



# JAPAN AUTOMOBILE FEDERATION

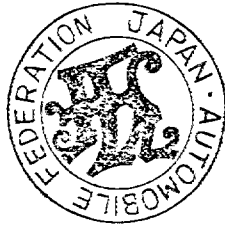
F. I. A. Recognition No. 1543  
Group 2 - Touring

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

|  |                               |                   |   |                               |             |       |
|--|-------------------------------|-------------------|---|-------------------------------|-------------|-------|
| Manufacturer   | <b>Toyota Motor Co., Ltd.</b> | Cylinder-capacity | <b>1077</b>                                 | cm <sup>3</sup>               | <b>65.8</b> | cu in |
| Serial No of chassis   | <b>KE10-100001</b>            | Model             | <b>Toyota Corolla w/disc brake, KE10(D)</b> |                               |             |       |
| Serial No of engine  | <b>K - 100001</b>             | Manufacturer      | <b>Toyota Motor Co., Ltd.</b>               |                               |             |       |
| Recognition is valid from  | <u>1st November 1968</u>      | Manufacturer      | <b>Toyota Motor Co., Ltd.</b>               |                               |             |       |
| The manufacturing of the model described in this recognition form was started on       |                               | List              | <u>1968/10</u>                              |                               |             |       |
| 1000 identical cars, in accordance with the specifications of this form was reached on |                               | April 1968        |   | and the minimum production of |             |       |
|  |                               |                   |   | September 1968.               |             |       |

Photograph A, 3/4 view of car from front



東京都港区芝公園第三号地一番五  
 機械振興会館内  
 法人団  
**日本自動車連盟**

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

Variants

|    |    |          |      |
|----|----|----------|------|
| 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

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 |

Stamp and signature of the F. I. A.

Make **Toyota**

Model **KELO(D)**

F. I. A. Rec. No.

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

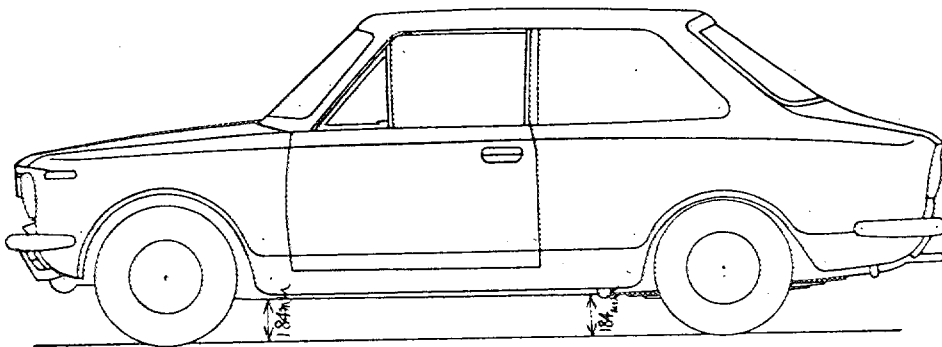
**CAPACITIES AND DIMENSIONS**

|   |       |           |      |             |
|---|-------|-----------|------|-------------|
| 1. <u>Wheelbase</u>   | 2285  | mm        | 90.0 | inches      |
| 2. <u>Front track</u>   | 1230  | mm        | 48.4 | inches *    |
| 3. <u>Rear track</u>  | 1220  | mm        | 48.0 | inches *    |
| 4. Overall length of the car  | 384.5 | cm        |      | inches      |
| 5. Overall width of the car   | 148.0 | cm        |      | inches      |
| 6. Overall height of the car  | 138.0 | cm        |      | inches      |
| 7. <u>Capacity of fuel tank</u> (reserve included)  |       |           | 36   | ltrs        |
|   | 9.5   | Gallon US |      | Gallon Imp. |
| 8. Seating capacity   | 5     |           |      |             |
| 9. <u>Weight</u> , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools: |       |           |      |             |
|   | 675   | kg        | 1490 | 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 **KE10(D)**

F. I. A. Rec. No

**CHASSIS AND COACHWORK** (Photographs A, B and C)

20. Chassis/body construction : ~~XXXXX~~ / unitary construction
21. Unitary construction, material (s) **Steel**  
Separate construction
22. Separate Constructions: Material (s) of chassis
23. Material (s) of coachwork
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 **Vertical, Manual**
32. Material (s) of rear-quarter light **Glass**

**ACCESSORIES AND UPHOLSTERY**

38. Interior heating : ~~XXX~~ - no
39. Air-conditioning : ~~XX~~ - no
40. Ventilation : yes - ~~XX~~
41. Front seats, type of seats and upholstery **Separate, Vinyl leather**
42. Weight of front seat (s), complete with supports and rails, out of the car :  
**10.7 x 2** kg lbs
43. Rear seats, type of seats and upholstery **Bench, Vinyl leather**
44. Front bumper, material (s) **Steel** Weight **2.3** kg lbs
45. Rear bumper, material (s) **Steel** Weight **3.3** kg lbs

**WHEELS**

50. Type **Pressed steel**
51. Weight (per wheel, without tyre) **5.0, 5.8** kg lbs
52. Method of attachment **4 Nuts**
53. Rim diameter **305, 329** mm **12, 13** inches
54. Rim width **102, 114** mm **4, 4.5** inches

**STEERING**

60. Type **Worm & sector roller**
61. Servo-assistance : ~~XXX~~ - no
62. Number of turns of steering wheel from lock to lock **3**
63. In case of servo-assistance

Make

Toyota

Model

KE10(D)

F. I. A. Rec. No

## SUSPENSION

70. Front suspension (photogr. D), type Independent, Macpherson  
 71. Type of spring Coil & transverse leaf  
 72. Stabiliser (if fitted)  
 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 | 1                  |                 |         | 1                   |                 |         |
| 94. Bore of wheel cylinder (s)    | mm                 | $1\frac{3}{4}$  | in.     | mm                  | 11/16           | in.     |
| <b>Drum brakes</b>                |                    |                 |         |                     |                 |         |
| 95. Inside diameter               | mm                 |                 | in.     | 200                 | mm              | in.     |
| 96. Length of brake linings       | mm                 |                 | in.     | 192                 | mm              | in.     |
| 97. Width of brake linings        | mm                 |                 | in.     | 30                  | mm              | in.     |
| 98. Number of shoes per brake     |                    |                 |         | 2                   |                 |         |
| 99. Total area per brake          | mm <sup>2</sup>    |                 | sq. in. | $115.2 \times 10^2$ | mm <sup>2</sup> | sq. in. |
| <b>Disc brakes</b>                |                    |                 |         |                     |                 |         |
| 100. Outside diameter             | 200                | mm              | in.     |                     | mm              | in.     |
| 101. Thickness of disc            | 10                 | mm              | in.     |                     | mm              | in.     |
| 102. Length of brake linings      | 97                 | mm              | in.     |                     | mm              | in.     |
| 103. Width of brake linings       | 37                 | mm              | in.     |                     | mm              | in.     |
| 104. Number of pads per brake     |                    | 2               |         |                     |                 |         |
| 105. Total area per brake         | $61.0 \times 10^2$ | mm <sup>2</sup> | sq. in. |                     | mm <sup>2</sup> | sq. in. |

Make **Toyota**

Model **KE10(D)**

F.I.A. Rec. No.

**ENGINE** (photographs J and K)

|   |                       |   |                                     |
|---|-----------------------|---|-------------------------------------|
| 130. Cycle  | <b>4</b>              | 131. Number of cylinders                              | <b>4</b>                            |
| 132. Cylinder arrangement   | <b>In line</b>        |   |                                     |
| 133. Bore   | <b>75</b> mm          | 134. Stroke   | <b>61</b> mm <b>2.40</b> in         |
| 135. Capacity per cylinder  | <b>269</b>            |   | cm <sup>3</sup> <b>16.5</b> cu. in. |
| 136. Total cylinder-capacity  | <b>1077</b>           |   | cm <sup>3</sup> <b>65.8</b> cu. in. |
| 137. Material (s) of cylinder block   | <b>Cast iron</b>      |   |                                     |
| 138. Material (s) of sleeves (if fitted)                                    |                       |   |                                     |
| 139. Cylinder-head, material (s)  | <b>Aluminum alloy</b> | Number fitted   | <b>1</b>                            |
| 140. Number of inlet ports  | <b>4</b>              | 141. Number of exhaust ports                          | <b>4</b>                            |
| 142. Compression ratio  | <b>9.0</b>            |   |                                     |
| 143. Volume of one combustion chamber                                       | <b>33.7</b>           |   | cm <sup>3</sup> cu. in.             |
| 144. Piston, material   | <b>Aluminum alloy</b> | 145. Number of rings                                  | <b>3</b>                            |
| 146. Distance from gudgeon pin centre line to highest point of piston crown | <b>36</b> mm          |   | inches                              |
| 147. Crankshaft : moulded / <del>sump</del>                                 |                       | 148. Type of crankshaft : integral / <del>xxxxx</del> |                                     |
| 149. Number of crankshaft main bearings                                     | <b>5</b>              |   |                                     |
| 150. Material of bearing cap  | <b>Cast iron</b>      |   |                                     |
| 151. System of lubrication : <del>xxxxx</del> / oil in sump                 |                       |   |                                     |
| 152. Capacity, lubricant  | <b>3.5</b> ltrs       |   | pts                                 |
| 153. Oil cooler : <del>xxxx</del> / no                                      |                       | 154. Method of engine cooling                         | <b>Water</b>                        |
| 155. Capacity of cooling system   | <b>4.7</b> ltrs       |   | pints                               |
| 156. Cooling fan (if fitted), dia.  | <b>31</b> cm          |   | inches                              |
| 157. Number of blades of cooling fan  | <b>2</b>              |   |                                     |

**Bearings**

|                              |              |      |           |    |     |
|------------------------------|--------------|------|-----------|----|-----|
| 158. Crankshaft main, type   | <b>Plain</b> | Dia. | <b>50</b> | mm | in. |
| 159. Connecting rod big end, | <b>Plain</b> | Dia. | <b>42</b> | mm | in. |

**Weights**

|   |            |    |             |                     |            |    |     |
|---|------------|----|-------------|---------------------|------------|----|-----|
| 160. Flywheel (clean)                         | <b>6.8</b> | kg |             | lbs                 |            |    |     |
| 161. Flywheel with clutch (all turning parts) |            |    | <b>10.0</b> | kg                  |            |    |     |
| 162. Crankshaft                               | <b>8.8</b> | kg | lbs         | 163. Connecting rod | <b>0.3</b> | kg | lbs |
| 164. Piston with rings and pin                | <b>0.4</b> | kg |             | lbs                 |            |    |     |

Make **Toyota**

Model **KR10(D)**

F. I. A. Rec. No

**FOUR STROKE ENGINES**

170. Number of camshafts **1** 171. Location **Cylinder block**  
172. Type of camshaft drive **Chain**  
173. Type of valve operation **Push rod & rocker**

**INLET** (see page 8) \*

180. Material(s) of inlet manifold **Aluminum alloy**  
181. Diameter of valves **34** mm **1.34** inches  
182. Max. valve lift **8.8** mm **0.35** in. 183. Number of valve springs **1**  
184. Type of spring **Coil** 185. Number of valves per cylinder **1**  
186. Tappet clearance for checking timing (cold) **0.08** mm inches  
187. Valves open at (with tolerance for tappet clearance indicated) **B.T.D.C. 16° ± 7°**  
188. Valves close at (with tolerance for tappet clearance indicated) **A.B.D.C. 50° ± 7°**  
189. Air filter, type **Dry**

**EXHAUST** (see page 8)

195. Material (s) of exhaust manifold **Cast iron**  
196. Diameter of valves **28** mm **1.10** inches  
197. Max. valve lift **8.4** mm **0.33** in. 198. Number of valve springs **1**  
199. Type of spring **Coil** 200. Number of valves per cylinder **1**  
201. Tappet clearance for checking timing (cold) **0.18** mm inches  
202. Valves open at (with tolerance for tappet clearance indicated) **B.B.D.C. 50° ± 7°**  
203. Valves close at (with tolerance for tappet clearance indicated) **A.T.D.C. 16° ± 7°**

**CARBURETION** (photograph N)

210. Number of carburetors fitted **1** 211. Type **Down draught**  
212. Make **Aisan** 213. Model **K**  
214. Number of mixture passages per carburetor **2**  
215. Flange hole diameter of exit port(s) of carburetor **28 & 28** mm in.  
216. Minimum dimensions of mixture passage(s) ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~  
**21 & 24** 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

\*1 for additional information concerning two-stroke engines and super-charged engines see page 13.

Make **Toyota**

Model **KE10(D)**

F.I.A. Rec. No.

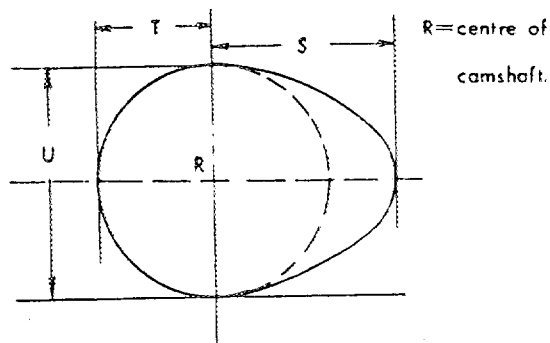
**ENGINE ACCESSORIES**

- |   |                                |                                      |               |
|---|--------------------------------|--------------------------------------|---------------|
| 230. Fuel pump : mechanical <del>electrical</del>               |                                | 231. No. fitted                      | <b>1</b>      |
| 232. Type of ignition system                                    | <b>Make and break ignition</b> | 233. No. of distributors             | <b>1</b>      |
| 234. No. of ignition coils                                      | <b>1</b>                       | 235. No. of spark plugs per cylinder | <b>1</b>      |
| 236. Generator, type: <del>brush</del> alternator-number fitted | <b>1</b>                       | 237. Method of drive                 | <b>V belt</b> |
| 238. Voltage of generator                                       | <b>12</b> volts                | 239. Battery, number                 | <b>1</b>      |
| 240. Location   | <b>Engine room</b>             |                                      |               |
| 241. Voltage of battery   | <b>12</b> volts                |                                      |               |

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

- |                               |                 |                                   |                |            |
|-------------------------------|-----------------|-----------------------------------|----------------|------------|
| 250. Max. engine output       | <b>60 PS</b>    | (type of horsepower: <b>JIS</b> ) | at <b>6000</b> | rpm        |
| 251. Maximum rpm              | <b>6500</b>     | output at that figure             | <b>58 PS</b>   |            |
| 252. Maximum torque           | <b>8.5 kg.m</b> | at <b>3800</b>                    | rpm            |            |
| 253. Maximum speed of the car | <b>140</b>      | km/hour                           | <b>93</b>      | miles/hour |

255.



|     |      | <u>Inlet cam</u>   |       |        |  |
|-----|------|--------------------|-------|--------|--|
| S = | 21.1 | mm                 | 0.831 | inches |  |
| T = | 15.4 | mm                 | 0.606 | inches |  |
| U = | 30.8 | mm                 | 1.213 | inches |  |
|     |      | <u>Exhaust cam</u> |       |        |  |
| S = | 21.2 | mm                 | 0.835 | inches |  |
| T = | 15.2 | mm                 | 0.598 | inches |  |
| U = | 30.4 | mm                 | 1.197 | inches |  |

Make

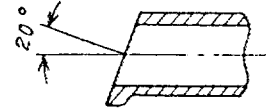
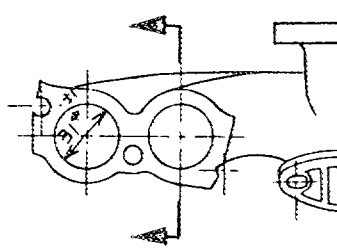
**Toyota**

Model

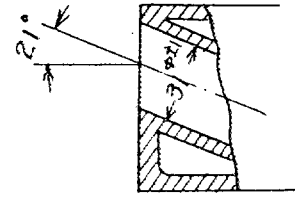
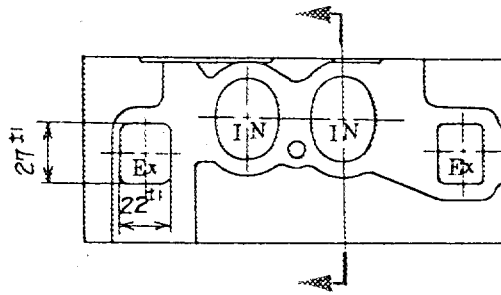
**KE10(D)**

E. I. A. Rec. No.

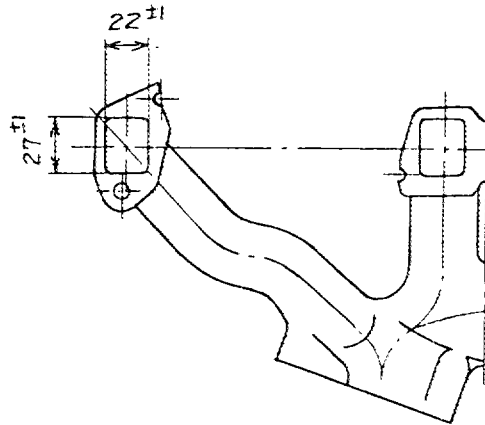
Drawing inlet  
manifold parts  
side of cylinder-  
head. Indicate  
scale or dimensions  
and manufacturing  
tolerance.



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



Drawing exhaust  
manifold parts,  
side of cylinder-  
head. Indicate  
scale or dimen-  
sions and manufact-  
uring tolerance.



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

Unit : **MM**



Make

Toyota

Model

KE10(D)

F.I.A. Rec. No

**DRIVE TRAIN**

**CLUTCH**

260. Type of clutch **Dry single plate** 261. No. of plates **1**
262. Dia. of clutch plates **18.3** cm inches
263. Dia. of linings, inside **12.5** cm in. outside **18.0** cm
264. Method of operating clutch **Mechanical**

**GEAR BOX** (photograph H)

270. Manual type, make **Toyota** Method of operation **Mechanical**
271. No. of gear-box ratios forward **4** 272. Synchronized forward ratios **1, 2, 3 & 4**
273. Location of gear-shift **Floor or column**
274. Automatic, make **Toyota** type **Torque converter**
275. No. of forward ratios **2** 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       | 3.684  | $\frac{32}{19}$ | $\times \frac{35}{16}$ | 1.82      |     | $\frac{23 + 28}{28}$ |                              |     |       |       |     |       |
| 2       | 2.050  | $\frac{32}{19}$ | $\times \frac{28}{23}$ | 1.00      |     |                      |                              |     |       |       |     |       |
| 3       | 1.384  | $\frac{32}{19}$ | $\times \frac{23}{28}$ |           |     |                      |                              |     |       |       |     |       |
| 4       | 1.000  |                 |                        |           |     |                      |                              |     |       |       |     |       |
| 5       |        |                 |                        |           |     |                      |                              |     |       |       |     |       |
| 6       |        |                 |                        |           |     |                      |                              |     |       |       |     |       |
| reverse | 4.316  | $\frac{32}{19}$ | $\times \frac{41}{16}$ | 1.82      |     | $\frac{23 + 28}{28}$ |                              |     |       |       |     |       |

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 **4.222, 4.444**
- Number of teeth **38/9, 40/9**

Make

**Toyota**

Model

**KELO(D)**

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 I, M, N, and page 8

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.

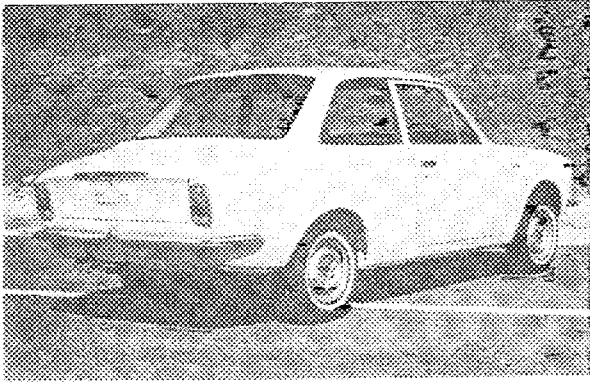
Make **Toyota**

Model **KE10(D)**

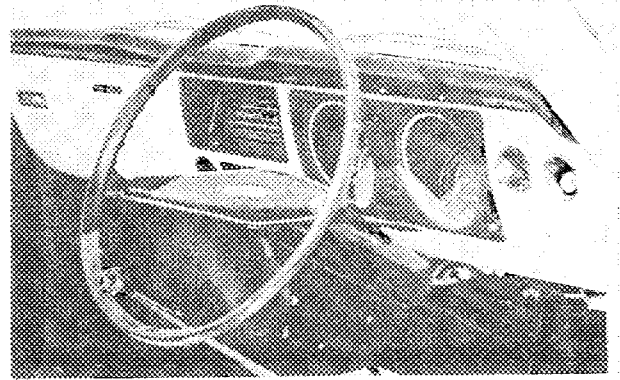
F.I.A. Rec. No

Photograph

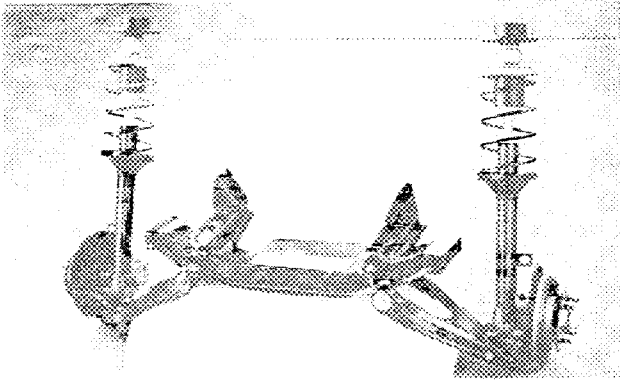
**B**, 3/4 view of car from rear



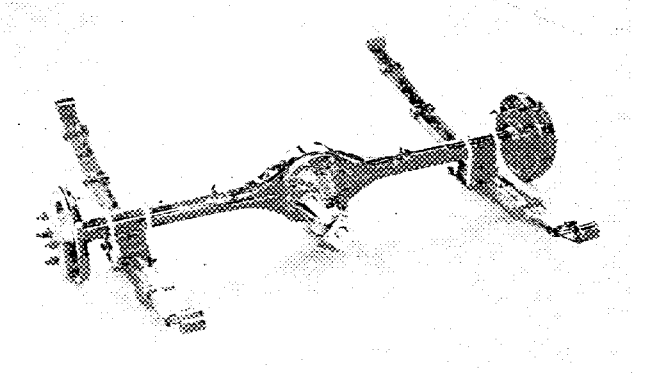
**C**, interior view of car through driver's door (open or removed) with dashboard



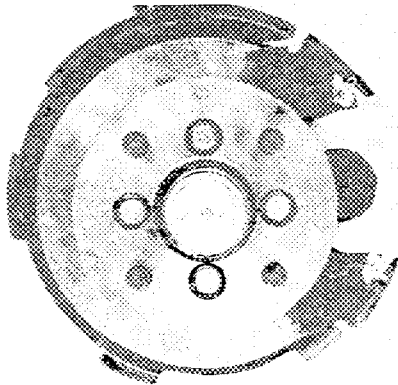
**D**, front axle complete, removed from car. Without wheels.



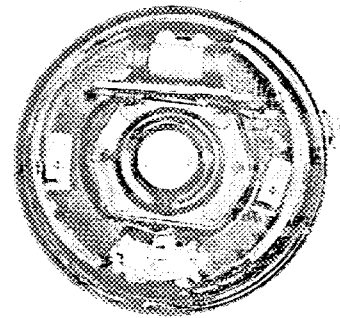
**E**, Rear axle complete without wheels, removed from car



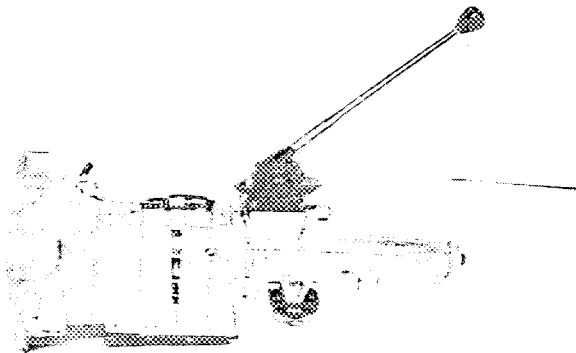
**F**, front brake, drum removed or disc with calipers



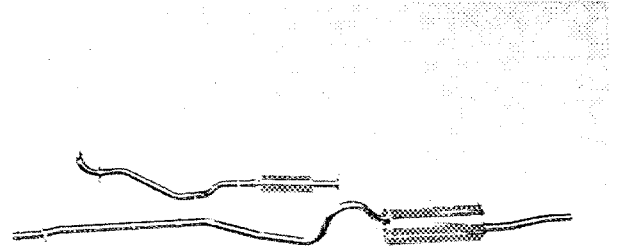
**G**, rear brake, drum removed or disc with calipers



**H**, gear-box, view from side



**I**, silencer + exhaust pipes after exhaust manifold



Make **Toyota**

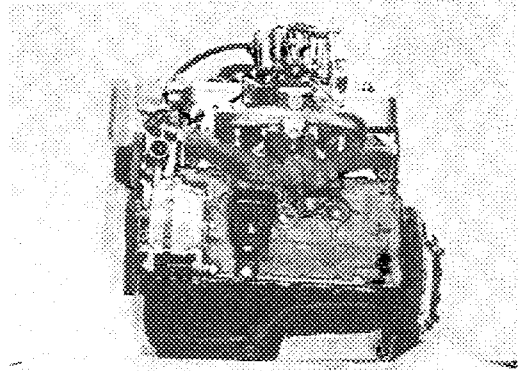
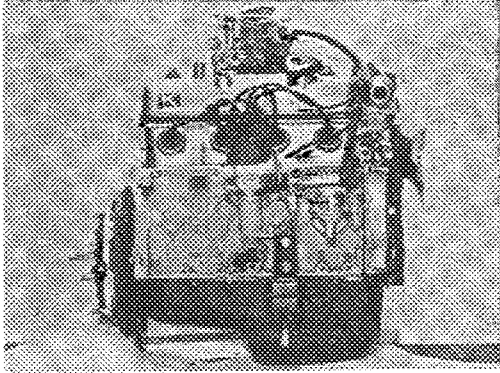
Model **KE10(D)**

F. I. A. Rec. No

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

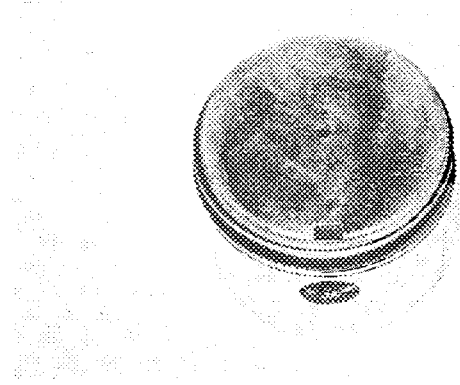
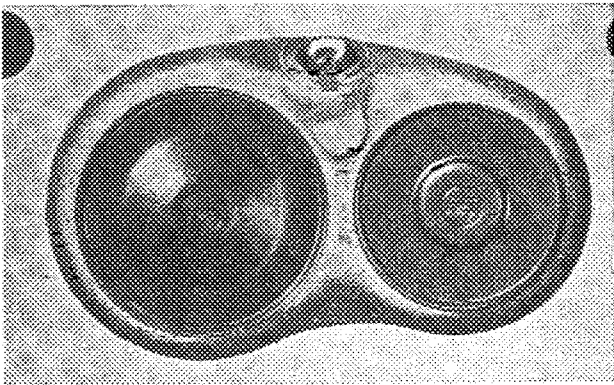
Photograph

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



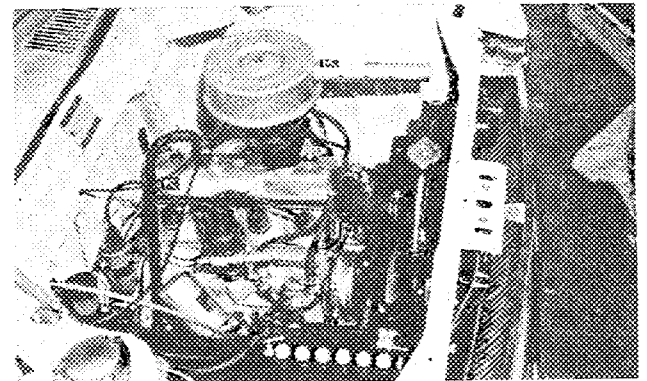
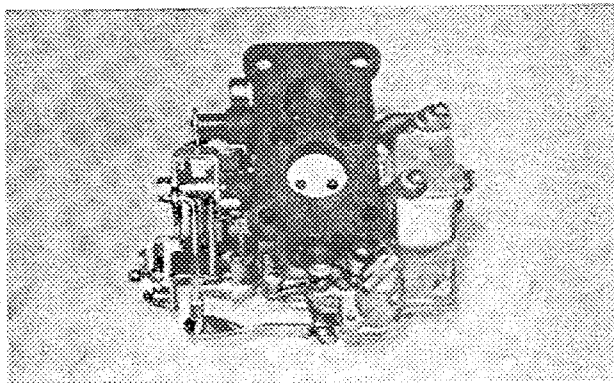
L, combustion chamber

M, piston crown



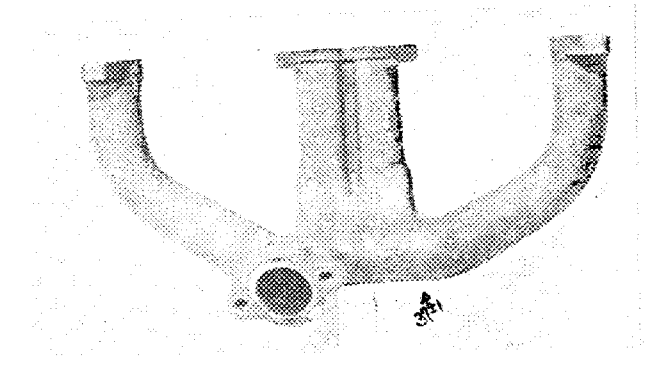
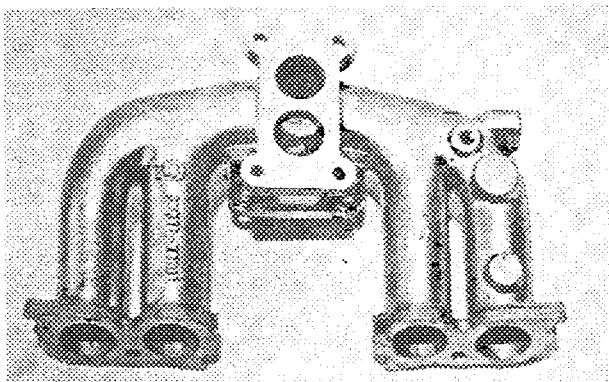
N, Carburettor (view from side of manifold)

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



P, inlet manifold

Q, exhaust manifold





JAPAN AUTOMOBILE FEDERATION F.I.A. Homol. No 1543

11/11V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Amendment to Form of Recognition in accordance with the International Sporting Code. FIA Recognition No 1543

Make Toyota Motor Co., Ltd. Model KE10(D)
Modification's application starts with serial No. chassis KE10-260001 engine K - 323596
Application of this amendment started the 11th March 1968
Commercial denomination after application of modifications Toyota Corolla SL, KE10-S
The modifications are to be considered as: Variant /
Data amendment is valid from 1st Jan 69 list 1969/1

Description of amendment
Another type of engine can be choiced for the KE10(D) cars as maker's option.

Cylinder Capacity. 1077 Cm3 65.8 Cu.in.
1. Max. engine output 73 PS (type of horsepower : JIS) at 6600 rpm
2. Max. rpm 6700 output at that figure 72.9 PS
3. Max. torque 9.0 Kg-m at 4600 rpm
4. Max. speed of the car 155 Km/h

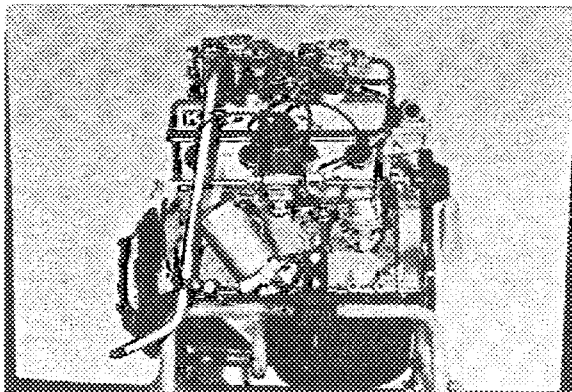


Photo J

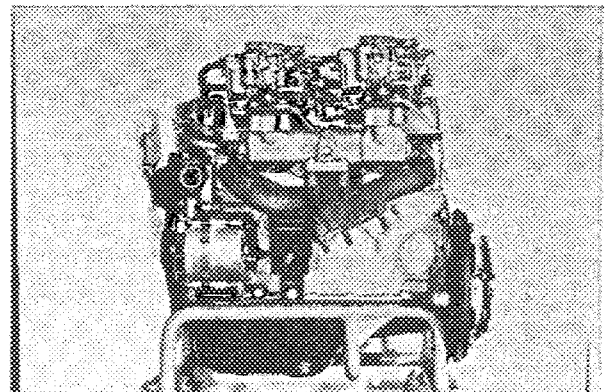


Photo K

Further detailed specifications are described on the attached sheets.

Name and signature of National Sporting Authority

Stamp and signature of F.I.A.

JAPAN AUTOMOBILE FEDERATION

Signature of Yasuharu Nanba

Yasuharu Nanba

Signature of F.I.A.



東京都港区芝公園第三号地一番五
機械振興会館内
日本自動車連盟

Make Toyota

Model KE10 (D)

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 75 mm 2.95 in.
- 134. Stroke 61 mm 2.40 in.
- 135. Capacity per cylinder 269 cm<sup>3</sup> 16.5 cu. in.
- 136. Total cylinder-capacity 1077 cm<sup>3</sup> 65.8 cu. in.
- 137. Material (s) of cylinder block Cast iron
- 138. Material (s) of sleeves (if fitted)
- 139. Cylinder-head, material (s) Aluminum alloy Number fitted 1
- 140. Number of inlet ports 4
- 141. Number of exhaust ports 4
- 142. Compression ratio 10.0
- 143. Volume of one combustion chamber 29.9 cm<sup>3</sup> cu. in.
- 144. Piston, material Aluminum alloy
- 145. Number of rings 3
- 146. Distance from gudgeon pin centre line to highest point of piston crown 36 mm inches
- 147. Crankshaft : moulded / ~~wrapped~~
- 148. Type of crankshaft : integral / ~~XXXXXXXXXX~~
- 149. Number of crankshaft main bearings 5
- 150. Material of bearing cap Cast iron
- 151. System of lubrication : ~~pressure~~ / oil in sump
- 152. Capacity, lubricant 3.5 ltrs pts
- 153. Oil cooler : ~~YES~~ / no
- 154. Method of engine cooling Water
- 155. Capacity of cooling system 4.7 ltrs pints
- 156. Cooling fan (if fitted), dia. cm inches
- 157. Number of blades of cooling fan 2

Bearings

- 158. Crankshaft main, type Plain Dia. 50 mm
- 159. Connecting rod big end, Plain Dia. 42 mm

Weights

- 160. Flywheel (clean) 6.8 kg lbs
- 161. Flywheel with clutch (all turning parts) 10.0 kg
- 162. Crankshaft 8.8 kg
- 163. Connecting rod 0.3 kg
- 164. Piston with rings and pin 0.4 kg lbs

Make Toyota

Model KE10 <sup>(D)</sup> ~~4MB~~

F. I. A. Rec. No

**FOUR STROKE ENGINES**

170. Number of camshafts 1 171. Location Cylinder Block  
 172. Type of camshaft drive Chain  
 173. Type of valve operation Push rod & rocker

**INLET (see page 8) \***

180. Material(s) of inlet manifold Aluminum alloy  
 181. Diameter of valves 34 mm 1.34 inches  
 182. Max. valve lift 8.6 mm 0.34 in.  
 183. Number of valve springs 1  
 184. Type of spring Coil  
 185. Number of valves per cylinder 1  
 186. Tappet clearance for checking timing (cold) 0.1 mm  
 187. Valves open at (with tolerance for tappet clearance indicated) B.T.D.C. 18° ± 7°  
 188. Valves close at (with tolerance for tappet clearance indicated) A.B.D.C. 58° ± 7°  
 189. Air filter, type Dry

**EXHAUST (see page 8)**

195. Material(s) of exhaust manifold Cast iron  
 196. Diameter of valves 28 mm 1.1 inches  
 197. Max. valve lift 8.9 mm 0.35 in.  
 198. Number of valve springs 1  
 199. Type of spring Coil  
 200. Number of valves per cylinder 1  
 201. Tappet clearance for checking timing (cold) 0.23 mm  
 202. Valves open at (with tolerance for tappet clearance indicated) B.B.D.C. 58° ± 7°  
 203. Valves close at (with tolerance for tappet clearance indicated) A.T.D.C. 18° ± 7°

**CARBURETION (photograph N)**

210. Number of carburetors fitted 2 211. Type Down draught  
 212. Make Aisan 213. Model K - B  
 214. Number of mixture passages per carburetor 2  
 215. Flange nose diameter of exit port(s) of carburetor 28 & 28 mm  
 216. Minimum dimensions of mixture passage(s) ~~XXXXXX~~  
 19.8, 24 mm inches

**INJECTION (if fitted)**

219. 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

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

Make Toyota

Model KE10<sup>(D)</sup>

F. I. A. Rec. No.

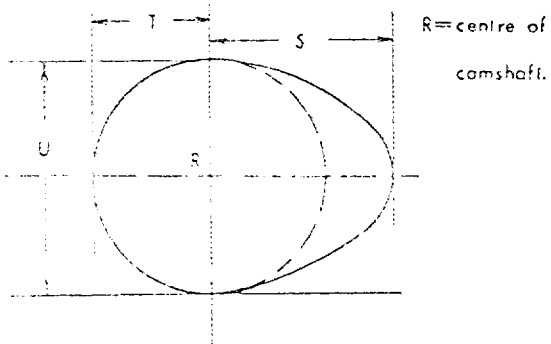
**ENGINE ACCESSORIES**

- 230. Fuel pump : mechanical ~~not~~ ~~electronic~~
- 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: ~~dyno~~ alternator-number fitted 1
- 237. Method of drive V belt
- 238. Voltage of generator 12 volts
- 239. Battery, number 1
- 240. Location Engine room
- 241. Voltage of battery 12 volts

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

- 250. Max. engine output 73PS (type of horsepower: JIS ) at 6600 rpm
- 251. Maximum rpm 6700 output at that figure 72.9 PS
- 252. Maximum torque 9.0 Kg-m at 4600 rpm
- 253. Maximum speed of the car 155 km/hour miles / hour

255



Inlet com

|     |      |    |       |        |
|-----|------|----|-------|--------|
| S = | 21.3 | mm | 0.839 | inches |
| T = | 15.5 | mm | 0.610 | inches |
| U = | 31.0 | mm | 1.220 | inches |

Exhaust com

|     |      |    |       |        |
|-----|------|----|-------|--------|
| S = | 21.3 | mm | 0.839 | inches |
| T = | 15.2 | mm | 0.598 | inches |
| U = | 30.5 | mm | 1.200 | inches |

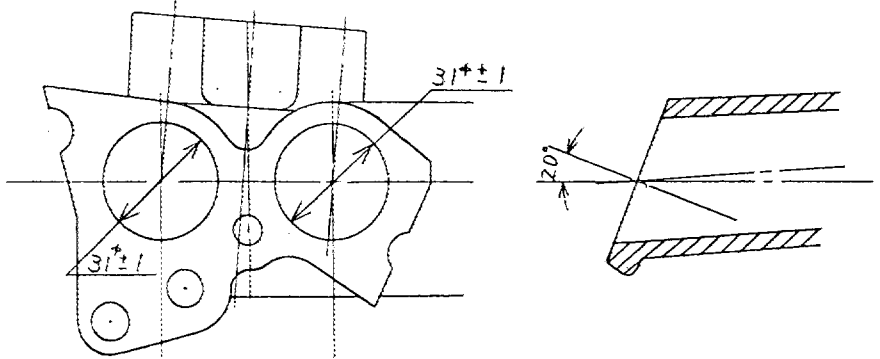


Make Toyota

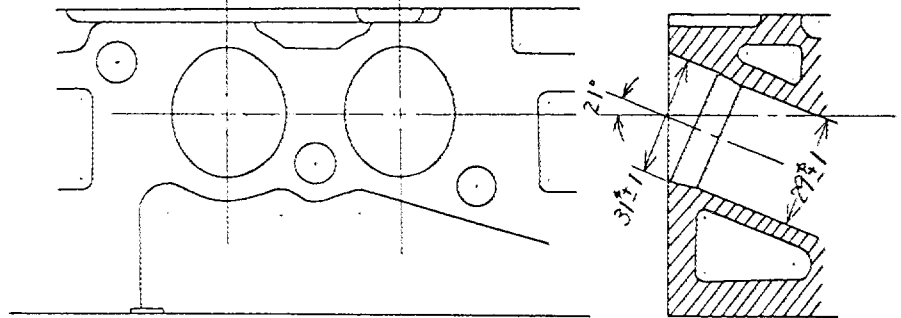
Model KE10 (D)

F.I.A. Rec No

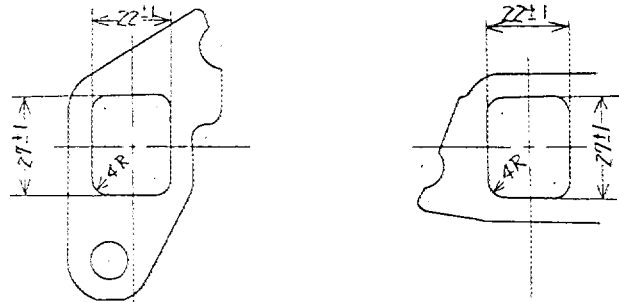
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



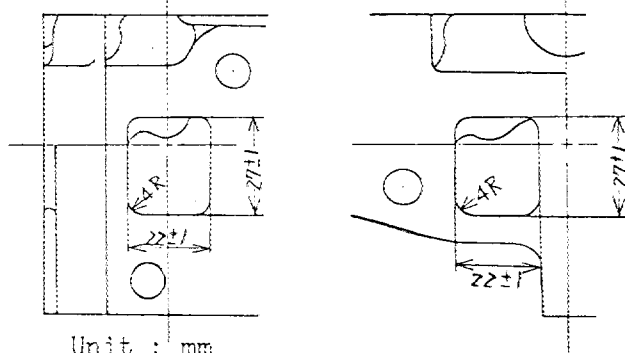
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



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



Drawing of exit to exhaust port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



Unit : mm

Model KE10 (D)

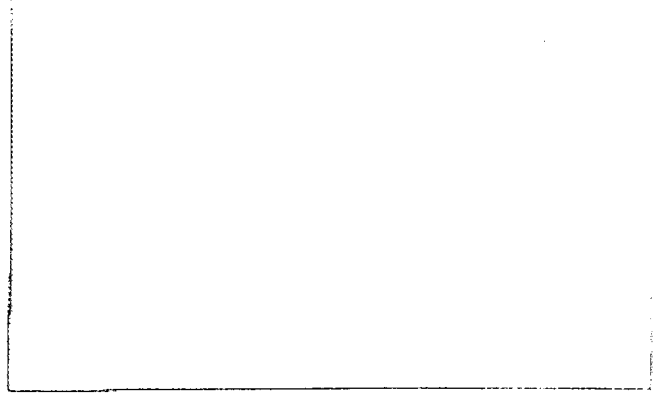
F.I.A. Rec. 1.

Photograph

1. Rear view of car from rear



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



2. Rear axle complete without wheels



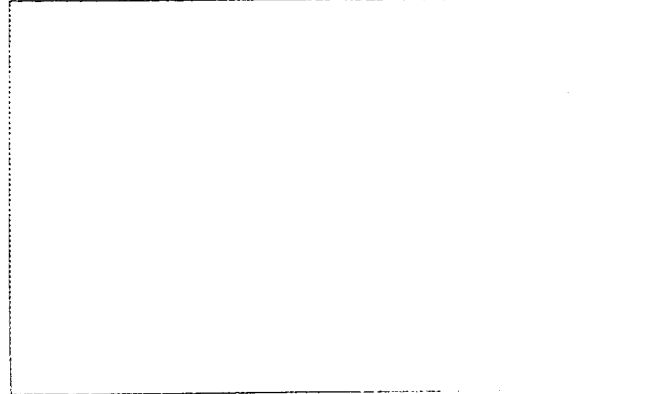
E. Rear axle complete without wheels, removed from car



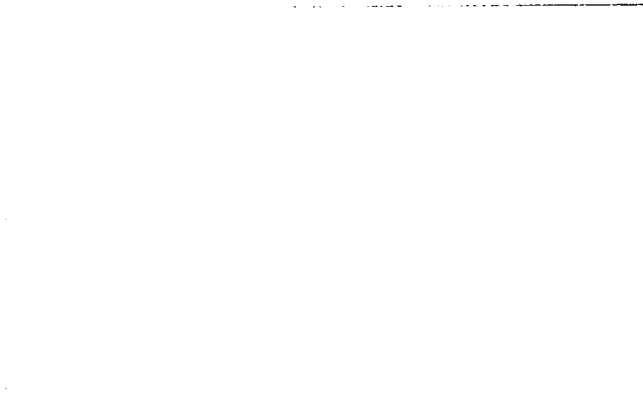
3. Rear brake drum



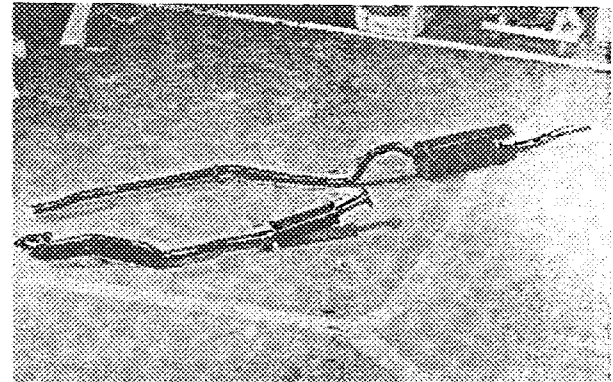
G. rear brake drum removed or disassembled



4. Silencer



I. silencer + exhaust pipes after exhaust pipes



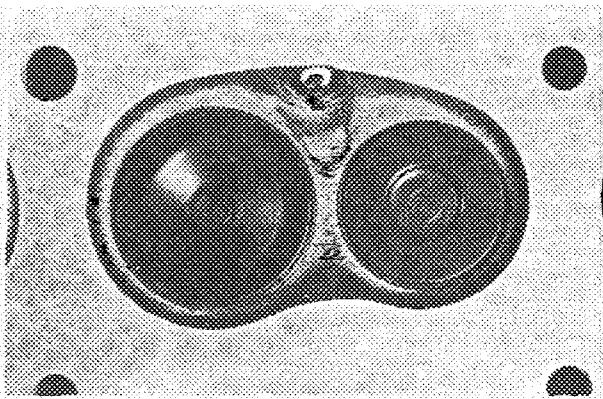
Model KE1006.

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

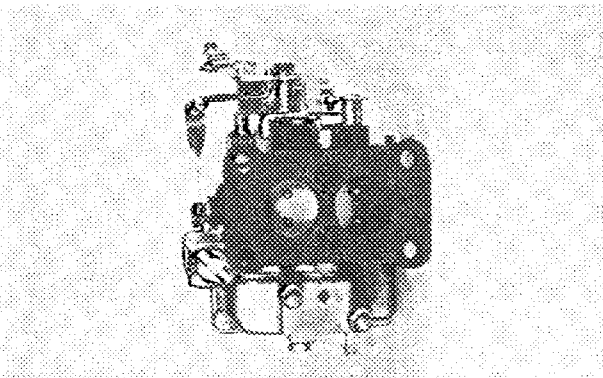
For recognition in group 4 the engine to be showed without accessories nor manifolds (inlet-exhaust).

*Attached on the "variant" form*

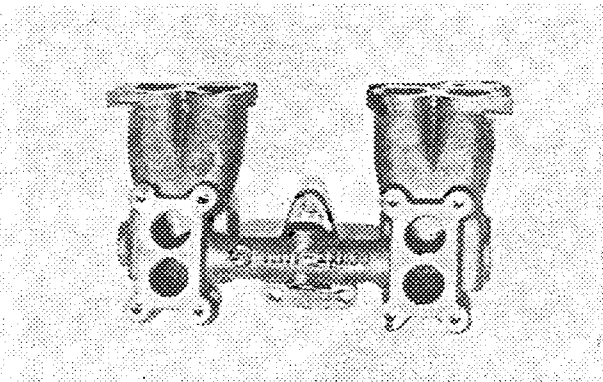
L, combustion chamber



M, piston crown (from side of manifold)



N, accessories



Photograph

Model KE10<sup>(D)</sup>

F.I.A. Rec. No

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

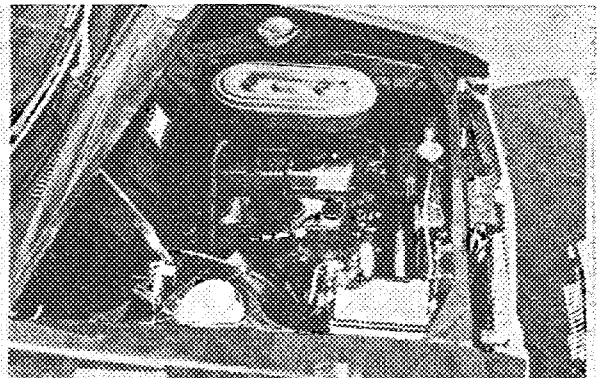
For recognition in group 4 the engine to be showed without accessories nor manifolds (inlet-exhaust).

*Attached on the "variant" form*

M, piston crown



O, engine in car with all accessories, bonnet open or rear



Q, exhaust manifold

