid 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)

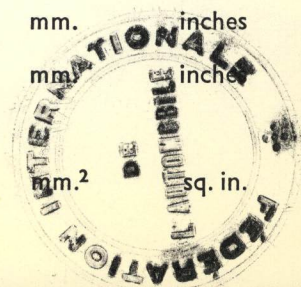
- |  |                                      |                      |
|--|--------------------------------------|----------------------|
| 90. Method of operation                  | Hydraulic                            |                      |
| 91. Servo-assistance (if fitted), type   | Lockheed type 6, Remove vacuum servo |                      |
| 92. Number of hydraulic master cylinders | 1                                    |                      |
| 93. Number of cylinders per wheel        | <b>FRONT</b> 2                       | <b>REAR</b> 1        |
| 94. Bore of wheel cylinder(s)            | 53.98 mm. 2.125 inches               | 19.05mm. 0.75 inches |

**Drum Brakes**

- |                               |                  |         |  |
|-------------------------------|------------------|---------|--|
| 95. Inside diameter           | mm.              | inches  | 228.6 mm. 9 inches                     |
| 96. Length of brake linings   | mm.              | inches  | 219 mm. 8.62 inches                    |
| 97. Width of brake linings    | mm.              | inches  | 43.68 mm. 1.72 inches                  |
| 98. Number of shoes per brake | 2                |         |  |
| 99. Total area per brake      | mm. <sup>2</sup> | sq. in. | 17967.7 mm. <sup>2</sup> 27.85 sq. in. |

**Disc Brakes**

- |  |                                       |                  |         |
|--|---------------------------------------|------------------|---------|
| 100. Outside diameter                  | 243.84 mm. 9.6 inches                 | mm.              | inches  |
| 101. Thickness of disc                 | 8.64 - 8.89 mm. 0.34 inches           | mm.              | inches  |
| 102. Length of brake linings (tapered) | 78.74 mm. 3.10 inches                 | mm.              | inches  |
| 103. Width of brake linings            | 46.5 mm. 1.83 inches                  | mm.              | inches  |
| 104. Number of pads per brake          | 2                                     |                  |         |
| 105. Total area per brake              | 6219.7 mm. <sup>2</sup> 29.64 sq. in. | mm. <sup>2</sup> | sq. in. |





**ENGINE** (photographs J and K)

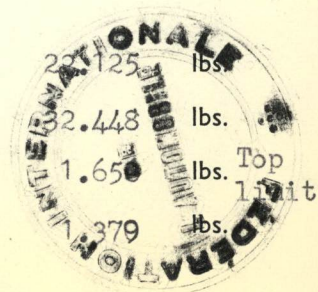
- |   |                         |   |  |
|---|-------------------------|---|--|
| 130. Cycle  | 4 stroke                | 131. Number of cylinders                | 4  |
| 132. Cylinder Arrangement   | In line inclined at 10° |   |  |
| 133. Bore   | 81.5 mm. 3.21 in.       | 134. Stroke                             | 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) | -  |
| 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                 | (8.57 - 9.72)                           |  |
| 143. Volume of one combustion chamber                                       |                         | 38.6 ± 0.8                              | cm. <sup>3</sup> 2.36 ± .06 cu. in.        |
| 144. Piston, material   | Aluminium               | 145. Number of rings                    | 3  |
| 146. Distance from gudgeon pin centre line to highest point of piston crown |                         | 46.86 - 47.0 mm.                        | 1.845 - 1.85 in.                           |
| 147. Crankshaft : moulded/ <del>stamped</del>                               |                         | 148. Type of crankshaft: integral/..... | Yes.....                                   |
| 149. Number of crankshaft main bearings                                     |                         | 5                                       |  |
| 150. Material of bearing cap  |                         | Cast iron                               |  |
| 151. System of lubrication : <del>dry sump</del> /oil in sump               |                         |   |  |
| 152. Capacity, lubricant  | 3.7 ltrs. 16.5          | pts. 3.95                               | quarts U.S. Without filter, 7.5 pints with |
| 153. Oil cooler : <del>yes</del> /no  |                         | 154. Method of engine cooling           | Water                                      |
| 155. Capacity of cooling system   | 7.1 ltrs. 12.6          | pts. 7.56                               | quarts U.S.                                |
| 156. Cooling fan (if fitted) dia.   |                         | 37.0                                    | cm. 14.5 in.                               |
| 157. Number of blades of cooling fan  |                         | 4                                       |  |

**Bearings**

- |                                   |       |      |      |      |       |     |
|-----------------------------------|-------|------|------|------|-------|-----|
| 158. Crankshaft main, type        | Shell | dia. | 60.3 | m.m. | 2.374 | in. |
| 159. Connecting rod big end, type | Shell | dia. | 54.0 | m.m. | 2.126 | in. |

**Weights**

- |   |                   |                     |           |
|---|-------------------|---------------------|-----------|
| 160. Flywheel (clean)                         |                   | 10.036              | kg.       |
| 161. Flywheel with clutch (all turning parts) |                   | 14.72               | kg.       |
| 162. Crankshaft                               | 14.97 kg. 33 lbs. | 163. Connecting rod | 0.751 kg. |
| 164. Piston with rings and pin                |                   | 0.626               | kg.       |





**FOUR STROKE ENGINES**

170. Number of camshafts 1 171. Location Right hand side of crankcase  
 172. Type of camshaft drive Single stage duplex chain  
 173. Type of valve operation Push rod and rocker.

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

180. Material(s) of inlet manifold Aluminium  
 181. Diameter of valves (valve head) 38.23 mm. 1.505 ins.  
 182. Max. valve lift 10.62 mm. 0.418 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~~) hot 0.305 mm. 0.012 ins.  
 187. Valves open at (with tolerance for tappet clearance indicated) 0.015 in 29° B.T.D.C.  
 188. Valves close at (with tolerance for tappet clearance indicated) 0.015 in 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 (valve head) 30.63 mm. 1.206 ins.  
 197. Max. valve lift 10.62 mm. 0.418 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~~) hot 0.356 mm. 0.014 ins.  
 202. Valves open at (with tolerance for tappet clearance indicated) 0.015 in 69° B.B.D.C.  
 203. Valves close at (with tolerance for tappet clearance indicated) 0.015 in 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.C. 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)  
 Nominal Piston Lift 25.4 mm. 1.0 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

\* For additional information concerning two-stroke engines and super-charged engines, see page 1

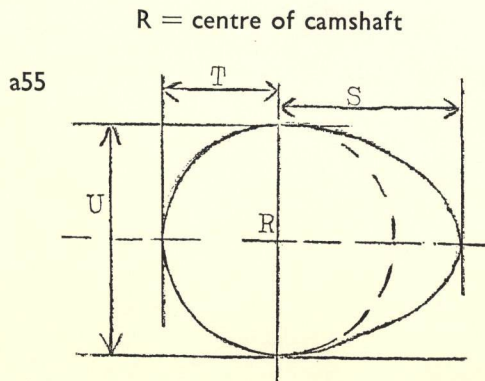


**ENGINE ACCESSORIES**

- 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 Engine compartment
- 241. Voltage of battery 12 volts

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

- 250. Max. engine output 94 (type of horsepower: B.H.P. ) at 5,200 r.p.m.
- 251. Max. r.p.m. 6,200 output at that figure Not available for publication
- 252. Max. torque 107 lbs. ft. at 4,000 r.p.m.
- 253. Max. speed of the car 156 km./hour 97 miles/hour

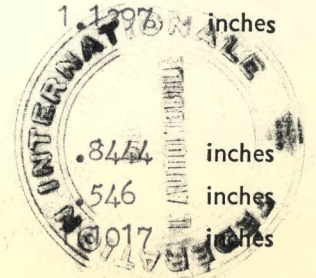


**Inlet cam** and **Exhaust Cam** (except No. 3 exhaust)

S =	21.93 mm.	.8634 inches
T =	14.35 mm.	.565 inches
U =	28.95 mm.	1.1397 inches

**Exhaust cam** (No. 3)

S =	21.45 mm.	.844 inches
T =	13.87 mm.	.546 inches
U =	27.98 mm.	1.097 inches





**DRIVE TRAIN**

**CLUTCH**

260. Type of clutch Dry Plate, diaphragm 261. No. of plates 1  
 262. Dia. of clutch plates 19.05 cm. 7.5 ins.  
 263. Dia. of linings, inside 13.65 cm. 5.375 ins.  
 outside 19.05 cm. 7.5 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 Borg Warner type 35  
 275. No. of forward ratios 3 276. Location of gear shift Centre floor

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth
1	3.353	37 16	2.39	67 28				
2	2.141	31 21	1.45	67 32				
3	1.392	24 25	1.0	Direct				
4	1.0	20 29						
5								
6								
reverse	3.569	32 13	2.09	67 32				

278. Overdrive, type Lay-cock epicyclic  
 279. Forward gears on which overdrive can be selected 3, 4  
 280. Overdrive ratio 0.803

**FINAL DRIVE**

290. Type of final drive Hypoid 291. Type of differential Bevel gear  
 292. Type of limited slip differential (if fitted) 0  
 293. Final drive ratio 3.89 : 1 Number of teeth 35/9



Make Humber Model Sceptre F.I.A. Rec. No. ....

**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

Manufacture Rootes Motors Ltd.

Model Humber Sceptre

F.I.A. Recognition No. 5230

Amendment No. 1/IV

*Amendment to Form of Recognition*

**FEDERATION INTERNATIONALE DE L'AUTOMOBILE**

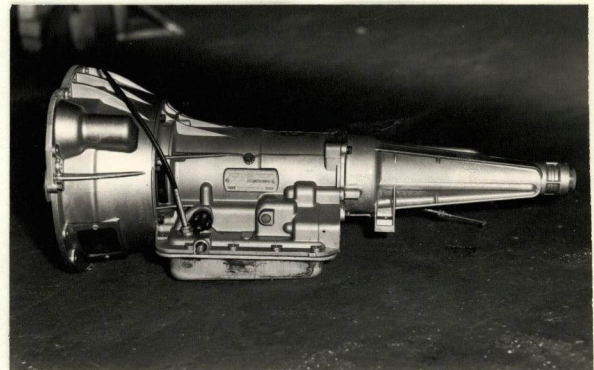
No.

Reference No.

OPTIONAL EQUIPMENT - GROUP 1 and 2

278

Automatic equipped variant  
Photograph H, Automatic gearbox



293

Final drive ratio on car fitted with automatic gearbox 3.70  
Number of teeth 37 - 10

9

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

Automatic 973 kg. 2134 lbs. 19.12 cwt.

Date amendment is valid from

*1st May 1968.  
List 1968/6*

*Huber Schra*  
Stamp of F.I.A./R.A.C.



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

Manufacturer Rootes Motors Ltd.

Model Humber Sceptre

F.I.A. Recognition No. 5230

Amendment No. 2/2V

Amendment to Form of Recognition

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.	Reference No.
	<u>OPTIONAL EQUIPMENT - GROUP 2</u>
7	Long Range Fuel Tank, Part No. 1241800 Capacity of tank 100.0 litres 21.9 galls. Imp 26.6 galls. U.S.
292	Type of limited slip differential (if fitted): Borg Warner Part No. 1241807
292	Type of limited slip differential (if fitted): Salisbury Powr Lok Part No. 1241808
60	Steering - type: Recirculating ball
61	Servo assistance: No
62	Number of turns from lock to lock of steering wheel: 3.25
63	In case of servo assistance: -
290	Final drive type: Hypoid 291. Type of differential: Bevel gear
292	Type of limited slip differential (if fitted): Nil
293	Final drive ratio: 4.22 No. of teeth 9 - 38
290	Final drive - type: Hypoid 291. Type of differential: Bevel gear
292	Type of limited slip differential (if fitted): Nil
293	Final drive ratio: 4.86 No. of teeth: 7 - 34

Date amendment is valid from

*1st May 1968.*  
*Aut 1968/6*







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

Manufacturer Rootes Motors Ltd.

Model HUMBER SCEPTRE

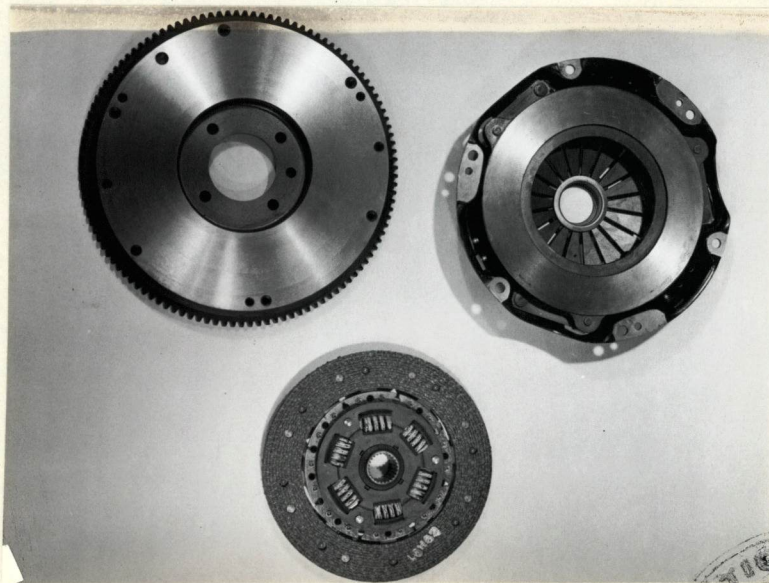
F.I.A. Recognition No. 5230

Amendment No. 3/3V GRI

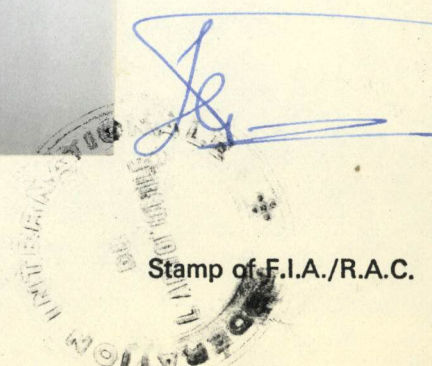
*Amendment to Form of Recognition*

**FEDERATION INTERNATIONALE DE L'AUTOMOBILE**

No.	Reference No.	<u>OPTIONAL EXTRAS</u> ( Not valid in Group 1 )	
	HOLBAY TYPE CLUTCH.	CTS NO's 1246220, 1801582, 1801583.	
260.	Type	:- Diaphragm.	
261.	No of Plates	:- 1	
262.	Diameter of Plates	:- 8.5 in, 21.5 cm.	
263.	Diameter of Lining	I.D. :-	5.75 in, 14.6 cm.
		O.D. :-	8.5 in, 21.5 cm.
264.	Method of operation	:- Hydraulic.	
160.	Weight of Flywheel	:- 21.1 lb, 9.6 kg.	
161.	Weight of Flywheel and clutch	:- 34.7 lb, 15.7 kg.	



Date amendment is valid from 1/4/70 - 7/4



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





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

Manufacturer Rootes Motors Ltd.  
Model HUMBER SCEPTRE  
F.I.A. Recognition No. 5230  
Amendment No. 4/AV GRU

*Amendment to Form of Recognition*

**FEDERATION INTERNATIONALE DE L'AUTOMOBILE**

No. \_\_\_\_\_ Reference No. \_\_\_\_\_

OPTIONAL EXTRAS ( Not valid in Group 1 )

COMPETITION UNDERSHIELD, CTS 180010.  
Width ( max ) :- 29 in, 73.5 cm.  
Length :- 24 in, 61 cm.  
Height :- 10 in, 25.4 cm.



Date amendment is valid from 1/4/70 - 70/4.

