



JAPAN AUTOMOBILE FEDERATION

F. I. A. Recognition No 1595

Group 2

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer	Isuzu Motors Limited	Cylinder-capacity	1584 cm ³ 96.66 cc in
Serial No. of chassis	PR50-4099361	Model	Isuzu PR50SD (Bellett1600S)
Serial No. of engine	G161-358860	Manufacturer	Isuzu Motors Limited
Recognition is valid from	1/14/70	Manufacturer	Isuzu Motors Limited
		List	70/4 1969

The manufacturing of the model described in this recognition form was started on **September**, and the minimum production of 1000 identical cars, in accordance with the specifications of this form was reached on **November, 1969**.



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 ISUZU

Model PR50SD

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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 hereafter.

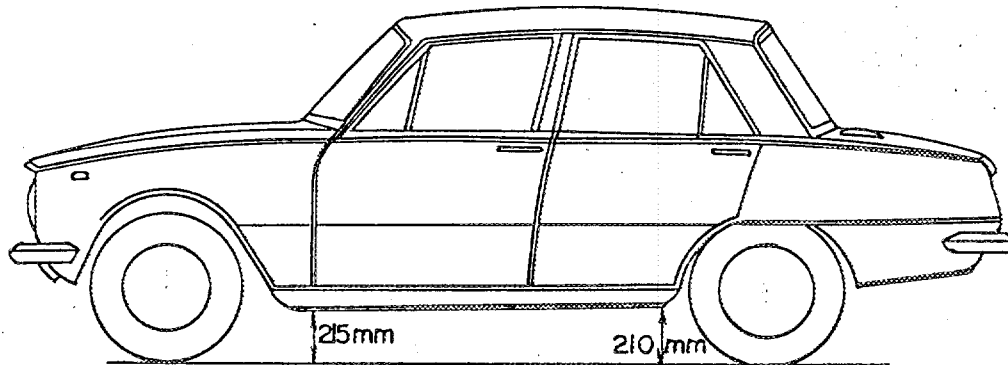
CAPACITIES AND DIMENSIONS

1. <u>Wheelbase</u>	2350	mm	92.5	inches
2. <u>Front track</u>	1245	mm	49.0	inches *
3. <u>Rear track</u>	1195	mm	47.0	inches *
4. Overall length of the car		401.5	cm	inches
5. Overall width of the car		149.5	cm	inches
6. Overall height of the car		139.0	cm	inches
7. <u>Capacity of fuel tank</u> (reserve included)				40 ltrs
	10.5	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:				
	880	kg	1940	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.

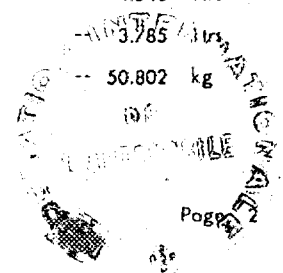
Specify ground clearance in relation to the track and give drawing of two fixed points of the vehicle's structure at which measurements are taken.

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 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



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CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis/body construction : ~~separate~~ / 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 **4** 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 **Glass**
31. Sliding system of door windows **Manual**
32. Material (s) of rear-quarter light

ACCESSORIES AND UPHOLSTERY

38. Interior heating : ~~XX~~ - no
39. Air-conditioning : ~~XX~~ - no
40. Ventilation : yes - ~~XX~~
41. Front seats, type of seats and upholstery **Separate, Vinyl**
42. Weight of front seat (s), complete with supports and rails, out of the car :
12.5 kg x 2 lbs
43. Rear seats, type of seats and upholstery **Bench, Vinyl**
44. Front bumper, material (s) **Steel** Weight **6.0 kg** lbs
45. Rear bumper, material (s) **Steel** Weight **6.0 kg** lbs

WHEELS

50. Type **Pressed steel**
51. Weight (per wheel, without tyre) **6.0 kg** lbs
52. Method of attachment **4 nuts**
53. Rim diameter **330.2 mm** **13.0 inches**
54. Rim width **114.3 mm** **4.5 inches**

STEERING

60. Type **Rack and pinion**
61. Servo-assistance : ~~XX~~ - no
62. Number of turns of steering wheel from lock to lock **2.9**
63. In case of servo-assistance



SUSPENSION

- 70. Front suspension (photogr. D), type Independent, Wishbone
- 71. Type of spring Coil
- 72. Stabiliser (if fitted) Torsion bar
- 73. Number of shock absorbers 2
- 74. Type Hydraulic telescopic
- 78. Rear suspension (photogr. E), type Independent, Swing axle
- 79. Type of spring Coil and Transverse Leaf
- 80. Stabiliser (if fitted)
- 81. Number of shock absorbers 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 2

	FRONT		REAR	
93. Number of cylinders per wheel	2		1	
94. Bore of wheel cylinder (s)	57.2 mm	in.	22.2 mm	in.
Drum brakes				
95. Inside diameter	mm	in.	203.2 mm	in.
96. Length of brake linings	mm	in.	195.0 mm	in.
97. Width of brake linings	mm	in.	37.1 mm	in.
98. Number of shoes per brake				
99. Total area per brake	mm ²	sq. in.	14,430 mm ²	sq. in.
Disc brakes				
100. Outside diameter	237 mm	in.	mm	in.
101. Thickness of disc	10 mm	in.	mm	in.
102. Length of brake linings	60 mm	in.	mm	in.
103. Width of brake linings	45 mm	in.	mm	in.
104. Number of pads per brake	2			
105. Total area per brake	5,400 mm ²	sq. in.	mm ²	sq. in.



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ENGINE (photographs J and K)

- 130. Cycle 4
- 131. Number of cylinders 4
- 132. Cylinder arrangement **In-line**
- 133. Bore 82 mm 3.228 in. 134. Stroke 75 mm 2.953 in.
- 135. Capacity per cylinder 396 cm³ 24.17 cu. in.
- 136. Total cylinder-capacity 1584 cm³ 96.68 cu. in.
- 137. Material (s) of cylinder block **Cast Iron**
- 138. Material (s) of sleeves (if fitted)
- 139. Cylinder-head, material (s) **Aluminum** Number filled 1
- 140. Number of inlet ports 4
- 141. Number of exhaust ports 4
- 142. Compression ratio 9.7
- 143. Volume of one combustion chamber 41.5 cm³ cu. in.
- 144. Piston, material
- 145. Number of rings 3
- 146. Distance from gudgeon pin centre line to highest point of piston crown 37.2 mm inches
- 147. Crankshaft : ~~cast~~ / stamped
- 148. Type of crankshaft : integral ~~xxx~~
- 149. Number of crankshaft main bearings 5
- 150. Material of bearing cap **Cast Iron**
- 151. System of lubrication : ~~dry sump~~ / oil in sump
- 152. Capacity, lubricant 3.2 ltrs pts quarts US
- 153. Oil cooler : ~~xxx~~ / no
- 154. Method of engine cooling **Water** pints quarts US
- 155. Capacity of cooling system 6 ltrs inches
- 156. Cooling fan (if fitted), dia. 34 cm
- 157. Number of blades of cooling fan 7

Bearings

- 158. Crankshaft main, type **Plain** Dia. 56 mm in.
- 159. Connecting rod big end, **Plain** Dia. 49 mm in.

Weights

- 160. Flywheel (clean) 6.0 kg lbs
- 161. Flywheel with clutch (all turning parts) 11.5 kg lbs
- 162. Crankshaft 15.5 kg lbs
- 163. Connecting rod 0.68 kg lbs
- 164. Piston with rings and pin 0.53 kg lbs



FOUR STROKE ENGINES

- 170. Number of camshafts **1** 171. Location **Cylinder head**
- 172. Type of camshaft drive **Chain**
- 173. Type of valve operation **Rocker arm**

INLET (see page 8) *

- 180. Material(s) of inlet manifold **Aluminum**
- 181. Diameter of valves **41** mm **1.614** inches
- 182. Max. valve lift **10.4** mm **0.41** 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) **0.10** mm inches
- 187. Valves open at (with tolerance for tappet clearance indicated) **B.T.D.C. 31° ± 3°**
- 188. Valves close at (with tolerance for tappet clearance indicated) **A.B.D.C. 67° ± 3°**
- 189. Air filter, type **Dry**

EXHAUST (see page 8)

- 195. Material (s) of exhaust manifold **Cast Iron**
- 196. Diameter of valves **32** mm **1.26** inches
- 197. Max. valve lift **10.4** mm **0.41** 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) **0.15** mm inches
- 202. Valves open at (with tolerance for tappet clearance indicated) **B.B.D.C. 59° ± 3°**
- 203. Valves close at (with tolerance for tappet clearance indicated) **A.T.D.C. 23° ± 3°**

CARBURETION (photograph N)

- 210. Number of carburetors fitted **2** 211. Type **Side draught (SU)**
- 212. Make **HITACHI** 213. Model **HJD 42W**
- 214. Number of mixture passages per carburetor **1**
- 215. Flange hole diameter of exit port(s) of carburetor **42** mm in.
- 216. Minimum dimensions of mixture passage(s) with piston at max. height (example: SU) **34** 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.

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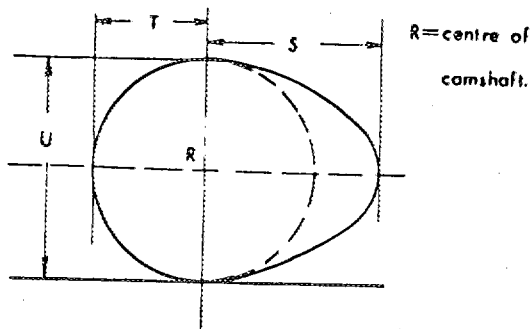
ENGINE ACCESSORIES

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

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

250. Max. engine output **103 PS** (type of horsepower: **JIS**) at **5800** rpm
251. Maximum rpm **5800** output at that figure **103 PS**
252. Maximum torque **13.6kg-m** at **4200** rpm
253. Maximum speed of the car **165** km/hour miles/hour

255.



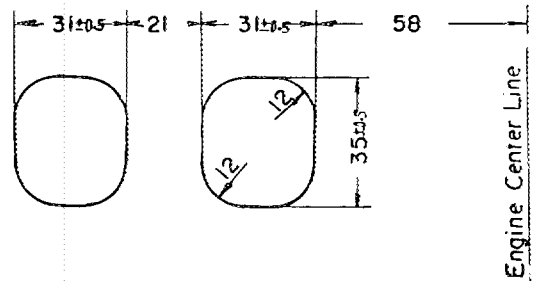
Inlet cam

S =	24.0	mm	0.945	inches
T =	16.0	mm	0.63	inches
U =	32.0	mm	1.26	inches

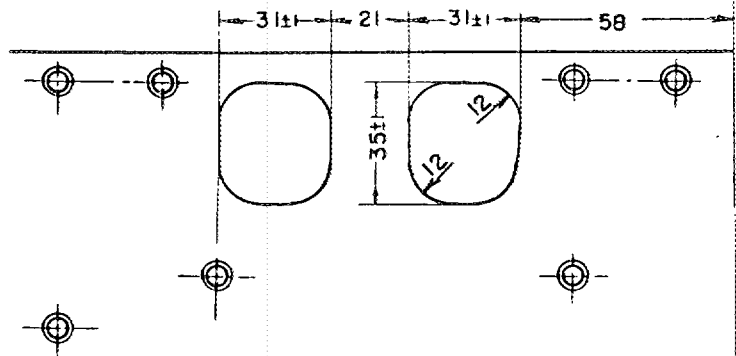
Exhaust cam

S =	24.0	mm	0.945	inches
T =	16.0	mm	0.63	inches
U =	32.0	mm	1.26	inches

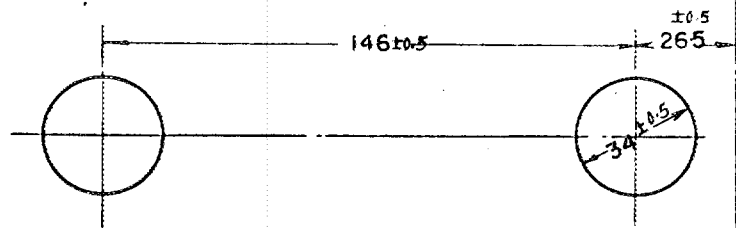
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



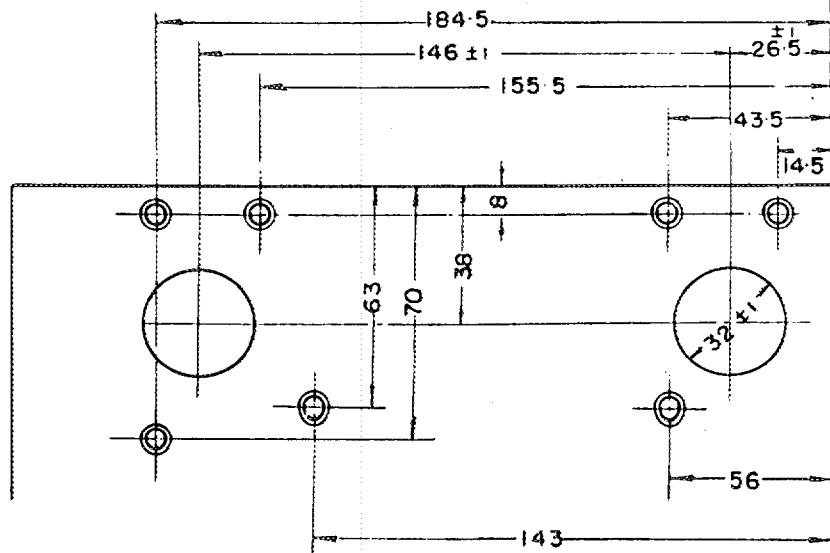
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



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



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



Unit: mm

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DRIVE TRAIN

CLUTCH

- 260. Type of clutch Dry plate
- 261. No. of plates 1
- 262. Dia. of clutch plates 20.3 cm inches
- 263. Dia. of linings, inside 14.6 cm in. outside 20.3 cm in.
- 264. Method of operating clutch Mechanical

GEAR BOX (photograph 4)

- 270. Manual type, make ISUZU 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
- 274. Automatic, make Borg Warner type M 35
- 275. No. of forward ratios 3
- 276. Location of gear-shift Column

277.	Manual		Automatic		Alternative manual/ XXXXXX		Ratio	No. teeth
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth		
1	3.507	$\frac{29}{18} \times \frac{37}{17}$	2.393	$\frac{67}{28}$	3.507	$\frac{28}{19} \times \frac{37}{17}$		
2	2.175	$\frac{29}{18} \times \frac{27}{20}$	1.450	$\frac{67(28 + 32)}{28(32 + 67)}$	1.989	$\frac{28}{19} \times \frac{27}{20}$		
3	1.418	$\frac{29}{18} \times \frac{22}{25}$	1.000		1.356	$\frac{28}{19} \times \frac{23}{25}$		
4	1.000				1.000			
5								
6								
reverse	3.927	$\frac{29}{18} \times \frac{39}{16}$	2.093	$\frac{67}{32}$	3.592	$\frac{28}{19} \times \frac{39}{16}$		

- 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 3.729 or 4.100
- Number of teeth 41/11 or 41/10



Make **ISUZU**

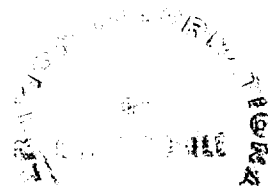
Model **PR50SD**

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 - gtr

Model

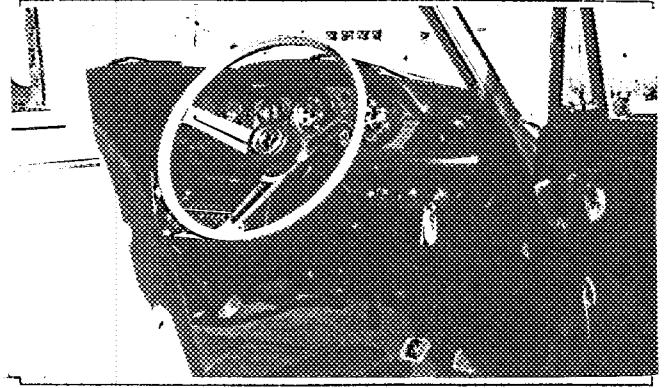
F. I. A. Rec. No.

Photograph

PR508D

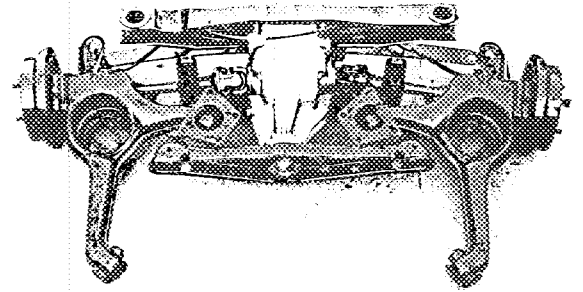
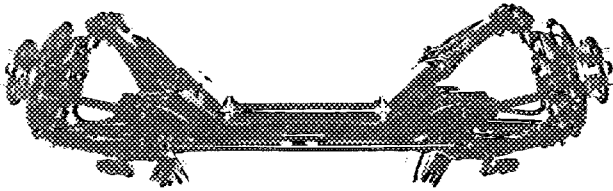
interior view of car through driver's door (open or removed) with dashboard

B, 3/4 view of car from rear



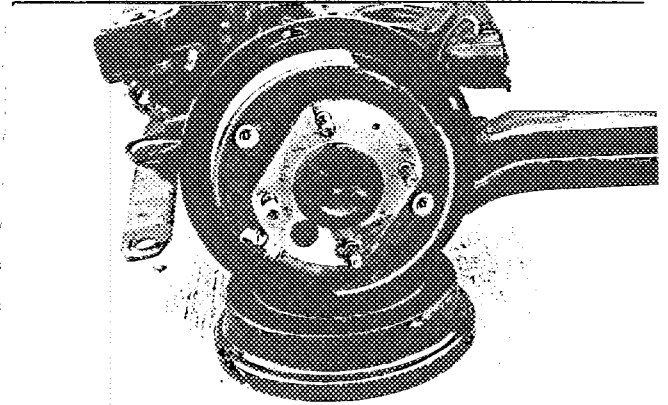
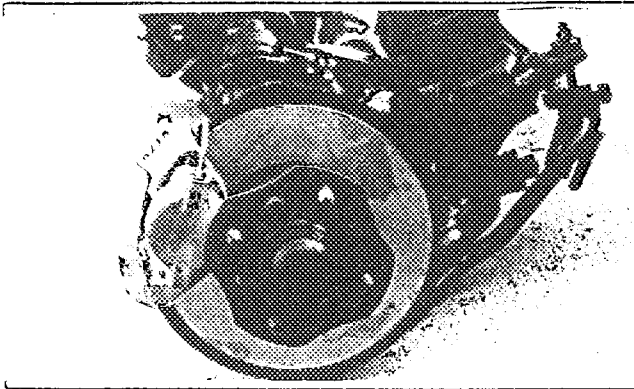
D, front axle complete, removed from car. Without wheels.

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



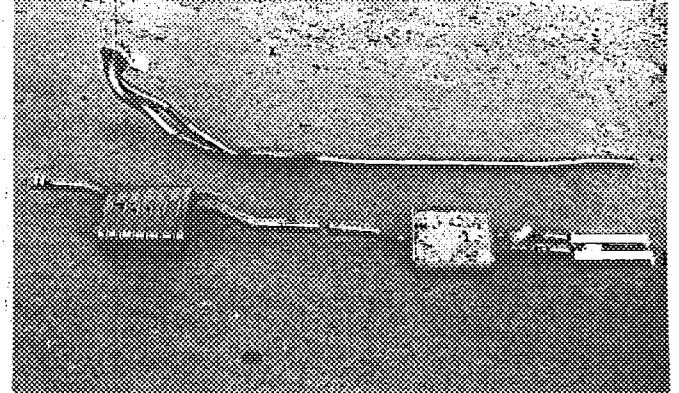
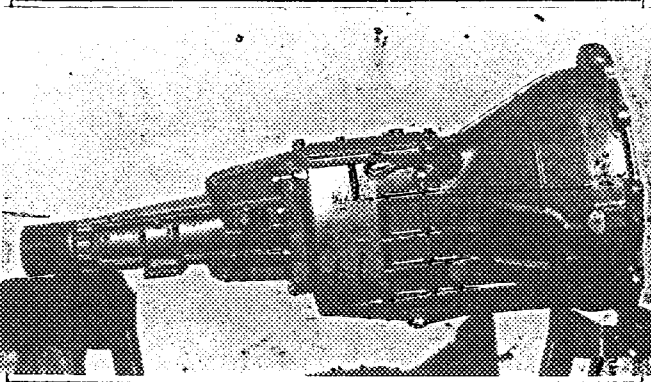
F, front brake, drum removed or disc with caliper(s)

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



H, gear-box, view from side

I, silencer + exhaust pipes after exhaust manifold.



Make ISUZU

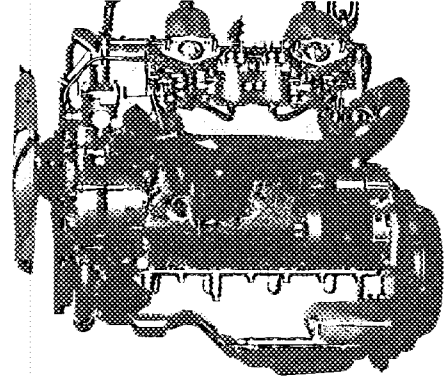
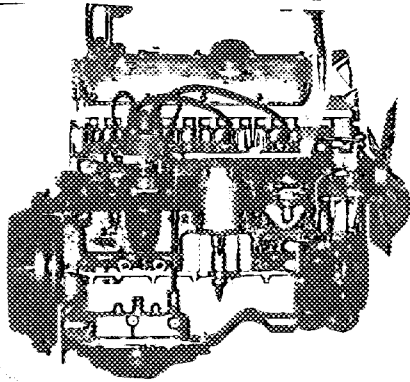
Model PR50SD

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Photograph

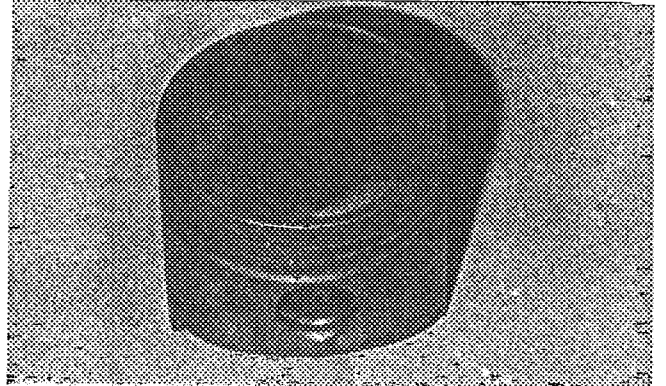
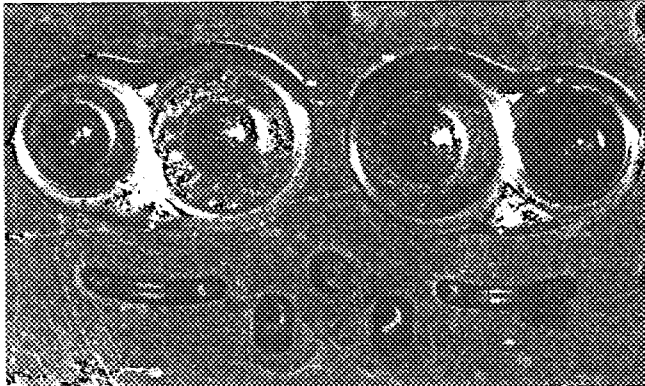
engine unit out of car, from right. With clutch and accessories but without air filter nor gear-box.

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



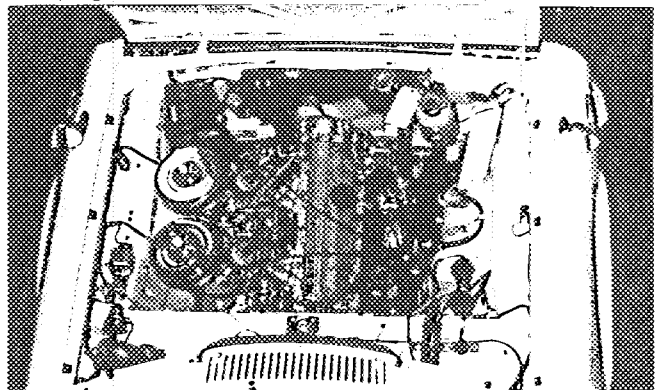
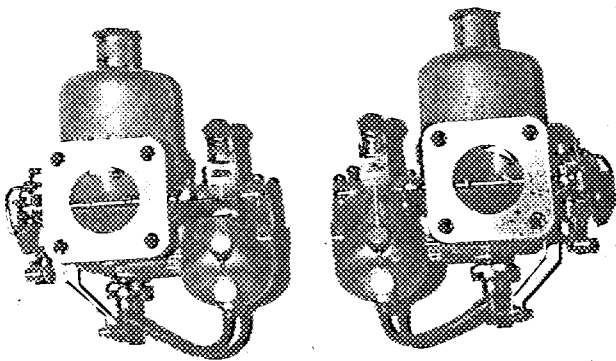
L, combustion chamber

M, piston crown



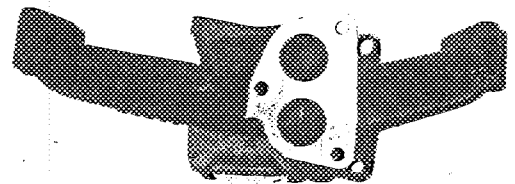
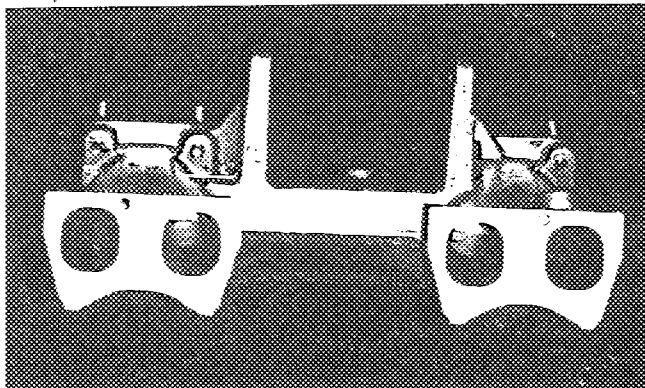
N, Carburettor (view from side of manifold)

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



P, inlet manifold

Q, exhaust manifold

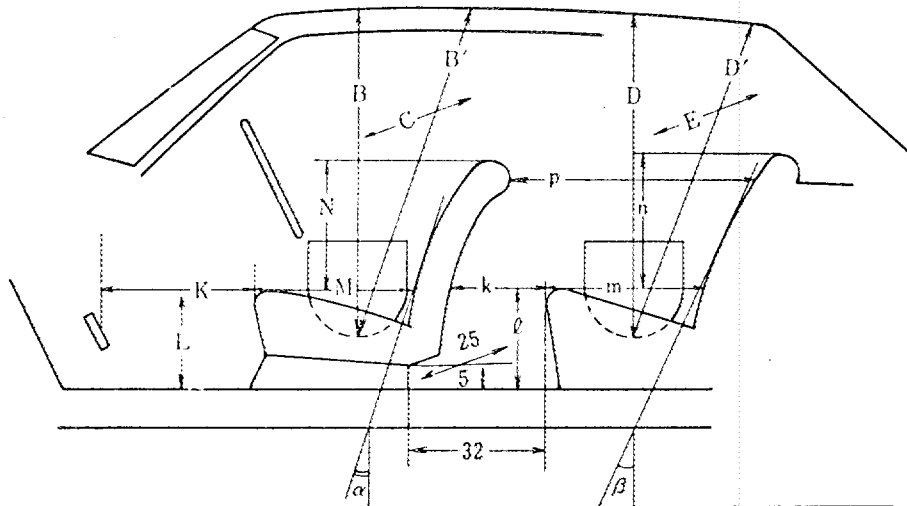


35φ x 2

DIMENSIONS OF INTERIOR

(Conform to Art. 253 b of Appendix J)

For four seaters:



Minimum Dimensions (cm)							
B	B'	α	C	D	D'	β	E
94	97	15°	123	92	94	20°	122

Minimum Dimensions (cm)										
L	ℓ	M	m	N	n	k+m	p	k	k+l+m	K+L+M
29	30	46	44	40	39	70	73	26	100	121
0.9L = 26.1		0.85M = 39.1		0.8N = 32		0.8(k+m) = 56		(15)	(95)	(120)



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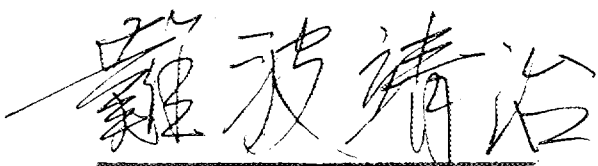
F. I. A. Rec. No.

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 ² sq. in. |
| 305. Exhaust ports, length measured around cylinder wall | | | | mm inches |
| 306. Height exhaust port | mm | in. | 307. Area | mm ² sq. in. |
| 308. Transfer port, length measured around cylinder wall | | | | mm inches |
| 309. Height transfer port | mm | in. | 310. Area | mm ² sq. in. |
| 311. Piston ports, length measured around piston | | | | mm inches |
| 312. Height piston port | mm | in. | 313. Area | mm ² 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. <u>Drawing of cylinder ports.</u> | | | | |

330. Supercharging—state full details hereafter :

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Yasuharu Nanba

