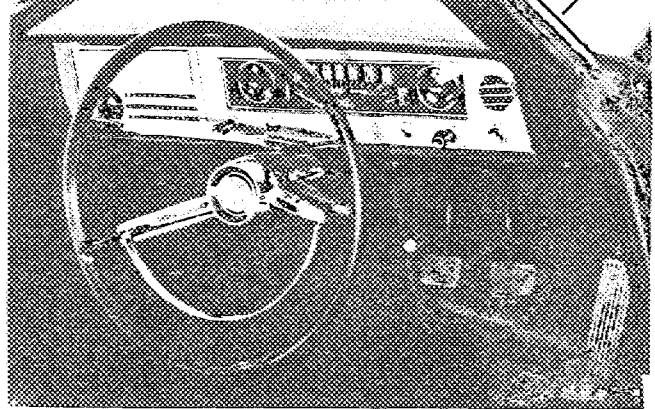


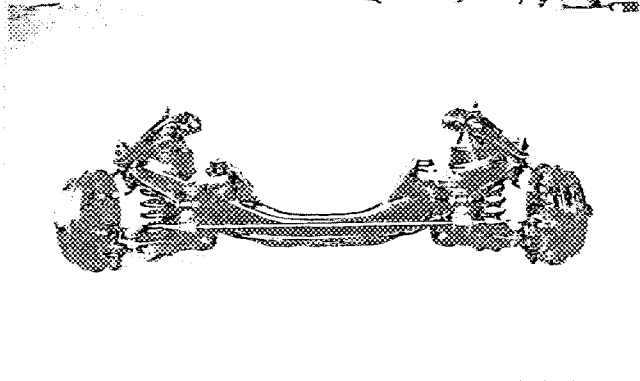
B view of car from rear



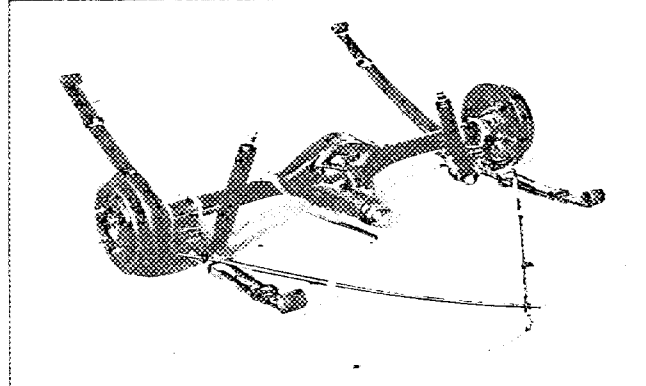
C interior view of car through driver's door open or removed



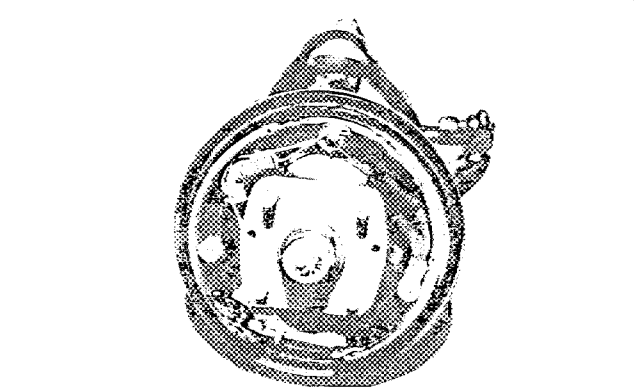
D front axle complete, removed from car. Without wheels.



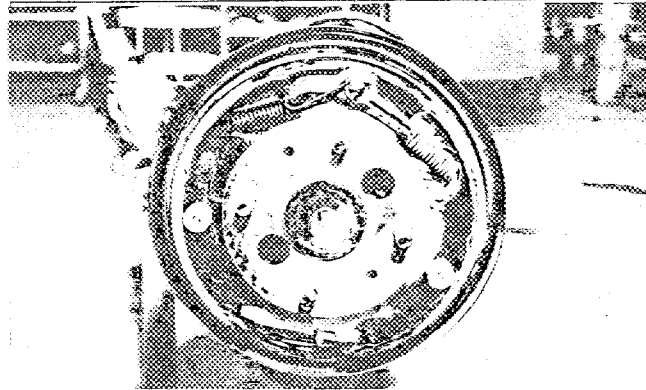
E Rear axle complete without wheels, removed from car.



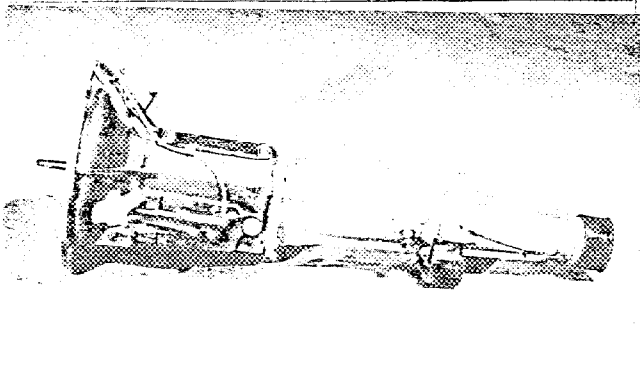
F front brake, drum removed



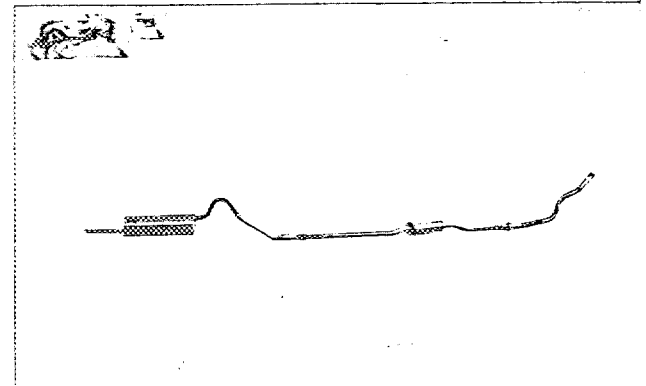
G rear brake, drum removed



H gearbox, view from side

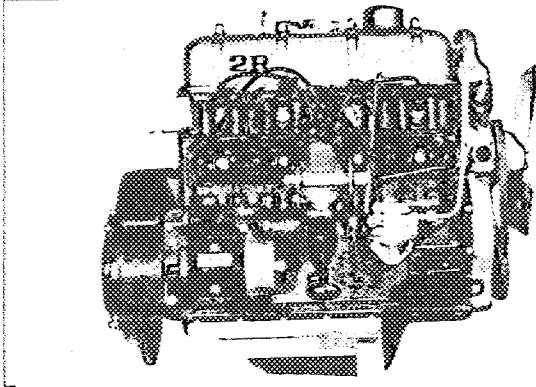


I silencer + exhaust pipes after exhaust manifold.

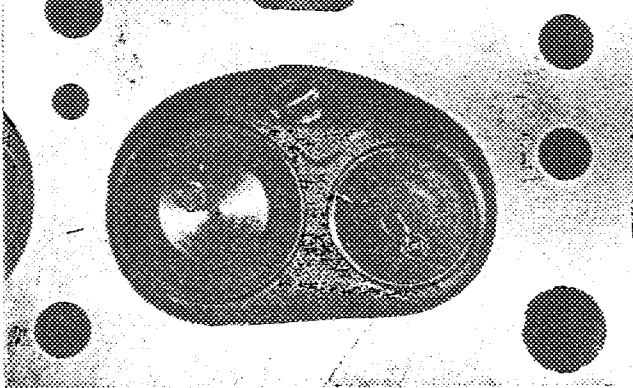


Make **Toyota**

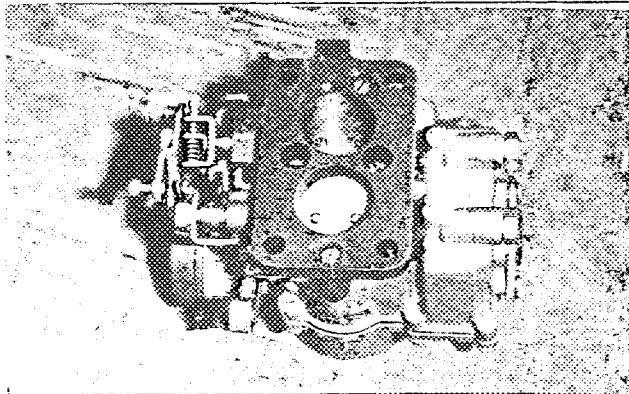
engine unit out of car, from right. With clutch and accessories but without air filter nor gear-box.



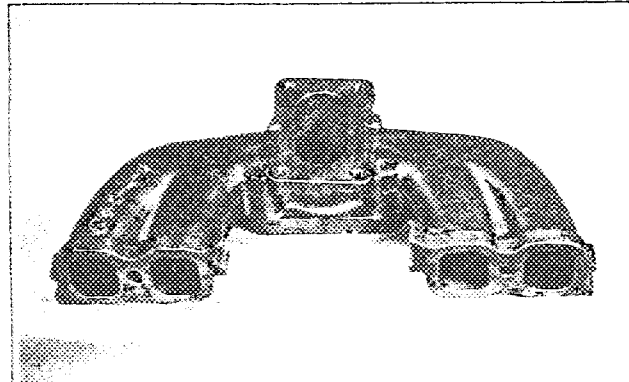
L combustion chamber



N Carburettor (view from side of manifold)



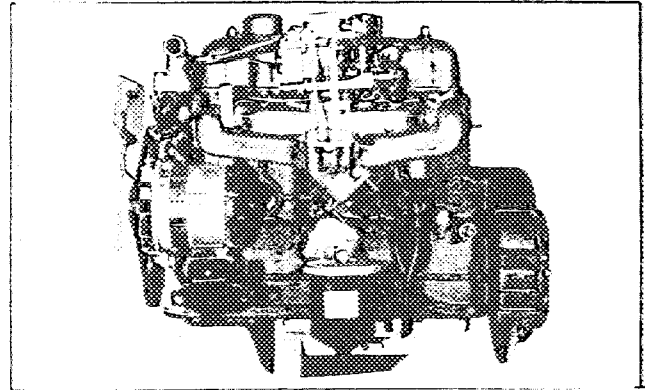
P inlet manifold



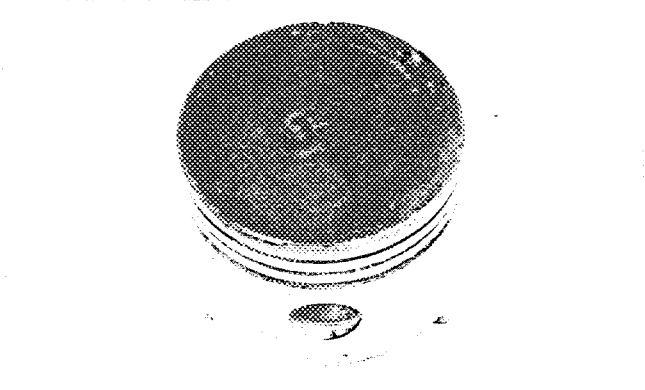
Photograph Model **RT 50**

F.I.A. Rec. No

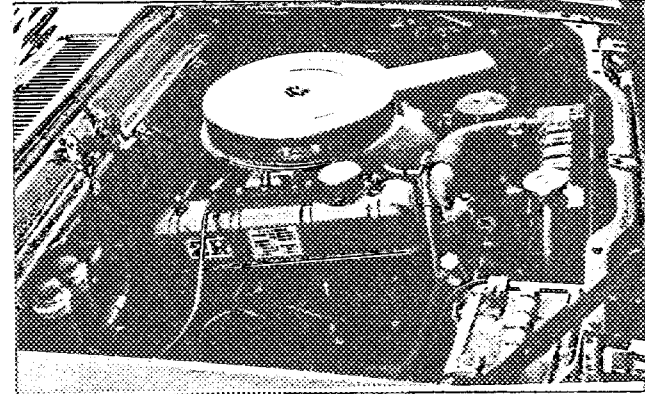
Engine unit out of car, from left. With clutch and accessories but without gear-box nor air filter.



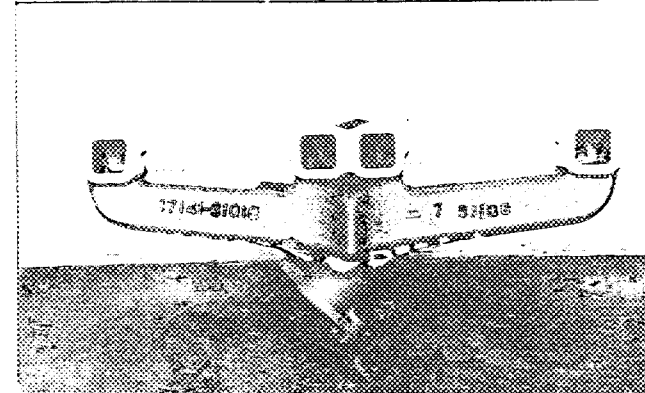
M piston crown



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

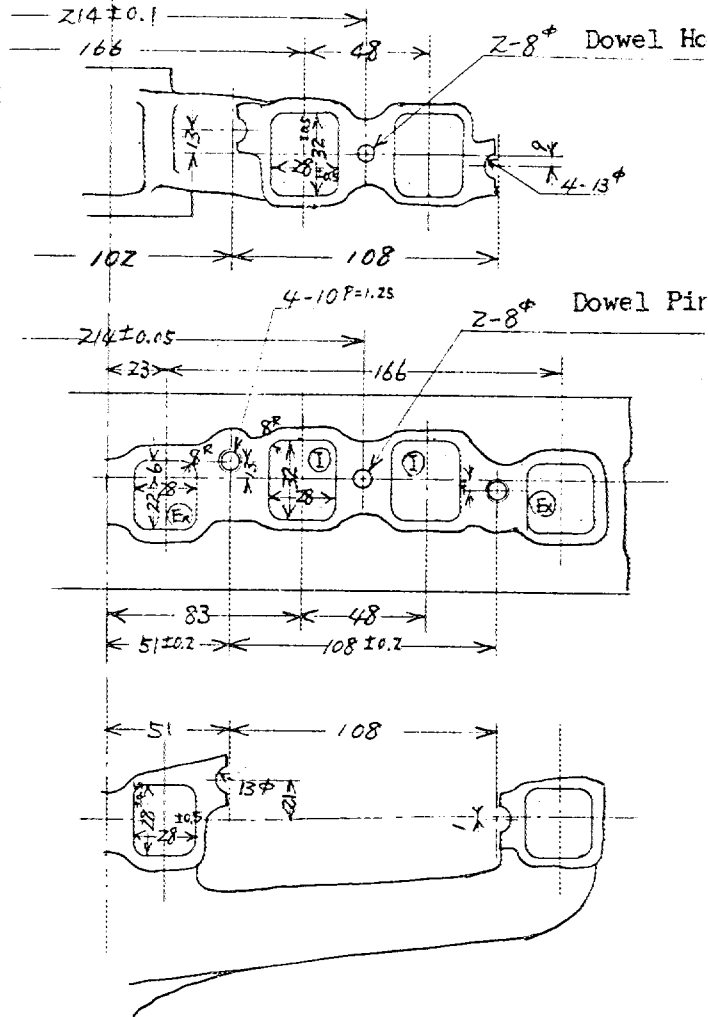


Q exhaust manifold



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

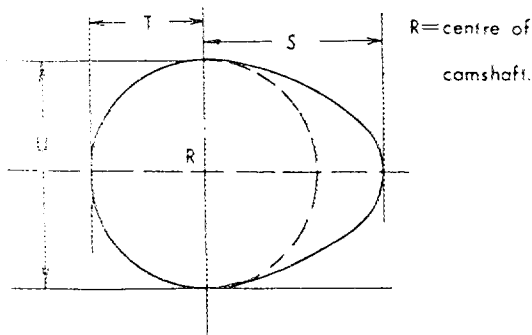
True position of all ports against the machining basis is 1 DIA.



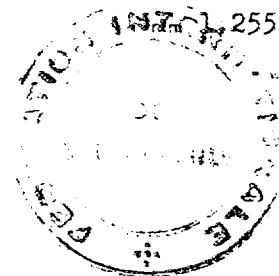
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.

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.



inlet cam		
S = 22.4	mm	0.882
T = 16.0	mm	0.630
U = 32.0	mm	1.261
Exhaust cam		
S = 22.4	mm	0.882
T = 15.9	mm	0.626
U = 31.9	mm	1.255



Make Toyota

Model

RT 50

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

CAPACITIES AND DIMENSIONS

1. <u>Wheelbase</u>	2420	mm	95.3	inches
2. <u>Front track</u>	1270	mm	50.0	inches *
3. <u>Rear track</u>	1270	mm	50.0	inches *
4. Overall length of the car	406.5,			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, total weight</u> of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools :				
	925	kg	2037	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.

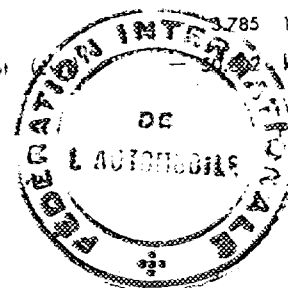
Specify ground clearance in relation to the track and give drawing of two easily recognizable points at front and rear at which measurements are taken.

These ground clearance dimensions are only for information when checking the track and can in no way affect the eligibility of the car.



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 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	— 90.718 kg



Make Toyota

Model RT 50

F.I.A. Rec. No

CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis/body construction : / unitary construction
21. Unitary construction, material (s) Steel Plate
Separate construction
22. Material (s) of chassis
23. Material (s) of coachwork
24. Number of doors 2 Material (s) Steel Plate
25. Material (s) of bonnet Steel Plate
26. Material (s) of boot lid Steel Plate
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 Vertical, Manual
32. Material (s) of rear-quarter light Glass

ACCESSORIES AND UPHOLSTERY

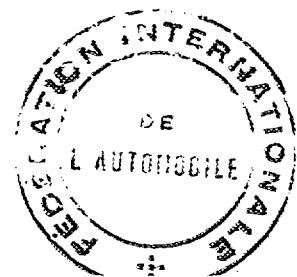
38. Interior heating : - no
39. Air-conditioning : - no
40. Ventilation : yes -
41. Front seats, type of seat and upholstery Separate, Vinyl Leather
42. Weight of front seat (s), complete with supports and rails, out of the car :
18 (per piece) kg lbs
43. Rear seats, type of seat and upholstery Bench, Vinyl Leather
44. Front bumper, material (s) Steel Plate Weight 3.9 kg inches
45. Rear bumper, material (s) Steel Plate Weight 5.8 kg inches

WHEELS

50. Type ~~Pressed~~ Disc Wheel
51. Weight (per wheel, without tyre) 5.8 (4J-13) kg
6.7 (4½J-14)
52. Method of attachment Four Hub Bolts and Nuts
53. Rim diameter 330, 356 mm 13, 14 inches
54. Rim width 102, 114 mm 4, 4½ inches

STEERING

60. Type Worm & Sector Roller
61. Servo-assistance : - no
62. Number of turns of steering wheel from lock to lock 3-3/4
63. In case of servo-assistance -



Make Toyota

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SUSPENSION

70. Front suspension (photogr. D), type Independent by Double Wishbones
71. Type of spring Coil Spring
72. Stabiliser (if fitted) Torsion Bar
73. Number of shockabsorbers 2
74. Type Hydraulic Telescopic Double Action
78. Rear suspension (photogr. E), type Hotchkiss Drive
79. Type of spring Semi-elliptic Leaf Spring
80. Stabiliser (if fitted) -
81. Number of shockabsorbers 2
82. Type Hydraulic Telescopic Double Action

BRAKES (photographs F and G)

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

	FRONT		REAR	
93. Number of cylinders per wheel	1		1	
94. Bore of wheel cylinder (s)	mm $\frac{13}{16}$	in.	mm $\frac{5}{8}$	in.
Drum brakes				
95. Inside diameter	228.6	mm in.	228.6	mm in.
96. Length of brake linings	220, 250	mm in.	220, 250	mm in.
97. Width of brake linings	40	mm in.	40	mm in.
98. Number of shoes per brake	2		2	
99. Total area per brake	188×10^2	mm ² sq. in.	188×10^2	mm ² sq. in.
Disc brakes				
100. Outside diameter		mm in.		mm in.
101. Thickness of disc		mm in.		mm in.
102. Length of brake linings		mm in.		mm in.
103. Width of brake linings		mm in.		mm in.
104. Number of pads per brake				
105. Total area per brake		mm ² sq. in.		mm ² sq. in.

An alfin brake drum ~~is available.~~
~~is available.~~



Make **Toyota**

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F. I. A. Rec. No.

ENGINE (photographs J and K)

130. Cycle	4	131. Number of cylinders	4
132. Cylinder arrangement	In Line		
133. Bore	78 mm	134. Stroke	78 mm
	3.07 in.		3.07 in.
135. Capacity per cylinder	372.5 cm ³		22.7 cu. in.
136. Total cylinder-capacity	1490 cm ³		90.9 cu. in.
137. Material (s) of cylinder block	Cast Iron		
138. Material (s) of sleeves (if fitted)	-		
139. Cylinder-head, material (s)	Cast Iron	Number fitted	1
140. Number of inlet ports	4	141. Number of exhaust ports	4
142. Compression ratio	8.0		
143. Volume of one combustion chamber	53 cm ³		cu. in.
144. Piston, material	Al-Alloy	145. Number of rings	3
146. Distance from gudgeon pin centre line to highest point of piston crown	39 mm		inches
147. Crankshaft : stamped / stamped		148. Type of crankshaft :	integral / integral
149. Number of crankshaft main bearings	3		
150. Material of bearing cap	Cast Iron		
151. System of lubrication : oil in sump / oil in sump			
152. Capacity, lubricant	3.5 ltrs		pts quarts US
153. Oil cooler : no / no		154. Method of engine cooling	Forced Water Circulation
155. Capacity of cooling system	7 ltrs		quarts US
156. Cooling (if fitted), dia.	30 cm		inches
157. Number of blades of cooling fan	2,		
	4 blades fan ; is available is available		

Bearings

158. Crankshaft main, type	Plain Bearing, Two Halves	Dia.	58 mm	in.
159. Connecting rod big end, type	Plain Bearing, Two Halves	Dia.	50 mm	in.

Weights

160. Flywheel (clean)	12 kg		lbs
161. Flywheel with clutch (all turning parts)		16 kg	lbs
162. Crankshaft	15 kg	lbs 163. Connecting rod	0.4 kg lbs
164. Piston with rings and pin	0.45 kg		lbs



FOUR STROKE ENGINES

170. Number of camshafts 1 171. Location Cylinder Block
 172. Type of camshaft drive Gear
 173. Type of valve operation Push Rod & Rocker

INLET (see page 4) *

180. Material(s) of inlet manifold Al-Alloy
 181. Diameter of valves 40 mm 1.58 inches
 182. Max. valve lift 9.3 ± 0.3 mm 0.37 ± 0.01 in. 183. Number of valve springs 2
 184. Type of spring Coil Spring 185. Number 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) B.T.D.C. $16^\circ \pm 2.5^\circ$
 188. Valves close at (with tolerance for tappet clearance indicated) A.B.D.C. $54^\circ \pm 2.5^\circ$
 189. Air filter, type Dry

EXHAUST (see page 4)

195. Material (s) of exhaust manifold Cast Iron
 196. Diameter of valves 32 mm 1.26 inches
 197. Max. valve lift 9.5 ± 0.3 mm 0.38 ± 0.01 in. 198. Number of valve springs 2
 199. Type of spring Coil Spring 200. Number of valves per cylinder 1
 201. Tappet clearance for checking timing (cold) 0.30 mm inches
 202. Valves open at (with tolerance for tappet clearance indicated) B.B.D.C. $54^\circ \pm 2.5^\circ$
 203. Valves close at (with tolerance for tappet clearance indicated) A.T.D.C. $16^\circ \pm 2.5^\circ$

CARBURETION (photograph N)

210. Number of carburetors fitted 1 211. Type Down Draught, 2 Barrel
 212. Make Aisan 213. Model 21100 - 31010
 214. Number of mixture passages per carburetor 2
 215. Flange hole diameter of exit port(s) of carburetor 30 & 32 mm in.
 216. Minimum diameter of venturi ~~30 & 32~~
 22 & 27 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.



Toyota

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F.I.A. Rec. No.

ENGINE ACCESSORIES

230. Fuel pump : mechanical electrical	231. No fitted	1
232. Type of ignition system Make and Break Ignition	233. No of distributors	1
234. No of ignition coils 1	235. No of spark plugs per cylinder	1
236. Generator, type: alternator alternator-number fitted 1	237. Method of drive	V Belt
238. Voltage of generator 12 volts	239. Battery, number	1
240. Location Engine Compartment		
241. Voltage of battery 12 volts		

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

250. Max. engine output 70 PS (type of horsepower: JIS) at 5000 rpm		
251. Maximum rpm 5400 output at that figure 69 PS		
252. Maximum torque 11.5 kg-m at 2600 rpm		
253. Maximum speed of the car 140 km/hour miles / hour		



Make Toyota

Model RT 50

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 20.3 cm inches
 263. Dia. of linings, inside 14 cm in. outside 20 cm in.
 264. Method of operating clutch Hydraulic

GEAR BOX (photograph H)

270. ~~Method of operation~~ Manual Type, make: Toyota
 271. No. of gear-box ratios forward 3 & 4 272. Synchronized forward ratios
 273. Location of gear-shift Steering Column or Floor
 274. Automatic, make Toyota type Hydraulic Operating
 275. No. of forward ratios 2 276. Location of gear-shift Steering Column or Floor

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth
1	3.337	$\frac{31}{18} \cdot \frac{31}{16}$	1.82	$\frac{23+28}{28}$	3.673	$\frac{31}{18} \cdot \frac{32}{15}$		
2	1.653	$\frac{31}{18} \cdot \frac{24}{25}$	1		2.114	$\frac{31}{18} \cdot \frac{27}{22}$		
3	1				1.403	$\frac{31}{18} \cdot \frac{22}{27}$		
4					1			
5								
6								
reverse	4.449	$\frac{31}{18} \cdot \frac{34}{14}$	1.82	$\frac{23+28}{28}$	4.183	$\frac{31}{18} \cdot \frac{34}{14}$		

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) -
 293. Final drive ratio 3.70, 4.111
 Number of teeth 37/10, 37/9



Make **Toyota**

Model **RT 50**

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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, 236, 250, 251, 252, 253, 255 page 4. and photographs I, M and N,

During the scrutineering of 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.



Make

Toyota

Model

RT 50

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 mm² sq. in.
- 305. Exhaust ports, length measured around cylinder wall mm inches
- 306. Height exhaust port mm in. 307. Area mm² sq. in.
- 308. Transfer port, length measured around cylinder wall mm inches
- 309. Height transfer port mm in. 310. Area mm² sq. in.
- 311. Piston ports, length measured around piston mm inches
- 312. Height piston port mm in. 313. Area mm² 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

Chairman

of Technical Subcommission

