

F. I. A. Recognition No. 1593

# FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer

Isuzu Motors Limited

chassis PR50-4097363

engine G161-313182

Recognition is valid from 1/4/70

Cylinder-capacity

1584 cm3 96.66 cu. in.

Model

Isuzu PR50SD ( Bellett1600S )

Manufacturer

Isuzu Motors Limited

Manufacturer

List 70/4.

Isuzu Motors Limited

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

Photograph A, 3.4 view of car from front



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

Variants					ution of the t		
on	19	rec. No.	List	on	19	rec. No.	List
on	19	rec. No.	List	on	19	rec. No.	List
on	19	rec. No.	List	on	19	rec. No.	List
on	19	iec. 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 Moder

PR50SD

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

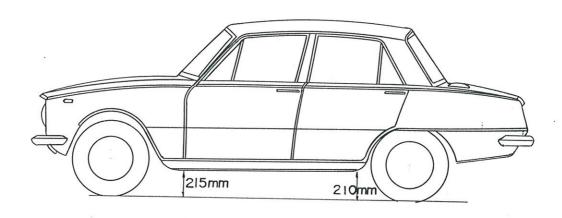
1.	<u>V√heelbase</u>	2350	mm			92.5	inches			
2.	Front track	1245	mm			49.0	inches	*		
3.	Rear track	1195	mm			47.0	inches	*		
4.	Overall length of the car			401.5	cn	n				inches
5.	Overall width of the car			149.5	cn	n				inches
6.	Overall height of the car			139.0	cn	า				inches
7.	Capacity of fuel tank (reserve	included)					4	10	1 trs	
	10.5 Gallon	US					G	allon	Imp.	

- 8. Seating capacity
- 9. Weight, total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools: 870 kg
- 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.

1920 lbs

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

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 1trs
1 foot / pied	30.4794 cm	1 pint (pt)	0.568 1trs
1 square inch/pouce carré	6.452 cm <sup>2</sup>	1 gallon lmp.	4.546 ltrs
1 cubic inch/pouce cube	16.387 cm <sup>3</sup>	1 gallon US	3.785 Irs
1 pound / livre (1b)	453.593 gr. 3APAN	1 hundred weight (cwt)	50.802 kg

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

- 20. Chassis / body construction: Your / unitary construction
- Steel 21. Unitary construction, material (s) 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

#### ACCESSORIES AND UPHOLSTERY

38. Interior heating:

- 39. Air-conditioning:

- 40. Ventilation : yes -
- 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

- 43. Rear seats, type of seats and upholstery
- Bench, Vinyl
- 44. Front bumper, material (s)

- Steel

- Weight
- 6.0
- lbs

- 45. Rear bumper, material (s)
- Steel

- Weight
- lbs

## WHEELS

- 50. Type
- Pressed steel
- 51. Weight (per wheel, without tyre)

6.0

lbs

- 52. Method of attachment
- 4 nuts
- 330.2
- 13.0
- inches

- 53. Rim diameter 54. Rim width
- 114.3
- 4.5
- inches

#### STEERING

- 60. Type Rack and pinion
- 61. Servo-assistance : 💥 -
- 62. Number of turns of steering wheel from lock to lock 2.9
- 63. In case of servo-assistance





# SUSPENSION

92. Number of hydraulic master cylinders

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), ty	/ре	Independent, Swing axle
79.	Type of spring		Coil and Transverse Leaf
80.	Stabiliser (if fitted)		
81.	Number of shockabsorbers	2	82. Type Hydraulic telescopic
	<b>BRAKES</b> (photographs F and G)		
90.	System	Hydraul	lic
91.	Servo-assistance (if fitted), type		

1

		FRC	TMC			F	REAR
93.	Number of cylinders per wheel		2				1
94.	Bore of wheel cylinder (s)	57.2	mm	in.	22.2	mm	in.
95.	Drum brakes 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					2	
99.	Total area per brake		mm²	sq. in.	14,430	mm²	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	mm²	sq. in.		mm²	sa. in.





Make	Isuzu

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ENGINE (photographs J and K)

130. Cycle

131. Number of cylinders

132. Cylinder arrangement

In-line

133. Bore 82

3.228

134. Stroke

75 mm

2.953 in.

135. Capacity per cylinder

396

24.17cu. in. 96.68 u. in.

136. Total, cylinder-capacity

1584 cm3

Cast iron

137. Material (s) of cylinder block 138. Material (s) of sleeves (if fitted)

139. Cylinder-head, material (s)

Aluminum

Number fitted

3

140. Number of inlet ports

141. Number of exnaust ports

142. Compression ratio

9.3

143. Volume of one combustion chamber

47.7 cm3

cu. in.

144. Piston, material

Aluminum

145. Number of rings

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

42.2

147. Crankshaft: nowlder xx stamped

148. Type of crankshaft : integral XXXXXX

Water

149. Number of crankshaft main bearings 5

150. Material of bearing cap

Cast iron

152. Capacity, lubricant

3.2

pts

quarts US

153. Oil cooler: XXX / no

154. Method of engine cooling

pints

quarts US

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

155. Capacity of cooling system 5.7

ltrs cm

inches

157. Number of blades of cooling fan

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

161. Flywheel with clutch (all turning parts)

11.1

162. Crankshaft

15.3

lbs 163. Connecting rod

0.59

lbs

lbs

164. Piston with rings and pin

0.515 kg lbs



FOUR	STROKE	ENGINES

170. Number of camshafts

Cylinder block 171. Location

172. Type of camshaft drive

Chain

173. Type of valve operation

Push rod

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

180. Material(s) of intel manifold	180.	Material(s)	of	inlet	manifold
------------------------------------	------	-------------	----	-------	----------

## Aluminum

181. Diameter of valves

9.3 mm

0.366

41 mm

1.614 inches

182. Max. valve lift

in. 183. Number of valve springs

184. Type of spring

Coil

185. Number of valves per cylinder

inches

186. Tappet clearance for checking timing (cold)

0.30 mm

187. Valves open at (with tolerance for tappet clearance indicated)

B.T.D.C A.B.D.C 38° + 3°

188. Valves close at (with tolernce for lappet clearance indicated) 189. Air filter, type Dry

82° + 3°

#### **EXHAUST** (see page 8)

195. Material (s) of exhaust manifold

Steel

mm

1.417 inches

197. Max. valve lift

196. Diameter of valves

36 9.3 mm 0.366

198. Number of valve springs

200. Number of valves per cylinder 1

inches

199. Type of spring

Coil

0.35 mm

201. Tappet clearance for checking timing (cold) 202. Valves open at (with tolerance for tappet clearance indicated)

B.B.D.C

203. Valves close at (with tolerance for tappet clearance indicated)

A.T.D.C

### CARBURETION (photograph N)

210. Number of carburettors fitted

211. Type

Side draught (SU)

212. Make

Hitachi

213. Model

HJD 38W

214. Number of mixture passages per caburettor

215. Flange hole diameter of exit port(s) of carburetteor

38

in.

216. Minimum dimensions of mixture pasage(s) with piston at max. height (example:SU)

**2**9 mm

### 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

<sup>\*)</sup> for additional information concerning two-stroke engines and super-charged engines see page 13.



	mgm .
Make	Isuzu
Make	TRUZI

Model PR50SD

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### ENGINE ACCESSORIES

230. Fuel pump : mechanical MONIX XXXXXXIII

232. Type of ignition system Make and break

234. No. of ignition coils

236. Generator, type: xxxxxxx/alternator-number fitted 1

238. Voltage of generator

12 volts

Engine room

241. Voltage of battery

240. Location

12 volts

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

250. Max. engine output

90PS

(type of horsepower: JIS

at

231. No. fitted

233. No. of distributors 1

237. Method of drive

239. Battery, number

235. No. of spark plugs per cylinder 1

5,400

251. Maximum rpm

5,400

output at that figure

90PS

rpm

252. Maximum torque

13.0 kg-m

at 4,200 <sub>rpm</sub>

253. Maximum speed of the car

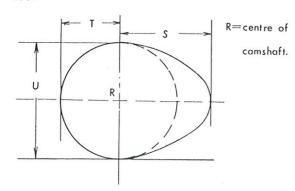
160 km/hour

miles / hour

V belt

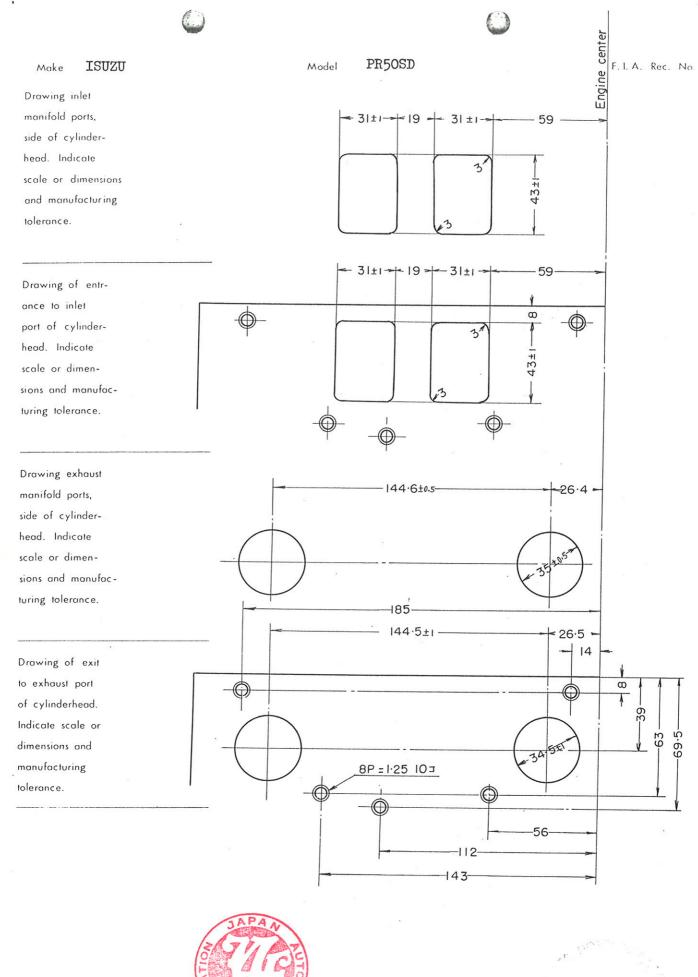
1

255.



Inlet ca	m			
S =	21.5	mm	0.845	inches
T =	14.6	mm	0.575	inches
U =	29.3	mm	1.155	inches
Exhaust	cam			
s =	21.5	mm	0.845	inches
T =	14.6	mm	0.575	inches
U =	29.3	mm	1.155	inches





Unit: mm

#### DRIVE TRAIN

#### CLUTCH

260. Type of clutch

Dry plate

261. No. of plates

272. Synchronized forward ratios 1, 2, 3 & 4

262. Dia. of clutch plates 20.3

263. Dia. of linings, inside 14.6

cm cm

outside

inches

in.

20.3 cm

264. Method of operating clutch Mechanical

### GEAR BOX .photograph H)

270. Manual type, make

273. Location of gear-shift

Isuzu

Method of operation Mechanical

271. No. of gear-box ratios forward

Floor

274. Automatic, make

lype

hift

275.	No. of	forward	ratios	276.	location	of	gear-shi

277.	Manual Ratio No. teeth	Automatic Ratio No. teeth	Alternative manual XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1	3.507 29 x 37 18 x 17	:	3.507 <u>28</u> x <u>37</u> 17
2	$2.175  \frac{29}{18} \times \frac{27}{20}$		1.989 28 x 27 19 20
3	1.418 29 x 22 18 25		1.356 $\frac{28}{19} \times \frac{23}{25}$
4	1.000		1.000
5			
6			
reverse	3.927 29 x 39 18 x 16	:	3.592 28 x 39 19 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

3.727 or 4.100

Number of teeth

41/11 or 41/10





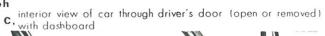
IMPORTANT- The conformity of the car with the following items of the present recognition form is to be disregarded during the scrutineering, when the vehicle has been entered in group 2 (Touring cars) or 3 (Grand Touring cars) : 41, 72, 80, 91, 142, 143, 144, 145, 146, 153, 156, 157, 160, 161, 162, 163, 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 formare 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 equipement affecting preceeding information. This to be stated together with reference number.

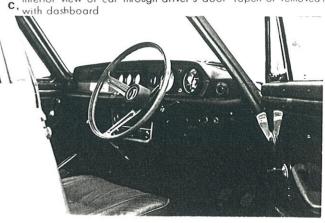


## Photograph

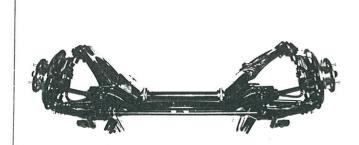




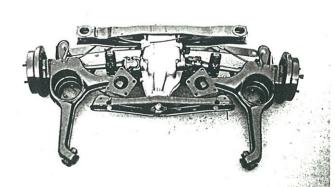
D. front axle complete, removed from car. Without wheels.



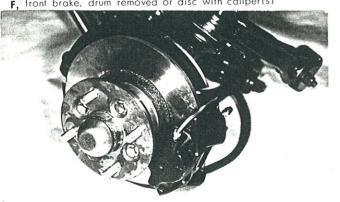
E, Rear axle complete without wheels, removed from car.



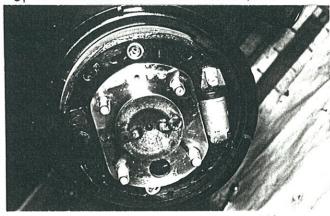
F, front brake. drum removed or disc with caliper(s)



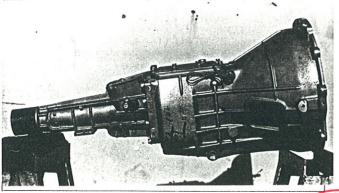
G, rear brake. drum removed or disc with caliper(s)



H, gear-box, view from side



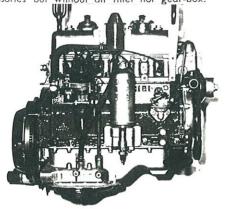
1. silencer + exhaust pipes after exhaust manifold.

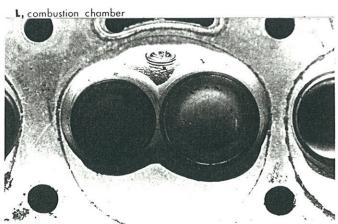




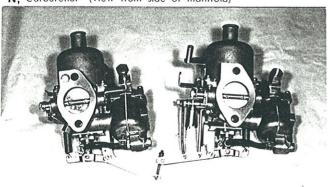
### Make ISUZU

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





 $\mathbf{N}$ , Carburettor (view from side of manifold)



P, inlet manifold



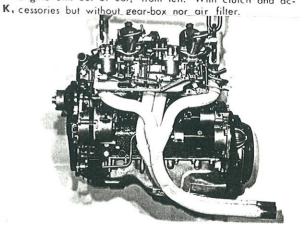


# Model PR50SD

Photograph

Engine unit out of car, from left. With clutch and ac-

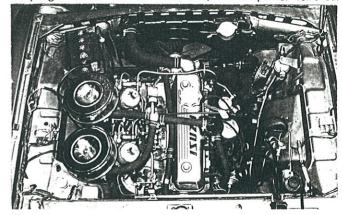
F. I. A. Rec. No



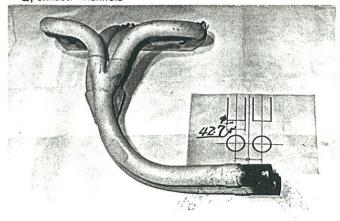
M, piston crown



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



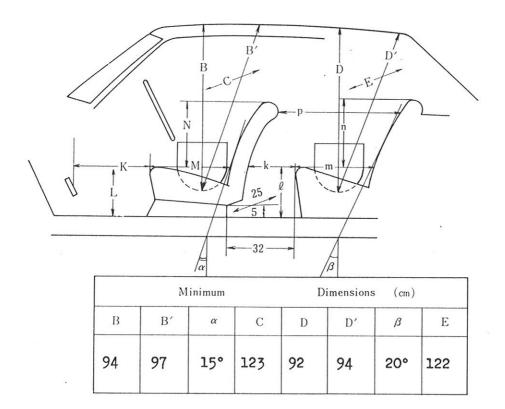
Q, exhaust manifold



# DIMENSIONS OF INTERIOR

(Conform to Art. 253 b of Appendix J)

For four seaters:



	Minimum						Dimensions (cm)				
L	l	М	m	N	n	k+m	р	k	$k+\ell+m$	K+L+M	
29	30	46	44	40	39	70	73	26	100	121	
0.9L =	0.9L = <b>26.1</b>		0.85M = <b>39.1</b>		0.8N = <b>32</b>		0.8(k+m)=56		(.95)	(120)	



## 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 po	rt :		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 por	t :		mm	inches							
321.	Drawing of cylinder ports.											

330. Supercharging—state full details hereafter :

JAPAN AUTOMOBILE FEDERATION

强技精治

Yasuharu Nanba

