



# JAPAN AUTOMOBILE FEDERATION

F. I. A. Recognition No.

584

Group 3

## FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition in accordance with Appendix J to the International Sporting Code.

Manufacturer **Toyota Motor Co., Ltd.**  
 Serial No. of chassis **RT 55 - 10001**  
 Serial No. of engine **9R - 10001**  
 Recognition is valid from

Cylinder-capacity **1,587 cm<sup>3</sup> 96.9 cu. in.**  
Model **RT 55 - 1600-67**  
Manufacturer **Toyota Motor Co., Ltd.**  
Manufacturer **Toyota Motor Co., Ltd.**  
List

The manufacturing of the model described in this recognition form was started on **May 1967** and the minimum production of **1000** identical cars, in accordance with the specifications of this form was reached on **November 1967**

Photograph A, 3/4 view of car from front



The vehicle described in this form has been subject to the following amendments :

| Vehicle |    |          |      | Normal evolution of the type |    |          |      |
|---------|----|----------|------|------------------------------|----|----------|------|
| 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 |

Stamp and signature of the National Sporting Authority

Stamp and signature of the F. I. A.

1.1.1968

Make **Toyota**

Model **RT 55**

IMPORTANT - the underlined items must be stated in two measuring systems, one of which must be the metric system. See conversion table hereafter.

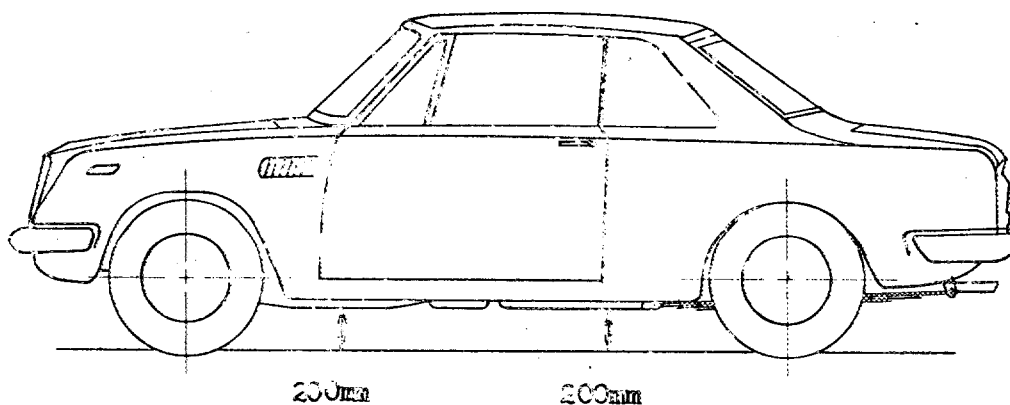
**CAPACITIES AND DIMENSIONS**

|   |       |           |       |             |
|---|-------|-----------|-------|-------------|
| 1. <u>Wheelbase</u>   | 2,420 | mm        | 95.3  | inches      |
| 2. <u>Front track</u>   | 1,290 | mm        | 50.8  | inches *    |
| 3. <u>Rear track</u>  | 1,270 | mm        | 50.0  | inches *    |
| 4. Overall length of the car  |       | 408.5     | cm    | inches      |
| 5. Overall width of the car   |       | 156.5     | cm    | inches      |
| 6. Overall height of the car  |       | 137.5     | cm    | inches      |
| 7. <u>Capacity of fuel tank</u> (reserve included)  |       |           | 45    | ltrs        |
|   | 11.9  | Gallon US |       | Gallon Imp. |
| 8. Seating capacity   | 4     |           |       |             |
| 9. <u>Weight</u> , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools: |       |           |       |             |
|   | 980   | kg        | 2,150 | lbs         |
|   |       |           |       | cwt         |

\* 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 fixed points of the vehicle's structure 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.



**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 square inch / pouce carré | -- 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   |



Make Toyota

Model RT 55

F. I. A. Rec. No.

**SUSPENSION**

- 70. Front suspension (photogr. D), type Independent
- 71. Type of spring Coil
- 72. Stabiliser (if fitted) Torsion Bar
- 73. Number of shockabsorbers 2
- 74. Type Hydraulic Telescopic
- 78. Rear suspension (photogr. E), type Rigid
- 79. Type of spring Leaf
- 80. Stabiliser (if fitted)
- 81. Number of shockabsorbers 2
- 82. Type Hydraulic Telescopic

**BRAKES (photographs F and G)**

- 90. System Hydraulic
- 91. Servo-assistance (if fitted), type
- 92. Number of hydraulic master cylinders 1

|                                   | FRONT       | REAR         |
|-----------------------------------|-------------|--------------|
| 93. Number of cylinders per wheel | 2           | 1            |
| 94. Bore of wheel cylinder (s)    | mm 1-7/8in. | mm 11/16 in. |

**Drum brakes**

|                               |                 |         |                       |                 |         |
|-------------------------------|-----------------|---------|-----------------------|-----------------|---------|
| 95. Inside diameter           | mm              | in.     | 228.6                 | mm              | in.     |
| 96. Length of brake linings   | mm              | in.     | 199, 249              | mm              | in.     |
| 97. Width of brake linings    | mm              | in.     | 35                    | mm              | in.     |
| 98. Number of shoes per brake | 2               |         |                       |                 |         |
| 99. Total area per brake      | mm <sup>2</sup> | sq. in. | 157 x 10 <sup>2</sup> | mm <sup>2</sup> | sq. in. |

**Disc brakes**

|                               |                      |                 |         |                 |         |
|-------------------------------|----------------------|-----------------|---------|-----------------|---------|
| 100. Outside diameter         | 268                  | mm              | in.     | mm              | in.     |
| 101. Thickness of disc        | 10.4                 | mm              | in.     | mm              | in.     |
| 102. Length of brake linings  | 54                   | mm              | in.     | mm              | in.     |
| 103. Width of brake linings   | 47                   | mm              | in.     | mm              | in.     |
| 104. Number of pads per brake | 2                    |                 |         |                 |         |
| 105. Total area per brake     | 51 x 10 <sup>2</sup> | mm <sup>2</sup> | sq. in. | mm <sup>2</sup> | sq. in. |

Make **Toyota** Model **RT 55**

**ENGINE** (photographs J and K)

|   |                  |                               |               |              |          |
|---|------------------|-------------------------------|---------------|--------------|----------|
| 130. Cycle  | 4                | 131. Number of cylinders      | 4             |              |          |
| 132. Cylinder arrangement   | In Line          |                               |               |              |          |
| 133. Bore   | 80,5 mm          | 3.17 in.                      | 134. Stroke   | 78 mm        | 3.07 in. |
| 135. Capacity per cylinder  |                  | 397 cm <sup>3</sup>           |               | 24.2 cu. in. |          |
| 136. Total cylinder-capacity  |                  | 1,587 cm <sup>3</sup>         |               | 96.8 cu. in. |          |
| 137. Material (s) of cylinder block   | Cast Iron        |                               |               |              |          |
| 138. Material (s) of sleeves (if fitted)                                    |                  |                               |               |              |          |
| 139. Cylinder-head, material (s)  | Al- <u>Alloy</u> |                               | Number fitted | 1            |          |
| 140. Number of inlet ports  | 4                | 141. Number of exhaust ports  |               | 4            |          |
| 142. Compression ratio  | 9.0              |                               |               |              |          |
| 143. Volume of one combustion chamber                                       | 50               | cm <sup>3</sup>               |               | cu. in.      |          |
| 144. Piston, material   | Al- <u>Alloy</u> | 145. Number of rings          |               | 3            |          |
| 146. Distance from gudgeon pin centre line to highest point of piston crown | 55 ± 0.15 mm     |                               | inches        |              |          |
| 147. Crankshaft : <del>casted</del> / stamped                               |                  | 148. Type of crankshaft :     | integral /    |              |          |
| 149. Number of crankshaft main bearings                                     | 3                |                               |               |              |          |
| 150. Material of bearing cap  | Cast Iron        |                               |               |              |          |
| 151. System of lubrication : <del>dry-sump</del> / oil in sump              |                  |                               |               |              |          |
| 152. Capacity, lubricant  | 3,8 ltrs         | pts                           |               | quarts US    |          |
| 153. Oil cooler : yes / no  |                  | 154. Method of engine cooling | Water         |              |          |
| 155. Capacity of cooling system   | 8,2 ltrs         | pints                         |               | quarts US    |          |
| 156. Cooling fan (if fitted), dia.  | 30 cm            | inches                        |               |              |          |
| 157. Number of blades of cooling fan  | 2                |                               |               |              |          |

**Bearings**

|                              |       |      |       |     |
|------------------------------|-------|------|-------|-----|
| 158. Crankshaft main, type   | Plain | Dia. | 58 mm | in. |
| 159. Connecting rod big end, | Plain | Dia. | 50 mm | in. |

**Weights**

|   |         |       |                     |         |     |
|---|---------|-------|---------------------|---------|-----|
| 160. Flywheel (clean)                         | 11 kg   | lbs   |                     |         |     |
| 161. Flywheel with clutch (all turning parts) |         | 16 kg | lbs                 |         |     |
| 162. Crankshaft                               | 15 kg   | lbs   | 163. Connecting rod | 0.39 kg | lbs |
| 164. Piston with rings and pin                | 0.53 kg | lbs   |                     |         |     |



Make **Toyota**

Model **RT 55**

F. I. A. Rec. No.

**FOUR STROKE ENGINES**

- 170. Number of camshafts **2**      171. Location **Cylinder Head**
- 172. Type of camshaft drive **Duplex Chain**
- 173. Type of valve operation **Direct**

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

- 180. Material(s) of inlet manifold **Al-Alloy**
- 181. Diameter of valves **45** mm **1.77** inches
- 182. Max. valve lift **9.0** mm **0.35** in.      183. Number of valve springs **2**
- 184. Type of spring **Coil**      185. Numbr of valves per cylinder **1**
- 186. Tappet clearance for checking timing (cold) **0.15** mm **inches**
- 187. Valves open at (with tolerance for tappet clearance indicated) **28° BTDC**
- 188. Valves close at (with tolerance for tappet clearance indicated) **48° ABDC**
- 189. Air filter, type **Dry**

**EXHAUST** (see page 4)

- 195. Material (s) of exhaust manifold **Cast Iron**
- 196. Diameter of valves **40** mm **1.57** inches
- 197. Max. valve lift **9.0** mm **0.35** 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) **0.35** mm **inches**
- 202. Valves open at (with tolerance for tappet clearance indicated) **52° BBDC**
- 203. Valves close at (with tolerance for tappet clearance indicated) **24° ATDC**

**CARBURETION** (photograph N)

- 210. Number of carburetors fitted **2**      211. Type **Side Draught**
- 212. Make **Mikuni**      213. Model **21100-88201**  
**21100-88202**
- 214. Number of mixture passages per carburetor **2**
- 215. Flange hole diameter of exit port(s) of carburettor **40 & 40** mm **in.**
- 216. Minimum dimensions of mixture pasage (s) ~~with piston at max height to example 60H~~  
**32 & 32** mm **inches**

**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** **inches**

\* for additional information concerning two-stroke engines and super-charged engines see page 13.

584

Make **Toyota**

Model **RT 55**

F. I. A. Rec. No.

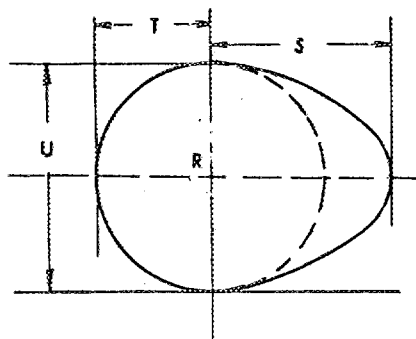
**ENGINE ACCESSORIES**

|   |                                  |                                      |               |
|---|----------------------------------|--------------------------------------|---------------|
| 230. Fuel pump : <del>mechanical</del> / or electric              |                                  | 231. No. fitted                      | 1             |
| 232. Type of ignition system                                      | <b>Make &amp; Break Ignition</b> | 233. No. of distributors             | 1             |
| 234. No. of ignition coils  | 1                                | 235. No. of spark plugs per cylinder | 1             |
| 236. Generator, type: <del>dynamo</del> /alternator-number fitted | 1                                | 237. Method of drive                 | <b>V Belt</b> |
| 238. Voltage of generator   | 12 volts                         | 239. Battery, number                 | 1             |
| 240. Location   | <b>Engine Room</b>               |                                      |               |
| 241. Voltage of battery   | 12 volts                         |                                      |               |

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

|                               |  |                     |
|-------------------------------|--|---------------------|
| 250. Max. engine output       | <b>110 PS</b> (type of horsepower: <b>JIS</b> ) at | <b>6,200 rpm</b>    |
| 251. Maximum rpm              | <b>6,600</b> output at that figure                 | <b>108 PS</b>       |
| 252. Maximum torque           | <b>14.0 kg-m</b> at <b>5,000 rpm</b>               |                     |
| 253. Maximum speed of the car | <b>175 km/hour</b>                                 | <b>miles / hour</b> |

255.



R=centre of  
camshaft.

Inlet cam

|     |      |    |      |        |
|-----|------|----|------|--------|
| S = | 25.9 | mm | 1.01 | inches |
| T = | 16.5 | mm | 0.65 | inches |
| U = | 33.1 | mm | 1.30 | inches |

Exhaust cam

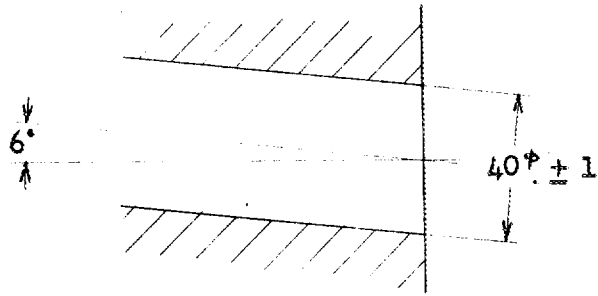
|     |      |    |      |        |
|-----|------|----|------|--------|
| S = | 25.9 | mm | 1.01 | inches |
| T = | 16.5 | mm | 0.65 | inches |
| U = | 33.1 | mm | 1.30 | inches |

Make Toyota

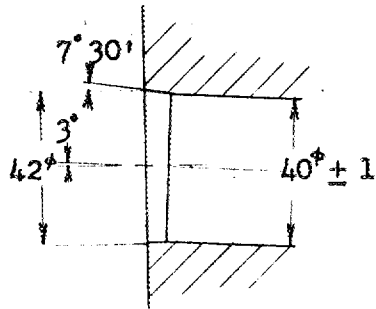
Model RT 55

F. I. A. Rec. No.

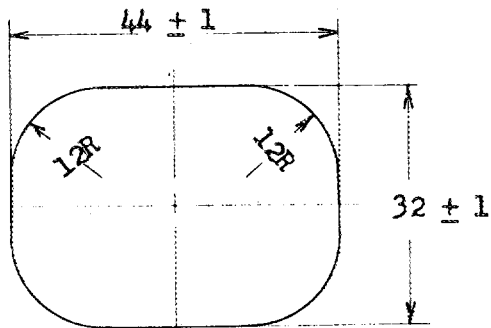
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



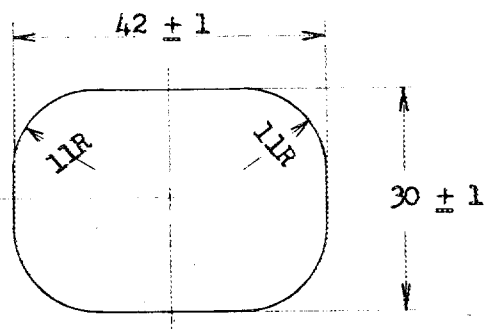
Drawing of entrance to inlet part of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



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



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



Unit ; mm



Make **Toyota**

Model **RT 55**

F. I. A. Rec. No.

**DRIVE TRAIN**

**CLUTCH**

260. Type of clutch **Dry Single Plate Friction** 261. No. of plates **1**
262. Dia. of clutch plates **20.5** cm inches
263. Dia. of linings, inside **14.0** cm in. outside **20.0** cm in.
264. Method of operating clutch **Hydraulic**

**GEAR BOX** (photograph H)

270. Manual type, make **Toyota** Method of operation **Mechanical**
271. No. of gear-box ratios forward **4 & 5** 272. Synchronized forward ratios **1, 2, 3, & 4**
273. Location of gear-shift **Floor** **1, 2, 3, 4, & 5**
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       | 3.673  | 31  | 32    |           |     |       | 3.337                        | 31  | 31    | 3.143 | 28  | 33    |
|         |        | 18  | 15    |           |     |       |                              | 18  | 16    |       | 21  | 14    |
| 2       | 2.114  | 31  | 27    |           |     |       | 1.948                        | 31  | 26    | 1.636 | 28  | 27    |
|         |        | 18  | 22    |           |     |       |                              | 18  | 23    |       | 21  | 22    |
| 3       | 1.403  | 31  | 22    |           |     |       | 1.340                        | 31  | 21    | 1.179 | 28  | 23    |
|         |        | 18  | 27    |           |     |       |                              | 18  | 27    |       | 21  | 26    |
| 4       | 1.0    |     |       |           |     |       | 1.0                          |     |       | 1.0   |     |       |
| 5       |        |     |       |           |     |       |                              |     |       | 0.844 | 28  | 19    |
|         |        |     |       |           |     |       |                              |     |       |       | 21  | 30    |
| 6       |        |     |       |           |     |       |                              |     |       |       |     |       |
| reverse | 4.183  | 31  | 34    |           |     |       | 4.183                        | 31  | 34    | 3.238 | 28  | 34    |
|         |        | 18  | 14    |           |     |       |                              | 18  | 14    |       | 21  | 14    |

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

**FINAL DRIVE**

290. Type of final drive **Hypoid Gear**
291. Type of differential **Bevel Gear**
292. Type of limited slip differential (if fitted) **Friction**
293. Final drive ratio **3.90, 4.11, 4.375, 4.625, 4.875, 5.286**
- Number of teeth **39/10, 37/9, 35/8, 37/8, 39/8, 37/7**

Make Toyota

Model RT 55

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, 184, 186, 187, 188, 189, 199, 201, 202, 203, 212, 213, 215, 216, 222, 225, 230, 250, 251, 252, 253, and photographs L, M and N

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.

Optional equipment affecting preceding information. This to be stated together with reference number.

7. Capacity of fuel tank

90 litres

23.8 Gallon US

91. Servo-assistance type

Vacuum Servo

|         |                    |                                      |       |                                      |
|---------|--------------------|--------------------------------------|-------|--------------------------------------|
| 277.    | Alternative manual |                                      |       |                                      |
| 1       | 2.148              | $\frac{23}{21} \times \frac{29}{18}$ | 3.143 | $\frac{28}{21} \times \frac{33}{14}$ |
| 2       | 1.449              | $\frac{23}{21} \times \frac{25}{25}$ | 1.636 | $\frac{23}{21} \times \frac{27}{22}$ |
| 3       | 1.179              | $\frac{23}{21} \times \frac{23}{26}$ | 1.231 | $\frac{25}{21} \times \frac{24}{26}$ |
| 4       | 1.0                |                                      | 1.0   |                                      |
| 5       | 0.873              | $\frac{23}{21} \times \frac{19}{29}$ | 0.844 | $\frac{28}{21} \times \frac{19}{30}$ |
| 6       |                    |                                      |       |                                      |
| reverse | 3.238              | $\frac{23}{21} \times \frac{34}{14}$ | 3.238 | $\frac{28}{21} \times \frac{34}{14}$ |

584

Make Toyota

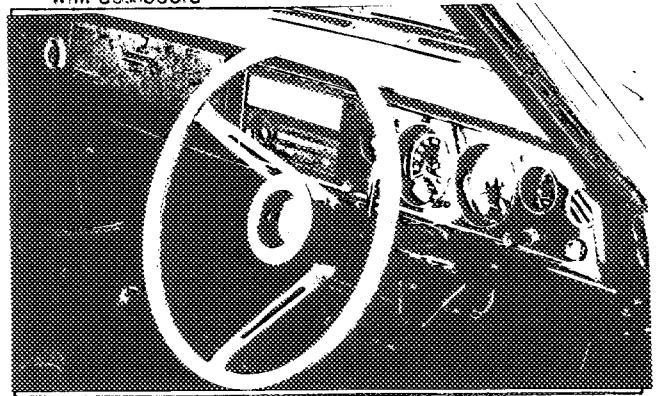
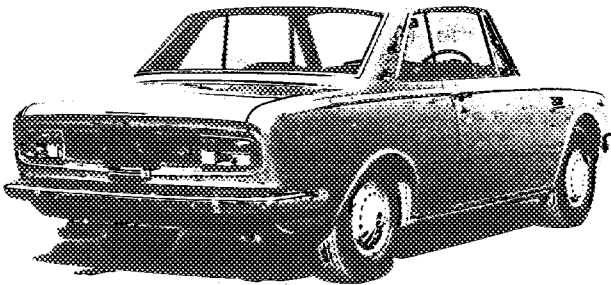
Model RT 55

F. I. A. Rec. No.

Photograph

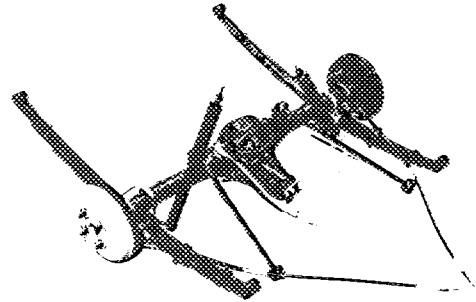
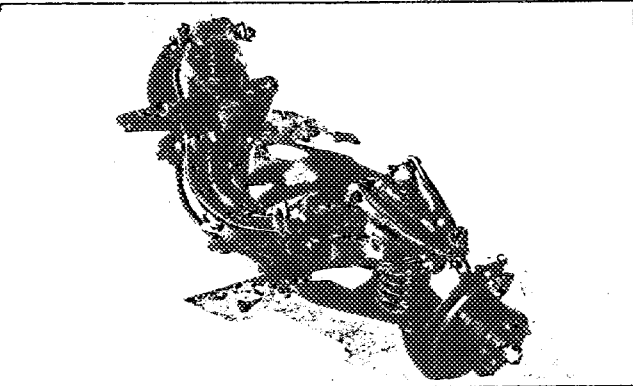
interior view of car through driver's door (open or removed) with dashboard

B, 3/4 view of car from rear



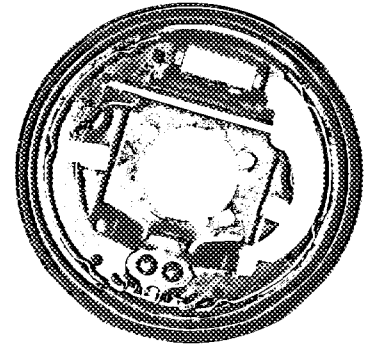
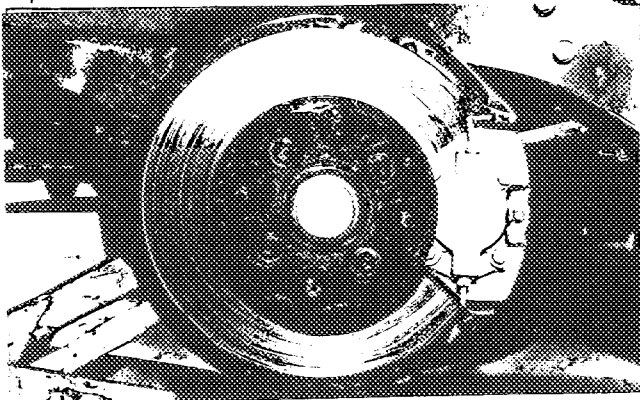
D, front axle complete, removed from car. Without wheels.

E, Rear axle complete without wheels, removed from car.



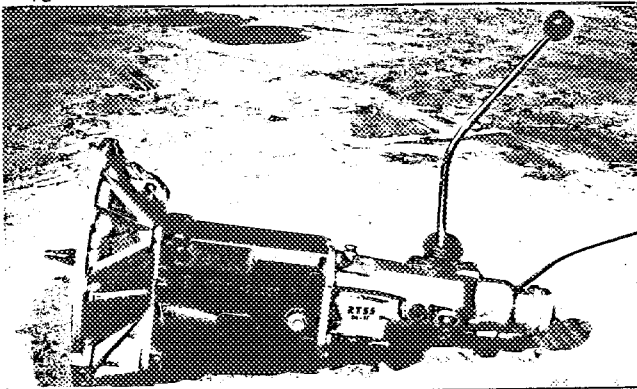
F, front brake drum removed or disc with caliper(s)

G, rear brake drum removed or disc with caliper(s)



H, gear-box, view from side

I, silencer + exhaust pipes after exhaust manifold.



584

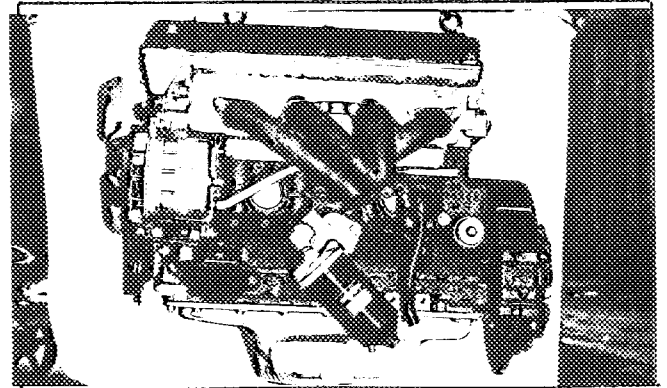
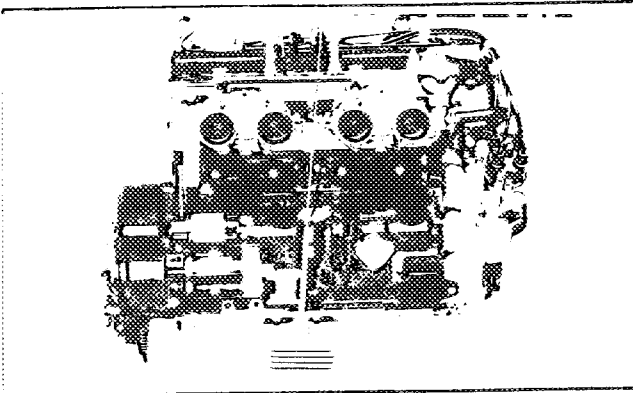
Make **Toyota**

Model **RT 55**

F.I.A. Rec. No

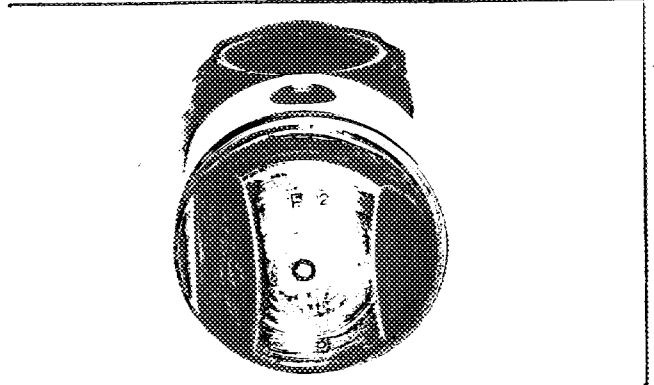
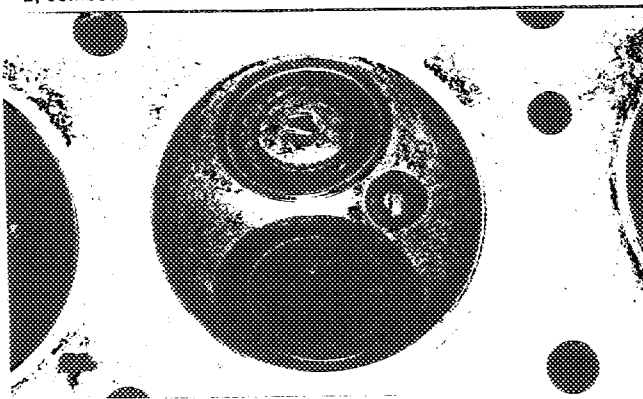
engine unit out of car, from right. With clutch and accessories but without air filter nor gear-box.

Engine unit out of car, from left. With clutch and accessories but without gear-box nor air filter.



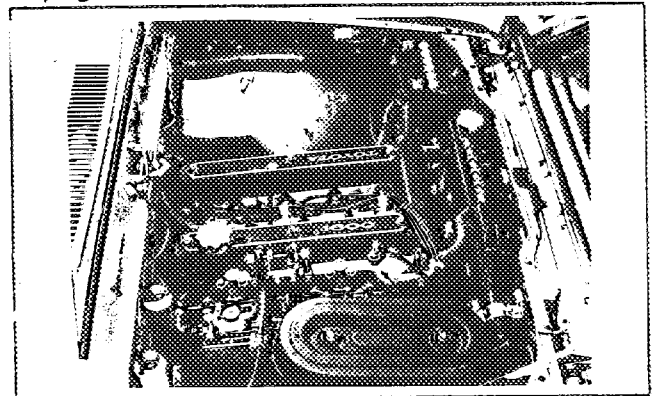
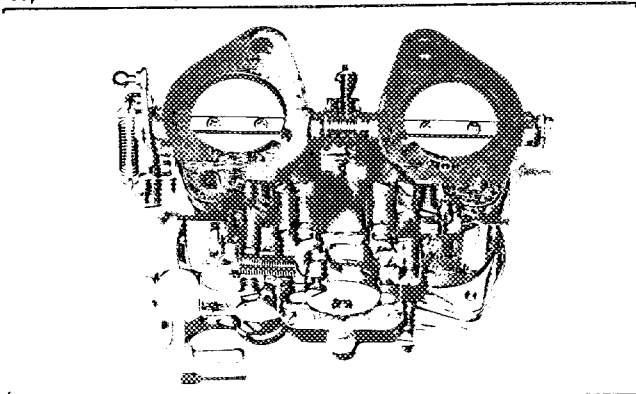
L, combustion chamber

M, piston crown



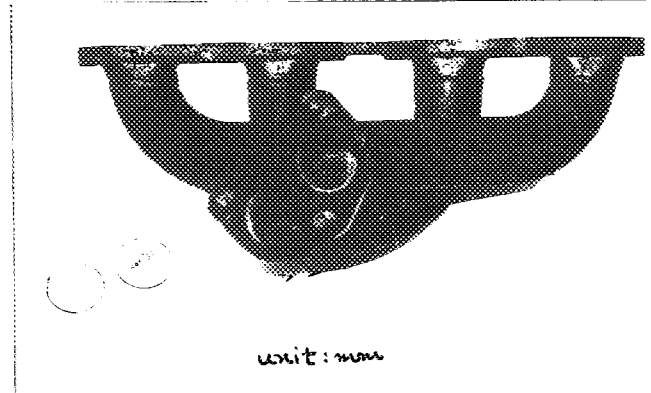
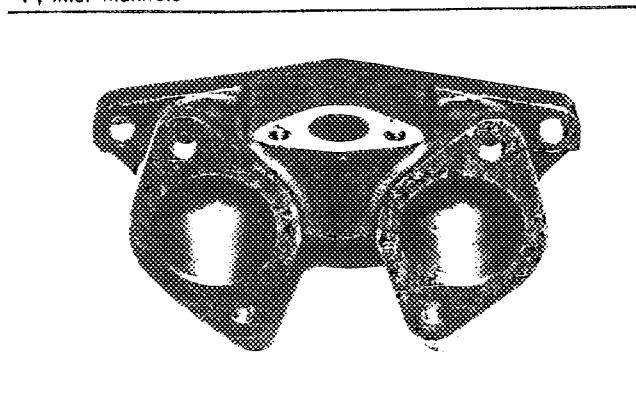
N, Carburettor (view from side of manifold)

O, engine in car with all accessories, bonnet open or removed.



P, inlet manifold

Q, exhaust manifold



unit: mm

100 200 300 400 500 600 700 800 900 1000

584

Make Toyota

Model RT 55

F. I. A. Rec. No.

TWO STROKE ENGINES

- 300. System of cylinder scavenging
- 301. Type of lubrication
- 302. Inlet ports, length measured around cylinder wall mm inches
- 303. Height inlet port mm in. 304. Area mm<sup>2</sup> sq. in.
- 305. Exhaust ports, length measured around cylinder wall mm inches
- 306. Height exhaust port mm in. 307. Area mm<sup>2</sup> sq. in.
- 308. Transfer port, length measured around cylinder wall mm inches
- 309. Height transfer port mm in. 310. Area mm<sup>2</sup> sq. in.
- 311. Piston ports, length measured around piston mm inches
- 312. Height piston port mm in. 313. Area mm<sup>2</sup> sq. in.
- 314. Method of precompression 315. Precompression cyl.: yes / no
- 316. Bore mm inches 317. Stroke mm inches
- 318. Distance from top of cyl. block to highest point of exhaust port : mm inches
- 319. Distance from top of cyl. block to lowest point of inlet port : mm inches
- 320. Distance from top of cyl. block to highest point of transfer port : mm inches
- 321. Drawing of cylinder ports.

330. Supercharging—state full details hereafter :

JAPAN AUTOMOBILE FEDERATION

Kazunari Komotori

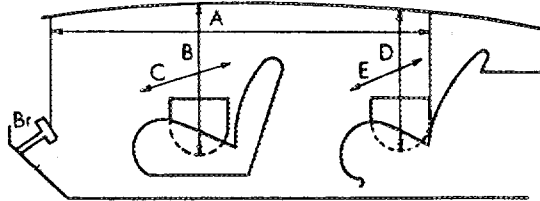
Make Toyota

Model RT 55

584  
F.I.A Rec. No.

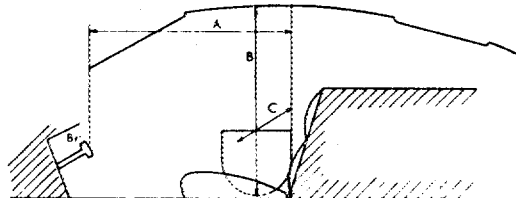
DIMENSIONS OF INTERIOR  
(Conform to Art. 253 b of Appendix J)

For four seaters :



| Minimum Dimensions |       |        |       |        |
|--------------------|-------|--------|-------|--------|
| A                  | B     | C      | D     | E      |
| 161 cm             | 93 cm | 128 cm | 93 cm | 126 cm |

For two seaters :



| Minimum Dimensions |    |    |
|--------------------|----|----|
| A                  | B  | C  |
| cm                 | cm | cm |