

F. I. A. Recognition No. 5305 Series - Production

1088 cm3

66.4 cv. in.

#### FEDERATION INTERNATIONALE L'AUTOMOBILE

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

FUJI HEAVY INDUSTRIES LTD.

chassis

A14-500002

Serial No. of engine

EA61-76113

Recognition is valid from

Cylinder-capacity Model A14 (SUBARU FF-1) Manufacturer FUJI HEAVY INDUSTRIES LTD. Manufacturer FUJI HEAVY INDUSTRIES LTD.

List 1969/5

Jan. 19 69 and the minimum production of The manufacturing of the model described in this recognition form was started on 5000 identical cars, in accordance with the specifications of this form was reached on Apr. 1969

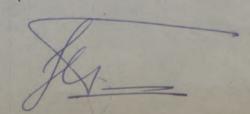
Photograph A 3.14 view of car from front



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

Normal evolution of the type Variants rec. No. rec. No .List on List 19 rec. No List rec. No. on rec. No List rec. No rec. No rec. No. List on 19 rec. No. List rec. No.

Stamp and signature of the National Sporting Authority



Stamp and signature of the F. I. A.

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	2420	mm		95.3	inches		
			311111					
2.	Front track	1225	mm		48.2	inches *		
3.	Rear track	1210	mm		47.7	inches *		100
4.	Overall length of the car			390.0	cm		inches	
5.	Overall width of the car			148.0	cm		inches	
6.	Overall height of the car			139.0	cm		inches	
7.	Capacity of fuel tank (reserve	ve included)		1		36	1 trs	
	9.5 Gall	on US				Gallor	Imp.	
0	S							

8. Seating capacity

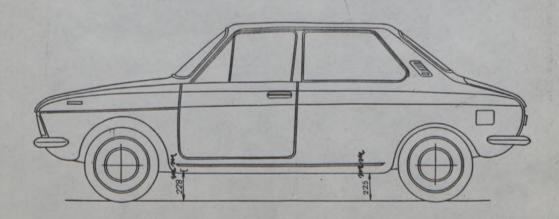
9. Weight, total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:

625 kg 1378 lbs cwl

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

# 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 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: yes - ao 39. Air-conditioning: yes - no

40. Ventilation : yes - -

41. Front seats, type of seats and upholstery Bench, Vinyl leather.

42. Weight of front seat (s), complete with supports and rails, out of the car :

21.5 kg lbs

43. Rear seats, type of seats and upholstery Bench, Vinyl leather.

44. Front bumper, material (s) Steel. Weight

45. Rear bumper, malerial (s) . Steel. Weight 3.0 kg

# WHEELS

50. Type Pressed steel.

51. Weight (per wheel, without tyre) 4.7 kg

52. Method of attachment Wheel nut (4 nuts)

53. Rim diameter 330 mm 13 inches

54. Rim width 102 mm 4 inches

# STEERING

60. Type Rack and pinion.

61. Servo-assistance : yes - no

62. Number of turns of steering wheel from lock to lock 3.3

63. In case of servo-assistance

2.9

lbs

lbs

lbs

# SUSPENSION

70.	Front suspension (photogr. D), type	Indepen	dent. (Wi	shbone)						
71.	Type of spring	Torsion bar.								
72.	Stabiliser (if fitted)									
73.	Number of shockabsorbers 2	74. Type Hydraulic, Telescopic.								
78.	Rear suspension (photogr. E), type	Indepen	dent. (Tra	ailing	arm)					
79.	Type of spring	Torsion	bar and (	Coil sp	ring.					
80.	Stabiliser (if fitted)									
81.	Number of shockabsorbers 2	82. Type	Hydrauli	ic, Tel	escopio					
	BRAKES (photographs F and G)									
90.	System		Hydrauli	ic.						
91.	Servo-assistance (if fitted), type									
92.	Number of hydraulic master cylinders	1								
			FRO	TNC			REAR			
93.	Number of cylinders per wheel		1	1			1			
94.	Bore of wheel cylinder (s)		23.81	mm	in.	15.88	mm	in.		
95.	Drum brakes Inside diameter		203.2	mm	in.	180	mm	in.		
96.	Length of brake linings		195	mm	in.	141	mm	in.		
97.	Width of brake linings		45	mm	in.	35	mm	in.		
98.	Number of shoes per brake		2			2				
99.	Total area per brake		17550	mm <sup>2</sup>	sq. in.	9870	mm <sup>2</sup>	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 <sup>2</sup>	sq. in.		mm²	sq. in.		

	,	ENGINE (photographs )	and K)						
13		Cycle 4			131. Number	of cylinders 4			
		Cylinder arrangement	Horiz	zontally or	posed.				
		Bore 76	mm		134. Stroke	60 m	nm	2.36	in.
		Capacity per cylinder		27	72 cm <sup>3</sup>		1	6.6	cu. in.
		Total, cylinder-capacity		108	38 cm <sup>3</sup>		6	6.4	cu. in.
		Material (s) of cylinder	block	Aluminium	alloy.				
		Material (s) of sleeves							
		Cylinder-head, material					Number	fitted	2
		Number of inlet ports				of exnaust ports	1 per d	ylinde	r.
		Compression ratio							
		Volume of one combust			28.	2 cm <sup>3</sup>			cu. in.
		Piston, material		ium alloy.		145. Number o	f rings 3	3	
		Distance from gudgeon p							
		District Home Banks	32.5			inches			
1	47	Crankshaft : moulded			148. Type of	crankshaft : in	legral / —	-	
		Number of crankshaft n		3					
		Material of bearing cap		,					
		System of lubrication :		oil in sump					
		Capacity, lubricant				pts			quarts US
		Oil cooler: yes /			154. Method	of engine cooling	Water		
		Capacity of cooling syst		ltrs		pints			quarts US
		Cooling fan (if fitted),		cm	1	inches			
		Number of blades of c							
1:	57.	Number of blades of C	oom gmoo.						
		Bandage							
		Bearings	Plain			Dia.	50	mm	
		Crankshaft main, type				Dia.	45	mm	
1	59.	Connecting rod big end,	Plain						

	Weights		
160.	Flywheel (clean) 6.95 kg	lbs	
161.	Flywheel with clutch (all turning parts)	10.65 kg	lbs
162.	Crankshaft 6.55 kg	lbs 163. Connecting rod 0.35	kg lbs
164.	Piston with rings and pin	0.33 kg lbs	

#### FOUR STROKE ENGINES

- 170. Number of camshafts 171. Location Crank case.
- 172. Type of camshaft drive Gear drive.
- 173. Type of valve operation Pushrods and rockers.

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

- 180. Material(s) of inlet manifold Aluminium alloy. 1.26 inches 181. Diameter of valves 0.28 in. 183. Number of valve springs 182. Max. valve lift 185. Number of valves per cylinder 184. Type of spring Coil spring. 0.22 mm inches 186. Tappet clearance for checking timing (cold) 187. Valves open at (with tolerance for tappet clearance indicated) 20° ± 5° (B.T.D.C.) 188. Valves close at (with tolernce for lappet clearance indicated) 60° + 5° (A.B.D.C.)
- 189. Air filter, type Dry.

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

- 195. Material (s) of exhaust manifold Steel. 1.09 inches 27.6 196. Diameter of valves 198. Number of valve springs 0.28 in. 197. Max. valve lift 200. Number of valves per cylinder 199. Type of spring Coil spring. inches
- 0.27 mm 201. Tappet clearance for checking timing (cold) 60' + 5' (B.B.D.C.) 202. Valves open at (with tolerance for tappet clearance indicated)
- 203. Valves close at (with tolerance for tappet clearance indicated) 20° + 5° (A.T.D.C.)

### CARBURETION (photograph N)

- Down draft. 211. Type 210. Number of carburettors fitted 213. Model
- DCG 286 Hitachi LTD. 212. Make 214. Number of mixture passages per caburettor
- 215. Flange hole diameter of exit port(s) of carburetteor Pri. 26, Secon. 28
- 216. Minimum dimensions of mixture pasage(s) with piston at max. height lexample SU inches Pri. 19. Secon. 25 mm

### INJECTION (if fitted)

- 221. Number of plungers 220. Make of pump 223. Total number of injectors 222. Model or type of pump
- 224. location of injectors
- 225. Minimum diameter of inlet pipe

inches

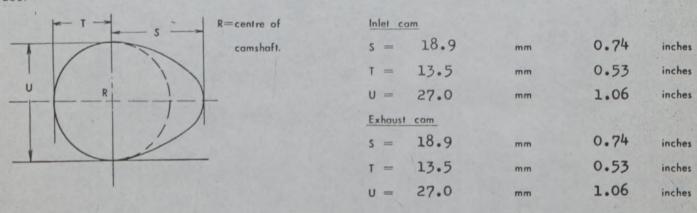
in.

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

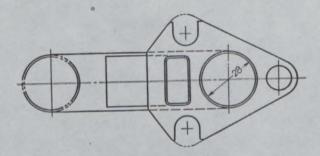
# ENGINE ACCESSORIES

230.	Fuel pump : mechanical and / er electric		231. No. fitted 1		
232.	Type of ignition system Make and Break	gnition.	233. No. of distributor	s 1	
234.	No. of ignition coils 1		235. No. of spark plus	gs per cylinder	1
236.	Generator, type: dynamo/alternator-number fitted	1	237. Method of drive	V Belt.	
238.	Voltage of generator 12 vol	ts	239. Battery, number	1	
240.	location Engine room.				
241.	Voltage of battery 12 vol	ts			
	ENGINE AND CAR PERFORMANCES (as decla	ired by manufactu	erer in catalogue)		
250.	Max. engine output 62 PS (type of ho	rsepower: JIS.	) at *	6000	rpm
251.	Maximum rpm 6500 output	at that figure	60 PS		
252.	Maximum torque 8.7 kg-m at	3200 rpm			
253.	Maximum speed of the car 145	km/hour		miles / hour	

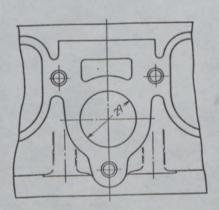
255.



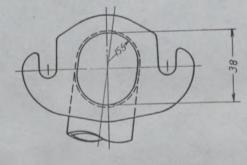
Drawing inlet
manifold ports,
side of cylinderhead. Indicate
scale or dimensions
and manufacturing
tolerance.



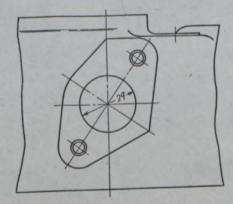
Drawing of entrance to inlet port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



Drawing exhaust manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



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



Unit : mm

Tolerance : ± 1.5

DRIVE TRAIN

CLUTCH

260. Type of clutch Dry plate. 261. No. of plates

262. Dia. of clutch plates

18.4 cm inches

263. Dia. of linings, inside

12.5 cm outside

18.0

264. Method of operating clutch

Mechanical.

GEAR BOX photograph H)

270. Manual type, make FUJI HEAVY INDUSTRIES LTD. Method of operation

Mechanical.

271. No. of gear-box ratios forward

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

273. Location of gear-shift Column.

274. Automatic, make

275. No. of forward ratios

276. Location of gear-shift

277.	Ratio	No. teeth	Automatic Ratio No.	teeth Ratio	Alternative mans	Ratio No.	teeth
1	3.540	39/11			0		
2	2.235	38/17					
3	1.542	37/24					
4	1,033	31/30					
5							
6							
reverse	4.100	41/19/10					

278. Overdrive, type

279. Forward gears on which overdrive can be selected

280. Overdrive ratio

## FINAL DRIVE

Hypoid gear. 290. Type of final drive

291. Type of differential

Bevel gear.

292. Type of limited slip differential (if fitted)

293. Final drive ratio

4.125

Number of teeth

33/8

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, 79, 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.

- 41. Front seats, type of seats and upholstery Separate, Vinyl leather.
- Weight of front seat(s), complete with supports and rails, out of the car:

  11.5 % 2kg lbs
- 273 Location of gear-shift Floor.

# Four door sedan





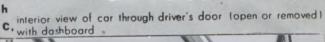
Weight, total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:

635 kg

1400 lbs

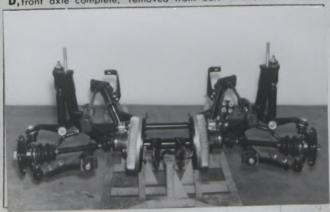
cwt

Photograph





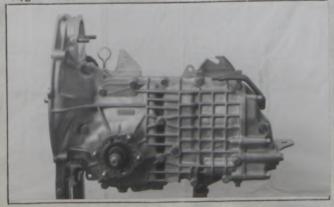
D, front axle complete, removed from car. Without wheels.



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



H, gear-box, view from side





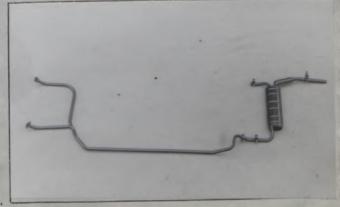
E, Rear axle complete without wheels, removed from car.



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

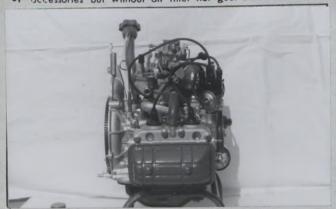


I, silencer + exhaust pipes after exhaust manifold.

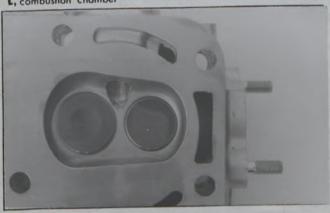


Make FUJI

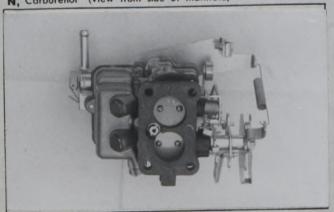
engine unit out of car, from right. With clutch and J. accessories but without air filter nor gear-box.



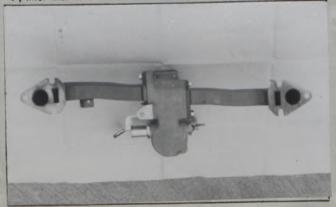
L, combustion chamber



N, Carburettor (view from side of manifold)



P, inlet manifold

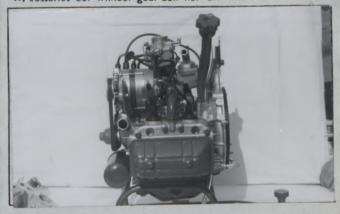


Model A14

F. I. A. Rec. No

Photograph

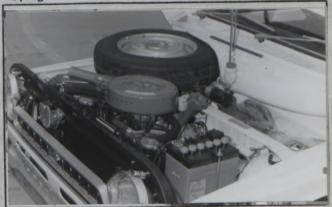
Engine unit out of car, from left. With clutch and acK, cessories but without gear-box nor air filter.



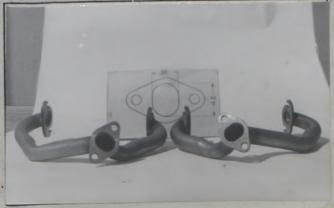
M, piston crown



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



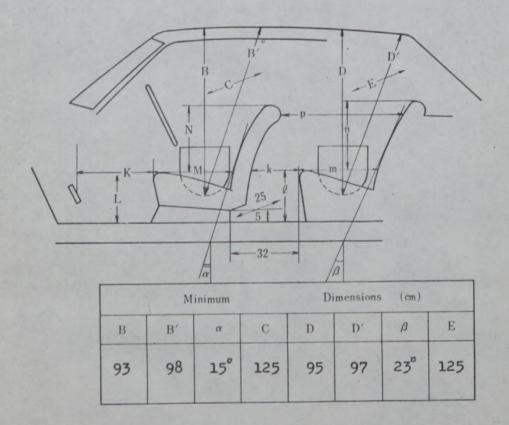
Q, exhaust manifold



# DIMENSIONS OF INTERIOR

(Conform to Art. 253 b of Appendix J)

For four seaters:



			Minimum				Dimensions	s (cm)		
L	l	M	m	N	n	k+m	р	k	k+ l+m	K+L+M
35	35	46	43	42	41	65	69	22	100	124
0.9L =	31.5	0.85M =	39.1	0.8N =	33.6	0.8(k+m)	- 52.0	(15)	(95)	(120)

Make FUJI

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 <sup>2</sup>	sq. in.
305.	Exhaust ports, length measured around cylinder wall				mm	inches
306.	Height exhaust port mm	in.	307.	Area	mm <sup>2</sup>	sq. in.
308.	Transfer port, length measured around cylinder wall				mm	inches
	Height transfer port mm	in.	310.	Area.	mm <sup>2</sup>	sq. in.
311.	Piston ports, length measured around piston				mm	inches
	Height piston port mm	in.	313.	Area	mm²	sq. in.
	Method of precompression		315.	Precompression cyl.:	yes ho	
	Bore mm inches		317.	Stroke	mm	inches
	Distance from top of cyl. block to highest point of exhaus	t po	rt :		mm	inches
	Distance from top of cyl. black to lowest point of inlet po				mm	Inches
	Distance from top of cyl. block to highest point of transfe		rt :		mm	inches
	Drawing of cylinder ports.					

330. Supercharging-state full details hereafter :

JAPAN AUTOMOBILE FEDERATION

723 for 8

Kazunari Komotori