F.I.A. Recognition No. 5018

Group 1- Series Production Touring



# ROYAL AUTOMOBILE CLUB

31, Belgrave Square, London, S.W.I

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

	Cylinder-capacity 1558 cm.3 95.2 in.3
Manufacturer Ford Motor Company Ltd.,	Model LOTUS CORTINA
Serial No. of chassis/body BA 74EU59030	Manufacturer FORD
Serial No. of engine 3231	Manufacturer LOTUS
Recognition is valid from	List
The manufacturing of the model described in this recog	gnition form started on lst October, 19.64.
and the minimum production of 5000	dentical cars, in accordance with the specifications of
this form was reached on 1st October, 19 65	

Photograph A, 3 view of car from front





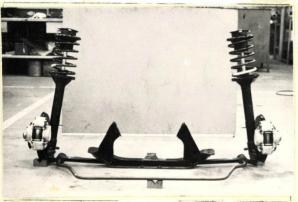
F.I.A. Stamp

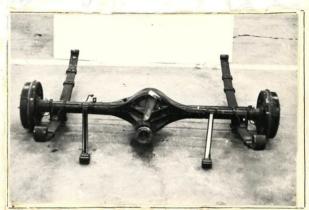
D

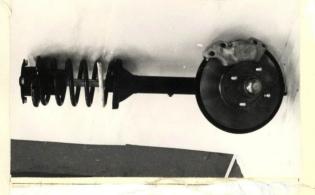
H











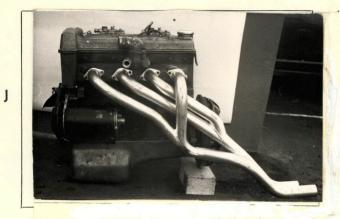




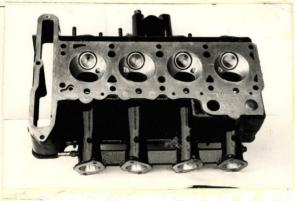


E

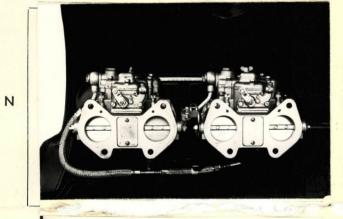
G

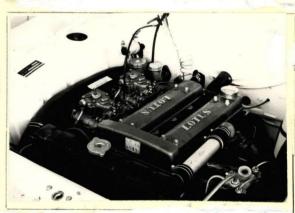
















Drawing inlet manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.

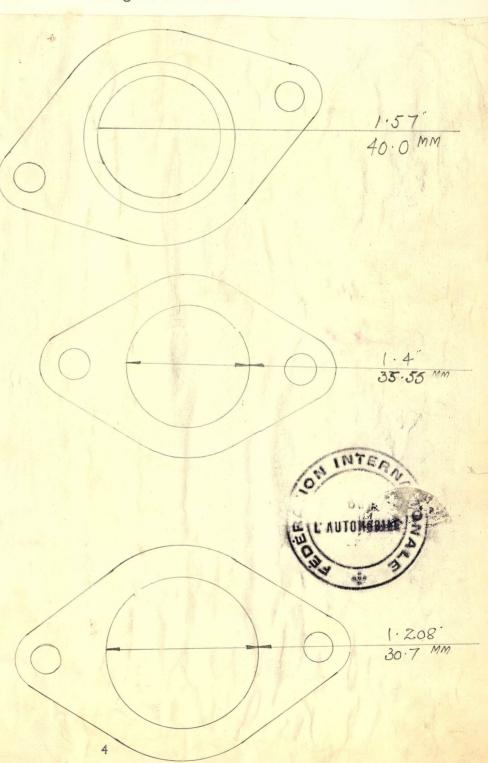
Drawing of entrance to inlet port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.

Drawing of 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.

± .030 in.

Integral with head.



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

### CAPACITIES AND DIMENSIONS

± 22mm .866 ins.

1. Wheelbase

2476.5

inches mm. 97.5

2. Front track

3. Rear track

1288 + 25 mm. 50.7 inches 1.00 ins.

Measurement from rocker panel to road. 203.20 mm rear. 190.50 mm front. OR

See Note 2 228.60 mm rear. 215.90mm front.

7.5 inches front. 8.0 inches rear; OR

8.5 inches front 9.0 inches rear.



cm.

cm.

cm.

168.31

62.50

53.70

4. Overall length of the car

5. Overall width of the car

6. Overall height of the car

7. Capacity of fuel tank (reserve included)

36.4

9.6

gall. U.S.

4275

1587

1364

25 mm 1.00 ins.

inches

inches

inches

8 gall. Imp.

4 8. Seating Capacity.

9. Weight. Total weight of the car with normal equipment, water, oil, and spare wheel but without fuel or repair tools:

850

kg.

Itrs.

1877

lbs.

cwts.

### 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	OF THE PARTY OF TH	— 0.9464	Itrs.
l foot/pied	<b>—</b> 30.4794	cm.	l pint (pt)	2	- 1568	ltrs.
1 sq. inch/pouce carre	<b>—</b> 6.452	cm. <sup>2</sup>	1 gallon Imp.	CE LIO	568 546	Itrs.
I cubic inch/pouce cube	<b>—</b> 16.387	cm.3	1 gallon US	di	- 3,785	ltrs.
I pound/livre (lb)	<b>— 453.593</b>	gr.	1 hundred weig	ght (exxt.)	50.802	kg.

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

20. Chassis/body construction: separate/unitary construction

21. Unitary construction, material(s) Steel

22. Separate construction, Material(s) of chassis Steel

23. Material(s) of coachwork Steel & aluminium

24. Number of doors 2 Material(s) Steel aluminium faced

25. Material(s) of bonnet Aluminium

26. Material(s) of boot lid Aluminium

27. Material(s) of rear-window Toughened Glass

28. Material(s) of windscreen 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 39. Air conditioning: \*\* no

40. Ventilation : yes — K& 41. Front seats, type of seat and upholstery P.V.C.

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

(2 seats) 20 kg. 44 lbs.

43. Rear seats, type of seat and upholstery P.V.C.

44. Front bumper, material(s) Steel Weight .59 each kg. 1.3 each lbs.

45. Rear bumper, material(s) Steel Weight 2.72 kg. 6.00 lbs.

### WHEELS

50. Type Pressed steel disc 'J' rim section

51. Weight (per wheel, without tyre) 5.94 kg. 13 lbs. 2 ozs.

52. Method of attachment 4 Taper nut fixing

53. Rim diameter 330 mm. 13.00 ins. 54. Rim width 139.7 mm. 5.50 ins.

### STEERING

60. Type Recirculating ball

61. Servo-assistance: xes — no

62. Number of turns of steering wheel from lock to lock 2.5 ± .5

63. In case of servo-assistance N/A



### **SUSPENSION**

Independent McPherson combined with torque reactor and Stabiliser Bar.

- 71. Type of spring Coil
- 72. Stabiliser (if fitted) Intergrated with lower arms.
- 73. Number of shock absorbers

74. Type

Intergrated with suspension leg-Telescopic double acting.

78. Rear suspension (photograph E), type

70. Front suspension (photograph D), type

Hotchkiss Drive

79. Type of spring

Multi leaf semi eliptic

80. Stabiliser (if fitted)

Trailing links

81. Number of shock absorbers

82. Type

Telescopic double acting

### BRAKES (photographs F and G)

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

93.	Number of cylinders per wheel	2	FRONT		1	REAR	
94.	Bore of wheel cylinder(s)	54	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.9.00 mm.8.62	inches
97.	Width of brake linings		mm.	inches	44.45	mm.1.75	inches
98.	Number of shoes per brake		mm.			2	
99.	Total area per brake		mm. <sup>2</sup>	sq. in.	19464	mm.30.17	sq. in.
	Disc Brakes						

100.	Outside diameter	244.0	mm.9.6	inches	mm.	inches
101.	Thickness of disc	12.7	mm. •500	inches	mm.	inches
102.	Length of brake linings	75.5	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	(1)     1	surgreents/2)	

- 105. Total area per brake
- \* 6670
  - \* Nominal

ENGINE (photographs J and K)

130. Cycle Four Stroke 131. Number of cylinders 4

132. Cylinder Arrangement In line

133. Bore 82.55 mm. 3.25 in. 134. Stroke 72.75 mm. 2.875 in.

135. Capacity per cylinder 389.0 cm.<sup>3</sup> 23.8 cu. in.

136. Total cylinder capacity 1558 cm.<sup>3</sup> 95.2 cu. in.

137. Material(s) of cylinder block Cast iron 138. Material(s) of sleeves (if fitted) None

139. Cylinder head, material(s)

Aluminium alloy Number fitted

140. Number of inlet ports 4 141. Number of exhaust ports 4

142. Compression ratio 9.8:1 ± 0.3

143. Volume of one combustion chamber 40<sup>+</sup> 1.5 cm.<sup>3</sup> 2.442 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
40.44 mm. 1.586 in.

147. Crankshaft: moulded hstartxpcd 148. Type of crankshaft: integral/ Cast with balance weights.

149. Number of crankshaft main bearings 5

150. Material of bearing cap Cast Iron

151. System of lubrication: dry sump/oil in sump

152. Capacity, lubricant 3.977 Itrs. 7 pts. 4.2 quarts U.S.

155. Capacity of cooling system 5.81 Itrs. 10.5 pts. 6.3 quarts U.S.

156. Cooling fan (if fitted) dia. 27.94 cm. 11.0 in.

157 Number of blades of cooling fan 2

Bearings

158. Crankshaft main, type Copper lead dia. 53.993 m.m. 2.125 in.

159. Connecting rod big end type Copper lead dia 49.205 m.m. 1.9372 in.

159. Connecting rod big end, type Copper lead dia. 49.205 m.m. 1.9372 in.

Weights

160. Flywheel (clean) 7 kg. 15.5 lbs.

161. Flywheel with clutch (all turning parts)

13.57 kg. 30 lbs.

162. Crankshaft 11.0 kg. 24.25 lbs. 163. Connecting rod 590 kg. 10110116

164. Piston with rings and pin .500 kg. lbs. 2 ozs.

lbs.5 ozs.

**FOUR STROKE ENGINES** 

2 in Cylinder head

170. Number of camshafts

171. Location

l in Block (idler)

172. Type of camshaft drive

Chain

173. Type of valve operation O.H.C. and tappets.

INLET (see page 4)\*

Aluminium alloy 180. Material(s) of inlet manifold

181. Diameter of valves

38.86

1.53 mm.

5018

ins.

182. Max. valve lift 8.89 mm. 350

in. 183. Number of valve springs 2

2

Coil 184. Type of spring

185. Number of valves per cylinder

.010

186. Tappet clearance for checking timing (cold)

. 254

26° B.T.D.C.

ins.

187. Valves open at (with tolerance for tappet clearance indicated)

188. Valves close at (with tolerance for tappet clearance indicated)

66° A.B.D.C.

189. Air filter, type Paper element

EXHAUST (see page 4)\*

195. Material(s) of exhaust manifold Steel

196. Diameter of valves

199. Type of spring

33.66

mm.

ins.

197. Max. valve lift in. 198. Number of valve springs 8.89 mm. 350

200. Number of valves per cylinder

1.325

Coil 201. Tappet clearance for checking timing (cold)

. 254

.010 ins.

202. Valves open at (with tolerance for tappet clearance indicated)

66° B.B.D.C.

203. Valves close at (with tolerance for tappet clearance indicated)

26°

CARBURETION (photograph N)

210. Number of carburettors fitted

211. Type

Horizontal

212. Make

2 Weber

213. Model

40 D.C.O.E. 18

214. Number of mixture passages per carburettor

215. Flange hole diameter of exit port(s) of carburettor

40

mm. 1.575

ins.

216. Minimum diameter of venturi/minimum diam., with piston at maximum height (example: SU)

30-33

mm. 1.18-1.30

ins.

INJECTION (if fitted) NONE

220. Make of pump

221. Number of plungers

222. Model or type of pump

223. Total number of injectors DE

ins.

224. Location of injectors

225. Minimum diameter of inlet pipe

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

### **ENGINE ACCESSORIES**

- 230. Fuel pump: mechanical and/or electrical
- 231. No. fitted
- 232. Type of ignition system Battery & Coil
- 233. No. of distributors 1

234. No. of ignition coils

- 235. No. of spark plugs per cylinder 1
- 236. Generator, type: dynamo/alternator—number 1

1

- 237. Method of drive Belt via crankshaft pulley
- 238. Voltage of generator
- 12
- volts

- 239. Battery, number
- 1

240. Location

- Right hand side of luggage compartment
- 241. Voltage of battery
- 12
- volts

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

- 250. Max. engine output
- 105
- (type of horsepower:
- b.h.p. ) at
- 5.500 r.p.m.

r.p.m.

- 251. Max. r.p.m.
- 6500
- output at that figure
- 100 b.h.p.

252. Max. torque

- 108 lbs/ft
- at
- 4000

253. Max. speed of the car

km./hour

- miles/hour
- Not declared by manufacturer in catalogue

# R = centre of camshaft a55 U R COUTOROGOUS 80

### Inlet cam

S = 24.10 mm. .950 inches T = 15.22 mm. .600 inches U = 30.50 mm. 1.201 inches

# Exhaust cam

S = 24.10 mm. .950 inches S = 15.22 mm. .600 inches S = 30.50 mm. 1.201 inches inches inches

### **DRIVE TRAIN**

### **CLUTCH**

260. Type of clutch Single dry plate dia-261. No. of plates

262. Dia. of clutch plates

203.2 cm. 8.00 ins.

263. Dia. of linings, inside

146.05 5.75 cm. ins.

outside

203.2 cm.

8.00 ins.

264. Method of operating clutch

Hydraulic

### GEAR BOX (photograph H)

270. Manual type, make Ford

Remote Control Method of operation

271. No. of gear-box ratios forward

272. Synchronized forward ratios

273. Location of gear-shift Central remote lever

274. Automatic, make

N/A

type

275. No. of forward ratios

276. Location of gear shift

277.	Man Ratio	No. teeth	Auto Ratio	matic No. teeth	Ratio	Alternative manual/automatic No. teeth Ratio No. teeth
1	2.972	32 x 17			2.51	21 x 17
2	2.010	28 x 22			1.64	21 x 22
3	1.397	23 x 26		1	1.04	
4	1.000	19 x 30			1.23	$\frac{21}{28} \times \frac{26}{24}$
5	Constant	$=\frac{30}{10}$			1.00	Direct
6	<u> </u>	19				
reverse	3.324	40x22x19			2.807	$\frac{40}{19}$ via 22

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

FINAL DRIVE

290. Type of final drive

291. Type of differential

292. Type of limited slip difference (if fitted)

Number of teeth

Salisbury Four pinion

293. Final drive ratio

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, 186, 187, 188, 189, 201, 202, 203, 212, 213, 215, 216 222, 225, 230, 250, 251, 252, 253, 255 photographs I, M and N and page 4.

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, 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 and photographs A, B, D, E, F, G, H, J, K and O.

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

on 157 May 1966 rec. no.5018 Lis	st1	9 rec.	noList
on 13/14/05/ 19 66 rec. no. 5 010 Lis	st1	9 rec.	noList
on19 rec. noLis			
on19 rec. noLis			
on19 rec. noLis			

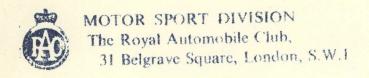
Optional equipment affecting preceding information. This to be stated together with reference number.

### Manufacturing Tolerances:

- 1. For all machined surfaces allow 0.75%
- 2. For all non machined surfaces allow 2%
- For weights of all part machined parts allow 2.5%
- For weights of all completely machined parts allow 1.25%







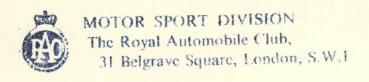
Manufacturer	Ford Motor Company
Model	Lotus Cortina
Amendment	No. 1
	nition No. 5018

## FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.	Reference No.	
		WEIGHTS
1.	9.	Should read 812 kgs.
		Valid in Group 1 or Group II
2.	24.	All Steel Door
3.	25.	Steel Bonnet \ + 12.0 kgs.
4.	26.	Steel Boot Lid)
		Valid in Group 2 Only
		Valle III dloup E oilly
5.	42.	Contoured Seats
6.		Aluminium Clutch Housing
7.		Aluminium Gearbox Rear casing
8.		Aluminium Final Drive casing
•	The same of the sa	- 5 magas

Samp of F.I.A./R.A.C. to be affixed here

Date amendment is valid from 1st May 1966



Manufacturer Ford Motor Company

Model Lotus Cortina

Amendment No. 2

F.I.A. Recognition No. 5018

Amendment to Form of Recognition

### FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No. Reference No.

3.

### EVOLUTION OR OPTIONAL EQUIPMENT

1. 44. One piece front bumper. Weight 2.72 kgs. 6.00 lbs.
2. Left Hand Drive or Right Hand Drive,

99. Self adjusting rear brakes and handbrake axle bracket.



Part Nos. 3004E-2A785A 2920E-2K338A 2920E-2297A

Changes:

Length of brake lining 7.1 ins. Total area of brake 24.85 sq. ins

Authorities & C. to be affixed force 14

Date amendment is valid from 1st May, 1966



Manufacturer.	Ford Motor Company				
Model	Lotus Cortina				
Amendment 1	No 3				
F.I.A. Recogni	tion No5018				

### FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.	Reference No.	
	E	OLUTION OR OPTIONAL EQUIPMENT GROUP 2
4.	7.	Fuel Tanks: 63.5 litres Part No. 3004E/9002C 36.35litres Part No. 3004E/9002D 43.5 litres Part No. 3004E/9002E 90 litres Part No. 3004E/9002F
5.		Front under body shield: Part No. CD 6775-B) See amendment
6.	•	Rear underbody shield: Part No. E915-T-1 )No. 6 for photograph.
		WHEELS
7.	50. 53.	Material:- Elektron C  Knock-on 15" Diameter Part No. B. 28G001  (to be fitted only with front and rear adapters Part Nos. 501G017 & 501G018)
8.	51. 50. 52. 53. 54.	Alternative Wheels:- Weight: Type: Disc 'J' rim section Method of attachment: A nut fixing Rim diameter: Rim width:  10lbs. 4.45 kgs. Disc 'J' rim section 4 nut fixing 6.50 ins.
		NOTE: When these wheels are used the track width must be increased by 1 inch or 25 mm.
9.	• •	Heavy duty suspension including non-adjustable shock absorbers and rubber bump stops. Part No. 118E/5019B
10.	et de la companya de	Aluminium clutch housing Part No. 28F/704
11.	41 coninton	Aluminium gearbox rear casing Part No. 28F/703
12.	• •	Aluminium differential casing Part No. 125E/4017
13.	•	REAR AXLE  Alternative Hypoid differential limited slip unit.  Part No. 105E/4017

This page supersedes all previous

Date amendment is valid from 1st May 1960



Manufacture	Ford Motor Company
Model	Lotus Cortina
Amendment	No. 4
F.I.A. Recog	nition No5018

Reference No.

### FEDERATION INTERNATIONALE DE L'AUTOMOBILE

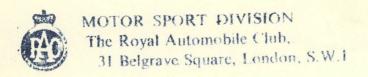
	1101010110011101	
		EVOLUTION OR OPTIONAL EQUIPMENT
14.	153.	Oil Cooler Part No. M.6738
15.	159.	Connecting Rod: Material EN24 Weight 0.588 kgs. Part No. 105/116
16a.	159.	Connecting Rod: Material EN19 Weight 650 kgs. (with bolts) Part No. B 2450
16b.	164.	Gudgeon pin for above: overall length 2.530 ins. Diameter 1"
17a.	180.	Valve (inlet): Material: EN 52.
17b.	181.	Head diameter 1.562" Part No. B. 2526
18.	293.	Final Drive Ratios:
		4.125 33/8 33/7
19.	••	Exhaust pipe (2 chamber) Part No. 28S/706
20.	••	Exhaust manifold (early type) Part No. 28S/705



No. 20 Photograph (i)



Date amendment is valid from 1st May 1966



Manufacturer	Ford I	Motor	Compa	ny
Model	Lotus	Corti	na	
Amendment 1	No	5		*
F.I.A. Recogni	tion No	, 50	18	

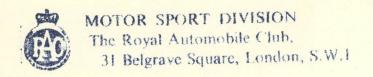
### FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No. Reference No.

		EVOLUTION OR OPTIONAL EQUIPMENT		
		Group II		
21.	••	Special Duty rear spring assemble	Ly: Part No. A28-D-733	
22.	••	Alternative Rear Brake		
27.	••	Brake Drum	Part No. CD-109E-1105	
	96.	Length of Brake Lining	218.9 mm 8.62 ins.	
	97•	Width of Brake Lining	57.15 mm 2.25 ins.	
	99•	Total area of brake	25032 mm sq. 39.00 sq ins.	
23.	277.	Alternative Gear Ratios:		
		1. $3.543  \frac{32}{17} \times \frac{32}{17}$		
		2. $2.04 \frac{32}{17} \times \frac{26}{24}$		
		3. $1.412 \frac{32}{17} \times \frac{21}{28}$		
24.	••	Alternative Choke size for 40 I Weber Carburettors 34 mm. Diameter.	O.C.O.E.	



Date amendment is valid from 1st May, 1966



Manufacture	Ford N	Motor Con	pany
Model	Lotus	Cortina	
Amendment	No.	6	***************************************
F.I.A. Recog	nition No	5018	},,

### FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No. Reference No.

5.

6.

### EVOLUTION OR OPTIONAL EQUIPMENT

Photograph of front under body shield: Part No. CD 6775-B



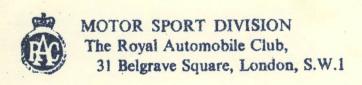
Photograph of rear underbody shield: Part No. E915-T-1



Aubulf chron

of I.A./R.A.C. to be

Date amendment is valid from 1st May, 1966



Manufacturer Ford Motor Company, Model Lotus Cortina F.I.A. Recognition No. 5018

Amendment No. 7

Amendment to Form of Recognition

### FEDERATION INTERNATIONALE DE L'AUTOMOBILE

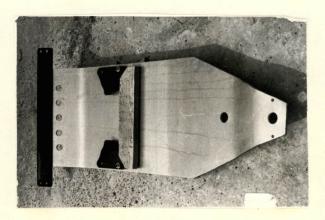
No.

1.

Reference No.

OPTIONAL EQUIPMENT

Photograph of alternative sump shield Part No. CD 6775-C





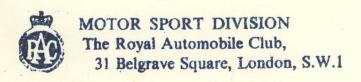
Material: Duraluminium with steel brackets

Measurements: width 15" +

length 20,5"

Date amendment is valid from 1st July 1966

Stamp of F.I.A./R.A.C.



Manufacturer Ford Motor Company

Model Lotus Cortina

F.I.A. Recognition No. 5018 B/V

Amendment No. 8

Amendment to Form of Recognition

## FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.	Reference No.		
		Additional Optional Equipment Group II	
1.		Alternative lever hand brake assembly Part No. 113E-CD2780-C	
		Wheels: Available alternatives	
2.	50. 52. 53. 54. 51.	Type: Cast Elektron C Method of attachment: 4 nut fixing Rim diameter: 330 mm. 13 ins. Rim width: 165 mm. 6.50 ins. Weight: 10 lbs. 4.45 kgs.	
3.	50. 52. 53. 54.	Type: Cast Elektron C Method of attachment: 4 nut fixing. Rim diameter: 330 mm. 13.00 ins. Rim width: 139.7mm. 5.50 ins.	
		Alternative gear ratios	
4.	277.	1. $2.296$ $\frac{28}{21}$ x $\frac{31}{18}$	
		2. 1.697 $\frac{28}{21} \times \frac{28}{22}$	
		3. 1.28 $\frac{28}{21} \times \frac{24}{25}$	

Date amendment is valid from 1st August 1966.

Gist 14/7

Stamp of F.I.A./R.A.C.



MOTOR SPORT DIVISION

The Royal Automobile Club,

31 Belgrave Square, London, S.W.1

Manufacturer FORD

Model LOTUS CORTINA

F.I.A. Recognition No. 5018

Amendment No. 9

Amendment to Form of Recognition

# FEDERATION INTERNATIONALE DE L'AUTOMOBILE

No.

Reference No.

70

(Amendment 9) Heavy Duty Suspension



PART: NO 118E 5019B



PART NOS CD 28C 710A CD 28C 711A



Date amendment is valid from...





