

# CAMS

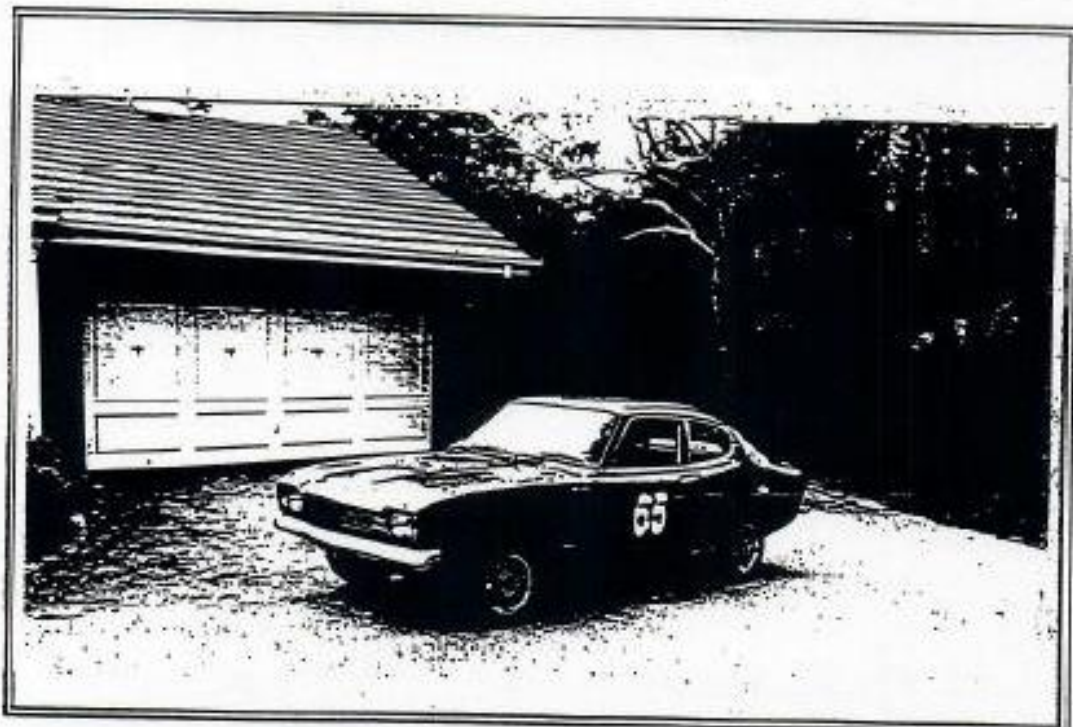
5TH CATEGORY - HISTORIC RACING

GROUP Nc

APPROVED VEHICLE SPECIFICATION

This form details the approved specifications of individual vehicle models in the 5th Category Historic car group. To be issued with an Historic Log Book, cars need to comply with these specifications, the physical appearance shown in the illustrations and the general historic rules as detailed in the current CAMS Manual of Motor Sport.

Make of Car: Ford Model: Capri V6 3 Litre  
Period of Original Manufacture: 1969 - 1973  
CAMS Historic Group: Nc  
Date of Issue of this Document: October 2010



## SECTION 1 - CHASSIS

### 1.1 CHASSIS FRAME

<b>Description:</b>	Unitary Construction	<b>Period of Manufacture:</b>
<b>Manufacturer:</b>	Ford Motor Company	1969 - 1973
<b>Chassis no. from:</b>		
<b>Chassis no. location:</b>	RHS Strut Re-inforcing Panel & Radiator Support Panel	
<b>Material:</b>	Steel	
<b>Comments:</b>	None	

### 1.2 FRONT SUSPENSION

<b>Description:</b>	Independent - McPherson Strut	
<b>Spring medium:</b>	Coil	
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b> No
<b>Anti-sway bar:</b>	Fitted	<b>Adjustable:</b> No
<b>Suspension adjustable:</b>	No	<b>Method:</b> N/A

**Comments:** Spring Rates and Ride Height Free. Shock Absorbers free subject to their being of appropriate period type and to the use of original mounts.

### 1.3 REAR SUSPENSION

<b>Description:</b>	Live Axle	
<b>Spring medium:</b>	Semi Elliptic Leaf	
<b>Damper type:</b>	Telescopic	<b>Adjustable:</b> No
<b>Anti-sway bar:</b>	Not Fitted	<b>Adjustable:</b> N/A
<b>Suspension adjustable:</b>	No	<b>Method:</b> N/A

**Comments:** Rear Suspension Stabilizer Fitted as Production Evolution. May be fitted all cars. Spring Rates & Height Free. Shock Absorbers free subject to their being of appropriate period type and to the use of original mounts. Axle Location may be improved. The original axle and suspension must not be overridden.

### 1.4 STEERING

<b>Type:</b>	Rack and Pinion	<b>Make:</b> Ford
<b>Comments:</b>	None	

### 1.5 BRAKES

<b>Type:</b>	<b>Front</b>	<b>Rear</b>
<b>Dimensions:</b>	Disc 244 x 12.7 mm	Drum 229 x 45 mm
<b>Material of drum/disc</b>	Cast iron	Cast iron
<b>No. cylinders/pots per wheel:</b>	2	2
<b>Actuation:</b>	Hydraulic	Hydraulic
<b>Caliper: Make, Material, Type:</b>		Girling
<b>Master cylinder make:</b>	Girling	<b>Type:</b> Single
<b>Adjustable bias</b>	No	
<b>Servo Fitted</b>	Yes	

**Comments:** Tandem/Twin Master Cylinder permitted. Any Braking System may be fitted, provided the swept area is not increased and all components are of period origin.

## SECTION 2 - ENGINE

### 2.1 ENGINE

**Make:** Ford  
**Model:**  
**No. cylinders:** 6 **Configuration:** Vee  
**Cylinder Block-material:** Cast Iron **Four Stroke**  
**Bore - Original:** 93.67 mm **Max. allowed:** 95.17 m  
**Stroke - original:** 72.42 mm **Max. allowed:** 72.42 m  
**Capacity - original:** 2994 cc **Max. allowed:** 3072 cc  
**Cooling method:** Water  
**Identifying marks:**  
**Comments:** None

### 2.2 CYLINDER HEAD

**Make:** Ford  
**No. of valves/cylinder:** **Inlet:** 1 **Exhaust:** 1  
**No. of ports total:** 12 **Inlet:** 6 **Exhaust:** 6  
**No. of camshafts:** 1 **Location:** Block **Drive:** Chain  
**Valve actuation:** Pushrod  
**Spark plugs/cylinder:** 1  
**Identifying marks:**  
**Comments:** None

### 2.3 LUBRICATION

**Method:** Wet sump  
**Dry sump pump type:** N/A **Location:** N/A **Oil tank location:** N/A  
**Oil cooler standard:** No **Location:** N/A  
**Comments:** Oil Cooler Permitted.

### 2.4 IGNITION

**Type:** Coil and Distributor  
**Make:** Lucas  
**Comments:** Coil/Distributor may be replaced with items of different manufacture.

### 2.5 FUEL FEED

**Carburettor: Make:** Weber **Model:** 40DFAV **Nc:** 1 **Size:** 40m  
**Fuel injection Make:** N/A **Type:** N/A  
**Supercharged:** N/A **Type:** N/A  
**Make:**  
**Comments:** Carburettor may be replaced by other/s of period type.

## SECTION 3 - TRANSMISSION

### 3.1 CLUTCH

**Make:** Various      **Type:** Diaphragm      **Diameter:** 241 mm  
**No. of Plates:** 1  
**Actuation:** Hydraulic  
**Comments:** Clutch Free

### 3.2 TRANSMISSION

**Type:** 4 Speed Synchronesh  
**Make:** Ford      **Model:**  
**No. forward speeds:** 4      **Gearbox location:** Behind Engine  
**Gear change type and location:** Floor- Remote  
**Case material:**      **Identifying marks:**  
**Comments:** Ratios Free. Both Model Gearboxes Permitted

### 3.3 FINAL DRIVE

**Make:** Ford      **Model:**  
**Wheel drive method:** Rear  
**Ratios:** 3.22:1, 4.1:1 (Standard)  
**Differential:** Free      **Type:** Hypoid Bevel  
**Comments:** Ratios Free LSD Permitted

### 3.4 TRANSMISSION SHAFTS (EXPOSED)

**Number:** 1      **Location:** Gearbox to Final Drive  
**Description:** Tubular Tailshaft with Universal Joints  
**Comments:** None

### 3.5 WHEELS & TYRES

<b>Wheel type:</b> Original:	Pressed Steel Disc	<b>Material:</b> Original:	Steel
Allowed:	Steel or Period Alloy	Allowed:	Alloy
<b>Fixture method:</b>	4 Studs	<b>No. studs:</b>	4
	<b>FRONT</b>		<b>REAR</b>
<b>Wheel dia. &amp; rim width</b>			
Original:	5 x 13		5 x 13
Allowed:	7 x 13		7 x 13
<b>Tyre section:</b>			
Original:	175 x 13		175 x 13
Allowed:	205/60 x 13		205/60 x 13
<b>Aspect ratio - minimum:</b>	60%		60%
<b>Comments:</b>	None		

## **SECTION 4 - GENERAL**

### **4.1 FUEL SYSTEM**

**Tank Location:** Rear **Capacity:** 61 Litres  
**Fuel pump, type and location:** Mechanical **Make:**  
**Comments:** Electric pump/s permitted.

### **4.2 ELECTRICAL SYSTEM**

**Voltage:** 12 **Alternator fitted.**  
**Battery Location:** Engine Compartment  
**Comments:** None

### **4.3 BODYWORK**

**Type:** Four Seat Coupe **Material:** Steel  
**No. of seats:** 4 **No. of doors:** 2  
**Comments:** Body shell may be seam welded.

### **4.4 DIMENSIONS**

**Track - Front:** 1372 mm **Rear:** 1346 mm  
**Wheelbase:** 2560 mm **Overall length:** 4262 mm  
**Dry weight:** 1002 kg  
**Comments:** None

### **4.5 SAFETY EQUIPMENT**

**Fire extinguisher required**  
**Seat belt required**  
**Rollbar required**  
**Electrical cut off switch required**  
**Safety fuel tank optional**



F.I.A. Recognition No. 5336

Group I

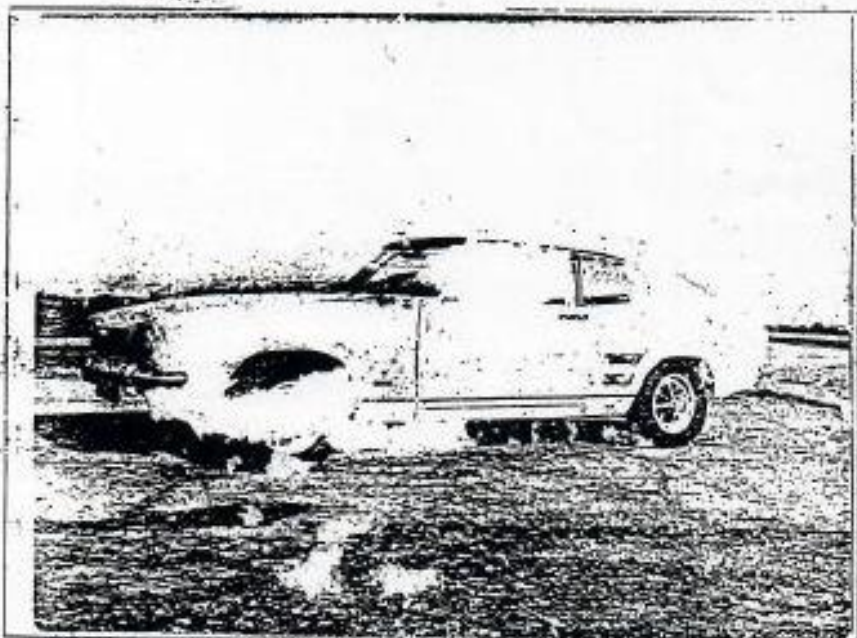
# ROYAL AUTOMOBILE CLUB

31 Belgrave Square, London, SW1X 8DH

Form of recognition in accordance with Appendix 1 to the International Sporting Code of the  
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

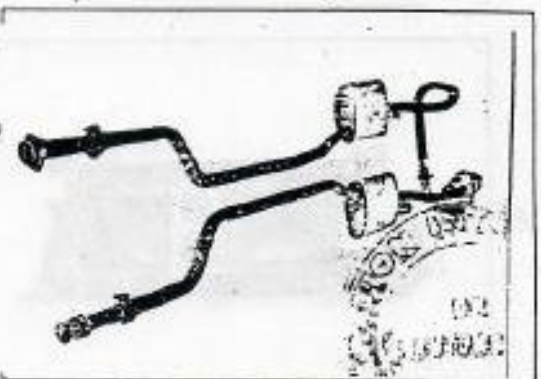
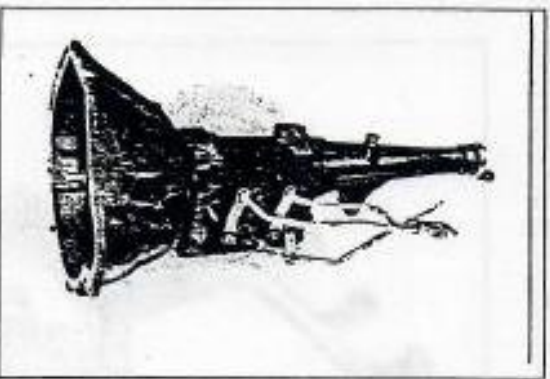
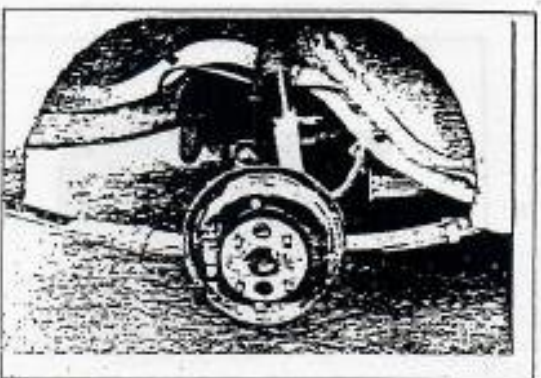
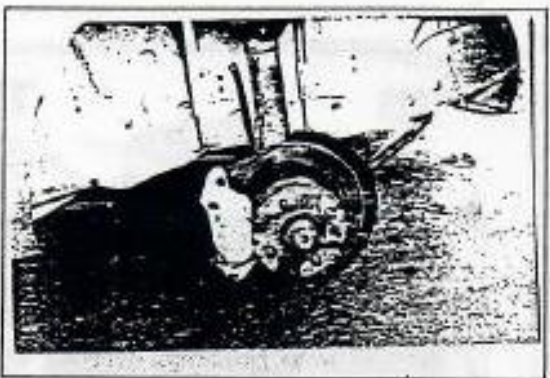
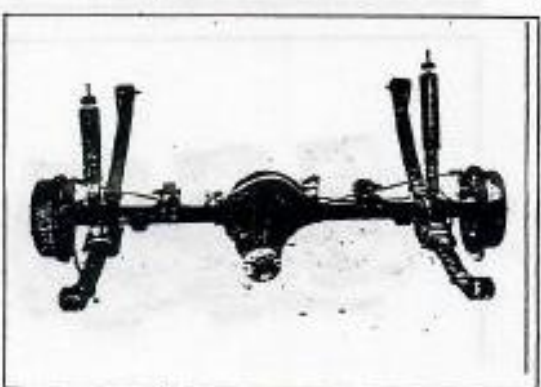
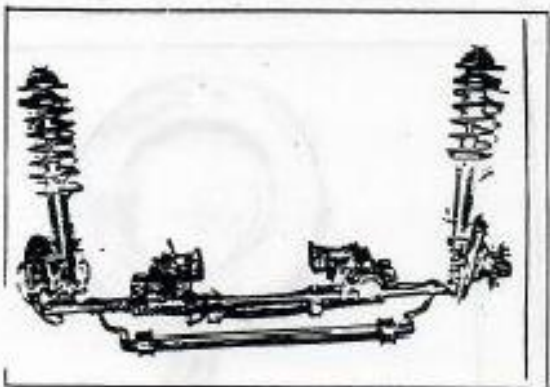
Manufacturer	FORD MOTOR COMPANY LIMITED	Cylinder capacity	2994	cm <sup>3</sup>	182.7	(in <sup>3</sup> )
Serial No. of chassis/body	BEDCHL 20391	Model	CAPRI 3 LITRE			
Serial No. of engine		Manufacturer	FORD			
Recognition valid from	1st APRIL 1970	Manufacturer	FORD			
		List	70/A			
The manufacturing of the model described in this recognition form started on 18 December 1969						
and the minimum production of 5000 identical cars, in accordance with the specifications of						
this form was reached on 16 February 1970.						

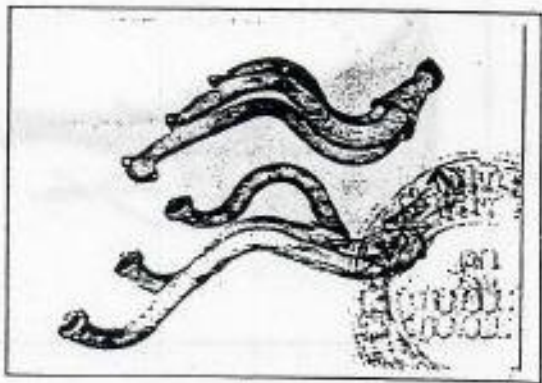
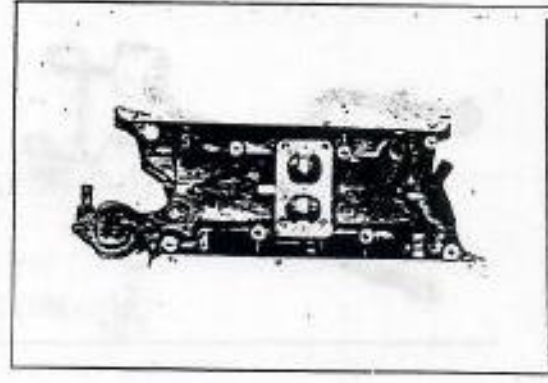
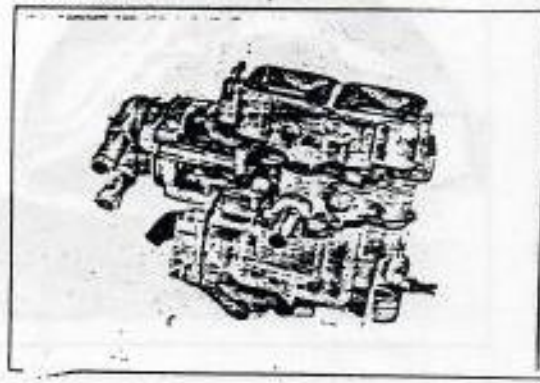
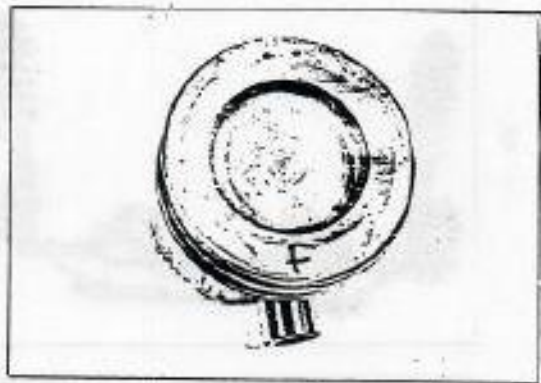
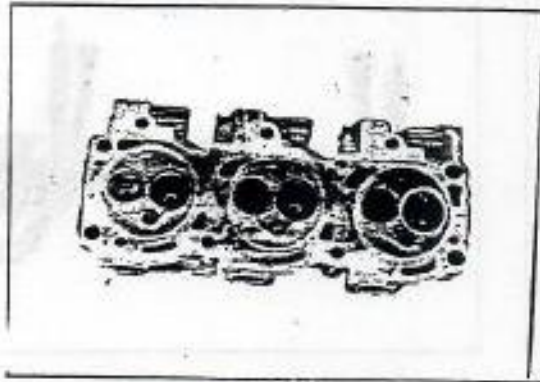
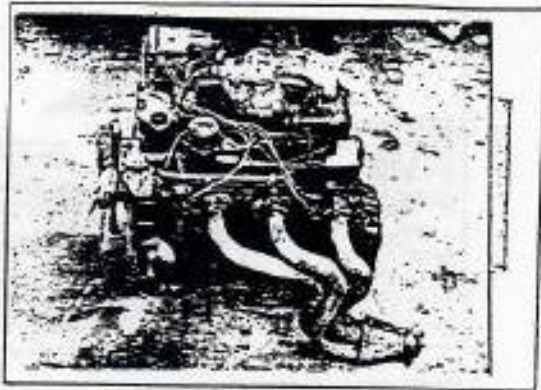
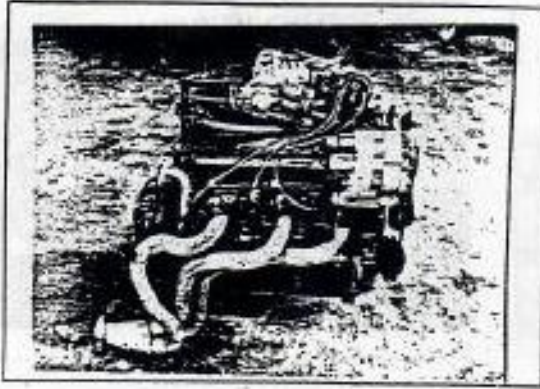
Photograph A. [ view of car from front



F.I.A. Stamp

R.A.C. Stamp





K

L

N

P

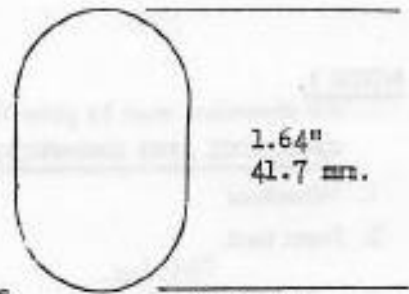


Make FORD

Model CAPRI 3 LITRE

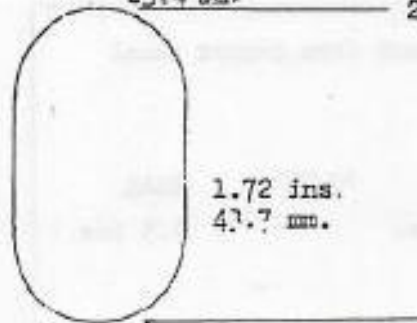
F.I.A. Rec. No. \_\_\_\_\_

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



1.64"  
41.7 mm.

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

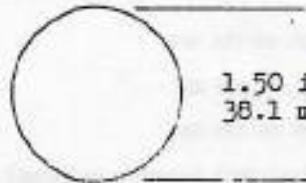


0.92 ins  
23.4 mm.

0.34 ins.  
21.3 mm.

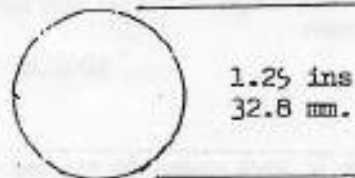
1.72 ins.  
43.7 mm.

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



1.50 ins.  
38.1 mm.

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



1.25 ins.  
32.8 mm.

All dimensions  $\pm$  .040 ins  
1.016 mm.

**NOTE 1.**

All dimensions must be given in two measuring systems, see Note 3.

**CAPACITIES AND DIMENSIONS**

- |                |                     |                      |            |                      |                      |
|----------------|---------------------|----------------------|------------|----------------------|----------------------|
| 1. Wheelbase   |                     |                      | 2560.3 mm. | <sup>±50.0mm.</sup>  | 100.8 inches         |
| 2. Front track | <sup>±25.4mm.</sup> | <sup>±1.0 ins.</sup> |            |                      |                      |
|                | 1371.6 mm.          | 54.0 inches          |            |                      |                      |
| 3. Rear track  |                     |                      | 1346.2 mm. | <sup>±25.4 mm.</sup> | <sup>±1.0 ins.</sup> |
|                |                     |                      |            |                      | 53.0 inches          |

Measurement from rocker panel to road

FRONT	See Note 1	REAR
7.5 ins.		7.5 ins.



- |   |             |                  |                 |
|---|-------------|------------------|-----------------|
| 4. Overall length of the car  |             | 426.2 cm.        | 167.8 inches    |
| 5. Overall width of the car   |             | 169.9 cm.        | 66.8 inches     |
| 6. Overall height of the car  |             | 149.8 cm.        | 50.9 inches     |
| 7. Capacity of fuel tank (reserve included)   |             |                  |                 |
|   | 61.37 ltrs. | 16.21 gall. U.S. | 13.5 gall. Imp. |
| 8. Seating Capacity   | 4           |                  |                 |
| 9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools: |             |                  |                 |
|   | 1001.8 kg.  | 2208.6 lbs.      | 19.72 cwt.      |

**NOTE 2.**

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 easily recognisable points at front and rear 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.

**NOTE 3.**

**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 sq. inch/pouce carre	— 6.452	cm. <sup>2</sup>	1 gallon Imp.	— 4.546	ltrs.
1 cubic inch/pouce cube	— 16.387	cm. <sup>3</sup>	1 gallon US	— 3.785	ltrs.
1 pound/livre (lb)	— 453.593	gr.	1 hundred weight (cwt.)	— 50.802	kg.

**CHASSIS AND COACHWORK** (Photographs A, B and C)

- |   |   |
|---|---|
| 20. Chassis/body construction:                    | <del>separate</del> /unitary construction |
| 21. Unitary construction, material(s)             | Steel                                     |
| 22. Separate construction, Material(s) of chassis | Steel                                     |
| 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                    | Toughened glass                           |
| 28. Material(s) of windscreen                     | Toughened or Laminated glass              |
| 29. Material(s) of front-door windows             | Toughened glass                           |
| 30. Material(s) of rear-door windows              | N/A                                       |
| 31. Sliding system of door windows                | Rotating handle                           |
| 32. Material(s) of rear-quarter light             | Toughened glass                           |

**ACCESSORIES AND UPHOLSTERY**

- |  |          |  |                     |
|--|----------|--|---------------------|
| 38. Interior heating : yes—no  | Optional | 39. Air conditioning : <del>yes</del> —no    |                     |
| 40. Ventilation : yes— <del>no</del>   |          | 41. Front seats, type of seat and upholstery | Bucket PVC or cloth |
| 42. Weight of front seat(s), complete with supports and rails, out of the car: |          |  |                     |
|  | 12.2 kg. |  | 27 lbs.             |
| 43. Rear seats, type of seat and upholstery                                    | Bench    |  | PVC or cloth        |
| 44. Front bumper, material(s)  | Steel    | Weight                                       | 2.5 kg. 5.5 lbs.    |
| 45. Rear bumper, material(s)   | Steel    | Weight                                       | 2.5 kg. 5.5 lbs.    |

**WHEELS**

- |                                      |                    |     |         |
|--------------------------------------|--------------------|-----|---------|
| 50. Type                             | Pressed steel disc |     |         |
| 51. Weight (per wheel, without tyre) | 5.8                | kg. | 12 lbs. |
| 52. Method of attachment             | 4 Taper nut fixing |     |         |
| 53. Rim diameter                     | 330.2              | mm. | 13 ins. |
| 54. Rim width                        | 127.0              | mm. | 5 ins.  |

**STEERING**

- |   |                 |  |  |
|---|-----------------|--|--|
| 60. Type  | Rack and Pinion |  |  |
| 61. Servo-assistance : yes—no                           | N/A             |  |  |
| 62. Number of turns of steering wheel from lock to lock | 3.2 approx,     |  |  |
| 63. In case of servo-assistance                         | N/A             |  |  |

Make FORD

Model CAPRI 3 LITRE

F.I.A. Rec. No. \_\_\_\_\_

**SUSPENSION**

70. Front suspension (photograph D), type Independent McPherson Strut
71. Type of spring Coil
72. Stabiliser (if fitted) Integral with Lower Arms
73. Number of shock absorbers 2      74. Type Integral Suspension Leg, Telescopic Double Acting
75. Rear suspension (photograph E), type Live Axle
76. Type of spring Multi-Leaf Semi-Elliptic
77. Stabiliser (if fitted) Trailing Links
78. Number of shock absorbers 2      79. Type Telescopic Double Acting

**BRAKES** (photographs F and G)

90. Method of operation Hydraulic
91. Servo-assistance (if fitted), type Hydraulic Vacuum
92. Number of hydraulic master cylinders One

	2 FRONT		1 REAR	
93. Number of cylinders per wheel				
94. Bore of wheel cylinder(s)	54.0 mm.	2.126 inches	19.05 mm.	0.75 inches

**Drum Brakes**

95. Inside diameter	mm.	inches	228.6 mm.	9.00 inches
96. Length of brake linings	mm.	inches	218.9 mm.	8.62 inches
97. Width of brake linings	mm.	inches	44.45 mm.	1.75 inches
98. Number of shoes per brake			2	
99. Total area per brake	mm. <sup>2</sup>	sq. in.	1946.4 mm. <sup>2</sup>	30.17 sq. in.

**Disc Brakes**

100. Outside diameter	244.0 mm.	9.6 inches	mm.	inches
101. Thickness of disc	12.7 mm.	.5 inches	mm.	inches
102. Length of brake linings	76.2 mm.	3.0 inches	mm.	inches
103. Width of brake linings	53.34 mm.	2.1 inches	mm.	inches
104. Number of pads per brake	2			
105. Total area per brake	667.0 mm. <sup>2</sup>	10.34 sq. in.	mm. <sup>2</sup>	sq. in.

ENGINE (photographs J and K)

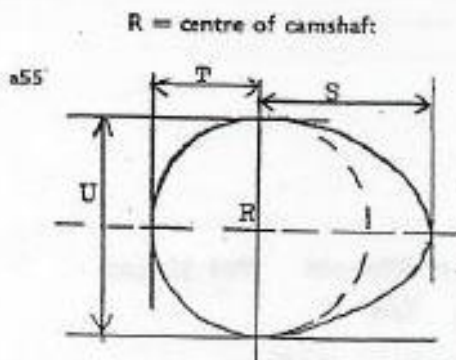
130. Cycle	Four Strokes	131. Number of cylinders	6
132. Cylinder Arrangement	V formation, banks of 3		
133. Bore	93.67 mm. 3.687 in.	134. Stroke	72.42 mm. 2.851 in.
135. Capacity per cylinder		499 cm. <sup>3</sup>	30.45 cu.in.
136. Total cylinder capacity		2994 cm. <sup>3</sup>	182.7 cu.in.
137. Material(s) of cylinder block	Cast iron	138. Material(s) of sleeves (if fitted)	None
139. Cylinder head, material(s)	Cast iron	Number fitted	2
140. Number of inlet ports	6	141. Number of exhaust ports	6
142. Compression ratio	8.9 : 1 ± .3		
143. Volume of one combustion chamber		± .3	± .2
		58.48 cm. <sup>3</sup>	3.568 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		46.1 mm.	1.8 in.
147. Crankshaft: moulded/ <del>cast</del>		148. Type of crankshaft: integral/ <u>Cast with balance weights</u>	
149. Number of crankshaft main bearings	4		
150. Material of bearing cap	Cast iron		
151. System of lubrication: <del>dry sump</del> /oil in sump			
152. Capacity, lubricant	5.6 ltrs. 9.8 pts.	5.9 quarts U.S.	
153. Oil cooler: <del>yes</del> /no		154. Method of engine cooling	Water and fan
155. Capacity of cooling system	11.2 ltrs. 19.7 pts.	11.6 quarts U.S. including heater if fitted	
156. Cooling fan (if fitted) dia.		30.48 cm.	12 in.
157. Number of blades of cooling fan	6		
<u>Bearings</u>			
158. Crankshaft main, type	Copper lead or aluminium tin	dia.	63.52 m.m. 2.5016 in.
159. Connecting rod big end, type		dia.	60.36 m.m. 2.3765 in.
<u>Weights</u>			
160. Flywheel (clean)		9.5 kg.	21 lbs.
161. Flywheel with clutch (all turning parts)		17.25 kg.	38 lbs.
162. Crankshaft	18 kg. 40 lbs.	163. Connecting rod	.74 kg. 1.72 lbs.
164. Piston with rings and pin		.75 kg.	1.73 lbs.

**ENGINE ACCESSORIES**

- 230. Fuel pump : mechanical ~~230~~ or electrical
- 231. No. fitted 1
- 232. Type of ignition system Coil
- 233. No. of distributors 1
- 234. No. of ignition coils 1
- 235. No. of spark plugs per cylinder 1
- 236. Generator, type : dynamo/alternator—number fitted Optional one
- 237. Method of drive V belt
- 238. Voltage of generator 12 volts
- 239. Battery, number 1
- 240. Location Under bonnet
- 241. Voltage of battery 12 volts

**ENGINE AND CAR PERFORMANCES** (as declared by manufacturer in catalogue)

- 250. Max. engine output 144 (type of horsepower: BHP ) at 4756 r.p.m.
- 251. Max. r.p.m. 6000 output at that figure
- 252. Max. torque 192.5 lbs.ft.at 3000 r.p.m.
- 253. Max. speed of the car km./hour miles/hour  
Not declared by Manufacturer in Catalogue.



Inlet cam

S =	20.274	mm.	.798	inches
T =	13.8	mm.	.543	inches
U =	27.609	mm.	1.087	inches

Exhaust cam

S =	20.426	mm.	.804	inches
T =	13.8	mm.	.543	inches
U =	27.609	mm.	1.087	inches

Make FORD Model CAPRI 3 LITRE F.I.A. Rec. No. \_\_\_\_\_

**DRIVE TRAIN**

**CLUTCH**

260. Type of clutch Diaphragm 261. No. of plates One
262. Dia. of clutch plates 24.13 cm. 9.5 ins.
263. Dia. of linings, inside 15.5 cm. 6.1 ins.
- outside 24.13 cm. 9.5 ins.
264. Method of operating clutch Hydraulic

**GEAR BOX (photograph H)**

270. Manual type, make Ford Method of operation Remote control
271. No. of gear-box ratios forward 4 272. Synchronized forward ratios 4
273. Location of gear-shift Central remote control
274. Automatic, make N/A 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	3.163	$\frac{21}{31} \times \frac{22}{23}$						
2	2.214	$\frac{21}{31} \times \frac{27}{18}$						
3	1.412	$\frac{21}{31} \times \frac{30}{14}$						
4	1 : 1	Direct						
5								
6								
reverse	3.346	$34 \times 15 \times 17$	idler					

278. Overdrive, type N/A
279. Forward gears on which overdrive can be selected N/A
280. Overdrive ratio N/A

**FINAL DRIVE**

290. Type of final drive Semi-floating Hypoid 291. Type of differential Two pinion
292. Type of limited slip differential (if fitted in series-production) N/A
293. Final drive ratio 3.22 : 1 Number of teeth 29/9  
4.1 11 31/9

**FOUR STROKE ENGINES**

170. Number of camshafts One 171. Location Between cylinder banks  
 172. Type of camshaft drive Gear  
 173. Type of valve operation O.H.V. and tappets

**INLET (see page 4)\***

180. Material(s) of inlet manifold Aluminium  
 181. Diameter of valves 41.07 mm. 1.617 ins.  
 182. Max. valve lift 8.97 mm. .344 in. 183. Number of valve springs 1 or 2  
 184. Type of spring Helical coil 185. Number of valves per cylinder 1  
 186. Tappet clearance for checking timing (cold/warm) .254 mm. .010 ins.  
 187. Valves open at (with tolerance for tappet clearance indicated) 20° B.T.D.C.  
 188. Valves close at (with tolerance for tappet clearance indicated) 64° A.B.D.C.  
 189. Air filter, type Paper element

**EXHAUST (see page 4)\***

195. Material(s) of exhaust manifold Steel tube  
 196. Diameter of valves 36.9 mm. 1.453 ins.  
 197. Max. valve lift 8.54 mm. .335 in. 198. Number of valve springs 1 or 2  
 199. Type of spring Helical coil 200. Number of valves per cylinder 1  
 201. Tappet clearance for checking timing (cold/warm) 1.425 mm. .15 ins.  
 202. Valves open at (with tolerance for tappet clearance indicated) 70° B.B.D.C.  
 203. Valves close at (with tolerance for tappet clearance indicated) 14° A.T.D.C.  
 204. Diameter outlet orifice exhaust manifold 38.1 mm. 1.5 ins.

**CARBURETION (photograph N)**

210. Number of carburetors fitted One 211. Type Downdraught  
 212. Make Weber 213. Model 40 DPAV.  
 214. Number of mixture passages per carburettor 2  
 215. Flange hole diameter of exit port(s) of carburettor 33.6 mm. 1.33 ins.  
 216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example: SU)  
28 mm. 1.16 ins.

**INJECTION (if fitted)**

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

\* For additional information concerning two-stroke engines and super-charged engines, see page 13.