

F.I.A. Recognition No. 545
Group 3 - Grand Touring



ROYAL AUTOMOBILE CLUB

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

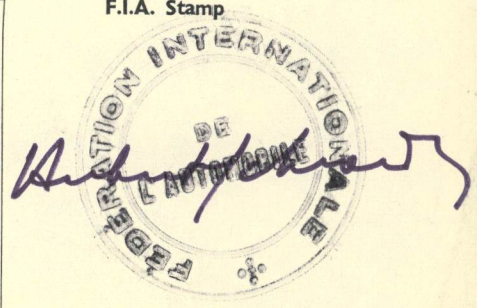
Form of recognition in accordance with appendix J to the International Sporting Code of the
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Cylinder-capacity 4235 cm.³ 258.4 in.³
Manufacturer Jaguar Cars Limited Model 4.2 2+2 'E' Type
Serial No. of chassis/body 1 E 50001 Manufacturer Jaguar Cars Limited
Serial No. of engine 7E 50001 Manufacturer Jaguar Cars Limited
Recognition is valid from 1st August 1966 List 14/7
The manufacturing of the model described in this recognition form started on February 22nd 1966
and the minimum production of 500 identical cars, in accordance with the specifications of
this form was reached on 26th April, 1966.

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



F.I.A. Stamp

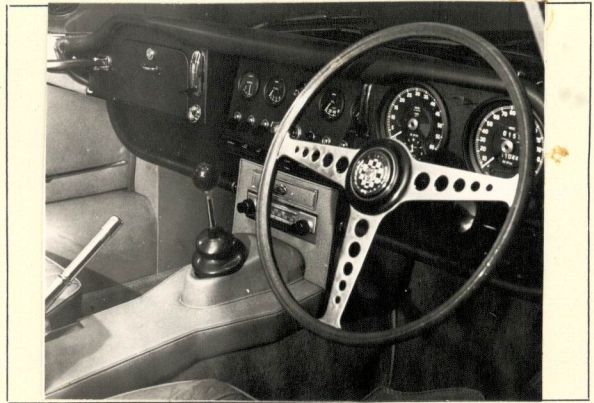


R.A.C. Stamp

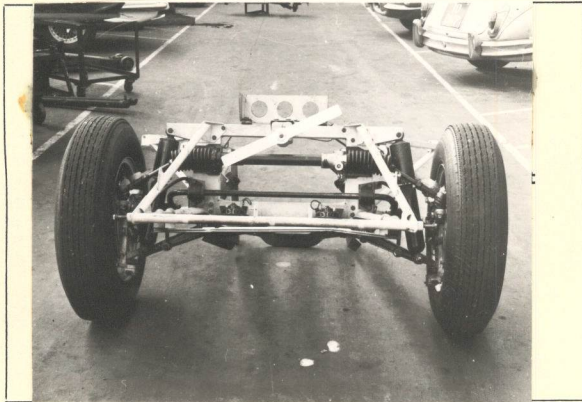
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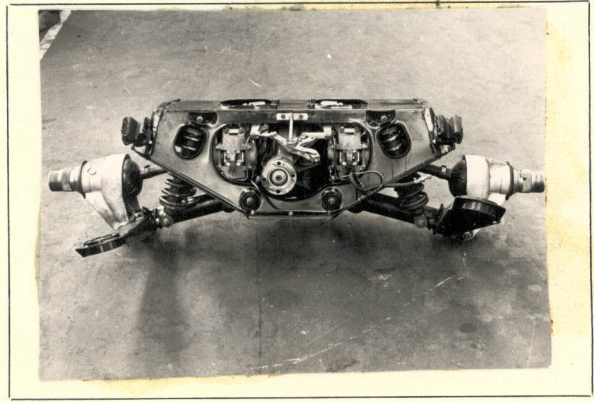
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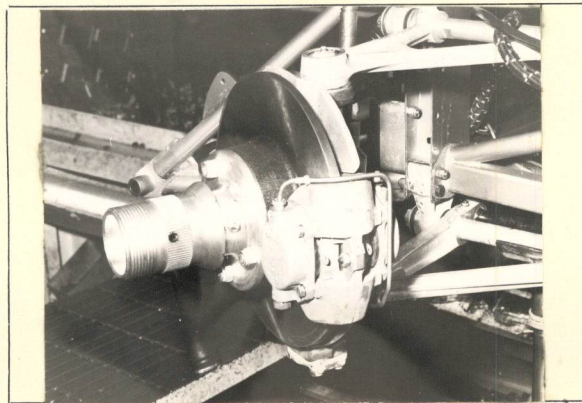
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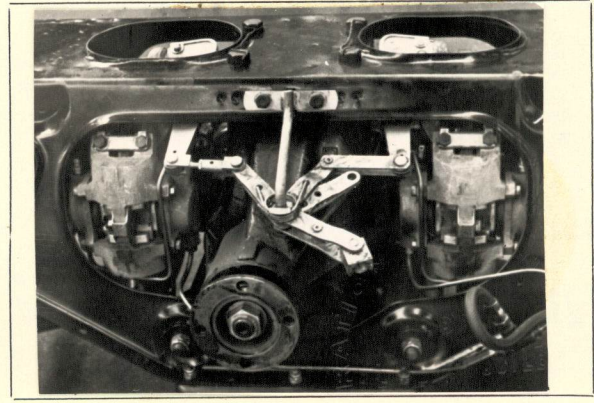
E



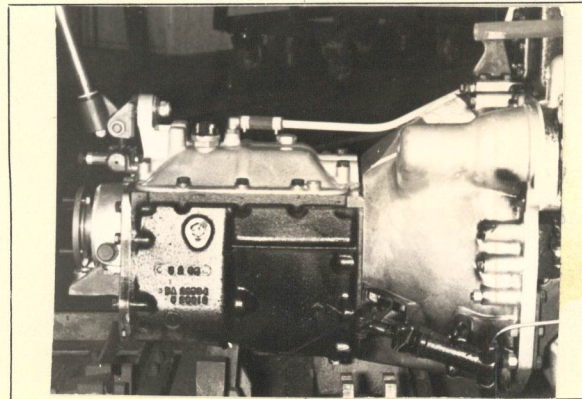
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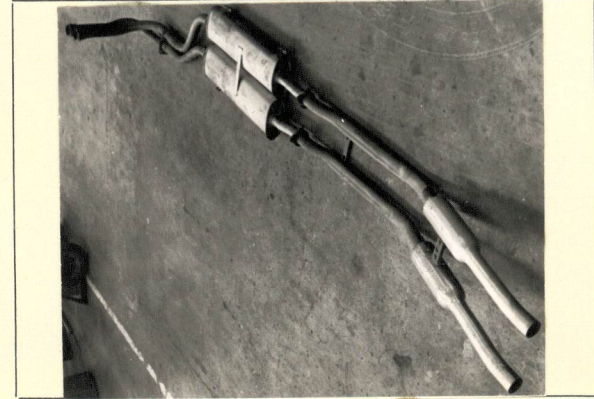
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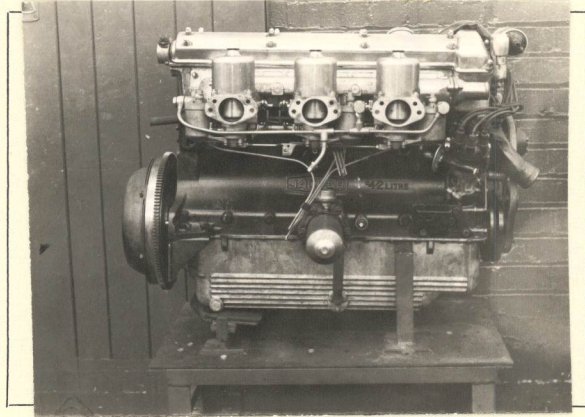
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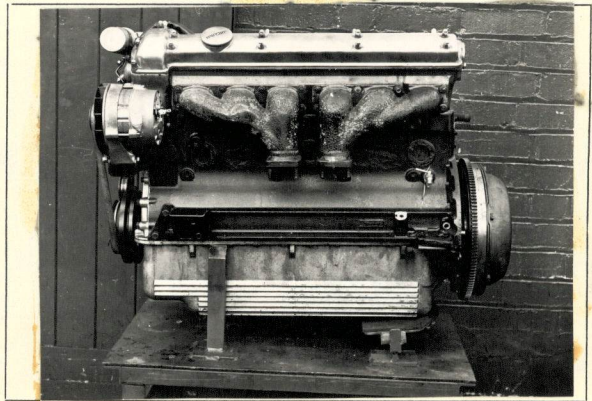
I



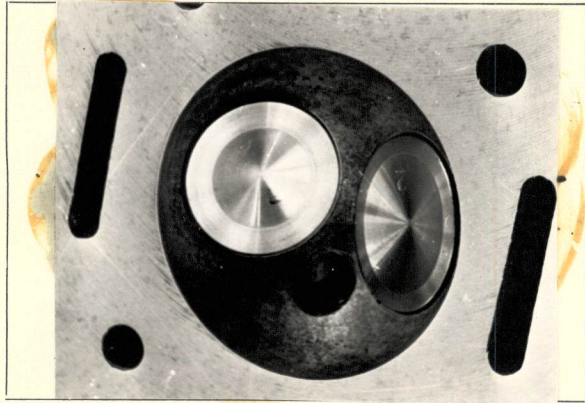
J



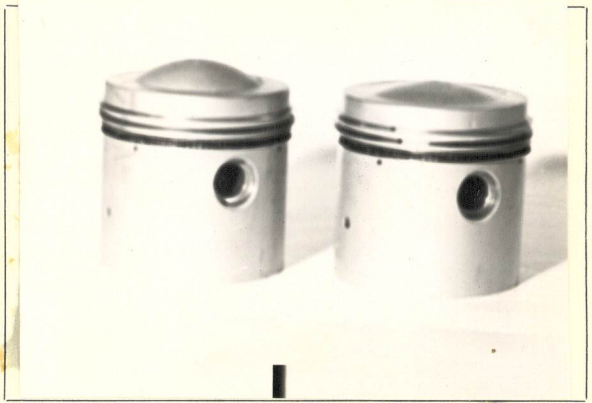
K



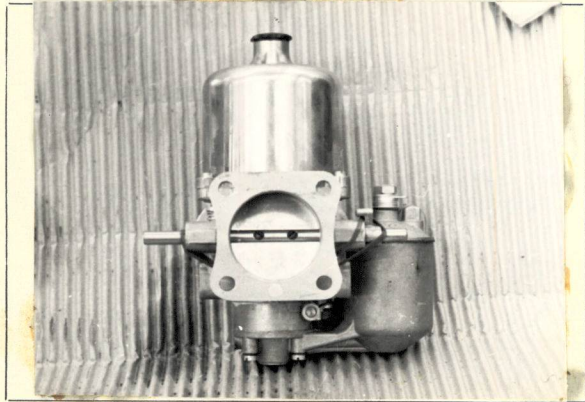
L



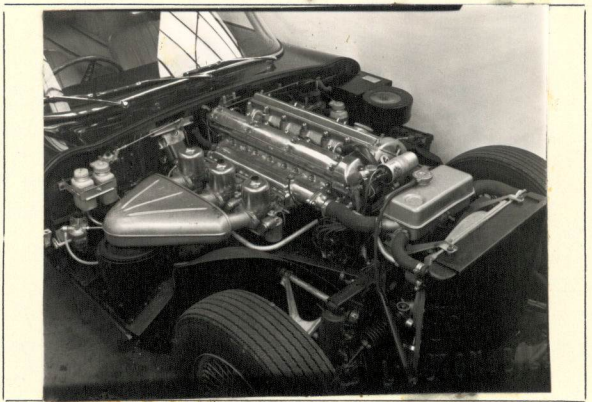
M



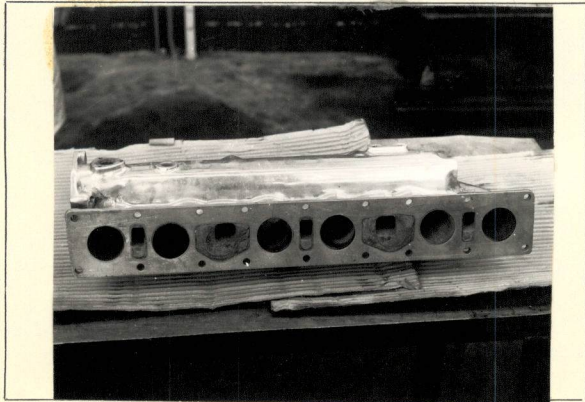
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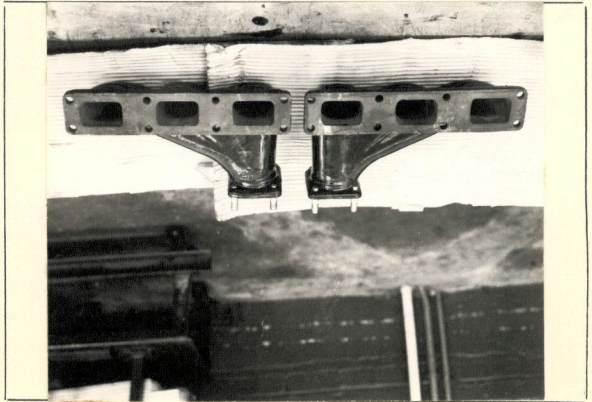
O



P



Q

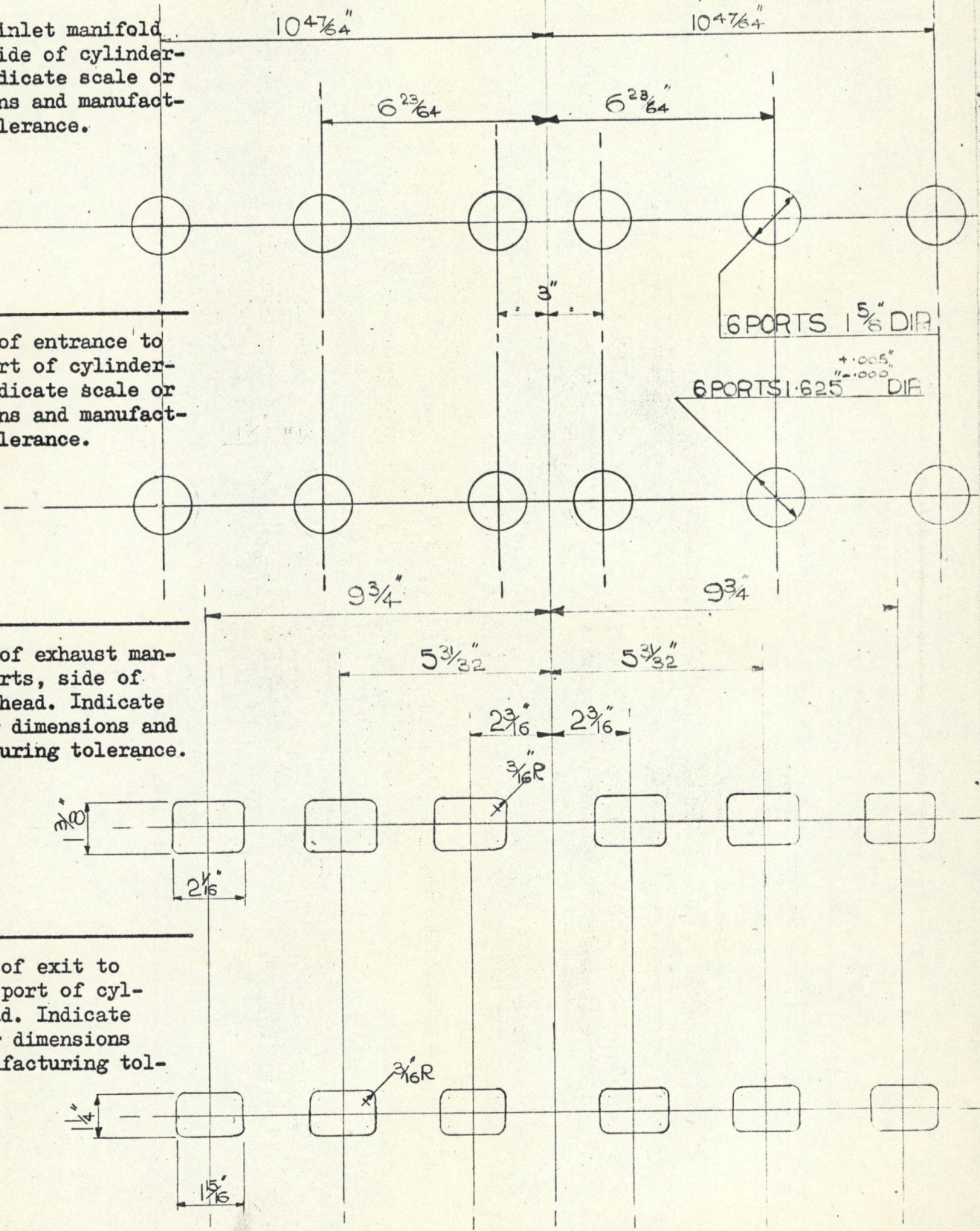


Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.

Drawing of entrance to inlet port of cylinder-head. 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.



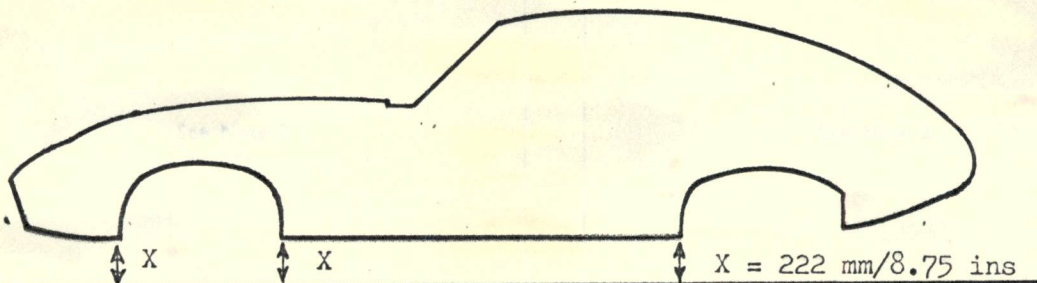
SCALE: 4/1 UNLIMITED MACHINING DIMENSIONS TO BE $\pm .010$ "

NOTE 1.

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

CAPACITIES AND DIMENSIONS

1. Wheelbase			2660	mm.	105	inches
2. Front track	1270	mm.	50	inches	3. Rear track	
			1270	mm.	50	inches



X is distance from underside of body to ground & is unaffected by track & wheel run width

4. Overall length of the car	478.0	cm.	184.94	inches		
5. Overall width of the car	166.0	cm.	65.25	inches		
6. Overall height of the car	127.0	cm.	50.13	inches		
7. Capacity of fuel tank (reserve included)	63.5	ltrs.	16.5	gall. U.S.	14.0	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 :

1298	kg.	2856	lbs.	255	cwts.
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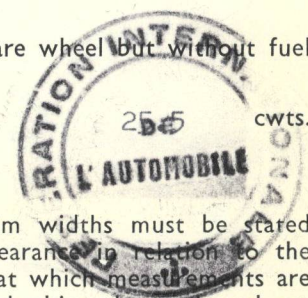
NOTE 2.

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.



Make Jaguar

Model 4.2 2+2 'E' type

F.I.A. Rec. No. 575

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 Steel
- 23. Material(s) of coachwork Steel
- 24. Number of doors 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 Glass
- 29. Material(s) of front-door windows Glass
- 30. Material(s) of rear-door windows
- 31. Sliding system of door windows Winding
- 32. Material(s) of rear-quarter light Glass

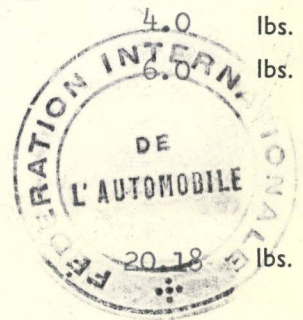
ACCESSORIES AND UPHOLSTERY

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

9.43	kg.	20.75	lbs.
------	-----	-------	------
- 43. Rear seats, type of seat and upholstery Bucket/Leather
- 44. Front bumper, material(s) Steel Weight 1.8 kg.
- 45. Rear bumper, material(s) Steel Weight 2.7 kg.

WHEELS

- 50. Type Wire
- 51. Weight (per wheel, without tyre) 9.16 kg.
- 52. Method of attachment Centre lock hub cap
- 53. Rim diameter 381 mm. 15 ins. 54. Rim width 127 mm. 5 ins.



STEERING

- 60. Type Rack and pinion
- 61. Servo-assistance : ~~yes~~ — no
- 62. Number of turns of steering wheel from lock to lock 2.5
- 63. In case of servo-assistance

Make Jaguar

Model 4.2 2+2 'E' type

F.I.A. Rec. No. 545

SUSPENSION

- 70. Front suspension (photograph D), type Independent
- 71. Type of spring Torsion bar
- 72. Stabiliser (if fitted) Yes
- 73. Number of shock absorbers 2
- 74. Type Telescopic
- 78. Rear suspension (photograph E), type Independent
- 79. Type of spring Coil
- 80. Stabiliser (if fitted) Yes
- 81. Number of shock absorbers 4
- 82. Type Telescopic

BRAKES (photographs F and G)

- 90. Method of operation Hydraulic
- 91. Servo-assistance (if fitted), type Vacuum
- 92. Number of hydraulic master cylinders 1
- 93. Number of cylinders per wheel 2

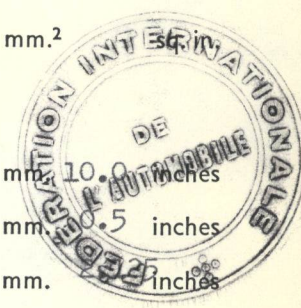
	FRONT		REAR	
94. Bore of wheel cylinder(s)	54.0	mm. 2.125 inches	44.5	mm. 1.75 inches

Drum Brakes

	FRONT		REAR	
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

	FRONT		REAR	
100. Outside diameter	279.4	mm. 11.0 inches	254.0	mm. 10.0 inches
101. Thickness of disc	9.5	mm. 0.375 inches	12.7	mm. 0.5 inches
102. Length of brake linings	54.0	mm. 2.125 inches	54.0	mm. 2.125 inches
103. Width of brake linings	47.5	mm. 1.875 inches	47.5	mm. 1.875 inches
104. Number of pads per brake	2		2	
105. Total area per brake	5120	mm. ² 8 sq. in.	5120	mm. ² 8 sq. in.



Make Jaguar Model 4.2 2+2 'E' type F.I.A. Rec. No. 545

ENGINE (photographs J and K)

- | | |
|---|--|
| 130. Cycle <u>Otto</u> | 131. Number of cylinders <u>6</u> |
| 132. Cylinder Arrangement <u>In line</u> | |
| 133. Bore <u>92.07</u> mm. <u>3.625</u> in. | 134. Stroke <u>106</u> mm. <u>4.173</u> in. |
| 135. Capacity per cylinder | <u>706</u> cm. ³ <u>43.1</u> cu. in. |
| 136. Total cylinder capacity | <u>4235</u> cm. ³ <u>258.43</u> cu. in. |
| 137. Material(s) of cylinder block <u>Cast iron</u> | 138. Material(s) of sleeves (if fitted) <u>Cast iron</u> |
| 139. Cylinder head, material(s) <u>Aluminium</u> | Number fitted <u>1</u> |
| 140. Number of inlet ports <u>6</u> | 141. Number of exhaust ports <u>6</u> |
| 142. Compression ratio <u>9:1 or 8:1</u> | |
| 143. Volume of one combustion chamber | <u>98</u> cm. ³ <u>6</u> cu. in. |
| 144. Piston, material <u>Aluminium</u> | 145. Number of rings <u>3</u> |
| 146. Distance from gudgeon pin centre line to highest point of piston crown | <u>57</u> mm. <u>2.24</u> in. |
| 147. Crankshaft: mounted /stamped | 148. Type of crankshaft: integral/..... |
| 149. Number of crankshaft main bearings <u>7</u> | |
| 150. Material of bearing cap <u>Steel</u> | |
| 151. System of lubrication: dry sump /oil in sump | |
| 152. Capacity, lubricant <u>8.5</u> ltrs. <u>15</u> pts. <u>9</u> quarts U.S. | |
| 153. Oil cooler: <u>yes</u> /no | 154. Method of engine cooling <u>Water</u> |
| 155. Capacity of cooling system <u>18</u> ltrs. <u>32</u> pts. <u>19.25</u> quarts U.S. | |
| 156. Cooling fan (if fitted) dia. | <u>40.6</u> cm. <u>16</u> in. |
| 157. Number of blades of cooling fan <u>2</u> | |

Bearings

- | | | | | | |
|---|------|--------------|------|-------------|-----|
| 158. Crankshaft main, type <u>Steel backed shell</u> | dia. | <u>69.85</u> | m.m. | <u>2.75</u> | in. |
| 159. Connecting rod big end, type <u>Steel backed shell</u> | dia. | <u>52.98</u> | m.m. | <u>2.08</u> | in. |

Weights

- | | | | | |
|---|---------------------------------|-----|--------------|------|
| 160. Flywheel (clean) | <u>9.5</u> | kg. | <u>21</u> | lbs. |
| 161. Flywheel with clutch (all turning parts) | <u>19.2</u> | kg. | <u>42.25</u> | lbs. |
| 162. Crankshaft <u>28.5</u> kg. <u>62.78</u> lbs. | 163. Connecting rod <u>0.88</u> | kg. | <u>1.94</u> | lbs. |
| 164. Piston with rings and pin | <u>0.67</u> | kg. | <u>1.47</u> | lbs. |



Make Jaguar

Model 4.2 2=2 'E' type

F.I.A. Rec. No. 545

FOUR STROKE ENGINES

170. Number of camshafts 2 171. Location Overhead
172. Type of camshaft drive Chain
173. Type of valve operation Overhead camshaft and tappet

INLET (see page 4)*

180. Material(s) of inlet manifold Aluminium
181. Diameter of valves 44.45 mm. 1.75 ins.
182. Max. valve lift 9.5 mm. 0.375 in. 183. Number of valve springs 12
184. Type of spring Coil 185. Number of valves per cylinder 1
186. Tappet clearance for checking timing (cold) 0.25 mm. 0.010 ins.
187. Valves open at (with tolerance for tappet clearance indicated) 15° B.T.D.C.
188. Valves close at (with tolerance for tappet clearance indicated) 57° 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 41.27 mm. 1.625 ins.
197. Max. valve lift 9.5 mm. 0.375 in. 198. Number of valve springs 12
199. Type of spring Coil 200. Number of valves per cylinder 1
201. Tappet clearance for checking timing (cold) 0.25 mm. 0.010 ins.
202. Valves open at (with tolerance for tappet clearance indicated) 57° B.B.D.C.
203. Valves close at (with tolerance for tappet clearance indicated) 15° A.T.D.C.

CARBURETION (photograph N)

210. Number of carburettors fitted 3 211. Type Horizontal
212. Make S.U. 213. Model H.D.8
214. Number of mixture passages per carburettor 1
215. Flange hole diameter of exit port(s) of carburettor 50.8 mm.
216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example: SU) 43 mm.

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.



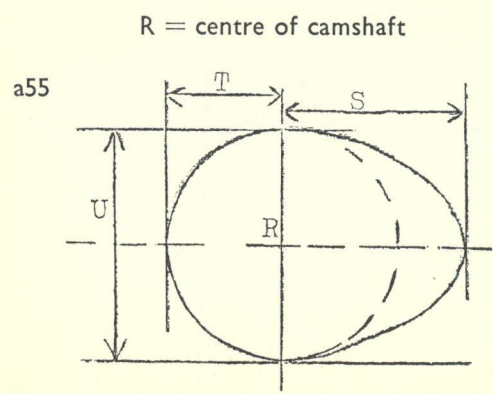
* For additional information concerning two-stroke engines and super-charged engines, see page 13.

ENGINE ACCESSORIES

- 230. Fuel pump : ~~mechanical and/or~~ electrical
- 231. No. fitted 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 bonnet
- 241. Voltage of battery 12 volts

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

- 250. Max. engine output 265 (type of horsepower: S.A.E.-B.H.P.) at 5500 r.p.m.
- 251. Max. r.p.m. 6000 output at that figure 255 B.H.P.
- 252. Max. torque 283 pounds feet at 4000 r.p.m.
- 253. Max. speed of the car 235 km./hour 145 miles/hour

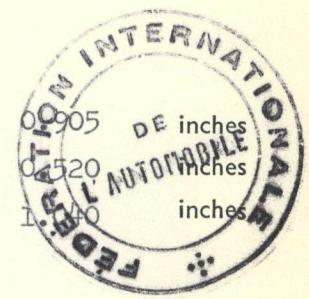


Inlet cam

S = 22.99 mm.
 T = 13.22 mm.
 U = 26.44 mm.

Exhaust cam

S = 22.99 mm. 0.905 inches
 T = 13.22 mm. 0.520 inches
 U = 26.44 mm. 1.040 inches



Make Jaguar

Model 4.2 2+2 'E' type

F.I.A. Rec. No. 575

DRIVE TRAIN

CLUTCH

- 260. Type of clutch Dry plate
- 261. No. of plates 1
- 262. Dia. of clutch plates 25.4 cm. 10.0 ins.
- 263. Dia. of linings, inside 21.4 cm. 8.4 ins.
- outside 25.4 cm. 10.0 ins.
- 264. Method of operating clutch Hydraulic

GEAR BOX (photograph H)

- 270. Manual type, make Jaguar Method of operation Hand change
- 271. No. of gear-box ratios forward 4
- 272. Synchronized forward ratios 4
- 273. Location of gear-shift Floor
- 274. Automatic, make Borg Warner type 8
- 275. No. of forward ratios 3
- 276. Location of gear shift Floor

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth
1	3.04:1	$\frac{29}{21} \times \frac{33}{15}$	2.40:1	-	2.68:1	$\frac{28}{23} \times \frac{33}{15}$		
2	1.97:1	$\frac{29}{21} \times \frac{30}{21}$	1.46:1	-	1.74:1	$\frac{28}{23} \times \frac{30}{21}$		
3								
4	1.33:1	$\frac{29}{21} \times \frac{25}{26}$	1.00:1	-	1.27:1	$\frac{28}{23} \times \frac{26}{25}$		
5	1.00:1	-			1.00:1	-		
6								
reverse	3.49:1	$\frac{29}{21} \times \frac{38}{15}$	2.00:1	-	3.08:1	$\frac{28}{23} \times \frac{38}{15}$		

- 278. Overdrive, type
- 279. Forward gears on which overdrive can be selected
- 280. Overdrive ratio

FINAL DRIVE

- 290. Type of final drive Hypoid
- 291. Type of differential Bevel gear
- 292. Type of limited slip differential (if fitted) Thornton Power-Lok
- 293. Final drive ratio 3.07:1 or 3.31:1 Number of teeth 14/43 or 13/43



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.

7. Larger fuel tank 109 litres 28.8 U.S. gallons 24.0 Imperial gallons

Wheels

- 2. 1300 mm/51.14 ins front track
- 3. 1300 mm/51.14 ins rear track
- 51. 11.14kg/24.54 lbs weight
- 54. 139.7mm/ 5.50 ins rim width

Brakes

- 94. 47.6 mm/ 1.875 ins bore rear wheel cylinders
- 100. 308.0 mm/12.125 ins diameter front discs
- 101. 12.7 mm/ 0.500 ins thick front discs
- 102. 60.3 mm/ 2.375 ins length front pads
- 103. 60.3 mm/ 2.375 ins width front pads
- 105. 7250 sq. mm/ 11.2 sq. ins area per brake

Final Drive

- 293. 2.88:1 ratio 17/49
- 3.54:1 ratio 13/46
- 3.77:1 ratio 13/49
- 4.09:1 ratio 11/45

