

MAKE Plymouth MODEL Barracuda FIA REC # 5159

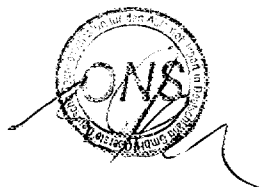


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AUTOMOBILE COMPETITION COMMITTEE FOR THE UNITED STATES, FIA, INC.

433 MAIN STREET, STAMFORD, CONN. 06901



Federation Internationale de l'Automobile
FORM OF RECOGNITION

In accordance with Appendix "J" of the International Sporting Code

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CONVERSION TABLE:

1 inch / pouce	2.54 cm	
1 foot / pied	30.479 cm	
1 square inch / pouce carre	6.452 cm ²	
1 cubic inch / pouce cube	16.387 cm ³	
1 pound (lb.) / livre	453.593 gr	
1 pint (U.S.)	.473 ltrs	.833 pt. Imp.
1 quart (U.S.)	.946 ltrs	.833 qt. Imp.
1 gallon (U.S.)	3.785 ltrs	.833 gal. Imp.
1 pint (Imp.)	.568 ltrs	1.20 pt. U.S.
1 quart (Imp.)	1.136 ltrs	1.20 qt. U.S.
1 gallon (Imp.)	4.546 ltrs	1.20 gal. U.S.





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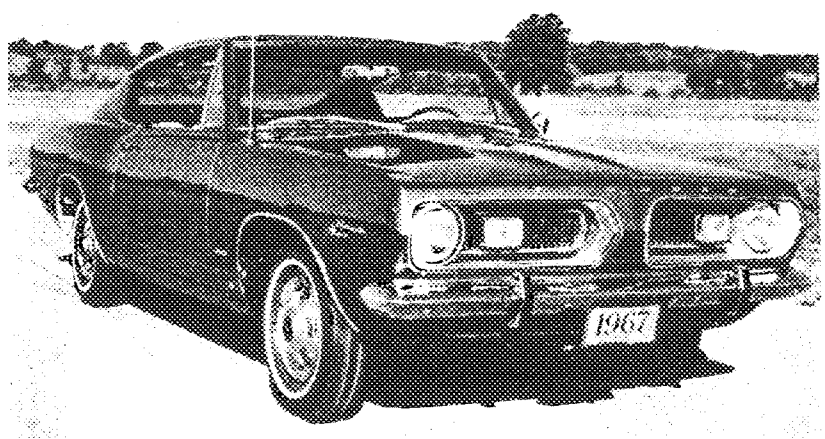
In accordance with Appendix "J" of the International Sporting Code

Cylinder capacity 6286.1 cm3 383.6 in3
Manufacturer Chrysler-Plymouth Division
Chrysler Corporation Model Barracuda
Serial # Chassis Bx2xx7xxxxxxx Manufacturer Chrysler Corporation
Serial # Engine C383xx Manufacturer Chrysler Corporation
Recognition valid from _____ List _____

The manufacturing of the model described in this recognition form was started on February 15, 1967 and the minimum production of 5000 identical cars, in accordance with the specifications of this form, was reached on May 15, 1967, 1967.

(*) need not be answered for Group II and III cars.
(**) only need to be answered for Group IV cars.

A 3/4 Front View Car **



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

Variants				Normal evolution of the type			
on	<u>19</u>	rec #	<u>list</u>	on	<u>19</u>	rec #	<u>list</u>
on	<u>19</u>	rec #	<u>list</u>	on	<u>19</u>	rec #	<u>list</u>
on	<u>19</u>	rec #	<u>list</u>	on	<u>19</u>	rec #	<u>list</u>



Stamp/Signature of
National Sporting Authority

John V. Oliveau
JOHN V. OLIVEAU
TECHNICAL DIRECTOR
ACCUB, F.I.A., INC.

Stamp/Signature
F.I.A.

MAKE Plymouth

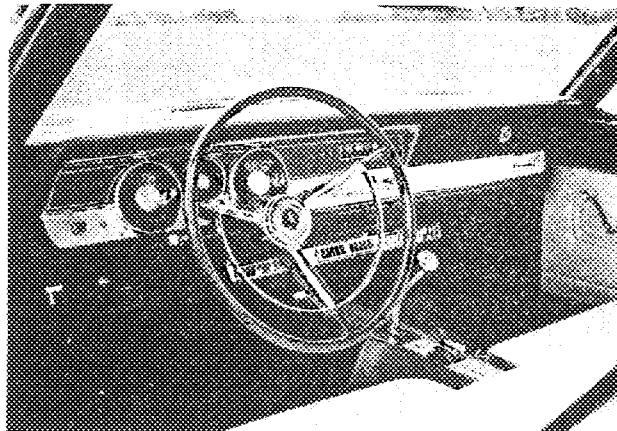
MODEL Barracuda

FIA REC # 5159

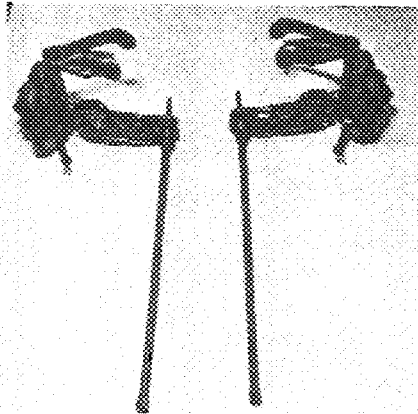
B 3/4 rear car (**)



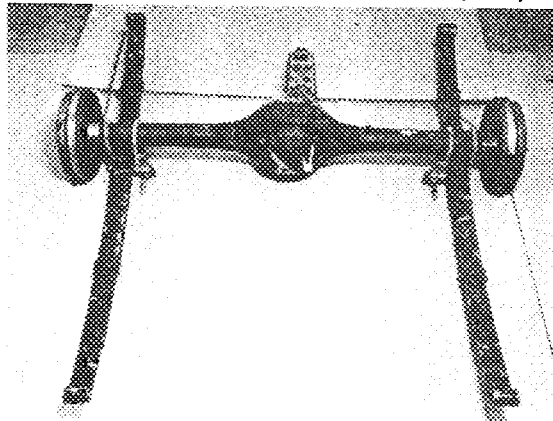
C interior-car (**)



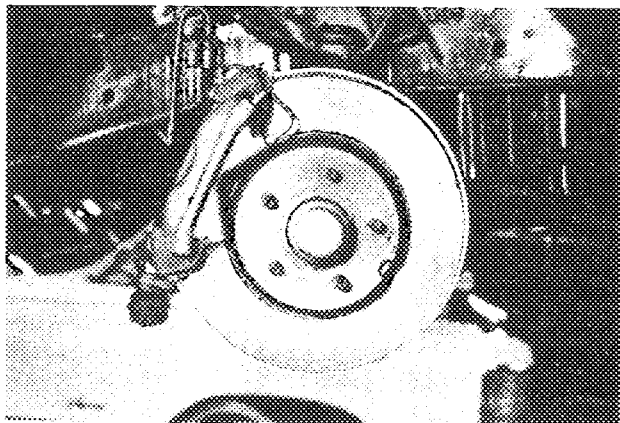
D front axle (**)



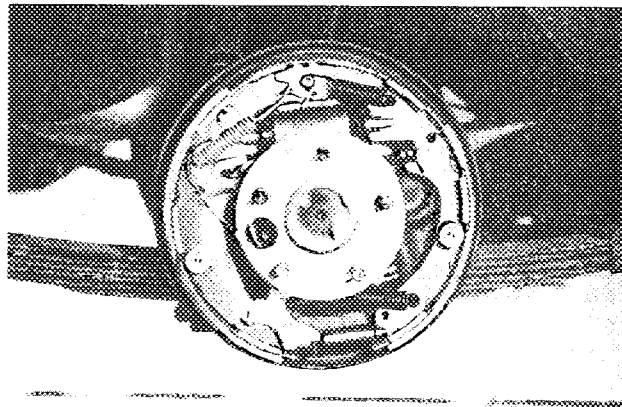
E rear axle (**)



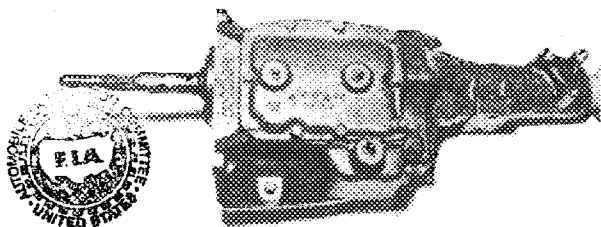
F brake, front (**)



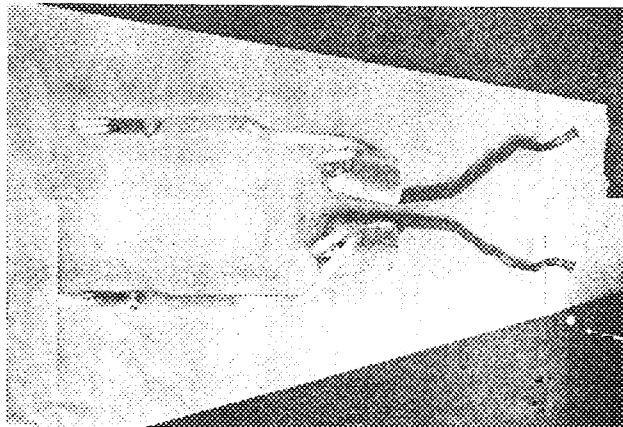
G brake, rear (**)



H gear box (**)



I exhaust system (*)



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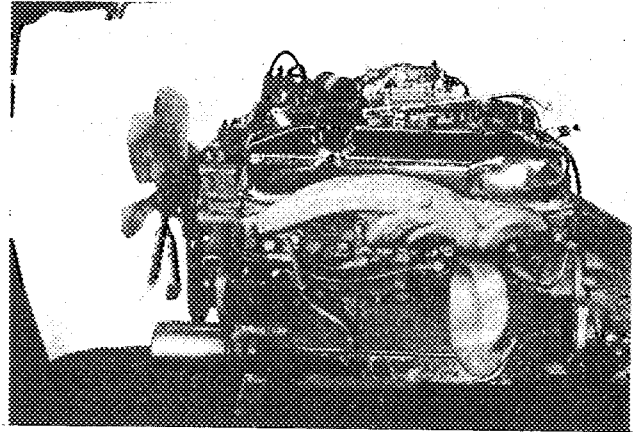
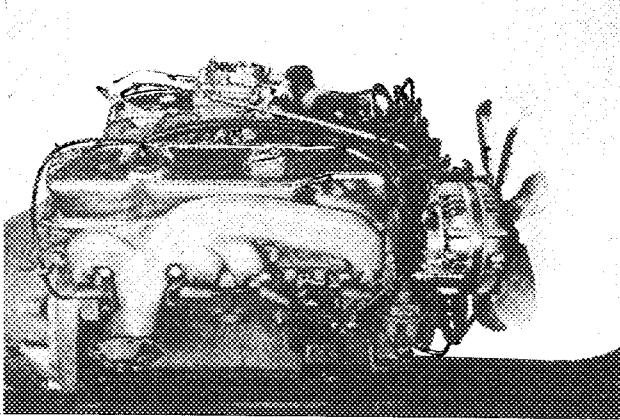
MAKE Plymouth

MODEL Barracuda

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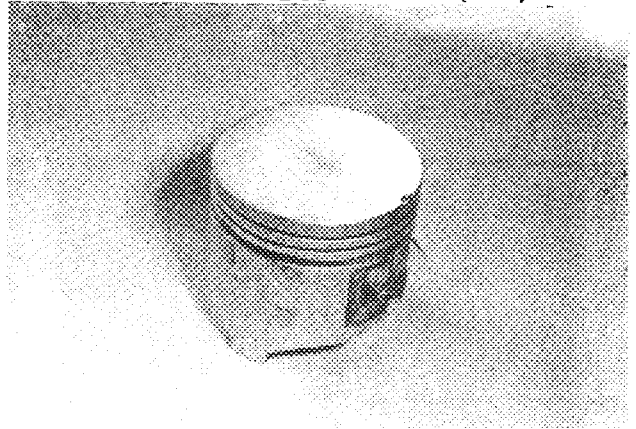
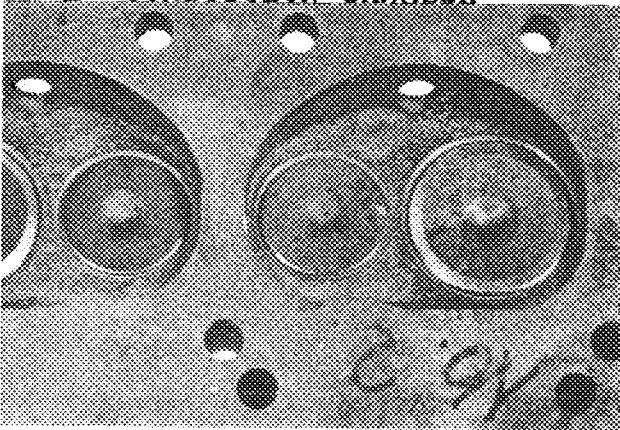
J ENGINE RIGHT (**)

K ENGINE LEFT (**)



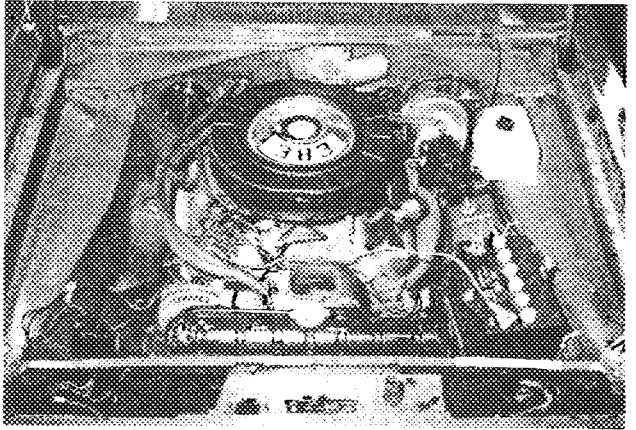
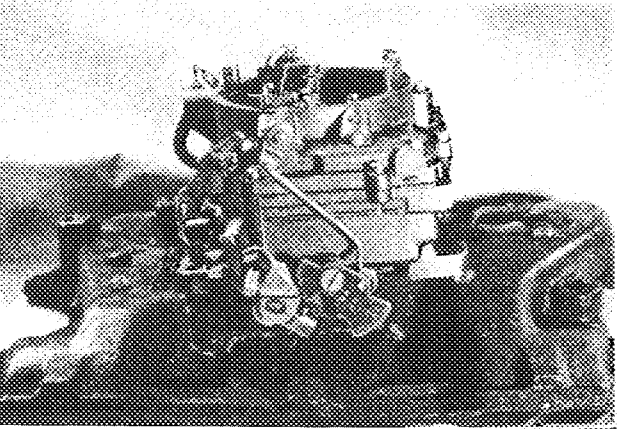
L COMBUSTION CHAMBER

M PISTON TOP (*)



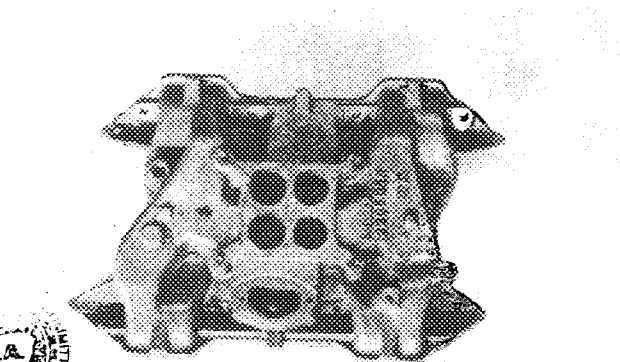
N CARBURETOR (*)

O ENGINE IN PLACE (**)



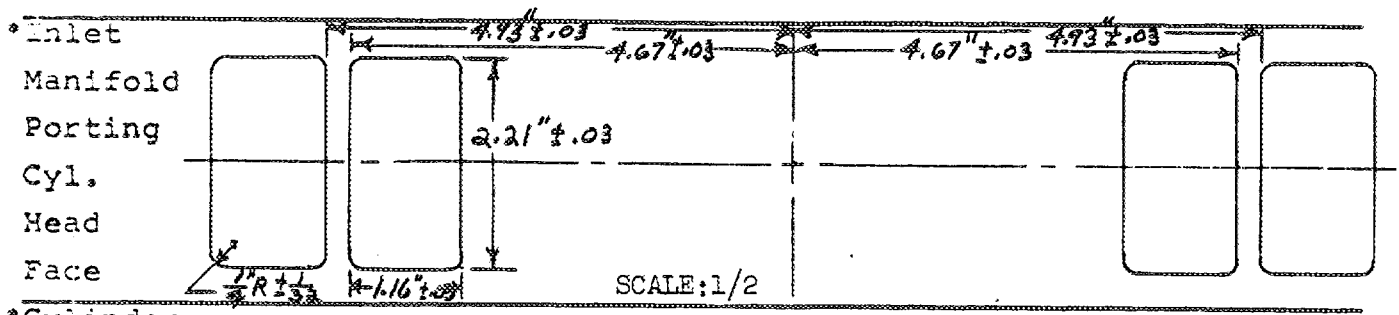
P MANIFOLD INLET

Q MANIFOLD EXHAUST



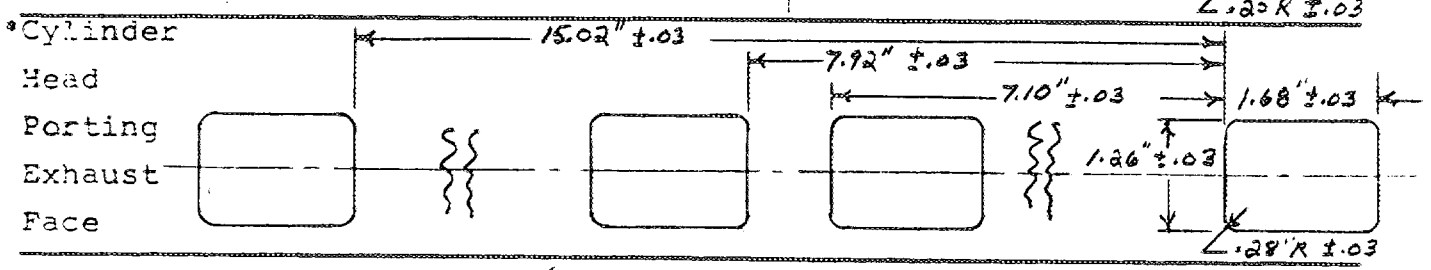
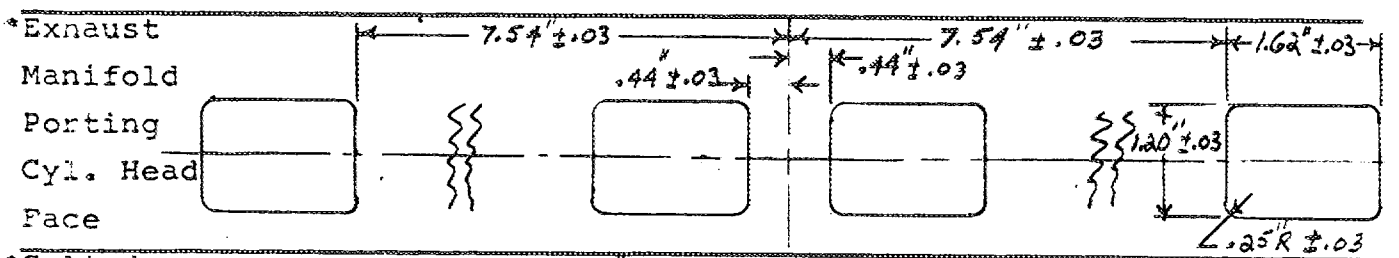
Strip out: ALL SKETCHES MUST INDICATE ACTUAL DIMENSIONS AND MANUFACTURER'S TOLERANCES. STAMP

ALL SKETCHES MUST INDICATE ACTUAL DIMENSIONS AND MANUFACTURER'S TOLERANCES.

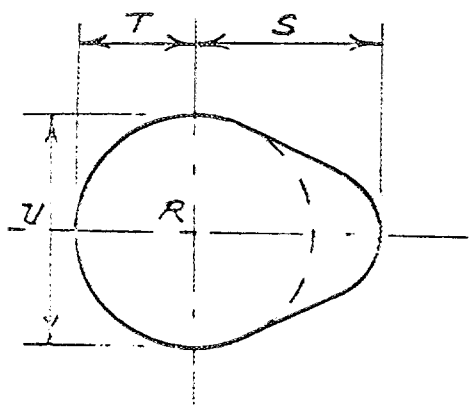


Cylinder Head Porting Inlet Face

SAME AS ABOVE



CAM



Inlet cam			
S=	24.1	mm	0.95 in
T=	17.0	mm	0.67 in
U=	34.0	mm	1.34 in
Exhaust cam			
S=	24.1	mm	0.95 in
T=	16.8	mm	0.66 in
U=	33.5	mm	1.32 in

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IMPORTANT: Questions 1 through 9 must be answered in two measuring systems, one of which must be the metric system.
See conversion table at index.

CAPACITIES & DIMENSIONS

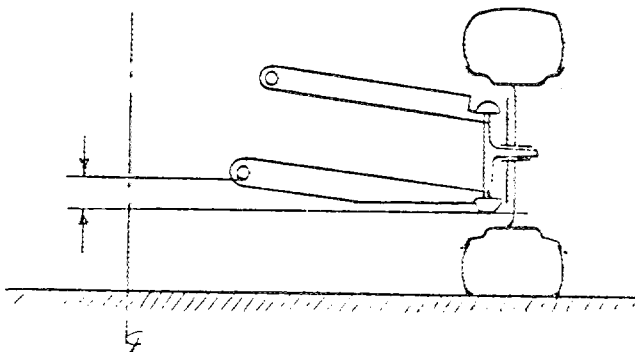
- (**) 1. Wheelbase 2741 mm 108 in
- (**) 2. Front track 1458 mm 57.4 in +
- (**) 3. Rear track 1412 mm 55.6 in +
+ Differences in track resulting from use of optional wheel and rim sizes must be stipulated on recognition application forms.

Dimensional relationship between track (front and/or rear) and ground clearance resulting from use of optional wheel sizes shall also be stipulated and a sketch illustrating suspension reference points shall be shown below to establish the "reference chassis height." The reference chassis height dimension is to be used only when checking track and shall not affect eligibility of car in any manner.

Sketch, Ground Clearance: Dimensional Suspension & Chassis Reference Points"

Rear Track is unaffected by changes in car height

Front Track Car Height: 2.125 in



- 4. Overall length of car 489 cm 192.8 in
- 5. Overall width of car 182 cm 71.6 in
- 6. Overall height of car 136 cm 53.4 in
- 7. Capacity of fuel tank (reserve included) 68 ltrs.
18 gallons US gallons, Imp.
- 8. Seating capacity 4
- (**) 9. Weight - total weight of car with normal equipment, water, oil and spare wheel but without fuel or repair tools.
1305 kg 2877 lbs



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CHASSIS & BODYWORK - Photos A, B, C

- (**) 20. Chassis/body construction - separate/unit construction
- (**) 21. Unit construction - material/s Stamped Steel
- (**) 22. Chassis - material/s - - - separate construction - - -
- (**) 23. Body - material/s - - - separate construction - - -
- (**) 24. Doors - number 2 material/s Stamped Steel
- (**) 25. Hood - material/s Stamped Steel
- (**) 26. Trunk Lid - material/s Stamped Steel
- 27. Window, Rear - material/s Safety Glass
- 28. Windshield - material/s Safety Glass - Laminated
- 29. Windows, front door - material/s Safety Glass
- 30. Windows, rear door - material/s None
- 31. Windows - actuating system Rotary Crank
- 32. Window, rear quarter - material/s Safety Glass

ACCESSORIES AND UPHOLSTERY

- 38. Heating, interior - yes no
- 39. Air conditioning - yes no
- 40. Ventilation - yes no
- (*) 41. Seats, front - type of seat and upholstery Bucket - Vinyl
- 42. Seats, front - weight
(complete with supports & rails out of car) 9.08 kg 20 lbs/seat
- CHECK: BENCH _____ BUCKET X CONSOLE INCLUDED Optional
- 43. Seats, rear - type of seat and upholstery Bench - Vinyl
- 44. Bumper, front - material/s Stamped Steel kg 6.4 lbs 14.0 Weight
- 45. Bumper, rear - material/s Stamped Steel kg 6.9 lbs 15.2 Weight

WHEELS

- 50. Type Stamped Steel Disc
- 51. Weight (per wheel, without tire) 7.9kg 17.4 lbs
- 52. Method of attachment Five Studs and Nuts
- 53. Rim, diameter 356 mm 14 in
- 54. Rim, width 140 mm 5.5 in

SUSPENSION

- (**) 70. Suspension, front (photo D) - type Independent
- (**) 71. Spring - type Torsion Bar
- (*) 72. Stabilizer - if fitted Link type



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73.	Shock absorbers - number	Two		
74.	Type	Telescopic		
(**)	78. Suspension, rear (photo E) - type	Live Axle		
(**)	79. Spring - type	Laminated Leaf		
(*)	80. Stabilizer - if fitted	None		
	81. Shock absorbers - number	Two		
	82. Type	Telescopic		
<u>BRAKES</u> (Photos E and F)				
		Hydraulic		
(**)	90. Method of operation			
(*)	91. Power assisted (if fitted) - type	Integral		
	92. Master Cylinders - number and type	One - Tandem		
	(indicate if duplex master cylinder)	<u>Front</u>		<u>Rear</u>
	93. Cylinders - number per wheel	4		1
	94. Cylinders - wheel bore	41.7 mm 1.64 in	23.7 mm	.933 in
	(indicate stepped bore dimensions if applicable)			
<u>Drum Brakes</u>				
	95. Diameter, inside	<u>Front</u>		<u>Rear</u>
		mm	in 254	mm 10 in
	96. Linings, length Primary plus Secondary	mm	in 496	mm 19.53 in
	97. Linings, width	mm	in 44.5	mm 1.75 in
	98. Shoes - number per brake			2
	99. Area, total - per brake	mm ²	in ² 22,053	mm ² 3418 in ²
<u>Disc Brakes</u>				
	100. Diameter, outside	274.1	mm 10.79 in	mm in
	101. Thickness of disc	20.6	mm 0.81 in	mm in
	102. Lining - length	122.4	mm 4.82 in	mm in
	103. Lining - width	46.7	mm 1.84 in	mm in
	104. Pads - number per brake		Two	
	105. Area, total - per brake	11,445	mm ² 17.74 in ²	mm ² in ²

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ENGINE (Photos J and K)

- (**) 130. Cycle two four Wankel
- (**) 131. Cylinders - number - - - Eight
- (**) 132. Cylinders - arrangement Vee Wankel - # of elements and basic dimensions
- (**) 133. Bore 108.0 mm 4.25 in
- (**) 134. Stroke 85.9 mm 3.38 in
- (**) 135. Cylinders - capacity 785.8 cm3 47.95 in3
- (**) 136. Cylinders, total capacity 6286.1 cm3 383.6 in3
- (**) 137. Cylinder Block - material/s Cast Iron
- (✓) 138. Sleeves - material/s (if fitted) None
- (**) 139. Head, cylinder - material/s Cast Iron number fitted Two
- (**) 140. Port, inlet - number Four/Head
- (**) 141. Port, exhaust - number Four/Head
- (*) 142. Compression - ratio Nominal 10.0:1
- (*) 143. Combustion chamber - volume Max. 79.5 cm3 Max. 4.85 in3
Min. 73.5 Min. 4.49
- (*) 144. Piston - material/s Aluminum
- (*) 145. Rings - number Three
- (*) 146. Distance from gudgeon pin centre line to highest point of piston crown ~~47.549~~ mm ~~1.872~~ in
47.676 1.877
- () 147. Crankshaft - cast-forged-mach from solid
- (**) 148. Crankshaft - type - integral - sectioned - # of sections
- (**) 149. Crankshaft, main bearings - number Five
- (**) 150. Bearing cap - material/s Cast Iron
151. Lubrication - system - dry sump/oil in sump
152. Lubricant - capacity 4.73 ltrs 10 pts 5 qts US
- (*) 153. Cooler, oil - yes no
154. Cooling - method Water
155. Cooling - capacity of system 16.08 ltrs 34 pts 17 qts US

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- (*) 156. Fan, cooling (if fitted) - diameter 45.7 cm 18 in
- (*) 157. Fan, cooling - number of blades Four material/s Steel

BEARINGS

- (**) 158. Crankshaft, main - type ^{Babbitt} on diameter 66.7 mm 2.625 in
Steel
- (**) 159. Connecting rod, big end - type ^{Babbitt} on diameter 60.3mm 2.375 in
Steel

WEIGHTS

- (*) 160. Flywheel (clean) 14.33 kg 31.6 lbs
- (*) 161. Flywheel with clutch (all rotating parts) 24.09 kg 53.1 lbs
- (*) 162. Crankshaft 30.53 kg 67.3 lbs
- 163. Connecting Rod 0.81 kg 1.79 lbs
- (*) 164. Piston with rings & pin 1.08 kg 2.37 lbs

FOUR CYCLE ENGINES

- (**) 170. Camshafts - number One material/s Hardenable Cast Iron
- (**) 171. Camshaft - location In Cylinder Block
- (**) 172. Camshaft Drive, type Chain
- (**) 173. Valve operation - type Push Rod

INLET (See Photo P) (for addtl info re 2 stroke engines and super charged, see page 15)

- 180. Inlet manifold - materials Aluminum
- 181. Valves (overall) - diameter 52.8 mm 2.08 in
- (*) 182. Valve lift - maximum 10.8 mm 0.425 in
- 183. Springs, valve - number One/Valve
- 184. Spring - type Coil
- (**) 185. Valves, per cylinder - number Two
- (*) 186. Tappet - clearance for checking timing (cold) Hydraulic mm in
- (*) 187. Valves - open at (with tolerance for tappet clearance indicated) 16° BTC
- (*) 188. Valves - close at (with tolerance for tappet clearance indicated) 60° ABC
- (*) 189. Air filter - type Paper Element

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EXHAUST (See Photo Q)

- 195. Manifold, exhaust - material/s Cast Iron
- 196. Valves (overall) - diameter 40.64 mm 1.60 in
- 197. Valve, lift - maximum 11.10 mm 0.437 in
- 198. Valve Springs/valve - number One/Valve
- 199. Springs - type Coil
- (**) 200. Valves - number per cylinder Two
- (*) 201. Tappet - clearance for checking timing (cold)
mmHydraulic in
- (*) 202. Valves - open at (with tolerance for tappet 64° BBC
clearance indicated)
- (*) 203. Valves - close at (with tolerance for tappet 16° ATC
clearance indicated)

CARBURETION (See Photo N)

- 210. Carburetors, fitted - number One
- 211. Type Downdraft
- (*) 212. Make Carter
- (*) 213. Model AFB - 4298 S
- 214. Carburetors - number of mixture passages Four
- (*) 215. Carburetor - flange hole diameter of exit port
Primary 36.51 mm 1.44 in
Secondary 39.69 mm 1.56 in
- 216. Venturi - throat diameter+ mm in
Primary 30.16 1.19
33.34 1.31

INJECTION

- 220. Pump - make None
- 221. Plungers - number
- (*) 222. Pump - model
- 223. Injectors - location
- 224. Injectors - total number
- (*) 225. Inlet pipe - minimum diameter mm in

For variable throat type carburetors, indicate minimum lift of shutter mechanism such as pistons in S.U.

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ENGINE ACCESSORIES

- (*) 230. Pump, fuel - mechanical and/or electrical Mechanical
- 231. Number fitted One
- 232. Ignition system - type Coil
- 233. Distributors - number One
- 234. Coils, ignition - number One
- 235. Spark plugs - number per cylinder One
- 236. Generator (or Alternator) - number fitted One
- 237. Drive - method Belt
- 238. Voltage, generator - volts Twelve
- 239. Battery - number One
- 240. Location Under Hood
- 241. Voltage - volts 12 amp hrs 59

ENGINE & CAR PERFORMANCE as declared by mfr. in catalogue

- (*) 250. Horsepower - maximum engine output 280 at 4200 rpm
(indicate SAE or DIN)
- (*) 251. RPM - maximum 6000 output at that figure 240 HP
- (*) 252. Torque - maximum 400 at 2400 rpm
- (*) 253. Speed - maximum 209 km/hour 130 miles/hour

DRIVE TRAIN

Clutch

- 260. Type Dry Plate
- 261. Plates - number of driven One
- 262. Plates - diameter 26.65 cm 10.5 in
- 263. Linings - diameter - inside 16.50 cm 6.5 in
Linings - diameter - outside 26.65 cm 10.5 in
- 264. Method of operation Foot Operated - Mechanical Linkage



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Gear Box (Photo H)

- (**) 270. Manual type - make Synchronesh - Chrysler
- (**) 271. Ratios, forward - number Four
- 272. Ratios, forward - number synchronized Four
- 273. Gear-Shift - location Floor optional - - -
- (**) 274. Automatic - make Chrysler type Planetary Gear Train
W/ Torque Converter
- (**) 275. Ratios, forward - number Three
- 276. Gear-Shift - location Floor

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	# Teeth	Ratio	# Teeth	Ratio	# Teeth	Ratio	# Teeth
1	2.66	$\frac{24}{31} \times \frac{17}{35}$	2.45	Annulus 62	2.65	$\frac{21}{27} \times \frac{16}{33}$		
2	1.91	$\frac{24}{31} \times \frac{23}{34}$	1.45	Sun 28	1.64	$\frac{21}{27} \times \frac{21}{28}$		
3	1.39	$\frac{24}{31} \times \frac{27}{29}$	1.00	Planet 17	1.19	$\frac{21}{27} \times \frac{26}{24}$		
4	1.00	- - -			1.00	- - -		
5	-							
6	-							
reverse	2.58	$\frac{24}{31} \times \frac{17}{22} \times \frac{22}{34}$	2.20	-	2.57	$\frac{21}{27} \times \frac{17}{22} \times \frac{22}{34}$		

- 278. Overdrive - type None
- 279. Forward gears on which overdrive can be selected - - -
- 280. Overdrive - ratio - - -

FINAL DRIVE

- (**) 290. Type Hotchkiss
- (**) 291. Differential - type Semi-Floating
- (**) 292. Limited Slip Differential (if fitted) - type \neq Friction
- 293. Ratio 3.23 3.55 3.91
Teeth - number 13/42 11/39 11/43

Specify friction or positive locking type

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IMPORTANT

The conformity of the car with the following items of the present recognition form is to be disregarded during the technical inspection when the vehicle has been entered in Group II (Touring Cars) or III (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, 201, 202, 203, 212, 213, 215, 216, 222, 225, 230, 250, 251, 252, 253, 255, photos I, M, N & items on page 5 as indicated.

During the technical inspection of cars entered in Group IV (Sports Cars) 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 & photos A, B, D, E, F, G, H, J, K, O.

Optional equipment affecting preceding information:

CATALOGUE PART NUMBER MUST BE GIVEN

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Optional Equipment - CATALOGUE PART NUMBER MUST BE GIVEN

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