



JAPAN AUTOMOBILE FEDERATION

F. I. A. Recognition No. **5377**
Group **1**

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer **TOYO KOGYO CO., LTD.**

Serial No. of chassis **SNA-10001**
engine **SNA-1001**

Recognition is valid from

The manufacturing of the model described in this recognition form was started on **MAY 19 70** and the minimum production of **5000** identical cars, in accordance with the specifications of this form was reached on **SEP. 19 70**

Cylinder-capacity **1586** cm³ **96.8** cu. in.

Model **MAZDA SNA (CAPELLA 1600)**

Manufacturer **TOYO KOGYO**

Manufacturer **TOYO KOGYO**

List

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

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.

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FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Make **TOYO KOGYO**

Model **MAZDA SNA**

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.

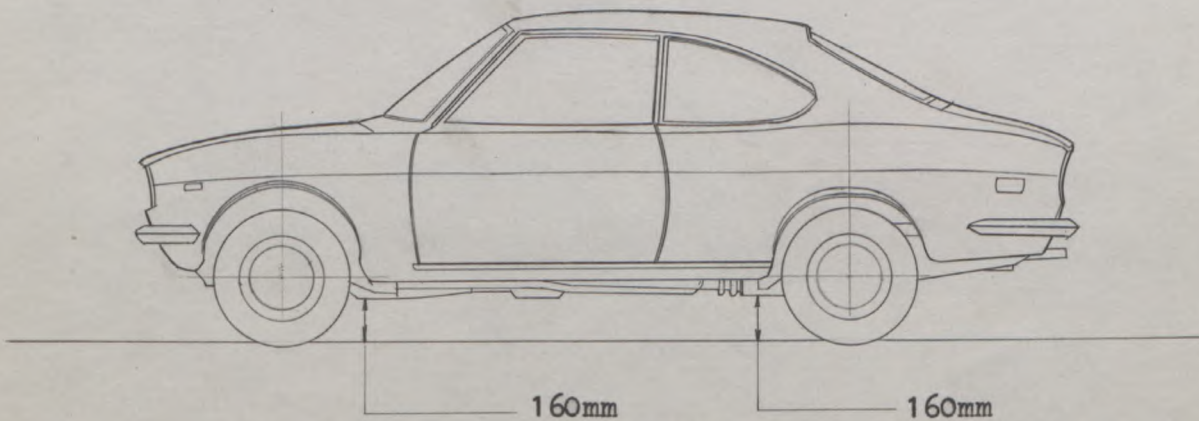
CAPACITIES AND DIMENSIONS

1. <u>Wheelbase</u>	2,470 mm	97.2 inches
2. <u>Front track</u>	1,285 mm	50.6 inches *
3. <u>Rear track</u>	1,280 mm	50.4 inches *
4. Overall length of the car	415.0 cm	inches
5. Overall width of the car	158.0 cm	inches
6. Overall height of the car	139.5 cm	inches
7. <u>Capacity of fuel tank</u> (reserve included)		50 ltrs Gallon Imp.
	13.2 Gallon US	
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:		
	865 kg	1,907 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.

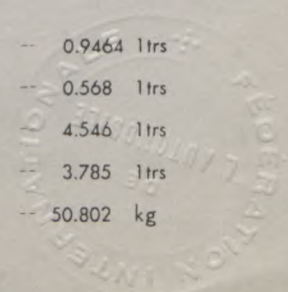
Specify ground clearance in relation to the track and give drawing of two fixed points of the vehicle's structure at which measurements are taken.

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 TOYO KOGYO

Model MAZDA SNA

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 **Steel**
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 : ~~XXXX~~ ^{yes} - ~~no~~
39. Air-conditioning : ~~XXXX~~ - 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 :

11.5x2^{kg} **lbs**

43. Rear seats, type of seats and upholstery **Bench, Vinyl Leather**
44. Front bumper, material (s) **Steel** Weight **5.0** kg lbs
45. Rear bumper, material (s) **Steel** Weight **5.1** kg lbs

WHEELS

50. Type **Pressed Steel**
51. Weight (per wheel, without tyre) **6.8** kg lbs
52. Method of attachment **4 Hub-Bolts**
53. Rim diameter **330** mm **14** inches
54. Rim width **102** mm **4** inches

STEERING

60. Type **Ball and Nut Type**
61. Servo-assistance : ~~XXXX~~ - no
62. Number of turns of steering wheel from lock to lock **3.3**
63. In case of servo-assistance



Make TOYO KOGYO

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SUSPENSION

- 70. Front suspension (photogr. D), type **Independent, Macpherson**
- 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 **~~4 Links Type with Lateral Rod, Rigid Axle~~**
- 79. Type of spring **Coil**
- 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 **2 (Tandem)**

	FRONT		REAR	
93. Number of cylinders per wheel	1		1	
94. Bore of wheel cylinder (s)	53.98 mm	in.	17.46 mm	in.
Drum brakes				
95. Inside diameter	mm	in.	200 mm	in.
96. Length of brake linings	mm	in.	200 mm	in.
97. Width of brake linings	mm	in.	32 mm	in.
98. Number of shoes per brake	2			
99. Total area per brake	mm ²	sq. in.	12800 mm ²	sq. in.
Disc brakes				
100. Outside diameter	230 mm	in.	mm	in.
101. Thickness of disc	12 mm	in.	mm	in.
102. Length of brake linings	90 mm	in.	mm	in.
103. Width of brake linings	46 mm	in.	mm	in.
104. Number of pads per brake	2			
105. Total area per brake	8280 mm ²	sq. in.	mm ²	sq. in.



Make TOYO KOGYO

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ENGINE (photographs J and K)

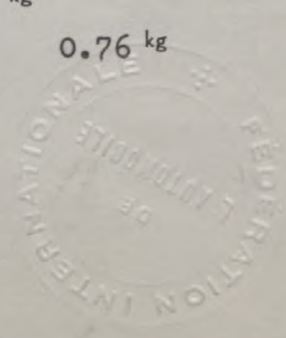
- | | | | | | |
|---|-----------------|--|---------------|-------|-----------------|
| 130. Cycle | 4 | 131. Number of cylinders | 4 | | |
| 132. Cylinder arrangement | In Line | | | | |
| 133. Bore | 78 mm | 3.07 in. | 134. Stroke | 83 mm | 3.27 in. |
| 135. Capacity per cylinder | | 396.5 cm ³ | | | 24.2 cu. in. |
| 136. Total cylinder-capacity | | 1586 cm ³ | | | 96.8 cu. in. |
| 137. Material (s) of cylinder block | Cast Iron | | | | |
| 138. Material (s) of sleeves (if fitted) | | | | | |
| 139. Cylinder-head, material (s) | Aluminium Alloy | | Number fitted | 1 | |
| 140. Number of inlet ports | 4 | 141. Number of exhaust ports | 4 | | |
| 142. Compression ratio | 8.6 | | | | |
| 143. Volume of one combustion chamber | | 52.2 cm ³ | | | cu. in. |
| 144. Piston, material | Aluminium Alloy | 145. Number of rings | 3 | | |
| 146. Distance from gudgeon pin centre line to highest point of piston crown | 41.25 mm | | | | inches |
| 147. Crankshaft : moulded / XXXXX | | 148. Type of crankshaft : integral / XXXXXX | | | |
| 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 : XXXX / no | | 154. Method of engine cooling | Water | | |
| 155. Capacity of cooling system | 7.0 ltrs | | | | pints quarts US |
| 156. Cooling fan (if fitted), dia. | 33 cm | | | | inches |
| 157. Number of blades of cooling fan | 4 | | | | |

Bearings

- | | | | | |
|------------------------------|-------|------|-------|-----|
| 158. Crankshaft main, type | Plain | Dia. | 63 mm | in. |
| 159. Connecting rod big end, | Plain | Dia. | 53 mm | in. |

Weights

- | | | |
|---|---------|-------------|
| 160. Flywheel (clean) | 10.2 kg | lbs |
| 161. Flywheel with clutch (all turning parts) | | 15.1 kg lbs |
| 162. Crankshaft | 16.8 kg | lbs |
| 163. Connecting rod | | 0.76 kg lbs |
| 164. Piston with rings and pin | 0.39 kg | lbs |



Make **TOYO KOGYO**

Model **MAZDA SNA**

F. I. A. Rec. No.

FOUR STROKE ENGINES

170. Number of camshafts **1** 171. Location **Cylinder Head**
 172. Type of camshaft drive **Chain**
 173. Type of valve operation ~~Over Head Camshaft and~~ **Rocker-Arm**

INLET (see page 8) *

180. Material(s) of inlet manifold **Aluminium Alloy**
 181. Diameter of valves **42** mm **1.65** inches
 182. Max. valve lift **9.5** mm **0.374** 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) **0.3** mm inches
 187. Valves open at (with tolerance for tappet clearance indicated) **13 ± 7° B.T.D.C.**
 188. Valves close at (with tolerance for tappet clearance indicated) **54 ± 7° A.B.D.C.**
 189. Air filter, type **Dry**

EXHAUST (see page 8)

195. Material (s) of exhaust manifold **Cast Iron**
 196. Diameter of valves **33** mm **1.30** inches
 197. Max. valve lift **9.5** mm **0.374** 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) **0.3** mm inches
 202. Valves open at (with tolerance for tappet clearance indicated) **57 ± 7° B.B.D.C.**
 203. Valves close at (with tolerance for tappet clearance indicated) **10 ± 7° A.T.D.C.**

CARBURETION (photograph N)

210. Number of carburettors fitted **1** 211. Type **Down Draught**
 212. Make **NIKKI** 213. Model **215282-231**
 214. Number of mixture passages per caburettor **2**
 215. Flange hole diameter of exit port(s) of carburetteor **28 & 33** mm in.
 216. Minimum dimensions of mixture pasage (s) ~~with piston at max. height (example: SU)~~
23 & 28 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. locafion 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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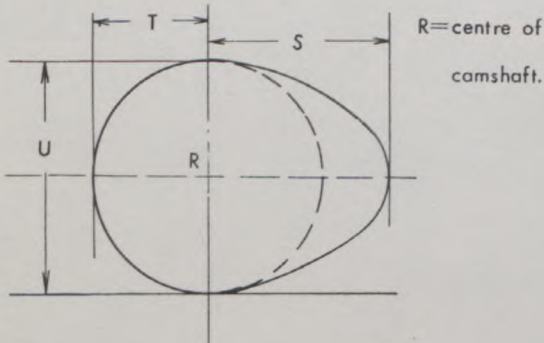
ENGINE ACCESSORIES

- | | | | | |
|---|--------------------------|--------------------------------------|----------------------|---|
| 230. Fuel pump : mechanical electric | 231. No. fitted | 1 | | |
| 232. Type of ignition system Make & Break | 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 | 100 PS | (type of horsepower: JIS) at | 6000 | rpm |
| 251. Maximum rpm | 6000 | output at that figure | 100 PS | |
| 252. Maximum torque | 14.0 kg-m | at | 3500 | rpm |
| 253. Maximum speed of the car | 165 | km/hour | | miles/hour |

255.



Inlet cam

S =	25.7	mm	1.01	inches
T =	19.0	mm	0.75	inches
U =	38.0	mm	1.50	inches

Exhaust cam

S =	25.7	mm	1.01	inches
T =	19.0	mm	0.75	inches
U =	38.0	mm	1.50	inches

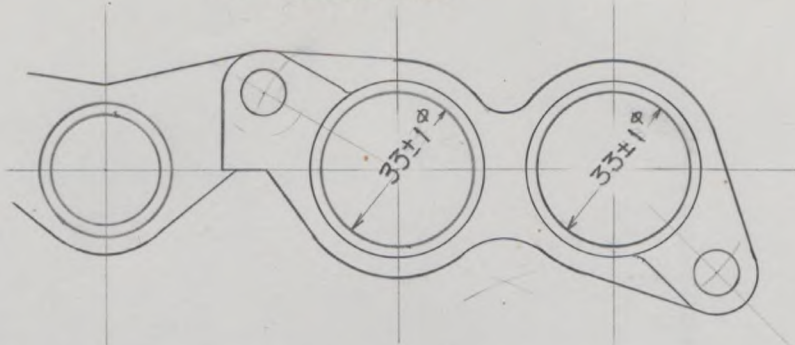


Make **TOYO KOGYO**

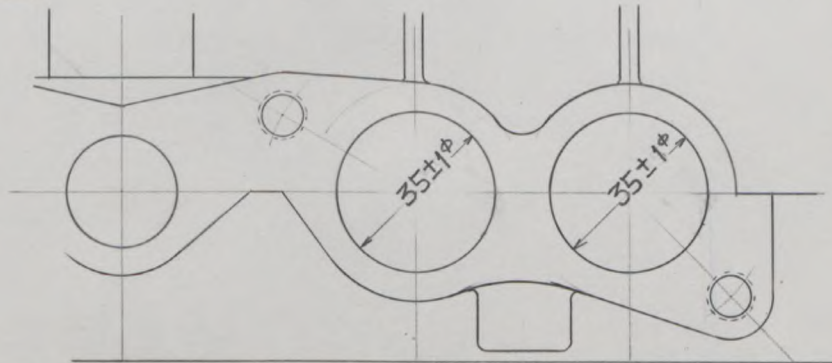
Model **MAZDA SNA**

F. I. A. Rec. No. _____

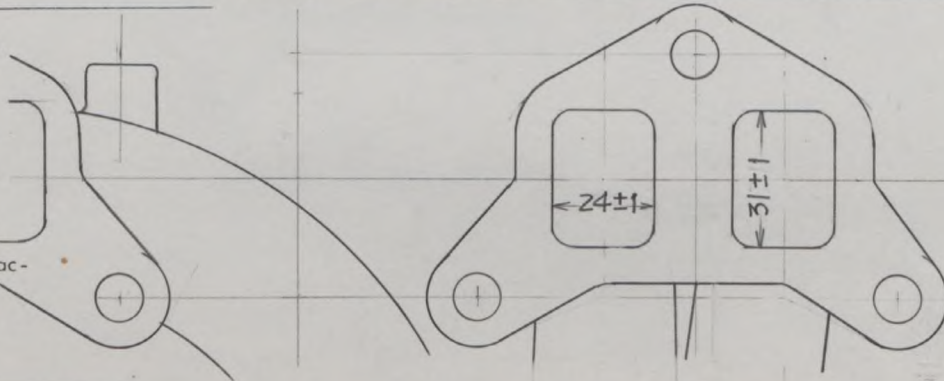
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



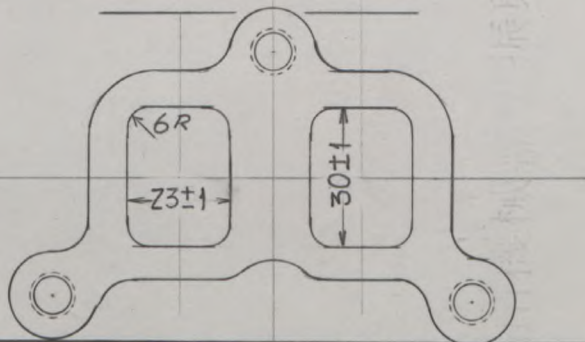
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



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



FISA - Transfert en Gr.A

Make **TOYO KOGYO**

Model **MAZDA SNA**

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DRIVE TRAIN

CLUTCH

260. Type of clutch **Dry Plate** 261. No. of plates **1**
262. Dia. of clutch plates **20.0** cm inches
263. Dia. of linings, inside **13.0** cm in. outside **20.0** cm in.
264. Method of operating clutch **Hydraulic**

GEAR BOX (photograph H)

270. Manual type, make **TOYO KOGYO** 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 type
275. No. of forward ratios 276. Location of gear-shift

277.	Manual		Automatic		Alternative manual/ automatic			
	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth	Ratio	No. teeth
1	3.403	30 / 17 27 / 14			2.014	24 / 22 27 / 14		
2	2.005	30 / 17 25 / 22			1.608	24 / 22 28 / 19		
3	1.373	30 / 17 21 / 27			1.240	24 / 22 25 / 22		
4	1.000				1.000			
5								
6								
reverse	3.655	30 / 17 29 / 14			2.266	24 / 22 27 / 13		

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 **3.700 , 4.111**
- Number of teeth **37 / 10, 37 / 9**



Make TOYO KOGYO

Model MAZDA SNA

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.

4 Door Type

9. Weight, total weight of the car with normal equipment.

~~880 kg~~ ~~1940 lbs~~
885 kg 1951 lbs

30. Material(s) of rear door windows Glass

Photograph A



WHEEL

54. Rim width and weight 114.3 mm 4.5 in. 7.5 kg

~~NOT~~
~~the following optional equipments are valid for group 4 only.~~

~~UNDER EXTENSION KIT, FRONT AND REAR~~

~~16.76 (front)~~
~~16.80 (rear)~~
~~16.76 (front)~~
~~16.80 (rear)~~



Unit : mm



Make TOYO KOGYO

Model MAZDA SNA

F.I.A. Rec. No.

CONTINUE Optional equipment ^{NOT} VALID FOR GROUP ¹ ONLY.

DISC BRAKES

	FRONT	REAR
93. Number of cylinder	2	1
94. Bore of wheel cylinder(s)	53.98 mm	31.75 mm
100. Outside diameter	254 mm	230 mm
101. Thickness of disc	20 mm	10 mm
102. Length of brake linings	78 mm	97.5 mm
103. Width of brake linings	52 mm	37.5 mm
104. Number of pads per brake	2	2
105. Total area per brake	8112 mm ²	7312.5 mm ²

Photograph F

Front brake,disc with caliper.



Photograph G

Rear brake,disc with caliper.



PROTECTION SHIELD UNDER THE CAR



DASHBOARD Deluxe type

Photograph C

Interior view



Make TOYO KOGYO

FISA - Transfert en Gr.A

Model MAZDA SNA

F. I. A. Rec. No.

Photograph

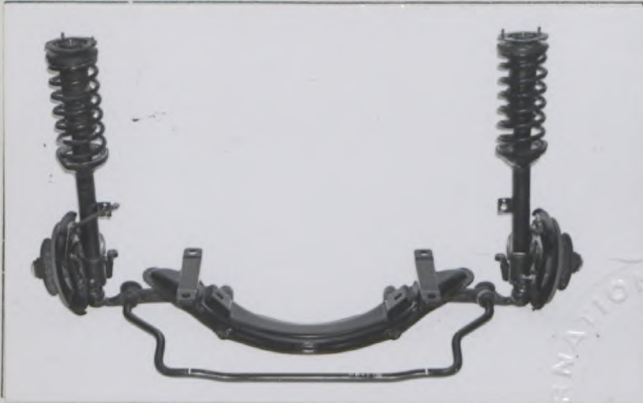
B, 3/4 view of car from rear



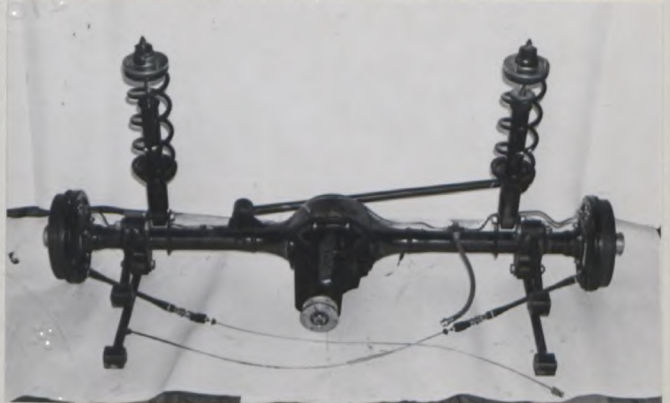
C, interior view of car through driver's door (open or removed) with dashboard



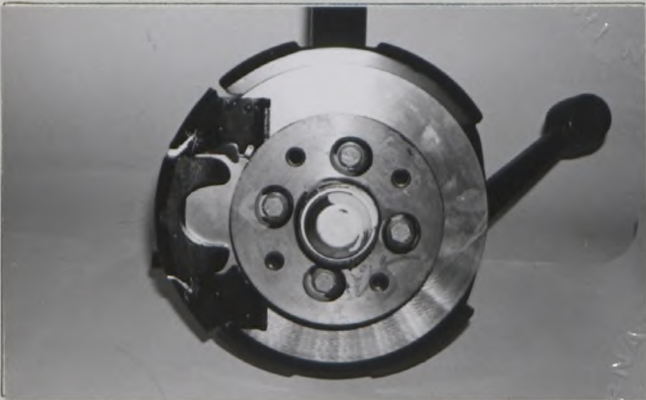
D, front axle complete, removed from car. Without wheels.



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



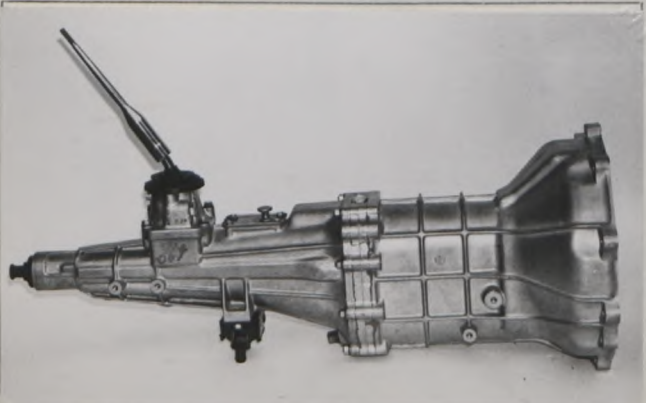
F, front brake, drum removed or disc with caliper(s)



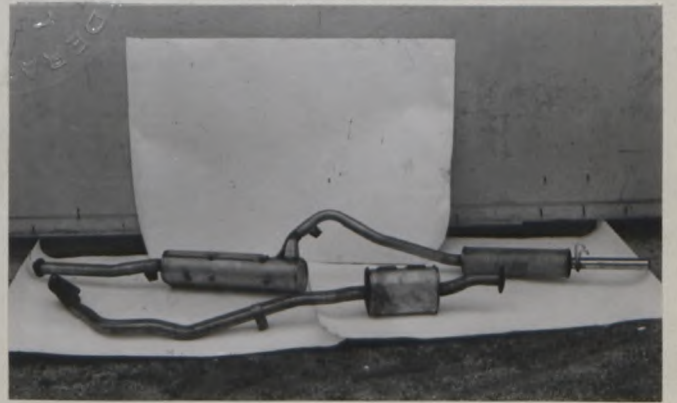
G, rear brake, drum removed or disc with caliper(s)



H, gear-box, view from side

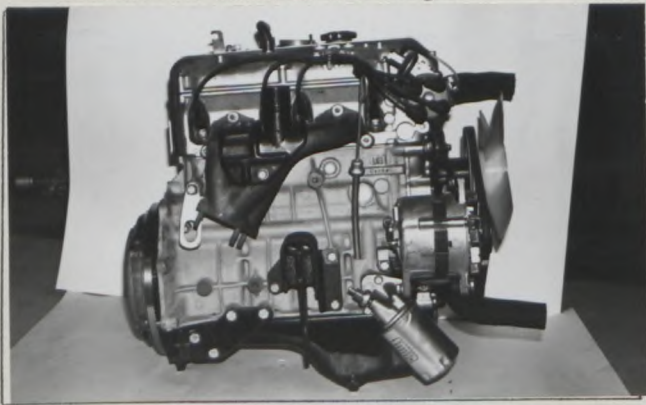


I, silencer + exhaust pipes after exhaust manifold.



Make TOYO KOGYO

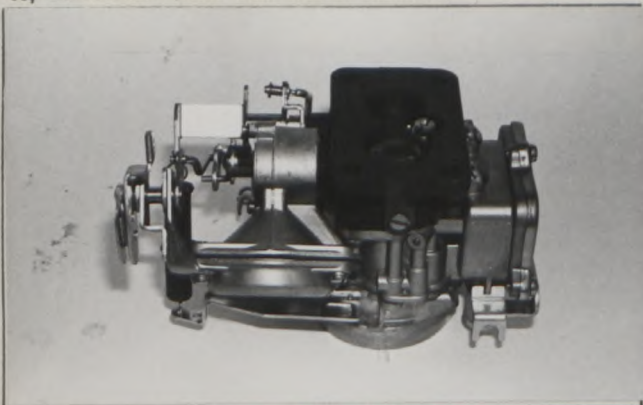
engine unit out of car, from right. With clutch and J, accessories but without air filter nor gear-box.



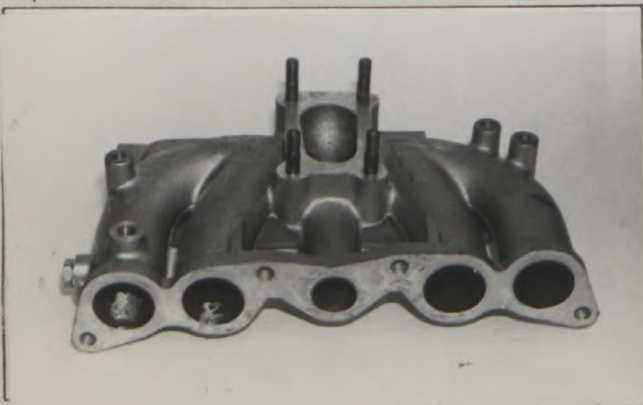
L, combustion chamber



N, Carburettor (view from side of manifold)



P, inlet manifold

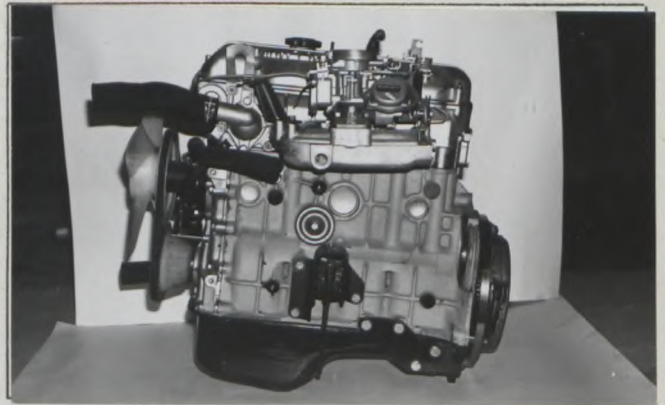


Model MAZDA SNA

F. I. A. Rec. No

Photograph

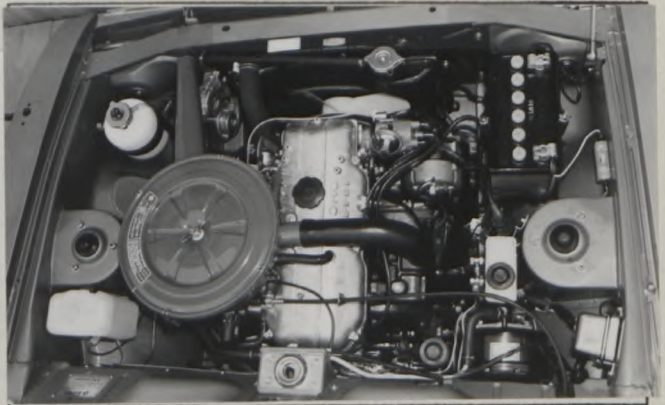
Engine unit out of car, from left. With clutch and accessories but without gear-box nor air filter.



M, piston crown



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



Q, exhaust manifold



Make **TOYO KOGYO**

Model **MAZDA SNA**

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 :

JAPAN AUTOMOBILE FEDERATION

難波清治

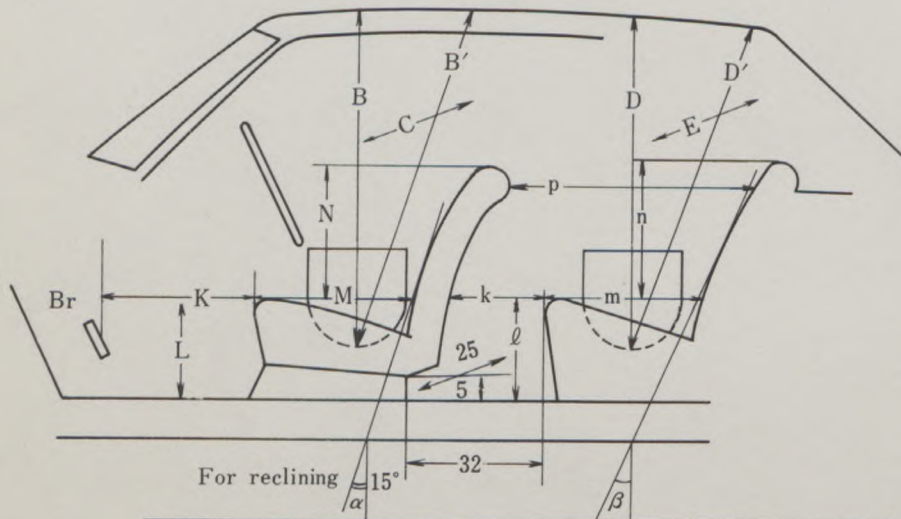
Yasuharu Nanba



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
93	97	15	129	92	88	20	129

Minimum Dimensions (cm)										
L	l	M	m	N	n	k+m	p	k	k+l+m	K+L+M
29.0	34.0	46.0	46.0	39.0	40.5	70.5	72.5	24.5	104.5	121.5
0.9L = 26.1		0.85M = 39.1		0.8N = 31.2		0.8(k+m) = 56.4		(15)	(95)	(120)

