

FILE COPY



AUTOMOBILE COMPETITION COMMITTEE
FOR THE UNITED STATES, FIA, INC.
330 Vanderbilt Motor Parkway
Hauppauge, L.I., N.Y. 11787
(516) 582-4040

FIA NO. 1658
GROUP 2

FEDERATION INTERNATIONALE DE L'AUTOMOBILE
FORM OF RECOGNITION

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

Cylinder Capacity 6568 cm³ 401 in³

Manufacturer American Motors Corporation

Model Javelin AMX

Serial # Chassis AOM798Z000001

Manufacturer American Motors Corp.

Serial # Engine AOM798Z000001

Manufacturer American Motors Corp.

Recognition valid from _____

List _____

The manufacturing of the model described in this recognition form was started on August 1, 1970 and the minimum production of 1,000 identical cars, in accordance with the specifications of this form, was reached on June 15, 1971

A 3/4 Front View Car *



The following amendments apply to the vehicle identified above:

Variants
on 19 Rec # list
on 19 Rec # list
on 19 Rec # list

Normal Evolution of the Type
on 19 Rec # list
on 19 Rec # list
on 19 Rec # list

Stamp/Signature of
National Sporting Authority

Stamp/Signature
F.I.A.



William K. Hopkins

MAKE American Motors

MODEL Javelin AMX

FIA REC # 1658

IMPORTANT - Underlined items must be filled in, in both metric and English values.
See Conversion Table below. SEE PAGE 10 FOR EXPLANATION OF SYMBOLS.

CAPACITIES AND DIMENSIONS

- * 1. Wheelbase: 2787 mm 109.7 inches
- * 2. Front track: 1528 mm 60.48 inches (1)
- * 3. Rear track: 1529 mm 60.50 inches (1)
- 4. Overall length of car 487 cm 191.77 inches
- 5. Overall width of car (at widest point) 189.8 cm 75.20 inches
- 5a Overall width of car (at vertical plane through front wheels) 189.23 cm 74.5 in
- 5b Overall width of car (at vertical plane through rear wheels) 194.31 cm 76.5 in
- 6. Overall height of car 124.46 cm 50.97 inches
- * 7. Capacity of fuel tank (reserve included) 42.6 Litres 16 U.S.Gals.
- 8. Seating capacity: four (two front, two rear)
- * 9. Weight - Total weight of vehicle with normal equipment described on homologation sheet, all required lubricants and coolants and one spare wheel and tire, but without fuel or repair tools
1367.6 kg 3015 lbs

(1) Specify ground clearance Front and Rear corresponding to Front and Rear track measurements shown above. Indicate by sketch below reference points on chassis or suspension where these dimensions are checked. These specifications are for the purpose of checking the track with specified wheel rim size with the suspension at reference setting. Differences in track resulting from use of different rim widths must be shown with suspension at reference setting. A sketch showing the rim widths superimposed is desirable.

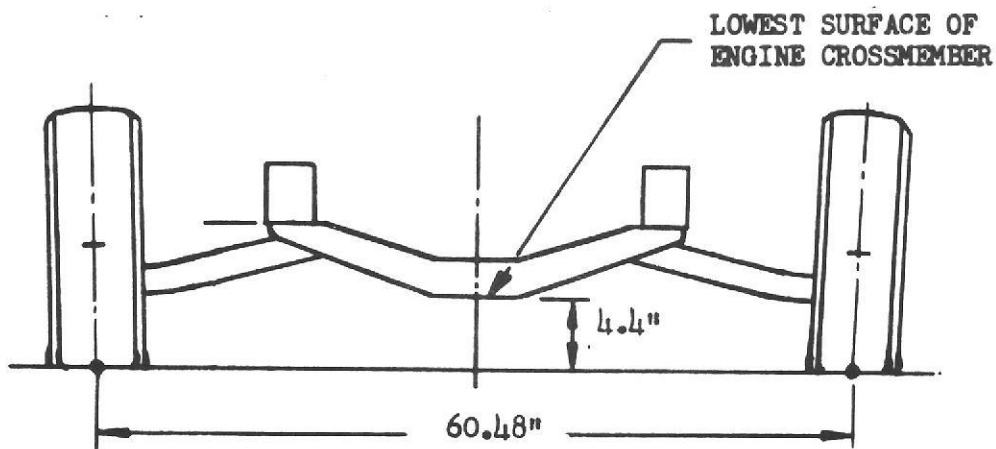


TABLE OF CONVERSIONS

1 inch -----	2.54 cm	1 pound -----	453.593 gr
1 foot -----	30.4794 cm	1 quart U.S. -----	0.9464 ltrs
1 square inch -----	6.452 cm ²	1 pint U.S. -----	0.473 ltrs
1 cubic inch -----	16.387 cm ³	1 gallon U.S. -----	3.785 ltrs



CHASSIS AND BODYWORK (Photos A, B and C)

- * 20. Chassis/body construction: (separate) (unit construction)
- * 21. Unit construction: material Steel
- * 22. Separate construction: material of chassis N.A.
- * 23. Material of body: N.A.
- * 24. Number of doors: Two Material: Steel
- * 25. Material of hood: Fiberglass and Steel
- * 26. Material of trunk lid: Fiberglass and Steel
- 27. Material of rear window: Tempered Safety Plate Glass
- 28. Material of windshield: Laminated Safety Plate Glass
- 29. Material of front door windows: Tempered Safety Plate Glass
- 30. Material of rear door windows: N.A.
- 31. Windows, actuating system: Crank
- 32. Material of rear quarter window: Tempered Safety Plate Glass

ACCESSORIES AND UPHOLSTERY

- 38. Heating, interior: (yes) (no)
- 39. Air conditioning: (yes) (no)
- 40. Ventilation: (yes) (no)
- (SP) 41. Seats, front: Type of seat and upholstery Bucket, Vinyl and Fabric
- 42. Seats, front: Weight (complete with supports and rails out of car) 18.6 kg 40.9 lbs
 Check: Bench _____ Bucket X Console included _____
- 43. Seats, rear: Type of seat and upholstery Bench, Vinyl and Fabric
- 44. Bumper, front: Material: Steel Weight: 5.3 kg 12.0 lbs
- 45. Bumper, rear: Material: Steel Weight: 6.6 kg 14.5 lbs

WHEELS

- 50. Type: Pressed Steel
- 51. Weight: (per wheel, without tire) 8.5 kg 18.7 lbs
- 52. Method of attachment:
- 53. Rim diameter: 355.6 mm 14.0 inches
- 54. Rim width: 152.4 mm 6.0 inches

STEERING

- 60. Type: Manual
- 61. Servo-assistance: (yes) (no)
- 62. Number of turns of steering wheel from lock to lock: 4.0
- 63. In case of servo-assistance: 3.2



SUSPENSION

- * 70. Front suspension (Photo D) type: Independant
- * 71. Type of spring: Coil
- (SP) 72. Stabilizer (if fitted): Yes
- 73. Number of shock absorbers: One per Wheel
- 74. Type: Telescopic

- * 78. Rear suspension (Photo E) type: Solid Axle
- * 79. Type of spring: Semi-Elliptic, Multi-Leaf
- (SP) 80. Stabilizer (if fitted): Yes
- 81. Number of shock absorbers: One per Wheel
- 82. Type: Telescopic

BRAKES (Photos F and G)

- * 90. Method of operation: Hydraulic
- (SP) 91. Power assisted (if fitted,) type: Vacume
- 92. Number of master cylinders: One (dual)

	<u>Front</u>		<u>Rear</u>	
93. Number of cylinders per wheel: One				
94. Bore of wheel cylinder:	<u>48.8 mm</u>	<u>2.0 in</u>	<u>22.4 mm</u>	<u>.88 in</u>
(SP) <u>Drum Brakes:</u>				
95. Inside diameter:	_____ mm	_____ in	<u>254.0 mm</u>	<u>10.0 in</u>
96. Length of brake linings:	_____ mm	_____ in	<u>491.24 mm</u>	<u>19.34 in</u>
97. Width of brake linings:	_____ mm	_____ in	<u>44.75 mm</u>	<u>1.75 in</u>
98. Number of shoes per brake: Two				
99. Total area per brake:	_____ mm ²	_____ in ²	<u>21,870 mm²</u>	<u>33.9 in²</u>
(SP) <u>Disc Brakes:</u>				
100. Outside diameter	<u>279.4 mm</u>	<u>11.0 in</u>	_____ mm	_____ in
101. Thickness of disc:	<u>25.4 mm</u>	<u>1.0 in</u>	_____ mm	_____ in
102. Length of brake linings:	<u>152.6 mm</u>	<u>6.01 in</u>	_____ mm	_____ in
103. Width of brake linings:	<u>45.7 mm</u>	<u>1.80 in</u>	_____ mm	_____ in
104. Number of pads per brake: Two				
105. Total area per brake:	<u>14,397.4 mm²</u>	<u>220 in²</u>	_____ mm ²	_____ in ²



ENGINE (Photos J and K)

- * 130. Cycle: Four
- * 131. Number of cylinders: Eight
- * 132. Cylinder arrangement: 90° V Wankel: # of elements & basic dimensions-
- * 133. Bore: 105.79 mm 4.165 inches
- * 134. Stroke: 93.47 mm 3.68 inches
- * 135. Capacity per cylinder: 823.23 cm³ 50.26 cu in
- * 136. Total cylinder capacity: 6568.38 cm³ 401 cu in
- * 137. Material of cylinder block: Cast Iron
- * 138. Material of sleeves (if fitted): None
- * 139. Cylinder head material: Cast Iron Number fitted: Two
- * 140. Number of inlet ports: Eight (four per head)
- * 141. Number of exhaust ports: Eight (four per head)
- (SP)142. Compression ratio: 8.5:1
- (SP)143. Volume of combustion chamber: 110.43 cm³ 6.74 cu in
- (SP)144. Piston, material: Aluminum
- (SP)145. Number of rings: Three (two compression, one oil)
- (SP)146. Distance from gudgeon pin centre line to highest point of piston crown: 40.67 mm 1.60 inches
- * 147. Crankshaft: (cast) (forged)
- * 148. Crankshaft, type: (integral) (sectioned)
- * 149. Crankshaft, number of main bearings: Five
- * 150. Material of bearing cap: Cast Iron
151. System of lubrication: (dry sump) (oil in sump)
152. Lubricant capacity: 4.73 litres pints 5 quarts U.S.
- (SP)153. Oil cooler: (yes) (no)
- * 154. Method of engine cooling: Water
155. Capacity of cooling system: 11.36 litres pints 12 quarts U.S.
- (SP)156. Cooling fan (if fitted) diameter: 43.18 cm 17 inches
- (SP)157. Number of blades of cooling fan: Six

BEARINGS

- * 158. Crankshaft, main, type: Alloy Lining Diameter: 69.85 mm 2.7474-.7489 inches
- * 159. Connecting rod, big end, type: Alloy Lin. Diameter: 53.09 mm 2.0934-.0951 inches

WEIGHTS

- (SP)160. Flywheel (clean): 14.1 kg 31.0 lbs
- (SP)161. Flywheel with clutch (all rotating parts): 24.1 kg 53.1 lbs
- (SP)162. Crankshaft: 26.3 kg 58.2 lbs
- (SP)163. Connecting Rod: .7 kg 1.5 lbs
- (SP)164. Piston with rings and pin: .7 kg 1.6 lbs



FOUR CYCLE ENGINES

- * 170. Number of camshafts: One
- * 171. Location of camshaft: In Block, Center of Vee
- * 172. Type of camshaft drive: Chain and Sprocket
- * 173. Type of valve operation: Push Rod

INLET (see Photo P) +

- 180. Material of inlet manifold: Cast Iron
- 181. Overall diameter of valves: 51.44 mm 2.025 inches
- (SP) 182. Maximum valve lift: 11.6 mm .457 inches
- 183. Number of valve springs: Eight
- 184. Type of spring: Coil
- * 185. Number of valves per cylinder: One
- (SP) 186. Tappet clearance for checking timing (cold) 0.0 mm 0.0 inches
- (SP) 187. Valves open at (with tolerance for tappet clearance indicated): 25.57° BTC
- (SP) 188. Valves close at (with tolerance for tappet clearance indicated): 90.75° ABC
- (SP) 189. Air filter: (wet) (dry) Cartridge type: (yes) (no)

EXHAUST (see Photo Q)

- 195. Material of exhaust manifold: Cast Iron
- 196. Overall diameter of valves: 42.67 mm 1.68 inches
- (SP) 197. Maximum valve lift: 11.6 mm .457 inches
- 198. Number of valve springs: Eight
- 199. Type of spring: Coil
- * 200. Number of valves per cylinder: One
- (SP) 201. Tappet clearance for checking timing (cold) 0.0 mm 0.0 inches
- (SP) 202. Valves open at (with tolerance for tappet clearance indicated): 80.80° BBC
- (SP) 203. Valves close at (with tolerance for tappet clearance indicated): 42.75° ATC
- (SP) 204. Inside diameter of exhaust manifold outlet: 2.25 in.

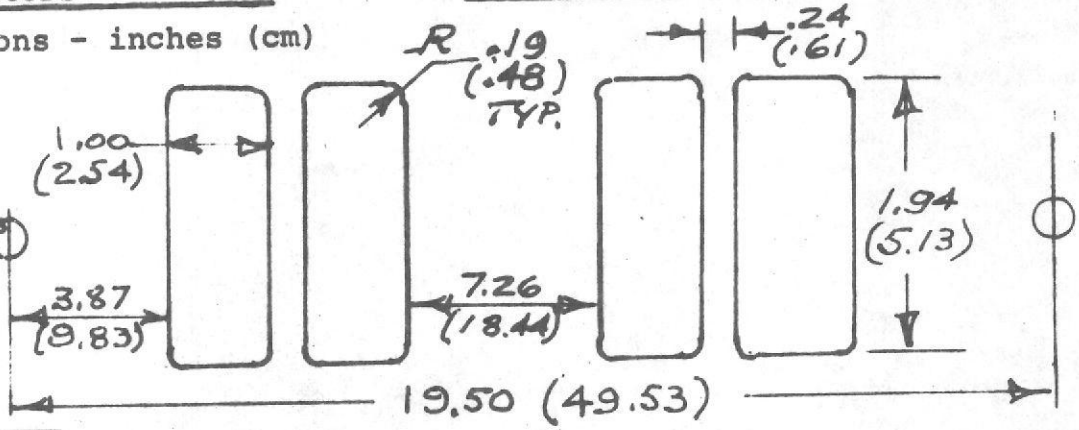
CARBURETION (see Photo N)

- 210. Number of carburetors fitted: One
- (SP) 211. Type: Four Barrel Down Draft
- (SP) 212. Make: American Motors
- (SP) 213. Model: AM 4300
- 214. Number of mixture passages per carburetor: Four 42.9 sec. 1.69 sec.
- (SP) 215. Flange hole diameter of exit port of carburetor: 29.6 prmm 1.56 pr inches
- (SP) 216. Depending on type of carburetor, indicate: diameter at throat of venturi/s
at the plane of maximum restriction. Dimension of mixture passage at the
point of maximum restriction with the piston in its maximum open position
(example SU type): 31.6 mm 1.25 inches

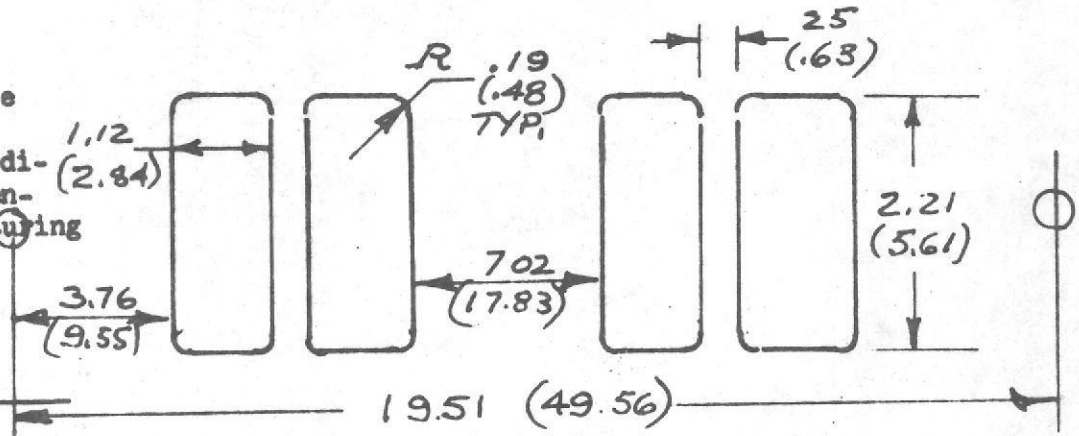
+ For additional information concerning two-stroke engines and supercharged engines, add supplementary page

All dimensions - inches (cm)

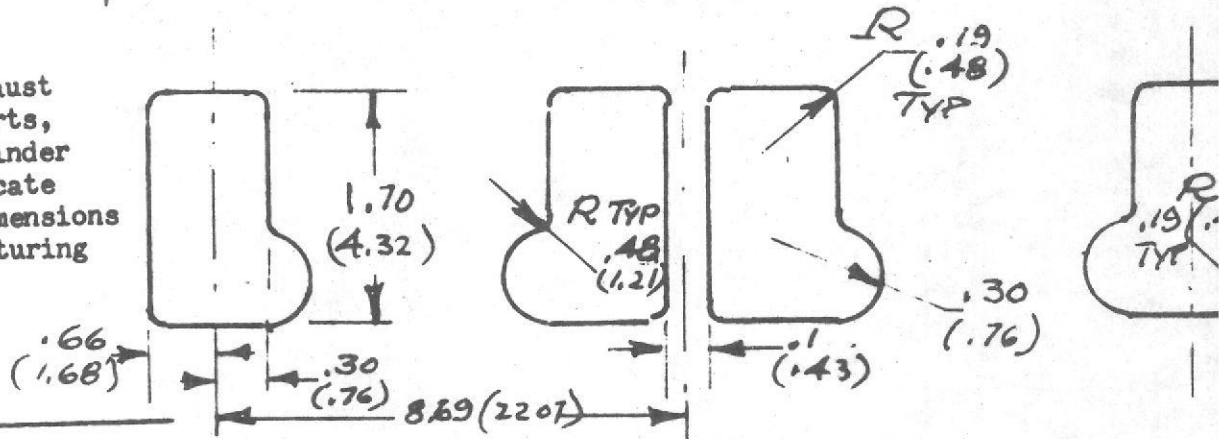
Drawing inlet manifold ports, side of cylinder head. Indicate scale or dimensions and manufacturing tolerance.



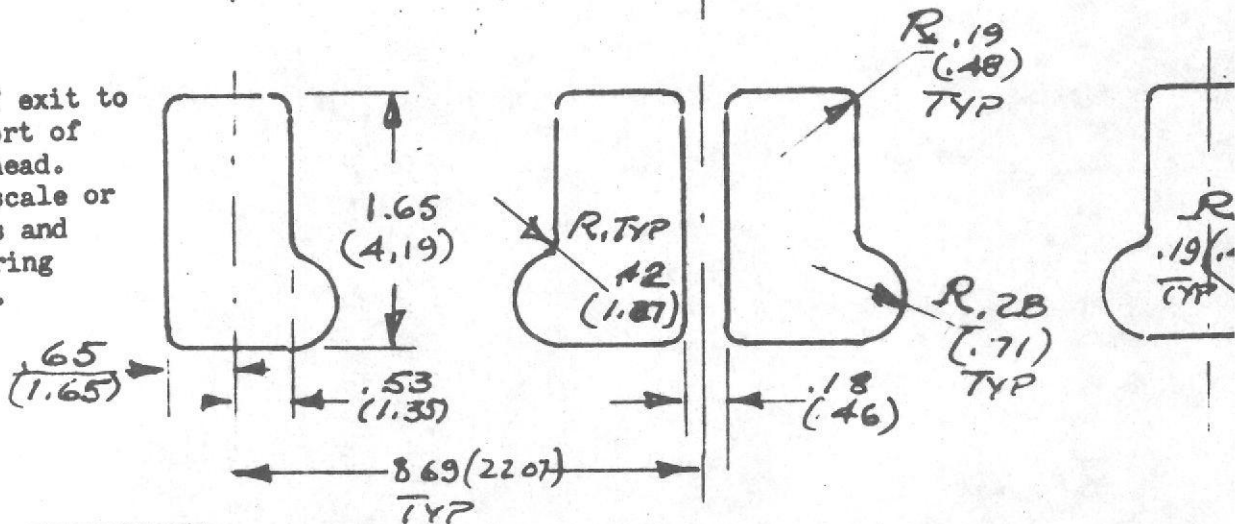
Drawing of entrance to inlet port of cylinder head. Indicate scale or dimensions and manufacturing tolerance.



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



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



MAKE American Motors

MODEL Javelin AMX

FIA REC # 1658

DRIVE TRAIN

Clutch

- 260. Type of clutch: Dry Plate
- 262. Diameter of clutch plates:
- 263. Inside diameter of lining:
Outside diameter of lining:
- 264. Method of operation: Manual Link

- 261. Number of plates: One
- 279.4 mm 11.00 inches
- 164.4 mm 6.5 inches
- 279.4 mm 11.00 inches

Gear Box (Photo H)

- * 270. Manual type, make: Warner Gear Method of operation: External Mech. Linkage
- * 271. Number of gear box forward ratios: Four
- 272. Synchronized forward ratios: Four
- 273. Location of gear-shift: Floor
- * 274. Automatic, make: Borg-Warner Type: Torque Converter and Planetary Gear
- * 275. Number of forward ratios: Three
- 276. Location of gear-shift: Floor

277.	Manual		Automatic		Alternative Manual/Automatic			
	Ratio	No. Teeth	Ratio	No. Teeth	Ratio	No. Teeth	Ratio	No. Teeth
1	2.23	22-26 18-34	2.40					
2	1.77	22-26 18-27	1.47					
3	1.35	22-26 22-23	1.00					
4	1.00	Direct						
5								
6								
Reverse	2.16	22-26 16-18 19-39	2.00					

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

FINAL DRIVE

- * 290. Type of final drive: Hotchkiss, Live Axle
- * 291. Type of differential: Hypoid Ring Gear and Pinion
- * 292. Type of limited slip differential (if fitted): Friction
- 293. Final drive ratio: 3.54 3.91
Number of teeth: 39/11 43/11



IMPORTANT - For cars engaged in Group 2 (Special Touring) and Group 4 (Special Grand Touring) conformity with characteristics identified by symbol (SP) and entire page 8 IS NOT REQUIRED.

For cars engaged in Group 5 (Sport) only the characteristics identified by asterisks (*) need be verified.

EQUIPMENT AND ACCESSORIES available as options or production installed must indicate the part number of the option and the item number affected.

	<u>Option</u>	<u>Part Number</u>
#151	Dry Sump Oil System	8122286
#100-105	Girling Disc Brake Assembly (RF)	4485732
#100-105	Girling Disc Brake Assembly (LF)	4485733
#100-105	Girling Disc Brake Assembly (RR)	4485734
#100-105	Girling Disc Brake Assembly (LR)	4485735

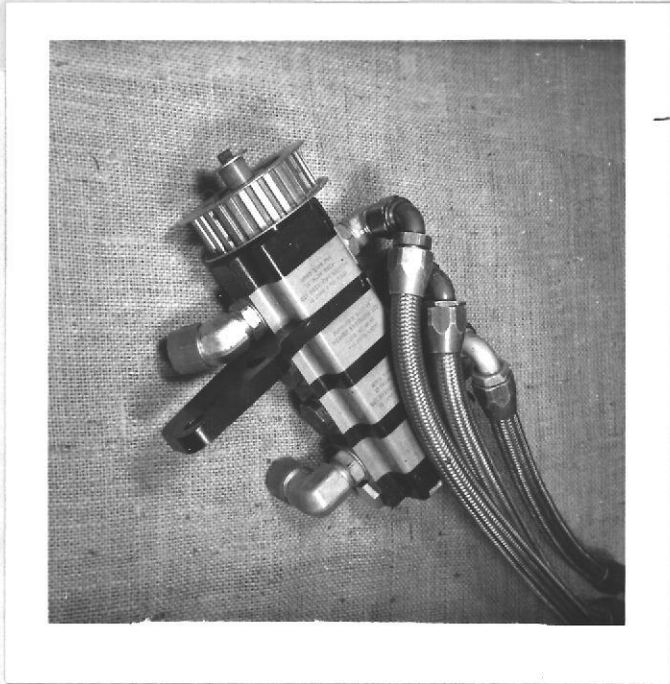


MAKE American Motors

MODEL Javelin AMX

FIA REC# 1658

DRY SUMP OIL SYSTEM



DISC BRAKE ASSEMBLY



MAKE American Motors

MODEL Javelin AMX

FIA REC # 1658

TABLE OF TOLERANCES

-Tolerances for all machining, except bore and stroke: $\begin{matrix} + \\ - \end{matrix} 0.2\%$

(articles 156, 158, 159, 181, 196, 215, 216, 225, 262, 263, and also the orifices appearing on page 8 of the recognition form.)

-Article 146: tolerances: $\begin{matrix} + \\ - \end{matrix} 0.5\%$

-Unfinished castings: $\begin{matrix} +44\% \\ - 2\% \end{matrix}$

-Cam-lift: $+11\%$

(articles 132, 197, 235.)

-Weight (articles 160 to 164) : $\begin{matrix} + 7\% \\ - 3\% \end{matrix}$

-Width of the car at the front and rear axles : $\begin{matrix} + 1\% \\ - 0.3\% \end{matrix}$

-Track (article 1) : $\begin{matrix} + \\ - \end{matrix} 0.5\%$

Combustion chamber.

a) Volume of combustion chamber: 110.43 cc

b) Head gasket thickness (compressed) : 1.118 mm .044 in $\begin{matrix} + \\ - \end{matrix} .005$



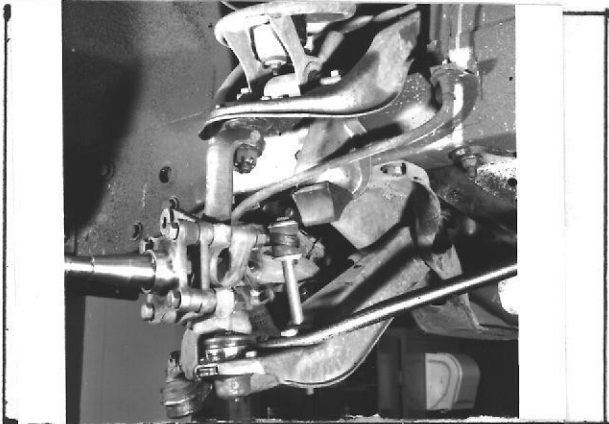
B 3/4 REAR CAR *



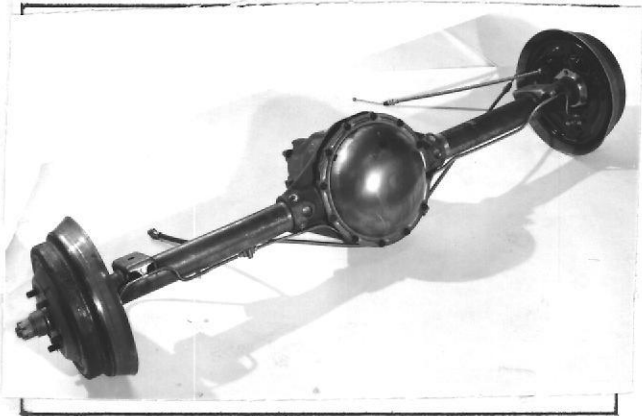
C INTERIOR CAR



D FRONT AXLE *



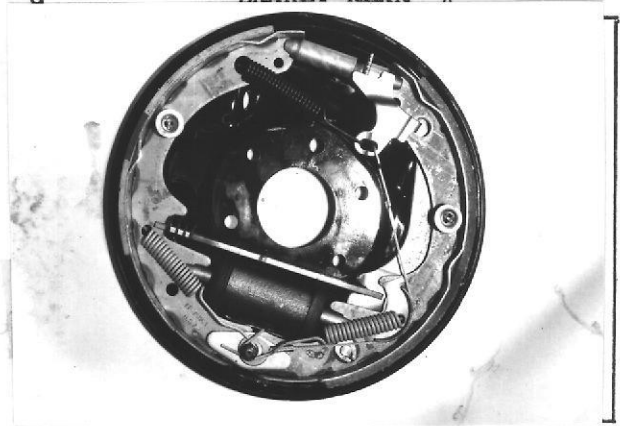
E REAR AXLE *



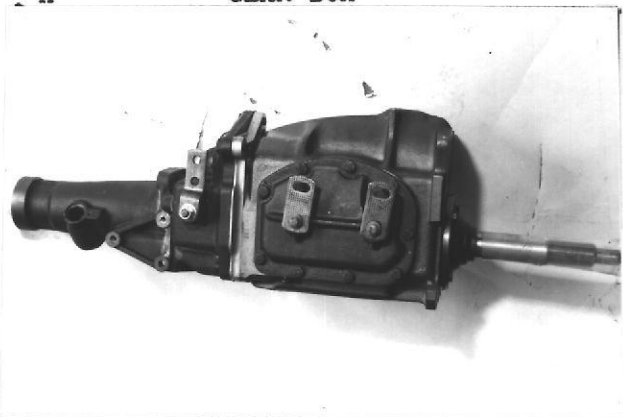
F BRAKE FRONT *



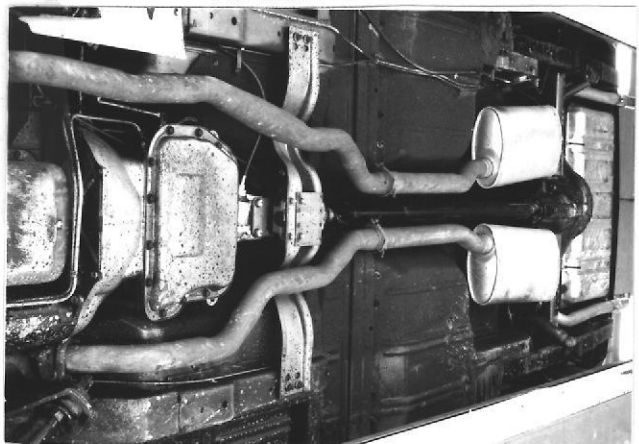
G BRAKE REAR *



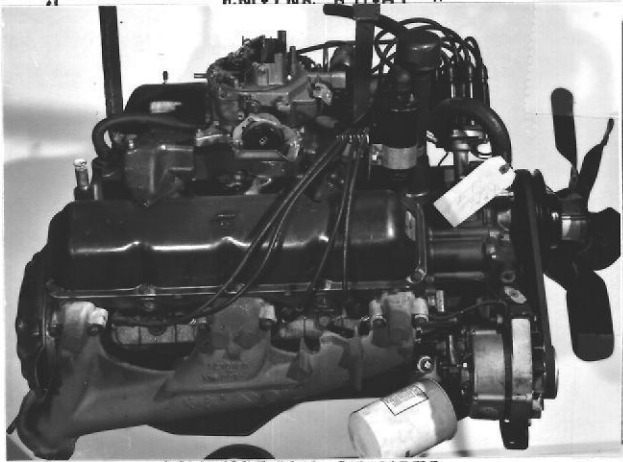
H GEAR BOX *



I EXHAUST SYSTEM



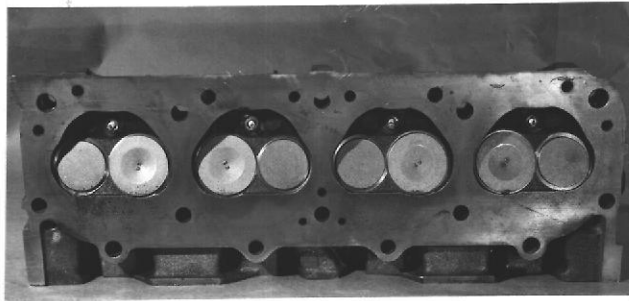
J ENGINE RIGHT *



K ENGINE LEFT *



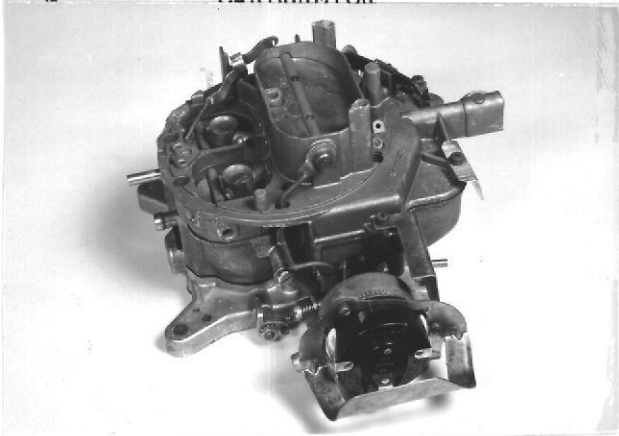
L COMBUSTION CHAMBER



M PISTON TOP



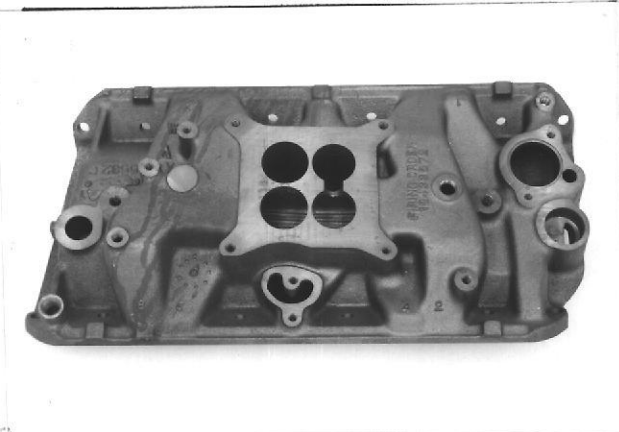
N CARRIURETOR



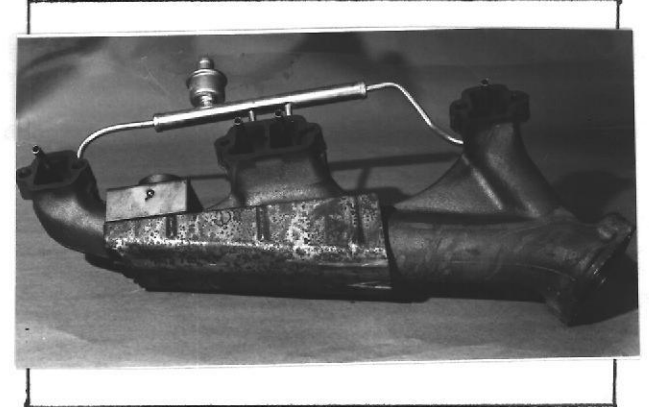
O ENGINE IN PLACE *

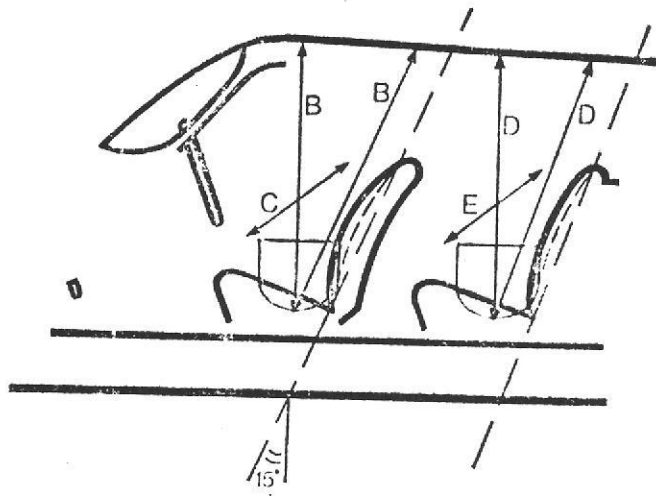


P MANIFOLD INLET

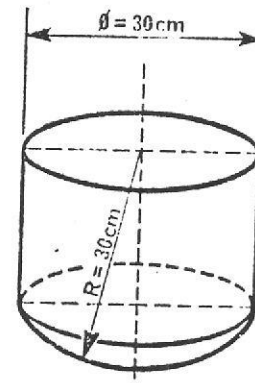


Q MANIFOLD EXHAUST



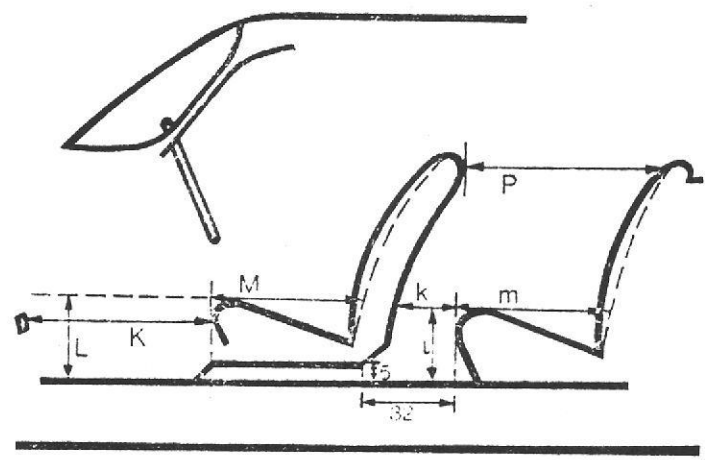


Dessin/drawing No. 1



Weight/tare 60 kgs ± 200 grms.
Dessin/drawing No. 2

<u>Dimension</u>	<u>Inches</u>	<u>MM</u>
B =	<u>36.3</u>	<u>994.52</u>
C =	<u>57.10</u>	<u>1450.3</u>
D =	<u>32.4</u>	<u>887.76</u>
E =	<u>56.10</u>	<u>1424.94</u>



Dessin/drawing No. 3

<u>Dimension</u>	<u>Inches</u>	<u>MM</u>	<u>Dimension</u>	<u>Inches</u>	<u>MM</u>
L =	<u>9.4</u>	<u>238.8</u>	l =	<u>13.7</u>	<u>348.0</u>
M =	<u>17.6</u>	<u>447.0</u>	m =	<u>19.35</u>	<u>491.49</u>
K =	<u>18.3</u>	<u>464.8</u>	k =	<u>5.5</u>	<u>139.7</u>
P =	<u>24.2</u>	<u>615.7</u>			



STAMP