JAPAN AUTOMOBILE FEDERATION

F. I. A. Recognition No. 5235
Group 1 - Series - Production

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Cylinder-capacity 1,584 cm3 96.68 cu. in.

Manufacturer Isuzu Motors Limited

Model Isuzu PA20 (Florian)

Serial No. of chassis PA20-5000001

Manufacturer Isuzu Motors Limited

engine G161-306124

Manufacturer Isuzu Motors Limited

Recognition is valid from 1st November 1968 List 1968/10

The manufacturing of the model described in this recognition form was started on June 1967 and the minimum production of 5,000 identical cars, in accordance with the specifications of this form was reached on Oct. 1967

Photograph **A**, 3/4 view of car from front

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	

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 National Sporting Authority

Stamp and signature of the F. I. A.

Make Isuzu Motors Limited Model. Isuzu PA20 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 coversion table hereafter.

CAPACITIES AND DIMENSIONS

1. Wheelbase	2,500	mm		98.43	inches	
2. Front track	1,310	mm		51.57	inches	*
3. Rear track	1,300	mm		51.18	inches	*
4. Overall length of the car			425.0	cm		inches
5. Overall width of the car			160.0	cm		inches
6. Overall height of the car			144.5	cm		inches

7. Capacity of fuel tank (reserve included) 46 ltrs
12.2 Gallon US Gallon Imp.

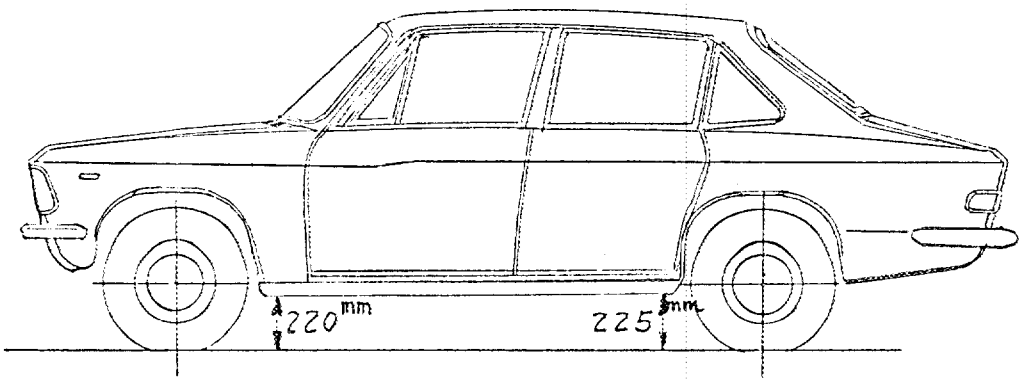
8. Seating capacity 5

9. Weight, total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:
905 kg 1995.2 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

Make Isuzu Motors Limited Model Isuzu PA20 F.I.A. Rec. No.

CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis / body construction : ~~xxxxxxx~~ / 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 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 : ~~xx~~ - no
41. Front seats, type of seats and upholstery Separate ~~Bucket~~ or Bench, Textiles and Vinyl
42. Weight of front seat (s), complete with supports and rails, out of the car :

Separate ~~Bucket~~ 12.5 x 2 kg lbs
Bench 25.0

43. Rear seats, type of seats and upholstery Bench, Textiles and Vinyl
44. Front bumper, material (s) Steel Weight 7.0 kg lbs
45. Rear bumper, material (s) Steel Weight 6.0 kg lbs

WHEELS

50. Type Pressed Steel
51. Weight (per wheel, without tyre) 7.2 kg (5 in) ~~xx~~ or 6.0 kg (4.5 in) lbs
52. Method of attachment 4 studs
53. Rim diameter 330.2 mm 13.0 inches
54. Rim width 127 or 114 mm 5 or 4.5 inches

STEERING

60. Type Ball nut
61. Servo-assistance : ~~xx~~ - no
62. Number of turns of steering wheel from lock to lock 3.5
63. In case of servo-assistance

Make Isuzu Motors Limited Model Isuzu PA20 F. I. A. Rec. No.

SUSPENSION

70. Front suspension (photogr. D), type Independent, Wishbone

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 Semi-elliptic 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 Vacuum servo

92. Number of hydraulic master cylinders 1

	FRONT			REAR		
93. Number of cylinders per wheel	1			1		
94. Bore of wheel cylinder (s)	25.4	mm	in.	22.2	mm	in.
Drum brakes						
95. Inside diameter	228.6	mm	in.	228.6	mm	in.
96. Length of brake linings	209.0	mm	in.	232.0	mm	in.
97. Width of brake linings	40.0	mm	in.	40.0	mm	in.
98. Number of shoes per brake	2			2		
99. Total area per brake	16,720	mm^2	sq. in.	18,560	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.

Make Isuzu Motors Limited Model Isuzu PA20 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 82 mm 3.228 in. 134. Stroke 75 mm 2.953 in.

135. Capacity per cylinder 396.1 cm^3 24.17 cu. in.

136. Total cylinder-capacity 1584 cm^3 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 fitted 1

140. Number of inlet ports 4 141. Number of exhaust ports 4

142. Compression ratio 8.7 : 1

143. Volume of one combustion chamber 51.5 cm^3 cu. in.

144. Piston, material Aluminum 145. Number of rings 3

146. Distance from gudgeon pin centre line to highest point of piston crown

37.0 mm inches

147. Crankshaft : ~~moulded~~ / stamped 148. Type of crankshaft : integral / XXXX

149. Number of crankshaft main bearings 5

150. Material of bearing cap Cast iron

151. System of lubrication : ~~XXXXXXX~~ / oil in sump

152. Capacity, lubricant 3.6 ltrs pts quarts US

153. Oil cooler : ~~XXX~~ / no 154. Method of engine cooling Water

155. Capacity of cooling system 6.0 ltrs pints quarts US

156. Cooling fan (if fitted), dia. 32 cm inches

157. Number of blades of cooling fan 4

Bearings

158. Crankshaft main, type Plain Dia. 56 mm in.

159. Connecting rod big end, Plain Dia. 49 mm in.

Weights

160. Flywheel (clean) 10.2 kg lbs

161. Flywheel with clutch (all turning parts) 15.2 kg lbs

162. Crankshaft 15.5 kg lbs 163. Connecting rod 0.69 kg lbs

164. Piston with rings and pin 0.47 kg lbs

Make Isuzu Motors Limited | Model Isuzu PA20 | F. I. A. Rec. No.

FOUR STROKE ENGINES

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

INLET (see page 8) *

180. Material(s) of inlet manifold Aluminum
181. Diameter of valves 41 mm 1,614 inches
182. Max. valve lift 8.95 mm 0.352 in. — 183. Number of valve springs 2
184. Type of spring Coil — 185. Numbdr of valves per cylinder 1
186. Tappet clearance for checking timing (cold) 0.20 mm inches
187. Valves open at (with tolerance for tappet clearance indicated) 15° BTDC
188. Valves close at (with tolernce for tappet clearance indicated) 73° ABDC
189. Air filter, type Dry

EXHAUST (see page 8)

195. Material (s) of exhaust manifold Cast iron
196. Diameter of valves 32 mm 1.260 inches
197. Max. valve lift 8.95 mm 0.352 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) 0.30 mm inches
202. Valves open at (with tolerance for tappet clearance indicated) 55° BBDC
203. Valves close at (with tolerance for tappet clearance indicated) 29° ATDC

CARBURETION (photograph N)

210. Number of carburettors fitted 1 — 211. Type ~~Stromburg~~ Down draught
212. Make Nikki — 213. Model D2832G
214. Number of mixture passages per caburettor 2
215. Flange hold diameter of exit port(s) of carburetteor Primary 28 Secondary 32 mm in.
216. Minimum dimensions of mixture pasage (s) [illegible]
Primary 22 mm inches
Secondary 28

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.

Make Isuzu Motors Limited Model Isuzu PA20 F. I. A. Rec. No.

ENGINE ACCESSORIES

230. Fuel pump : mechanical ~~xxxxxxxxxx~~

231. No. fitted 1

232. Type of ignition system Make and ~~brake~~ break ignition

233. No. of distributors 1

234. No. of ignition coils 1

235. No. of spark plugs per cylinder 1

236. Generator, type ~~xxxxxx~~/alternator-number fitted 1

237. Method of drive V-belt drive

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)

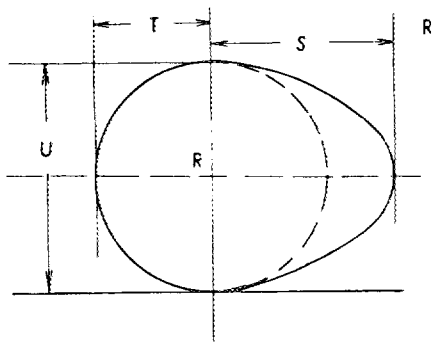
250. Max. engine output 84 PS (type of horsepower: JIS) at 5,200 rpm

251. Maximum rpm 5,200 output at that figure 84 PS

252. Maximum torque 12,4 kg-m at 2,600 rpm

253. Maximum speed of the car 150 km / hour miles / hour

255.

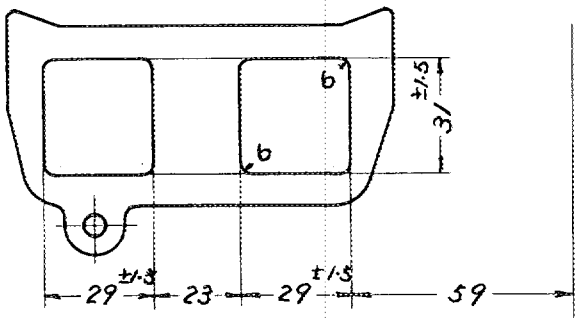


R = centre of camshaft.

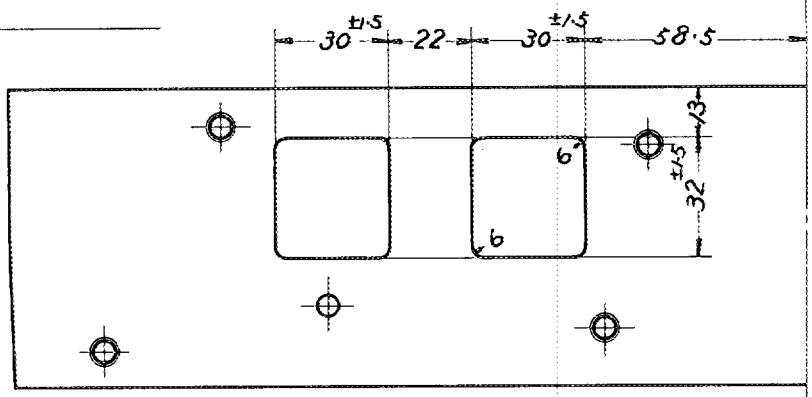
Inlet cam				
S =	22,2	mm	0,876	inches
T =	15,8	mm	0,622	inches
U =	31,6	mm	1,245	inches
Exhaust cam				
S =	22,3	mm	0,878	inches
T =	15,8	mm	0,622	inches
U =	31,7	mm	1,248	inches

Make Isuzu Motors Limited Model Isuzu PA20 F. I. A. Rec. No.

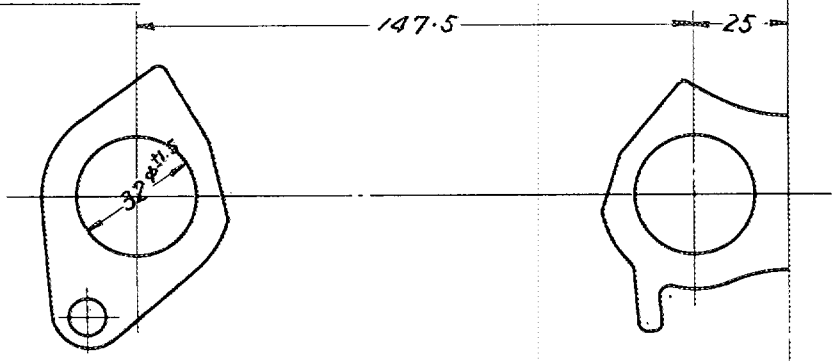
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



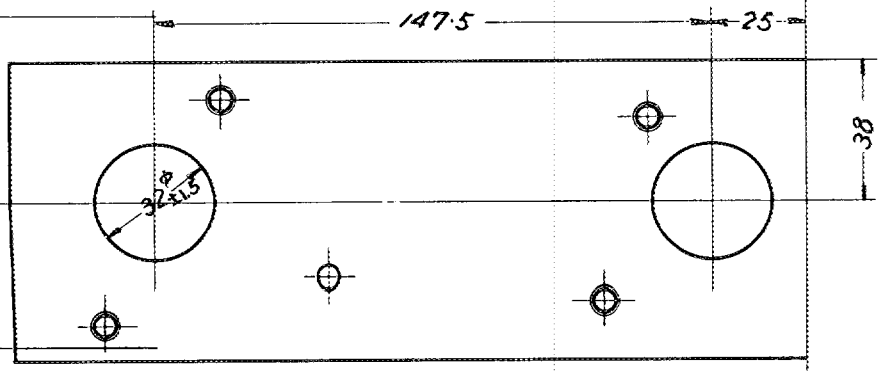
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



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



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



unit ; mm

Make Isuzu Motors Limited Model Isuzu PA20 F.I.A. Rec. No.

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 H)

270. Manual type, make Isuzu Method of operation Mechanical

271. No. of gear-box ratios forward 4 272. Synchronized forward ratios 4 (1,2,3,4)

273. Location of gear-shift Floor or Column

274. Automatic, make Borg Warner type M35

275. No. of forward ratios 3 276. Location of gear-shift Column

277.	Manual Ratio	No. teeth	Automatic Ratio	No. teeth	Alternative manual 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 bevel

291. Type of differential Bevel

292. Type of limited slip differential (if fitted)

293. Final drive ratio 3.727 or 4,100

Number of teeth 41/11 or 41/10

Make Isuzu Motors Limited Model Isuzu PA20 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, 186, 187, 188, 189, 197, 201, 202, 203, 211, 212, 213, 215, 216, 222, 225, 230, 236, 250, 251, 252, 253, 255, and photographs I, M and N. & 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, 7, 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, 154, 158, 159, 170, 171, 172, 173, 185, 200, 270, 271, 274, 275, 290, 291, 292 and photographs A, B, D, E, F, G, H and J.

Optional equipement affecting preceeding information. This to be stated together with reference number.

BRAKES

92. Number of hydraulic master cylinders 1 (Dual braking system)

Make Isuzu Motors Limited

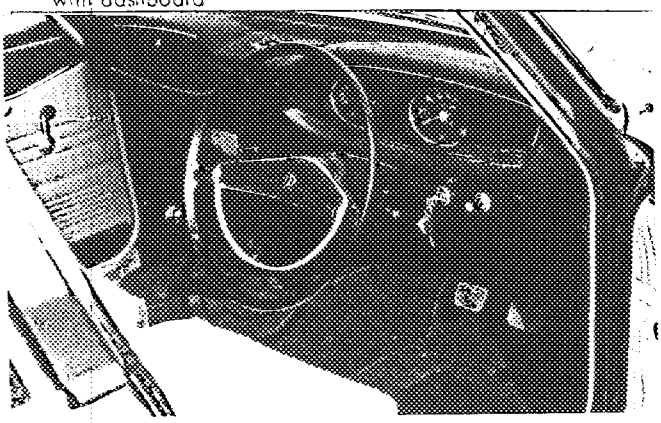
Model Isuzu PA20

F. I. A. Rec. No

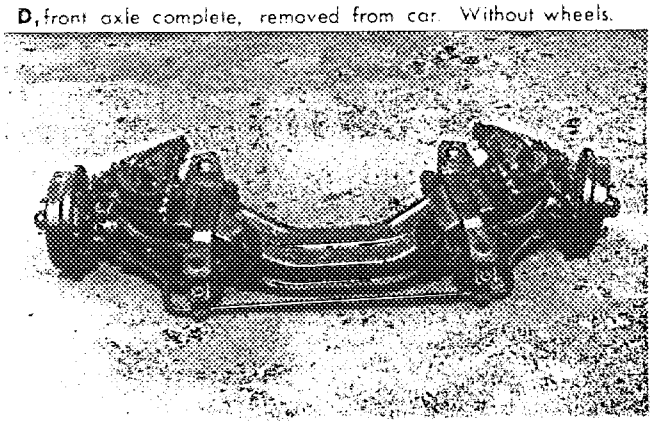
Photograph

B, 3/4 view of car from rear

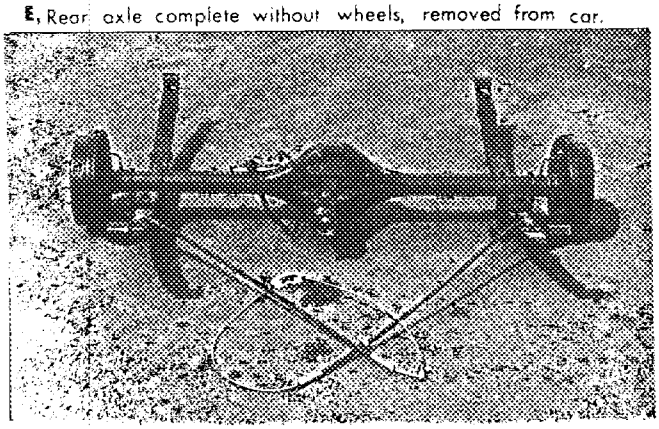
C, interior view of car through driver's door (open or removed) with dashboard



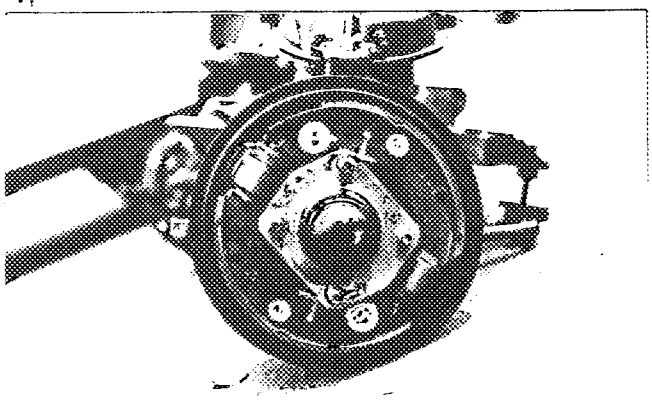
D, front axle complete, removed from car. Without wheels.



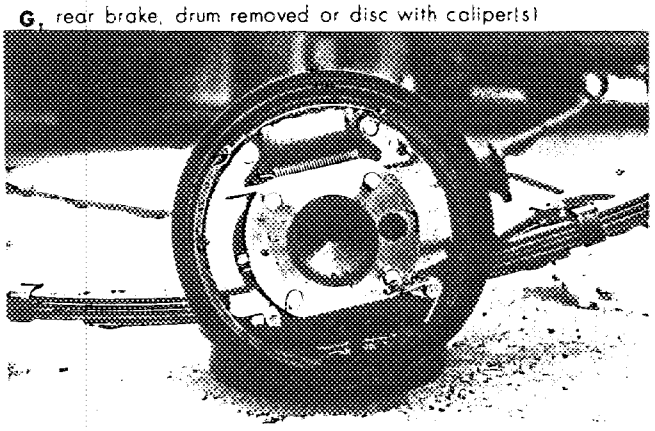
E, Rear axle complete without wheels, removed from car.



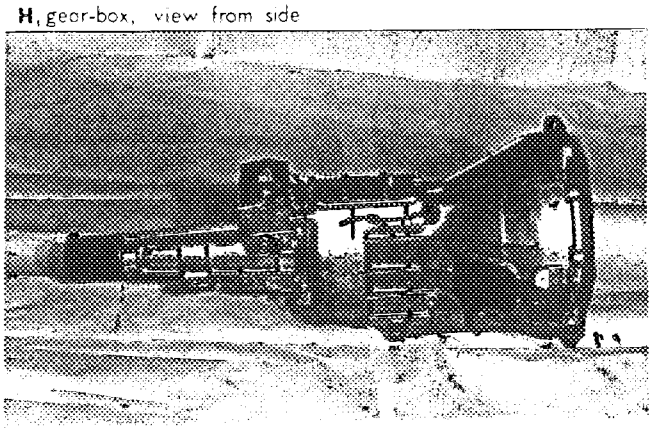
F, front brake, drum removed or disc with caliper(s)



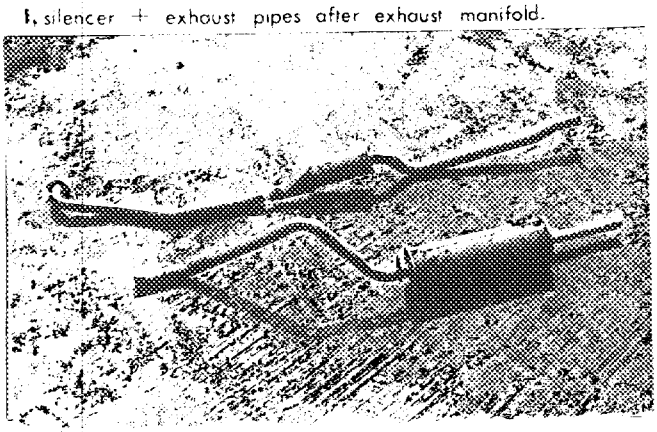
G, rear brake, drum removed or disc with caliper(s)



H, gear-box, view from side



I, silencer + exhaust pipes after exhaust manifold.

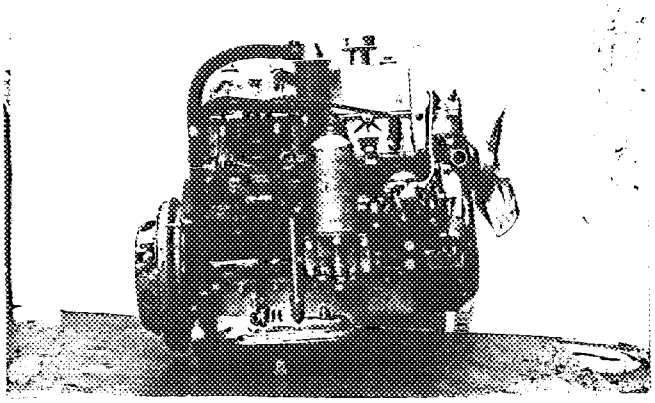


Make Isuzu Motors Limited

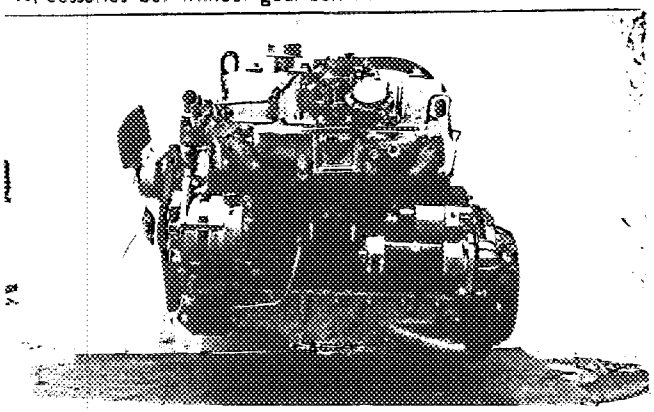
Model Isuzu PA20 F.I.A. Rec. No

Photograph

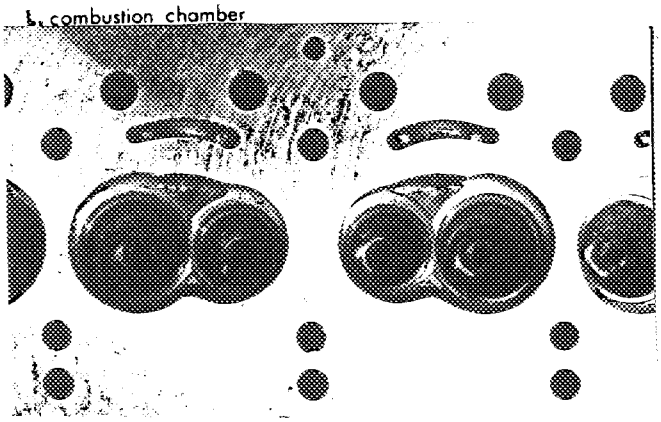
J, engine unit out of car, from right. With clutch and accessories but without air filter nor gear-box.



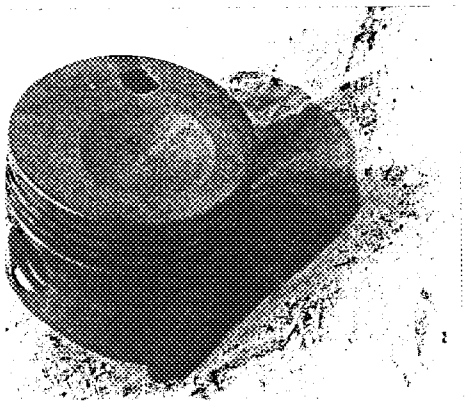
K, Engine unit out of car, from left. With clutch and accessories but without gear-box nor air filter.



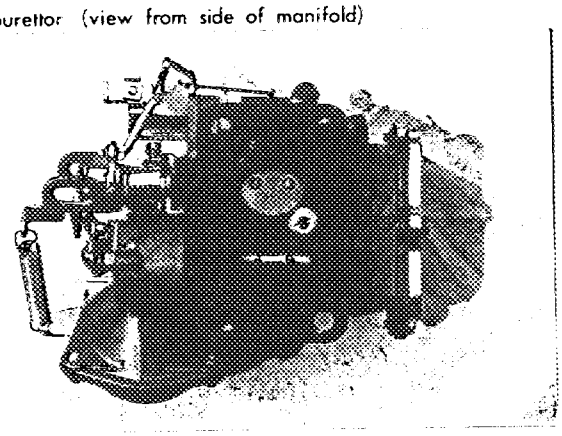
L, combustion chamber



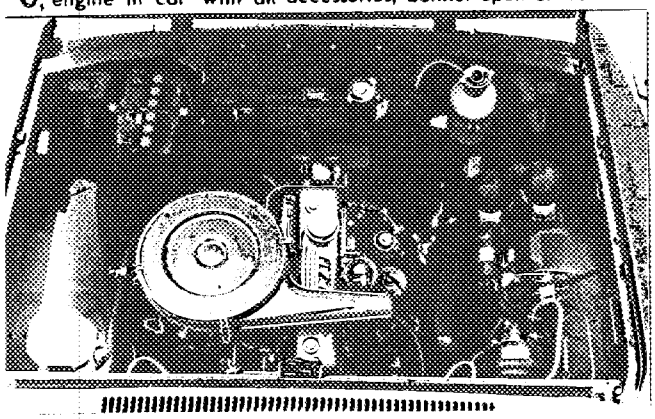
M, piston crown



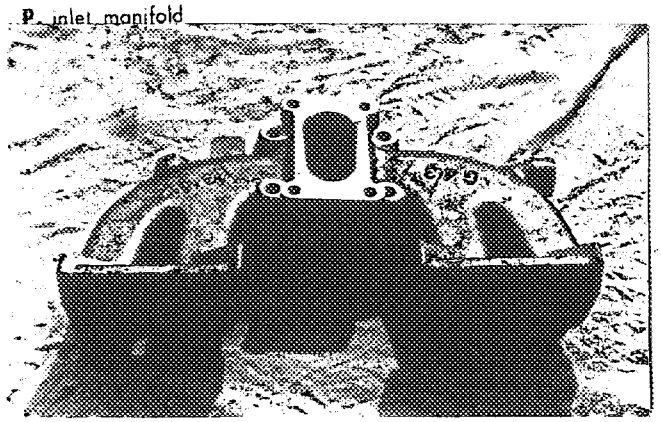
N, Carburettor (view from side of manifold)



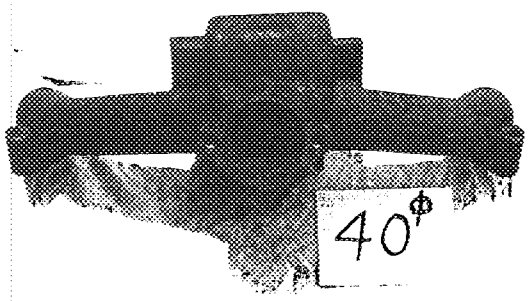
O, engine in car with all accessories, bonnet open or removed



P, inlet manifold



Q, exhaust manifold



Make Isuzu Motors Limited Model Isuzu PA20 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. Drawing of cylinder ports.

330. Supercharging—state full details hereafter :

JAPAN AUTOMOBILE FEDERATION

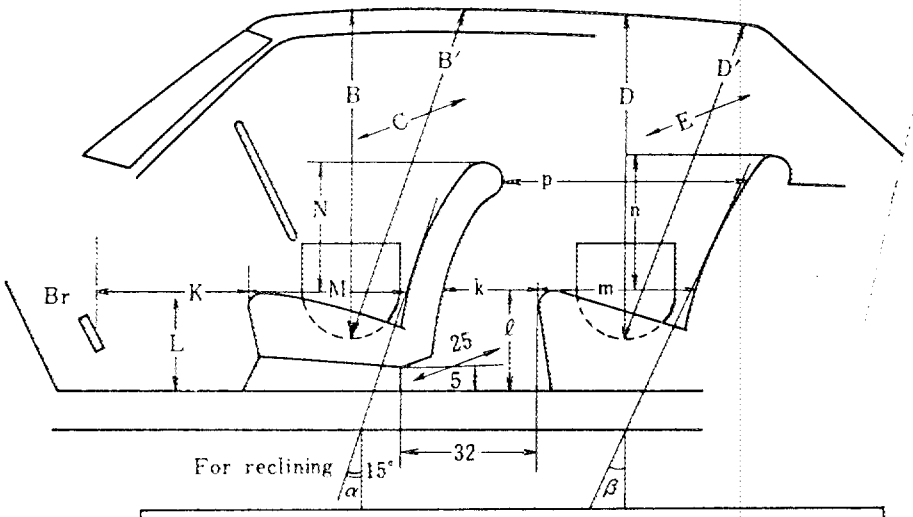
Kazunari Komotori

Make Isuzu Motors Limited Model Isuzu PA20

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
98.5	103.0	15°	135.0	95.0	94.5	23°	134.5

Minimum Dimensions (cm)										
L	ℓ	M	m	N	n	k+m	p	k	k+ℓ+m	K+L+M
28.0	36.0	45.0	45.5	36.5	40.5	67.0	67.5	21.5	103.0	123.0
0.9L = 25.2		0.85M = 38.3		0.8N = 29.2		0.8(k+m) = 53.6		(15)	(95)	(120)