



AUTOMOBILE COMPETITION COMMITTEE  
FOR THE UNITED STATES, F.I.A., INC.

433 MAIN ST.  
STAMFORD, CONN. 06901  
(203) 348-6233

5202

C  
302  
GI

Federation Internationale de l'Automobile  
FORM OF RECOGNITION

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

Cylinder capacity 4948.9 cm<sup>3</sup> 302 in<sup>3</sup>

Manufacturer Lincoln Mercury Division  
Ford Motor Company Model 1968 Cougar

Serial # Chassis 8F91J500001 Manufacturer Lincoln Mercury Division  
Ford Motor Company

Serial # Engine NONE Manufacturer Lincoln Mercury Division  
Ford Motor Company

Recognition valid from 1st Jan. 1968 List 1968/1

The manufacturing of the model described in this recognition form was started on August 23, 1967 and the minimum production of 10,000 identical cars, in accordance with the specifications of this form, was reached on November 30, 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

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

*John V. Oliveau*

JOHN V. OLIVEAU  
TECHNICAL DIRECTOR  
ACCUS, F.I.A., INC.

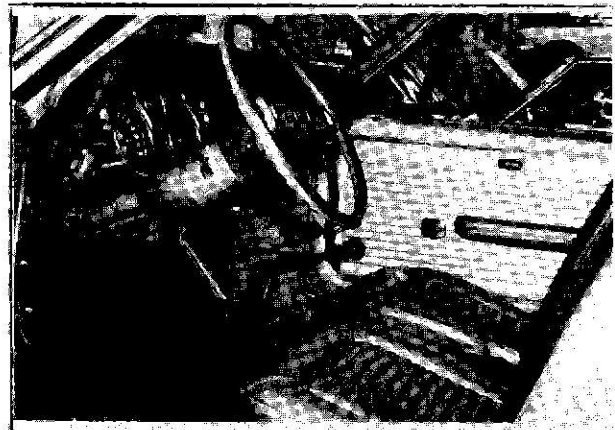
Stamp/Signature  
F.I.A.

*[Signature]*

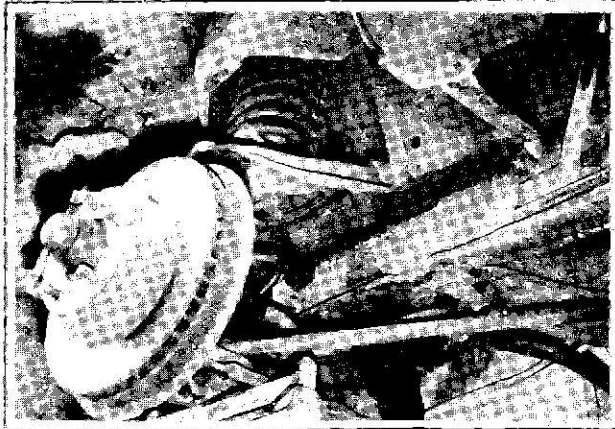
B 3/4 rear car (\*\*)



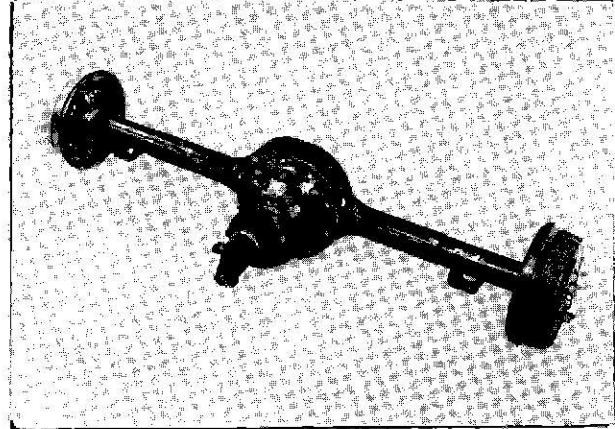
C interior-car (\*\*)



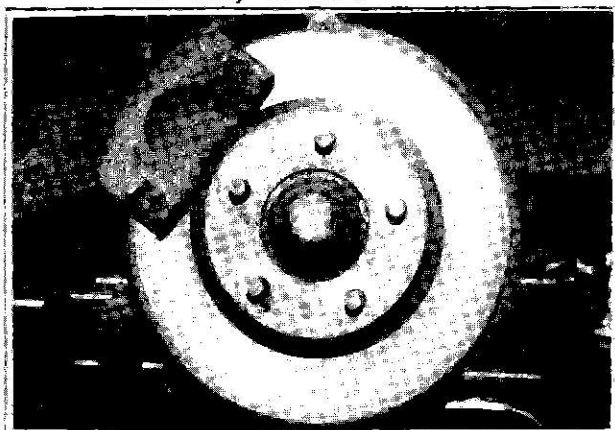
D front axle (\*\*)



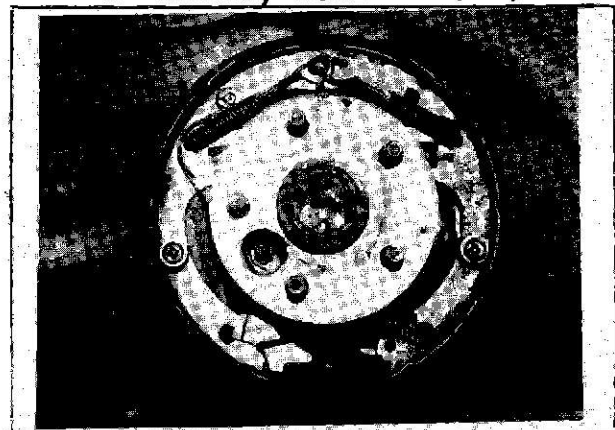
E rear axle (\*\*)



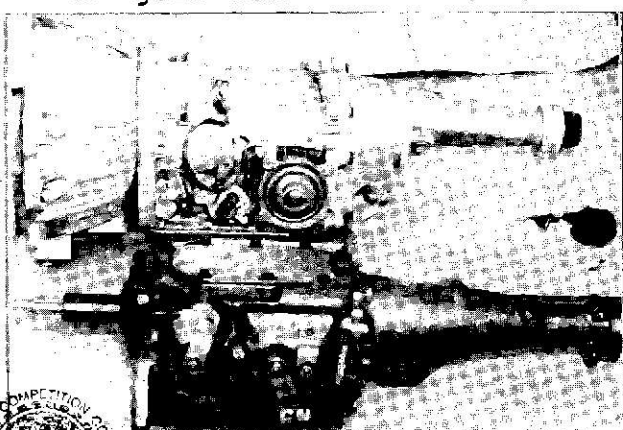
F brake, front (\*\*)



G brake, rear (\*\*)



H gear box (\*\*)



I exhaust system (\*)



STAMP

MAKE

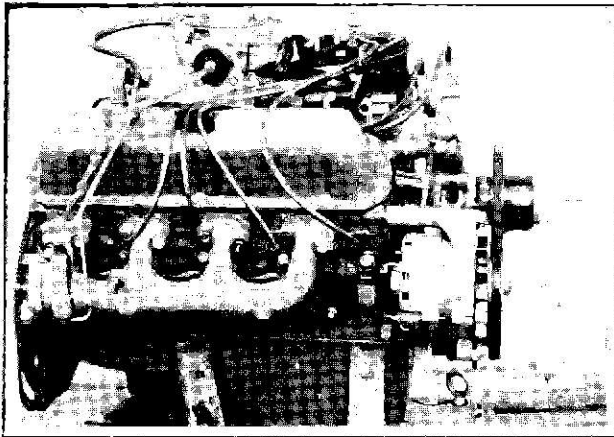
MERCURY

MODEL 1968 COMGAR 302

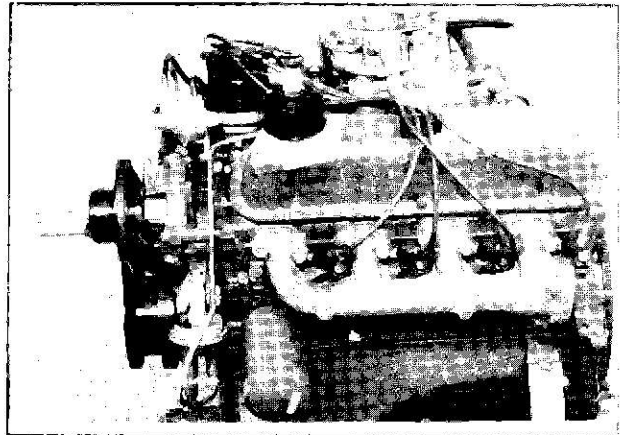
FIA REC #

G  
302  
GI

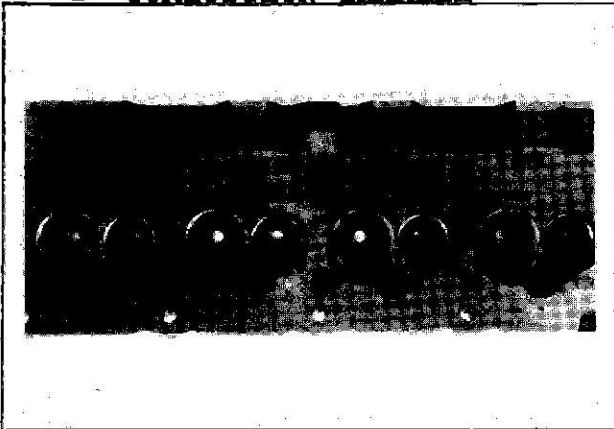
J ENGINE RIGHT (\*\*)



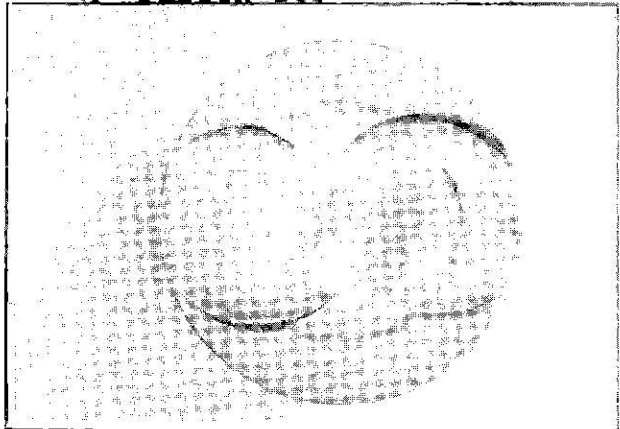
K ENGINE LEFT (\*\*)



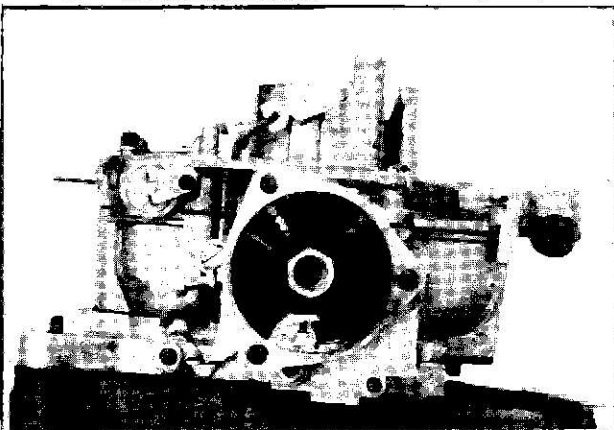
L COMBUSTION CHAMBER



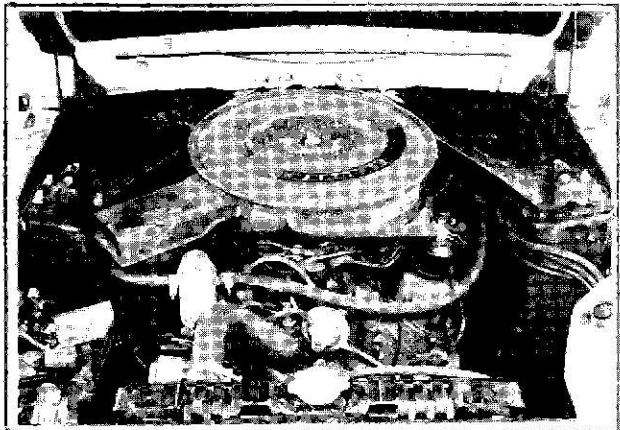
M PISTON TOP (\*)



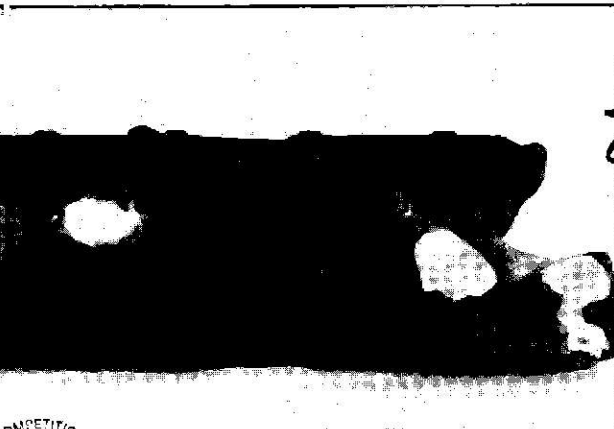
N CARBURETOR (\*)



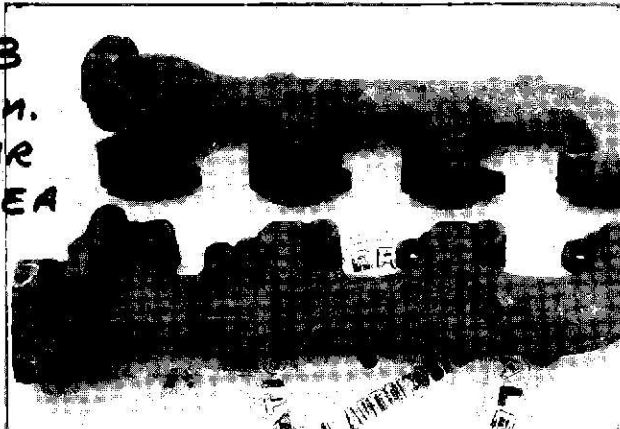
O ENGINE IN PLACE (\*\*)



P MANIFOLD INLET



Q MANIFOLD EXHAUST



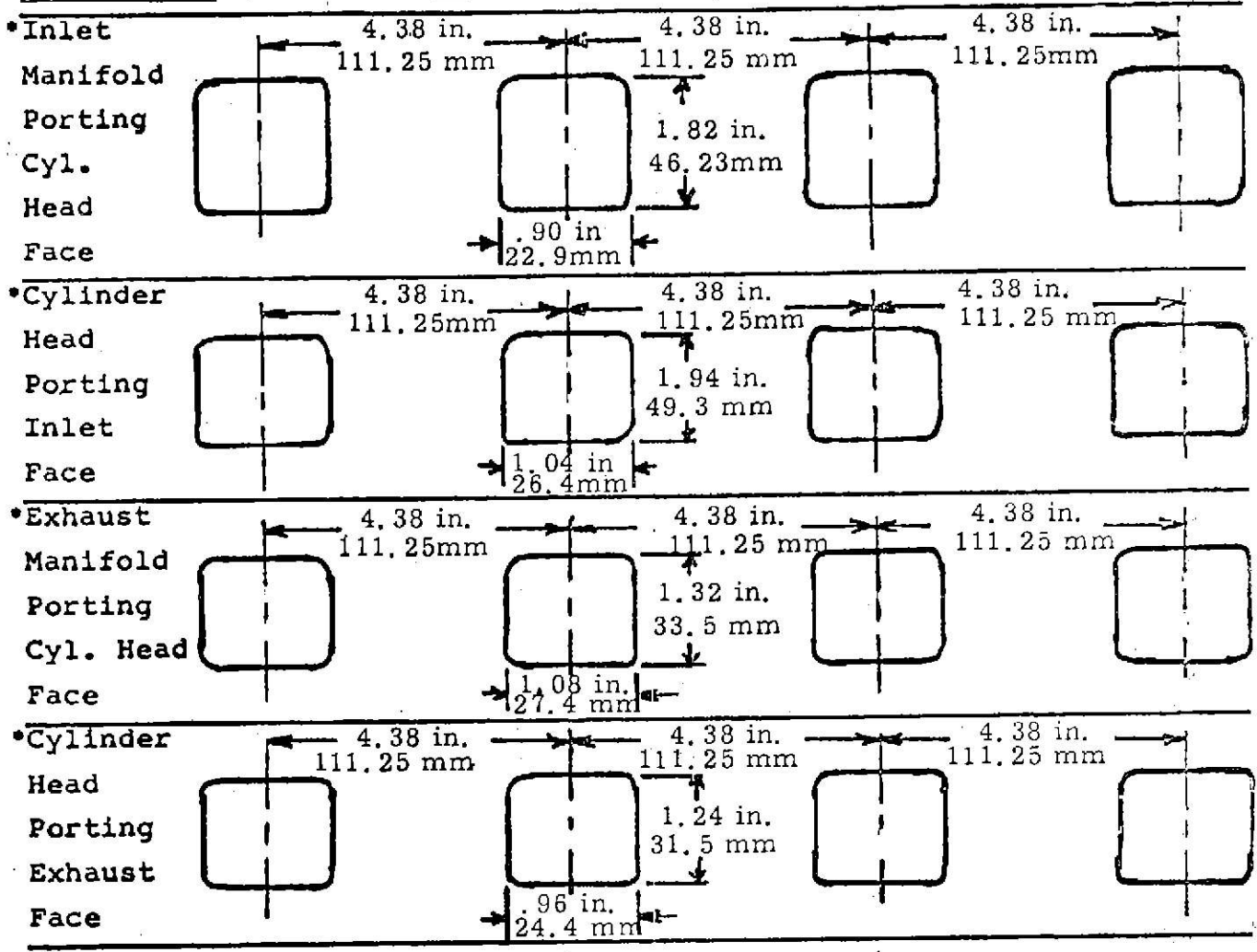
2.8  
SQ IN.  
CLEAR  
AREA



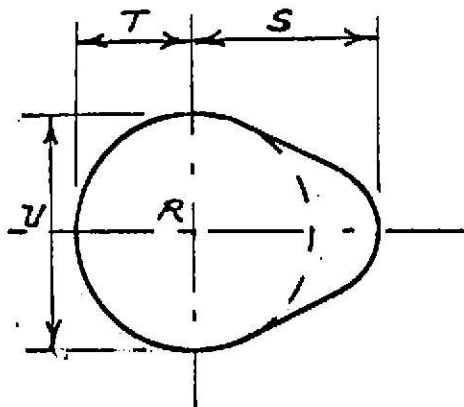
Strip out: ALL SKETCHES MUST INDICATE ACTUAL DIMENSIONS AND MANUFACTURER'S TOLERANCES.

STAMP

ALL SKETCHES MUST INDICATE ACTUAL DIMENSIONS AND MANUFACTURER'S TOLERANCES. = + .04 in or + 1.0 mm



**CAM**



**Inlet cam**

S = 24.63	mm	.9698	in
T = 18.80	mm	.740	in
U = 37.59	mm	1.480	in

**Exhaust cam**

S = 24.83	mm	.9775	in
T = 18.80	mm	.740	in
U = 37.59	mm	1.480	in



MAKE MERCURY MODEL 1968 COUGAR 302 FIA REC # \_\_\_\_\_

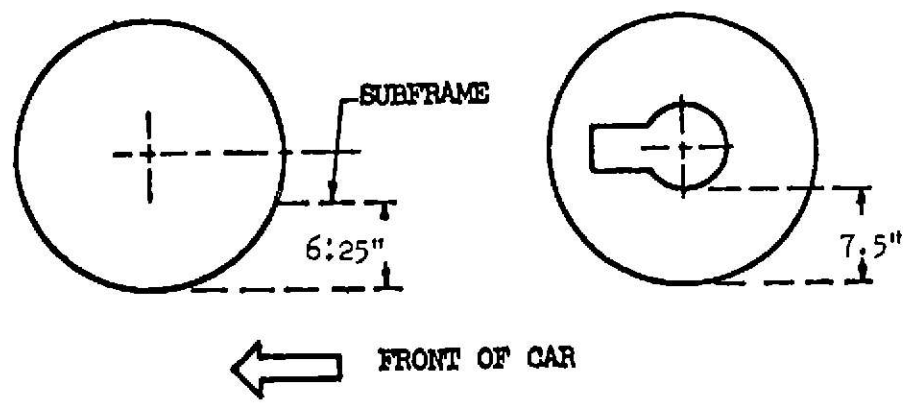
**IMPORTANT:** Questions 1 through 9 must be answered in two measuring systems, one of which must be the metric system.  
See conversion table at index.

**CAPACITIES & DIMENSIONS**

- (\*\*) 1. Wheelbase 2819.4 mm 111 in at 0° Camber -
  - (\*\*) 2. Front track 1483.4 mm 58.4 in + 0" Toe-In
  - (\*\*) 3. Rear track 1475.7 mm 58.1 in + \*See Note Below
- + Differences in track resulting from use of optional wheel and rim sizes must be stipulated on recognition application forms.

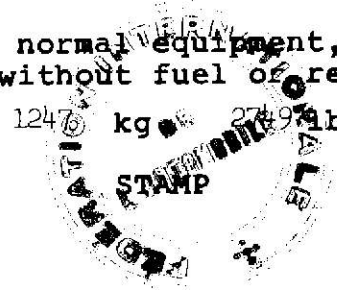
Dimensional relationship between track (front and/or rear) and ground clearance resulting from use of optional wheel sizes shall also be stipulated and a sketch illustrating suspension reference points shall be shown below to establish the "reference chassis height." The reference chassis height dimension 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"



\*NOTE: Geometry changes in front suspension will alter track.

- 4. Overall length of car 483.4 cm 190.3 in
- 5. Overall width of car 181.1 cm 71.3 in
- 6. Overall height of car 131.3 cm 51.7 in
- 7. Capacity of fuel tank (reserve included) 140.0/128.7/ 64.3 ltrs.  
37/34/ 17 gallons US gallons, Imp.
- 8. Seating capacity (4) FOUR
- (\*\*) 9. Weight - total weight of car with normal equipment, water, oil and spare wheel but without fuel or repair tools.  
1247 kg 2749 lbs





CHASSIS & BODYWORK - Photos A, B, C

- (\*\*) 20. Chassis/body construction - separate/unit construction
- (\*\*) 21. Unit construction - material/s Sheet Steel
- (\*\*) 22. Chassis - material/s Steel separate construction
- (\*\*) 23. Body - material/s Steel separate construction
- (\*\*) 24. Doors - number Two(2) material/s Steel
- (\*\*) 25. Hood - material/s Steel
- (\*\*) 26. Trunk Lid - material/s Steel
- 27. Window, Rear - material/s Glass
- 28. Windshield - material/s Glass
- 29. Windows, front door - material/s Glass
- 30. Windows, rear door - material/s DNA
- 31. Windows - actuating system Regulator
- 32. Window, rear quarter - material/s Glass

ACCESSORIES AND UPHOLSTERY

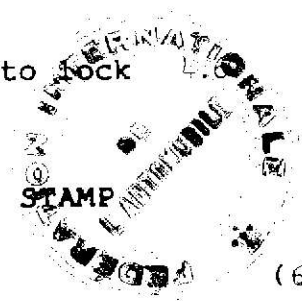
- 38. Heating, interior - yes no
- 39. Air conditioning - yes no
- 40. Ventilation - yes no
- (\*) 41. Seats, front - type of seat and upholstery Bucket - Vinyl and/or Cloth
- 42. Seats, front - weight  
(complete with supports & rails out of car) 16.0 kg 35.2(pair)lbs
- CHECK: BENCH \_\_\_\_\_ BUCKET X CONSOLE INCLUDED \_\_\_\_\_
- 43. Seats, rear - type of seat and upholstery Bench - Vinyl and/or Cloth
- 44. Bumper, front - material/s Steel kg 7.48 lbs 16.5 Weight
- 45. Bumper, rear - material/s Steel kg 6.57 lbs 14.5 Weight

WHEELS

- 50. Type Steel
- 51. Weight (per wheel, without tire) 8.9kg 19.5 lbs
- 52. Method of attachment Stud and Nut (FIVE)
- 53. Rim, diameter 356 - 381 mm 14 - 15 in
- 54. Rim, width 152 - 152 mm 6 - 6 in

STEERING

- 60. Type Recirculating Ball and Nut
- 61. Servo assistance (Opt.)
- 62. Number of turns of steering wheel from lock to lock
- 63. In case of servo assistance 3.7



SUSPENSION

- (\*\*) 70. Suspension, front (photo D) - type Independent
- (\*\*) 71. Spring - type Coil
- (\*) 72. Stabilizer - if fitted Yes
- 73. Shock absorbers - number (2) TWO
- 74. Type Tubular Adjustable
- (\*\*) 78. Suspension, rear (photo E) - type Live Axle
- (\*\*) 79. Spring - type Leaf
- (\*) 80. Stabilizer - if fitted No
- 81. Shock absorbers - number (2) TWO
- 82. Type Tubular Adjustable

BRAKES (Photos E and F)

- (\*\*) 90. Method of operation Hydraulic
- (\*) 91. Power assisted (if fitted) - type Pedal Boost
- 92. Master Cylinders - number and type ONE (1) Dual  
(indicate if duplex master cylinder)
- 93. Cylinders - number per wheel 

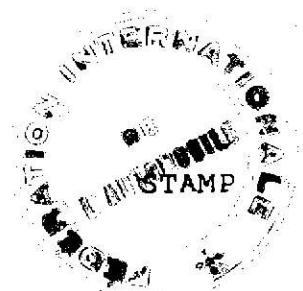
<u>Front</u>	<u>Rear</u>
1	1
- 94. Cylinders - wheel bore 60.32 mm 2.375 in 23 mm .906 in  
(indicate stepped bore dimensions if applicable)

Drum Brakes

- |                                      | <u>Front</u>    |                 | <u>Rear</u>     |                       |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------------|
| 95. Diameter, inside                 | mm              | in              | 254 mm          | 10 in                 |
| 96. Linings, length                  | mm              | in              | 495 mm          | 19.5 in               |
| 97. Linings, width                   | mm              | in              | 63.5 mm         | 2.5 in                |
| 98. Shoes - number per brake (2) TWO |                 |                 | 31,454          |                       |
| 99. Area, total - per brake          | mm <sup>2</sup> | in <sup>2</sup> | mm <sup>2</sup> | 48.75 in <sup>2</sup> |

Disc Brakes

- |                                      |        |                 |                      |                 |                 |
|--------------------------------------|--------|-----------------|----------------------|-----------------|-----------------|
| 100. Diameter, outside               | 287    | mm              | 11.3 in              | mm              | in              |
| 101. Thickness of disc               | 23.88  | mm              | .940 in              | mm              | in              |
| 102. Lining - length                 | 124.5  | mm              | 4.9 in               | mm              | in              |
| 103. Lining - width                  | 46.48  | mm              | 1.83 in              | mm              | in              |
| 104. Pads - number per brake (2) TWO |        |                 |                      |                 |                 |
| 105. Area, total - per brake         | 11,580 | mm <sup>2</sup> | 17.9 in <sup>2</sup> | mm <sup>2</sup> | in <sup>2</sup> |



MAKE MERCURY MODEL 1968 COUGAR 302 FIA REC # \_\_\_\_\_

ENGINE (Photos J and K)

- (\*\*) 130. Cycle             two                             four                     Wankel
- (\*\*) 131. Cylinders - number             EIGHT (8)
- (\*\*) 132. Cylinders - arrangement Vee     Wankel - # of elements and  
  basic dimensions
- (\*\*) 133. Bore                             101.6     mm             4.00     in
- (\*\*) 134. Stroke                             76.2     mm             3.00     in
- (\*\*) 135. Cylinders - capacity             619.4     cm3     37.8     in3
- (\*\*) 136. Cylinders, total capacity 4948.9 cm3 302     in3
- (\*\*) 137. Cylinder Block - material/s             Cast Iron
- (\*\*) 138. Sleeves - material/s (if fitted)     D.N.A.
- (\*\*) 139. Head, cylinder - material/s     Cast Iron             number fitted TWO (2)
- (\*\*) 140. Port, inlet - number             EIGHT (8) - 4 Per Head
- (\*\*) 141. Port, exhaust - number         EIGHT (8) - 4 Per Head
- ( \*) 142. Compression - ratio             9.5-1
- ( \*) 143. Combustion chamber - volume 53.5 cm3 3.264     in3
- ( \*) 144. Piston - material/s             Aluminum Alloy with Steel Struts
- ( \*) 145. Rings - number                     THREE (3)
- ( \*) 146. Distance from gudgeon pin centre line to highest point  
           of piston crown                     40.77     mm     1.605"     in
- (\*\*) 147. Crankshaft - cast-forged-mach from solid
- (\*\*) 148. Crankshaft - type - integral - sectioned - # of sections
- (\*\*) 149. Crankshaft, main bearings - number     FIVE (5)
- (\*\*) 150. Bearing cap - material/s             Cast Iron
- 151. Lubrication - system - dry sump/oil in sump
- 152. Lubricant - capacity             4.7     ltrs             pts     5     qts US
- ( \*) 153. Cooler, oil - yes     no
- 154. Cooling - method             Water Radiator
- 155. Cooling - capacity of system     14.2     ltrs             pts     15     qts US





MAKE MERCURY MODEL 1968 COUGAR 302 FIA REC #

- ( \*) 156. Fan, cooling (if fitted) - diameter 44.45 cm 17.50 in
- ( \*) 157. Fan, cooling - number of blades 4/5 material/s Steel

BEARINGS

- (\*\*) 158. Crankshaft, main - type insert diameter 57.11 mm 2.249 in
- (\*\*) 159. Connecting rod, big end - type insert diameter 53.94 mm 2.1236 in

WEIGHTS

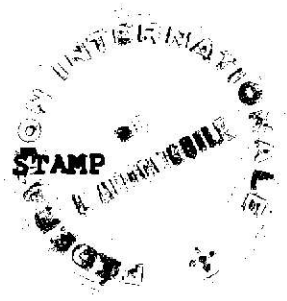
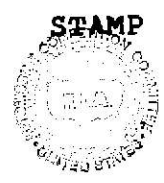
- ( \*) 160. Flywheel (clean) 10.32 kg 22.8 lbs
- ( \*) 161. Flywheel with clutch (all rotating parts) 18.91 kg 41.8 lbs
- ( \*) 162. Crankshaft 24.25 kg 53.6 lbs
- 163. Connecting Rod .562 kg 1.24 lbs
- ( \*) 164. Piston with rings & pin .768 kg 1.69 lbs

FOUR CYCLE ENGINES

- (\*\*) 170. Camshafts - number ONE (1) material/s Alloy Iron
- (\*\*) 171. Camshaft - location Cylinder Block
- (\*\*) 172. Camshaft Drive, type Chain
- (\*\*) 173. Valve operation - type Tappet, Pushrod, Rocker Arms

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

- 180. Inlet manifold - materials Cast Iron
- 181. Valves (overall) - diameter 45.42 mm 1.788 in
- ( \*) 182. Valve lift - maximum 10.8 mm .426 in
- 183. Springs, valve - number TWO (2)
- 184. Spring - type Coil
- (\*\*) 185. Valves, per cylinder - number ONE (1)
- ( \*) 186. Tappet - clearance for checking timing (cold) 0 mm 0 in
- ( \*) 187. Valves - open at (with tolerance for tappet clearance indicated) 15 BTC
- ( \*) 188. Valves - close at (with tolerance for tappet clearance indicated) 61 ABC
- ( \*) 189. Air filter - type Dry Element



EXHAUST (See Photo Q )

- 195. Manifold, exhaust - material/s Cast Iron
- 196. Valves (overall) - diameter 37.01 mm 1.457 in
- 197. Valve, lift - maximum 10.8 mm .426 in
- 198. Valve Springs/valve - number TWO (2)
- 199. Springs - type Coil
- (\*\*) 200. Valves - number per cylinder ONE (1)
- ( \* ) 201. Tappet - clearance for checking timing (cold)  
0 mm 0 in
- ( \* ) 202. Valves - open at (with tolerance for tappet 55 BBC  
clearance indicated)
- ( \* ) 203. Valves - close at (with tolerance for tappet 19 ATC  
clearance indicated)

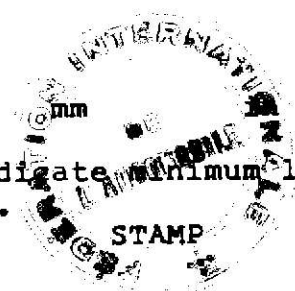
CARBURETION (See Photo N)

- 210. Carburetors, fitted - number ONE (1)
- 211. Type 4V Down Draft
- ( \* ) 212. Make Autolite
- ( \* ) 213. Model 9510
- 214. Carburetors - number of mixture passages FOUR (4)
- ( \* ) 215. Carburetor - flange hole diameter of exit port  
Prim. Sec. mm in Prim. Sec.  
36.4 39.6 1.437 1.562
- 216. Venturi - throat diameter+ 28.57 mm 1.125 in

INJECTION

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

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



MAKE MERCURY MODEL 1968 COUGAR 302 FIA REC # \_\_\_\_\_

**ENGINE ACCESSORIES**

- ( \*) 230. Pump, fuel - mechanical and/or electrical
- 231. Number fitted ONE (1) Each - Total TWO (2)
- 232. Ignition system - type Battery and Coil
- 233. Distributors - number ONE (1)
- 234. Coils, ignition - number ONE (1)
- 235. Spark plugs - number per cylinder ONE (1)
- 236. Generator (or Alternator) - number fitted ONE (1)
- 237. Drive - method Belt
- 238. Voltage, generator - volts 12.8
- 239. Battery - number ONE (1)
- 240. Location Front of Car
- 241. Voltage - volts 12 amp hrs 45

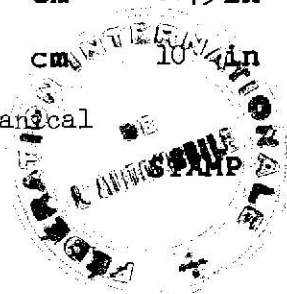
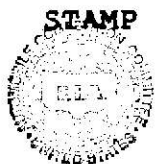
**ENGINE & CAR PERFORMANCE** as declared by mfr. in catalogue

- ( \*) 250. Horsepower - maximum engine output 230 at 4800 rpm **S.A.E.**  
(indicate **SAE** or **DIN**)
- ( \*) 251. RPM - maximum 4800 output at that figure 230
- ( \*) 252. Torque - maximum 310 at 2800 rpm
- ( \*) 253. Speed - maximum km/hour miles/hour

**DRIVE TRAIN**

**Clutch**

- 260. Type Dry Plate
- 261. Plates - number of driven ONE (1)
- 262. Plates - diameter 25.55 cm 10.06 in
- 263. Linings - diameter - inside 17.15 cm 6.75 in
- Linings - diameter - outside 25.4 cm 10 in
- 264. Method of operation Mechanical



MAKE MERCURY MODEL 1968 COUGAR 302 FIA REC # \_\_\_\_\_

Gear Box (Photo H)

- (\*\*) 270. Manual type - make Ford
- (\*\*) 271. Ratios, forward - number FOUR (4)
- 272. Ratios, forward - number synchronized FOUR (4)
- 273. Gear-Shift - location Floor optional --
- (\*\*) 274. Automatic - make Ford type Hydraulic with Planetary Gears and Torque Converter
- (\*\*) 275. Ratios, forward - number THREE (3)
- 276. Gear-Shift - location Floor

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	# Teeth	Ratio	# Teeth	Ratio	# Teeth	Ratio	# Teeth
1	2.78	$\frac{23}{30}$ $\frac{32}{15}$	2.46		2.32	$\frac{23}{25}$ $\frac{32}{15}$		
2	1.93	$\frac{23}{30}$ $\frac{31}{21}$	1.46	Torque Converter Maximum Ratio at Stall 2.02:1	1.69	$\frac{23}{25}$ $\frac{28}{18}$		
3	1.36	$\frac{23}{30}$ $\frac{25}{24}$	1.00		1.29	$\frac{23}{25}$ $\frac{25}{21}$		
4	1.00	Direct			1.00	Direct		
5								
6								
reverse	2.78		2.175			2.32		

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

FINAL DRIVE

- (\*\*) 290. Type Hypoid - Semi-Floating - Straddle Mounted Pinion
- (\*\*) 291. Differential - type Locking - By Ratchet or Roller
- (\*\*) 292. Limited Slip Differential (if fitted) - type  $\neq$  Positive Locking (Ratchet or Roller)
- 293. Ratio 3.25 3.50 3.70 3.89 4.11 4.33 4.55 4.77 5.00
- Teeth - number  $\frac{39}{12}$   $\frac{35}{10}$   $\frac{37}{10}$   $\frac{35}{9}$   $\frac{37}{9}$   $\frac{39}{9}$
- ( $\neq$ ) Specify friction or positive locking type



MAKE MERCURY MODEL 1968 COUGAR 320 FIA REC # \_\_\_\_\_

**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.

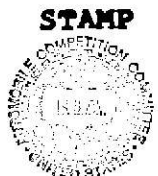
During the technical inspection of cars entered in Group IV (Sports Cars) only the following items of the present recognition form are to be taken into consideration:

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:

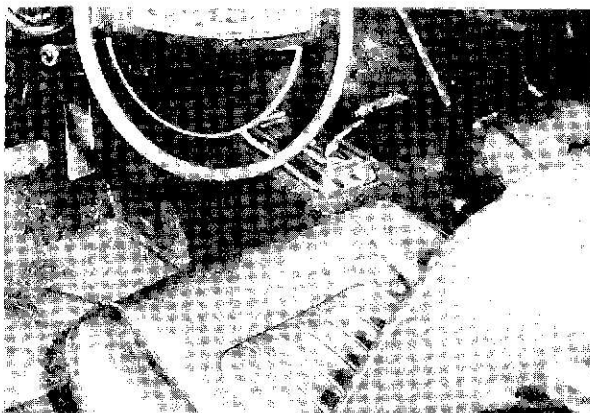
**CATALOGUE PART NUMBER MUST BE GIVEN**

S7MS-6675-B	Sump Guard	17.4 LBS	
W 64000	Power Steering	28.2BS	
W 65000	Air Conditioning	75 LBS	
SLMK-6642-B	Engine Oil Cooler Kit - Includes:	9.6 LBS	CAP 1.7 QT
	1 Radiator - Oil		
	1 Adapter		
	2 Hoses		
	Required Brackets, Fittings, Gaskets, Attaching Parts		

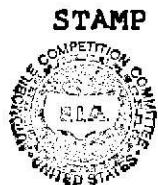


MAKE MERCURY MODEL 1968 COUGAR 300 PIA REC # \_\_\_\_\_

Optional Equipment - CATALOGUE PART NUMBER MUST BE GIVEN



INTERIOR OF CAR WITH AUTOMATIC GEARBOX





4/8/74  
Jenny Keenan  
Andover, Ct.

FIA #5202

2. JOHN A. HARRISON  
HOLDENBROOK FARM  
PISLEY LANE  
OCKLEY  
SURREY  
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