F.I.A. Recognition No. 528

Group 3 – Grand Touring

I.R.S.

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

and – – – –

Cylinder-capacity 2138 cm.³ 130.5 in.³

Manufacturer Standard-Triumph Motor Co. Ltd. Model TR-4A

Serial No. of chassis/body CTC 50,001 onwards Manufacturer Standard-Triumph Motor Co. Ltd.

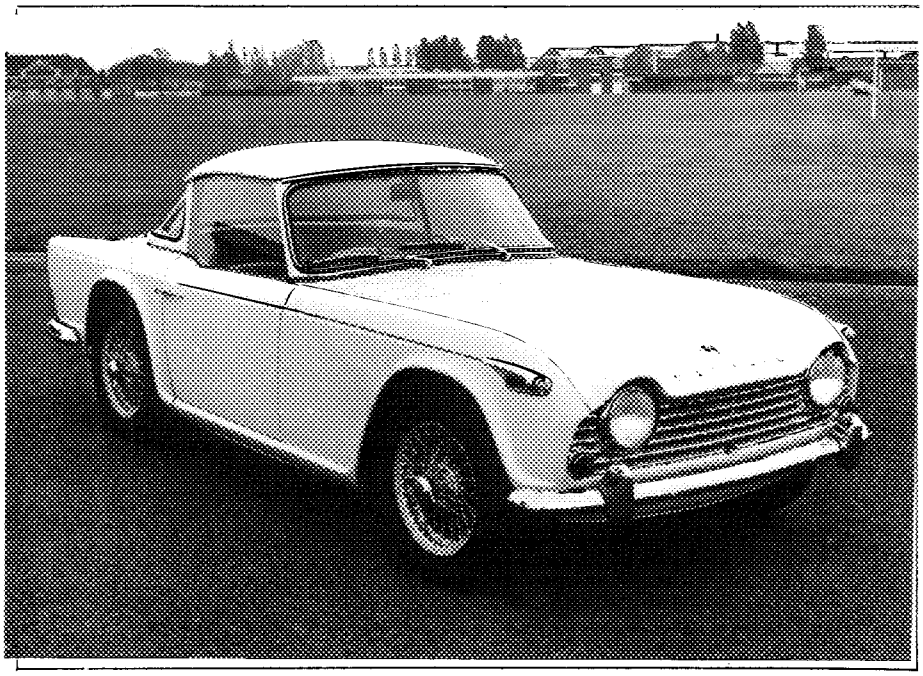
Serial No. of engine CT 50,001 onwards Manufacturer Standard-Triumph Motor Co. Ltd.

Recognition is valid from 1st Feb 1966 List 14/2

The manufacturing of the model described in this recognition form started on January 1965
and the minimum production of 500 identical cars, in accordance with the specifications of
this form was reached on 18th February 1965

for each of the two engines (1000 in all).

Photograph A, ¾ view of car from front

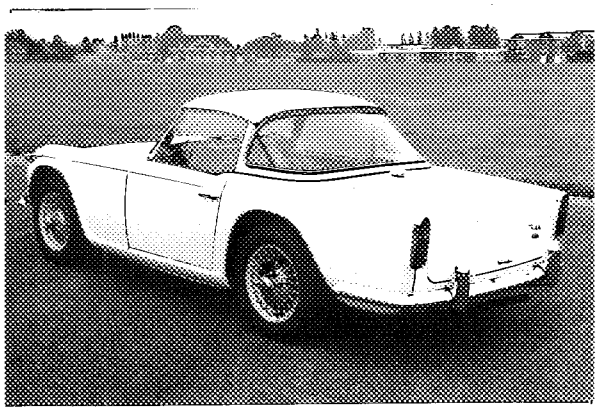


F.I.A. Stamp

R.A.C. Stamp

Make Triumph Model TR4A F.I.A. Rec. No.

B



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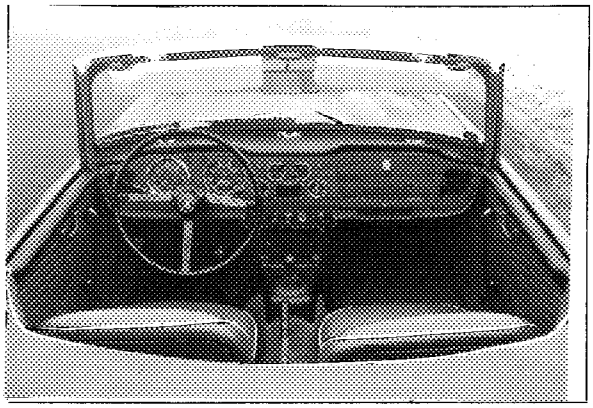

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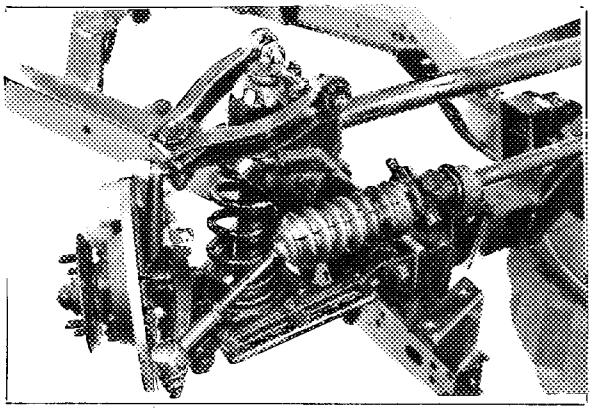

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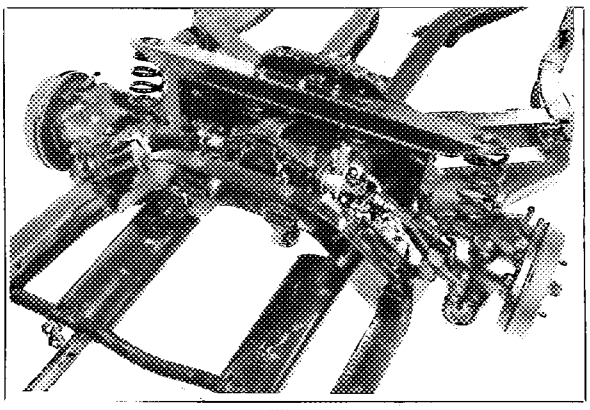

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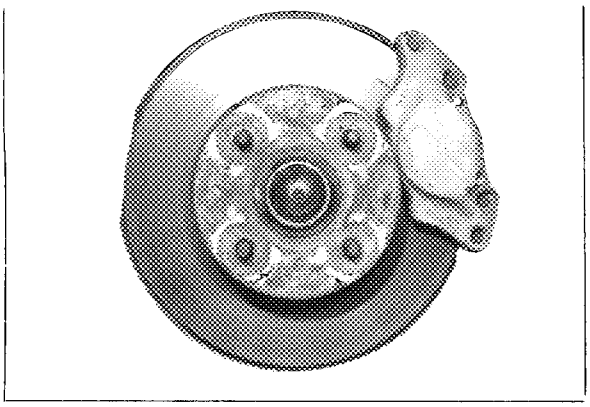

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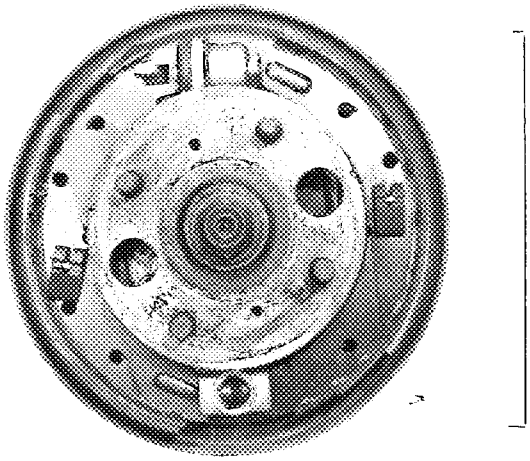

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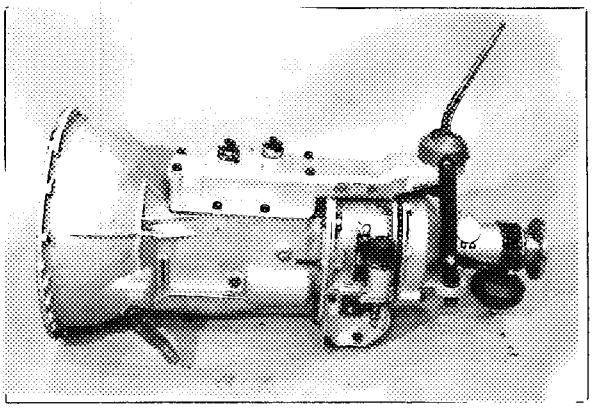

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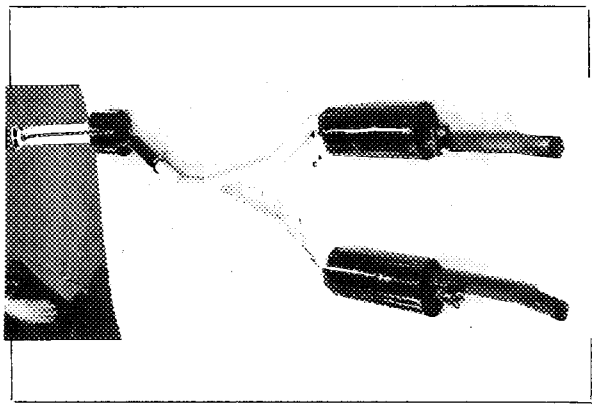
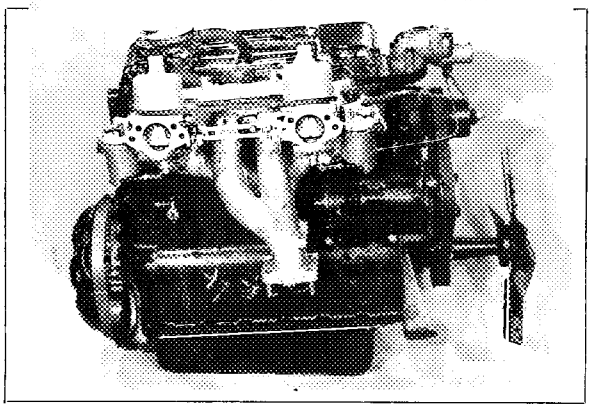


Make Triumph Model TR4A F.I.A. Rec. No.

J



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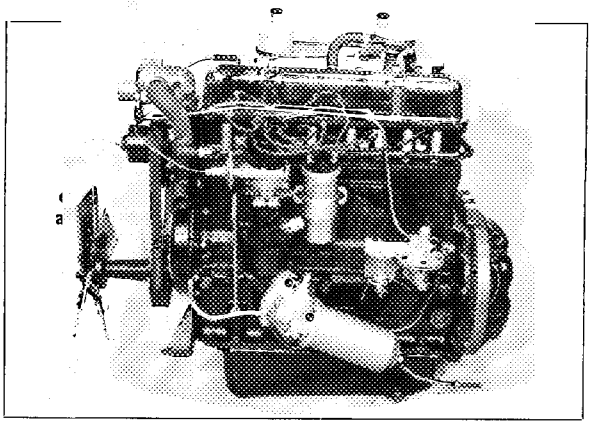

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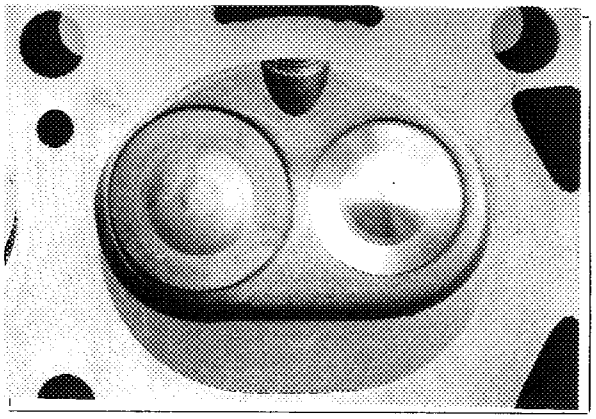

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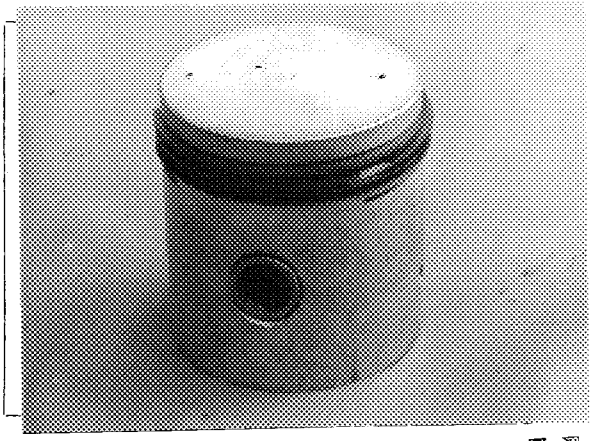

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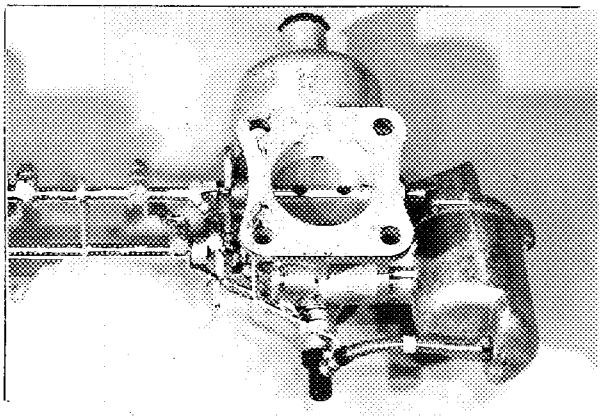

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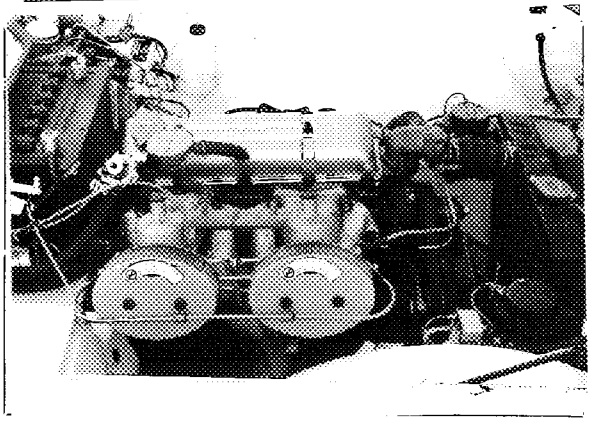

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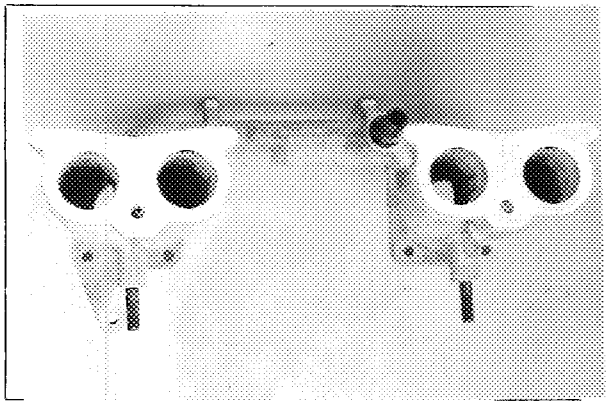

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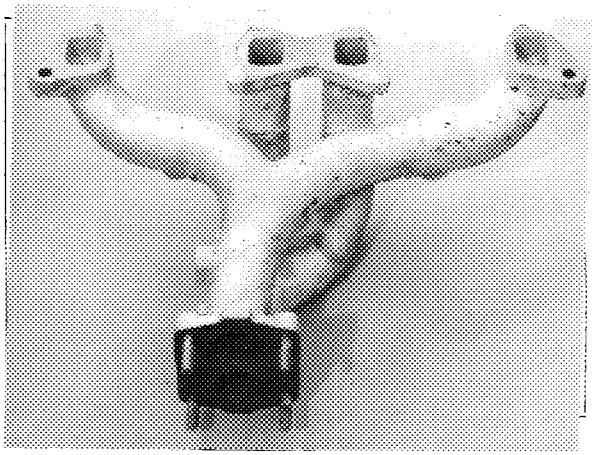
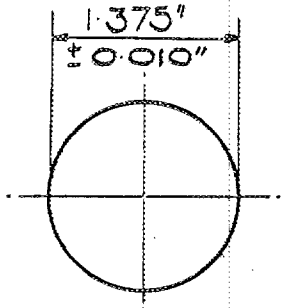


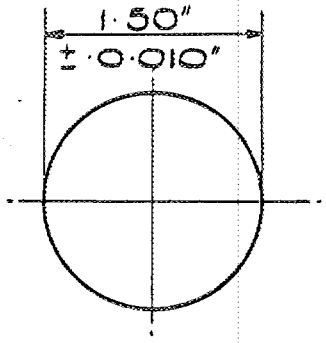
Make Triumph Model TR-4A F.I.A. Rec. No.

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



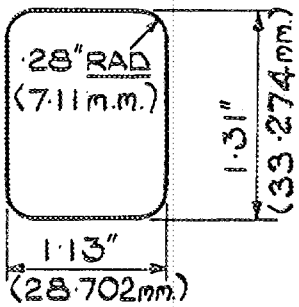
(34·925 mm. ± 0·254 mm.)

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



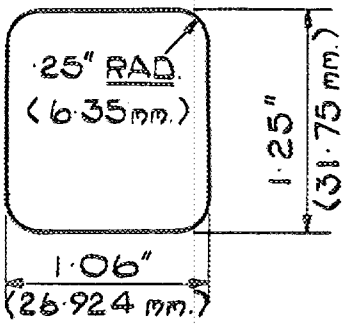
(38·1 mm. ± 0·254 mm.)

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



AS CAST ALL BURRS & FLASHES FETTLED.

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



AS CAST ALL BURRS & FLASHES FETTLED.

Make Triumph Model TR-4A F.I.A. Rec. No.

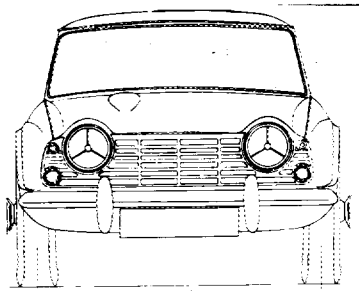
NOTE 1.

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

CAPACITIES AND DIMENSIONS

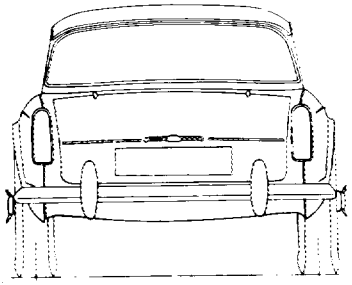
1. Wheelbase — 2440 mm. — 88 inches

2. Front track — 1245 mm. — 49 inches



Track to be measured with wheels at 0° camber

3. Rear track — 1232 mm. — 48.5 inches



Track to be measured with wheels at 0° camber

4. Overall length of the car — 390.2 cm. — 153⅝ inches

5. Overall width of the car — 147 cm. — 58 inches

6. Overall height of the car (hood erect) — 127 cm. — 50 inches

7. Capacity of fuel tank (reserve included)

53.5 ltrs. — 14.13 gall. U.S. — 11¾ 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 :

Hard top	979.3	kg.	2159	lbs.	19.277 cwts.
Soft top	969.8		2138		19.089

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 Triumph Model TR-4A F.I.A. Rec. No.

CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis/body construction: separate/~~unitary construction~~
21. Unitary construction, material(s) S
22. Separate construction, Material(s) of chassis Steel
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 Glass
28. Material(s) of windscreen Glass
29. Material(s) of front-door windows Glass
30. Material(s) of rear-door windows
31. Sliding system of door windows Wind up
32. Material(s) of rear-quarter light Glass

ACCESSORIES AND UPHOLSTERY

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

Each seat	9.98	kg.	22	lbs.

43. Rear seats, type of seat and upholstery
44. Front bumper, material(s) Steel chrome plated Weight 2.495 kg. 5.5. lbs.
45. Rear bumper, material(s) Steel chrome plated Weight 3.402 kg. 7.5 lbs.
overrider 2 lb each = 8 lb total
.907 kg ~~/~~ = 3.629 kg total

WHEELS

50. Type Disc 4J rim
51. Weight (per wheel, without tyre) 7.711 kg. 17 lbs.
52. Method of attachment 4 studs
53. Rim diameter 381 mm. 15 ins. 54. Rim width 101.6 mm. 4 ins.

STEERING

60. Type Rack and pinion
61. Servo-assistance : ~~yes~~—no
62. Number of turns of steering wheel from lock to lock $3\frac{1}{4}$
63. In case of servo-assistance

Make Triumph Model TR-4A F.I.A. Rec. No.

SUSPENSION

70. Front suspension (photograph D), type Independent double wishbone
71. Type of spring Coil
72. Stabiliser (if fitted)
73. Number of shock absorbers 1 per side 74. Type Telescopic
78. Rear suspension (photograph E), type Independent semi-trailing arms
79. Type of spring Coil
80. Stabiliser (if fitted)
81. Number of shock absorbers 1 per side 82. Type Piston

BRAKES (photographs F and G)

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

	FRONT		REAR	
93. Number of cylinders per wheel	2		1	
94. Bore of wheel cylinder(s)	mm. $2\frac{1}{8}$	inches	17.8 mm. .7	inches
Drum Brakes				
95. Inside diameter	mm.	inches	228.6 mm. 9	inches
96. Length of brake linings	mm.	inches	219.5 mm. 8.64	inches
97. Width of brake linings	mm.	inches	44.5 mm. $1\frac{3}{4}$	inches
98. Number of shoes per brake			2	
99. Total area per brake	mm.²	sq. in.	19516 mm.² 30.25	sq. in.
Disc Brakes				
100. Outside diameter	275.006 mm.	10.82 inches	mm.	inches
101. Thickness of disc	12.827 mm.	.505 inches	mm.	inches
102. Length of brake linings	67.818 mm.	2.67 inches	mm.	inches
103. Width of brake linings	52.324 mm.	2.06 inches	mm.	inches
104. Number of pads per brake	2			
105. Total area per brake	7097 mm.²	11 sq. in.	mm.²	sq. in.

Make Triumph Model TR-4A F.I.A. Rec. No.

ENGINE (photographs J and K)

130. Cycle OTTO
131. Number of cylinders 4
132. Cylinder Arrangement In line
133. Bore 86 mm. 3.386 in.
134. Stroke 92 mm. 3.622 in.
135. Capacity per cylinder 534.5 cm.³ 36.625 cu. in.
136. Total cylinder capacity 2138 cm.³ 130.5 cu. in.
137. Material(s) of cylinder block Cast iron
138. Material(s) of sleeves (if fitted) Centrifugally chill case nickel chrome
Number fitted 1
139. Cylinder head, material(s) Cast iron
140. Number of inlet ports 4
141. Number of exhaust ports 4
142. Compression ratio 9 : 1
143. Volume of one combustion chamber 57.6 ± 1 cc cm.³ 3.515±.061 cu. in.
144. Piston, material Aluminium alloy
145. Number of rings 3
146. Distance from gudgeon pin centre line to highest point of piston crown 50.94 mm. 2.004 in.
147. Crankshaft : ~~moulded~~/stamped
148. Type of crankshaft: integral/~~xxxxxx~~
149. Number of crankshaft main bearings 3
150. Material of bearing cap Cast iron
151. System of lubrication : ~~dryxsump~~/oil in sump
152. Capacity, lubricant 6.56 ltrs. 11½ pts. quarts U.S.
153. Oil cooler : ~~yes~~/no
154. Method of engine cooling Water
155. Capacity of cooling system 6.2 ltrs. 11 pts. quarts U.S. with heater
156. Cooling fan (if fitted) dia. 36.83 cm. 14½ in.
157 Number of blades of cooling fan 4

Bearings

158. Crankshaft main, type Shell lead indium dia. 62.97 m.m. 2.479 in.
159. Connecting rod big end, type Shell lead indium dia. 52.98 m.m. 2.086 in.

Weights

160. Flywheel (clean) and ring gear 14.80 kg. 32⅝ lbs.
161. Flywheel with clutch (all turning parts) 19.84 kg. 43¾ lbs.
162. Crankshaft 21.32 kg. 47 lbs.
163. Connecting rod assembly .92 kg. 2.031 lbs.
164. Piston with rings and pin .70 kg. 1.55 lbs.

Make Triumph Model TR-4A F.I.A. Rec. No.

FOUR STROKE ENGINES

170. Number of camshafts 1
171. Location Side, base of cylinders
172. Type of camshaft drive Chain
173. Type of valve operation Pushrod

INLET (see page 4)*

180. Material(s) of inlet manifold Aluminium alloy
181. Diameter of valves 39.675 mm. 1.562 ins.
182. Max. valve lift 98.3 mm. .387 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) .381 mm. 0.015 ins.
187. Valves open at (with tolerance for tappet clearance indicated) 24° BTDC
188. Valves close at (with tolerance for tappet clearance indicated) 64° ABDC
189. Air filter, type Paper element

EXHAUST (see page 4)*

195. Material(s) of exhaust manifold Cast iron
196. Diameter of valves 33.1 mm. 1.303 ins.
197. Max. valve lift 98.3 mm. 38.7 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) .381 mm. 0.015 ins.
202. Valves open at (with tolerance for tappet clearance indicated) 64° BBDC
203. Valves close at (with tolerance for tappet clearance indicated) 24° ATDC

CARBURETION (photograph N)

210. Number of carburettors fitted 2
211. Type Horizontaly
212. Make S.U.
213. Model HSC
214. Number of mixture passages per carburettor 1
215. Flange hole diameter of exit port(s) of carburettor 44.45 mm. $1\frac{3}{4}$ ins.
216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example : SU) 33 mm. 1.300 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 Triumph Model TR-4A F.I.A. Rec. No.

ENGINE ACCESSORIES

230. Fuel pump : mechanical ~~and/or electrical~~

231. No. fitted One

232. Type of ignition system Coil

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 1

237. Method of drive V 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 104 bhp (type of horsepower: Net) at 4700 r.p.m.

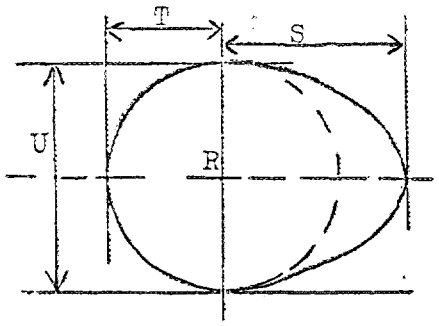
251. Max. r.p.m. 6000 output at that figure 80 bhp

252. Max. torque 1590 lb.in. at 3000 r.p.m. Net

253. Max. speed of the car 177 km./hour 110 miles/hour

R = centre of camshaft

a55



Inlet cam

S =	27.381	mm.	1.078	inches
T =	20.574	mm.	.81	inches
U =	41.148	mm.	1.62	inches

Exhaust cam

S =	27.381	mm.	1.078	inches
T =	20.574	mm.	.81	inches
U =	41.148	mm.	1.62	inches

Make Triumph Model TR-4A F.I.A. Rec. No.

DRIVE TRAIN

CLUTCH

260. Type of clutch Diaphragm

261. No. of plates Single

262. Dia. of clutch plates 21.59 cm. 8.5 ins.

263. Dia. of linings, inside 14.6 cm. 5.75 ins.

outside 21.6 cm. 8.5 ins.

264. Method of operating clutch Hydraulically

GEAR BOX (photograph H)

270. Manual type, make Standard-Triumph Method of operation Manual

271. No. of gear-box ratios forward 4 272. Synchronized forward ratios 4

273. Location of gear-shift Centre floor (transmission tunnel)

274. Automatic, make 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	3.14	33/16						
2	2.01	33/25						
3	1.33	27/31						
4	1.00	35/23						
5								
6								
reverse	3.22	35/17						

278. Overdrive, type Laycock de Normaville Type "A" Electrical operation

279. Forward gears on which overdrive can be selected 2nd 3rd and Top gear

280. Overdrive ratio 0.82 : 1 (22%)

FINAL DRIVE

290. Type of final drive Hypoid bevel

291. Type of differential Bevel gear

292. Type of limited slip differential (if fitted)

293. Final drive ratio 3.7/4.1/4.3/4.55 Number of teeth (10/37)(10/41)(10/43)(9/41)

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

TRIUMPH - TR 4 A	2/66	528
MARQUE ET MODELE	VALIDITE HOMOLOGATION	FICHE NR.

	3 /2500
	GROUPE / CLASSE

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES

Autres homologations du modèle 529 Modele avec essieu AR elgiole

Vérifiée le 5/10/95 par _____ visée ce jour le _____ par _____