

5TH CATEGORY - HISTORIC RACING GROUP N 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 Motorsport Australia Manual.

Make of Car:	Ford	Model:	Lotus Cortina Mark 1
Period of Original Manufacture:	1963-1966		
Motorsport Australia Historic Group:	Nb		
Date of Issue of this Document:	1 April 2025		



Refer to The *Manual*, Historic Appendix, Vehicle Eligibility, General Requirements & Historic Touring Cars Group N Regulations for permitted modifications.

Update Log			
1/1/2024	Inclusion of kerb and minimum racing weights		
26/2/2025	Adjustment of vehicle weights		

## Page 1 of 6

CHASSIS	
Description:	Unitary construction
Period of Manufacture:	1963-1965
Manufacturer:	Ford
Chassis Number From:	Z74C002368K (not applicable for "specification only" cars)
Chassis Number location:	On I/D plate in engine compartment
Material:	Steel with aluminium-alloy skinned swinging panels
Comments	This specification sheet relates to the "Coil over/A Frame" rear suspension
	cars using both the early body and the 'Aeroflow Ventilation' model
	introduced in September 1964.

# FRONT SUSPENSION

Description:	Independent - by MacPherson strut with torque reactor and stabiliser bar			
Spring Medium:	Coil			
Damper Type:	Telescopic double a	octing integrated	Adjustable:	No
Anti-sway bar:	Yes	Yes		No
Suspension adjustable:	Yes	Yes Method:		
Comments:	Refer to Appendix A.			

# **REAR SUSPENSION**

Description:	Live axle located by upper trailing arms and lower A-frame.			
Spring Medium:	Coil over damper units.			
Damper Type:	Telescopic		Adjustable:	No
Anti-sway bar:	No		Adjustable:	N/A
Suspension adjustable:	No	No Method:		
Comments:	Refer to Appendix A.			

# STEERING

Туре:	Recirculating ball	Make:	Ford
	2.5 turns lock to lock		
Comments	Original form including rod ends must be retained		

# BRAKES

	Front	Rear			
Туре:	Disc, solid	Drum			
Dimensions:	12.7 mm x 244 mm	229 x 44.5 mm			
Material of drum/disc:	Cast iron	Cast iron			
No. cylinders/pots per wheel:	Two	One			
Actuation:	Hydraulic	Hydraulic			
Caliper make:	Girling				
Caliper type:	Single Cylinder	Single Cylinder			
Material:	Cast iron	Cast iron			
Master cylinder make:	Girling	Girling			
Туре:	Single	Single			
Adjustable bias:	None	None			
Servo Fitted:	No				
Comments:	None				

ENGINE				
Make:	Ford			
Model:	Pre - cross flow type	e		
No. cylinders:	Four	Configuration:	In-line	
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four	
Bore - Original:	82.55 mm	Max allowed:	84.05 mm	
Stroke - original:	72.8 mm	Max allowed:	72.8 mm	
Capacity - original:	1558 cc	Max allowed:	1616 cc	
Identifying marks:	120E-6015	120E-6015		
Cooling method:	Liquid			
Comments:	Any 7.78" height deck block with the following Engine Casting Block			
	number: 116E-6015BA, 118E-6015BA, 120E-6015, 120E-6015BA, 2731-			
	6015BA, 3020-6015BA, 681F-6015BA, 701M-6015BA, as well as new Ford			
	Motorsport block P	art number M-6010-16L.		

#### **CYLINDER HEAD**

Make:	Lotus Ford				
No. of valves/cylinder:	Two	Inlet:	One	Exhaust:	One
No. of ports total:	Eight	Inlet:	Four	Exhaust:	Four
No. of camshafts:	Two	Location:	Overhead	Drive:	Chain
Valve actuation:	Direct	from camsha	ft via buckets		
Spark plugs/cylinder:	One				
Identifying marks:	Lotus part number A26E311 & foundry batch number (e.g., WM9403 -			M9403 -	
	the William Mills Foundry cast the heads) adjoin the gasket surface on			rface on	
	the exhaust side (visible on an assembled engine using a mirror).				
Comments:	The cylinder head manufactured by SAS Engineering may be used to				
	replace original Lotus heads. Modified original or replacement				
	aftermarket timing chests incorporating a removable water pump are			ump are	
	acceptable.				
	The Group Nb regulations allow the use of any original production Lotus			tion Lotus	
	twin cam cylinder head, including those manufactured for the Escort			Escort	
	Twin C	am (renamed	d Escort GT 1600 in Australia	circa 1970).	

## LUBRICATION

Method:	Wet sump external oil pump driven off idler cam located in cylinder block	Oil tank location:	N/A
Dry sump pump type:	N/A	Location:	N/A
Oil cooler standard:	No	Location:	N/A
Comments:	None		

#### **IGNITION SYSTEM**

Туре:	Points, coil and distributor
Make:	Lucas/Autolite
Comments	Breakerless electronic ignition permitted

#### FUEL SYSTEM

Carburettor Make:	Weber	Model:	40DCOE
<b>Carburettor Number:</b>	Тwo		
Size:	Various		
Fuel injection Make:	N/A	Type:	N/A
Supercharged:	No	Type:	N/A
Comments:	None		

# SECTION 3 - TRANSMISSION

# CLUTCH

Make:	Ford
Туре:	Dry plate
Diameter:	203 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	None

### TRANSMISSION

Туре:	Synchromesh		
Make:	Ford – Type 2000E with remote shifter (118E/Lotus is the stamp		
	number)		
	Refer Appendix A		
Gearbox location:	Behind engine		
No. forward speeds:	Four		
Gearchange type and location:	Remote change in extension housing		
Case material:	Cast iron with separate alloy bell housing		
Identifying marks:	N/A		
Comments:	Aluminium bell housing and gearbox extension housing are permitted.		

### FINAL DRIVE

Make:	Ford	Model:	'English 'Banjo type	
Туре:	Live rear axle, Semi floating hypoid			
Ratios:	Various			
Differential type:	Semi floating hypoid			
Comments:	Aluminium differential carrier is permitted			

# TRANSMISSION SHAFTS (EXPOSED)

Number:	One or two piece.	
Location:	Gearbox to final drive	
Description:	Tubular and Open tail shaft with twin uni joints.	
Comments:	One	

## WHEELS & TYRES

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Wheel type - Original:	Pressed disc	Material - Original:		Steel	
Wheel type - Allowed:	Steel	Materia	- Allowed:	Steel	
	Alloy (period style)			Alloy	
Fixture method:	Studs and nuts	No. studs:		Four	
Wheel dia. & rim width	FRONT			REAR	
Original:	5.5″ x 13″		5	5.5" x 13"	
Allowed	6" x 13"			6" x 13"	
Tyre Section:					
Allowed:	Refer approved tyre list.				
Aspect ratio - minimum:	60% minimum aspect ratio.				
Comments:	None				

## SECTION 4 GENERAL

### FUEL SYSTEM

Tank Location:	Floor of boot	Capacity:	36.4 litres
Fuel pump, type:	Mechanical on engine block	Make:	Ford
Comments:	None		

# ELECTRICAL SYSTEM

Voltage:	12	Alternator fitted:	Alternator	
Battery Location:	Right side of luggage compartment.			
Comments:	None			

### BODYWORK

Туре:	Closed touring	Material:	Steel.	
			Swinging panels	
			aluminium skinned	
No. of seats:	Four	No. doors:	Two	
Comments:	Interior and exterior trim must be present in its entirety.			
	For safety purposes, a fire wall of aluminium sheet is required between the			
	luggage compartment and the passenger compartment, including access			
	via the rear pillars.			

### DIMENSIONS

Track - Front:	1310 mm plus or minus 25	Rear:	1275 mm plus or minus
	mm		25mm
Wheelbase:	2499 mm plus or minus	Overall length:	4275 mm
	25mm		
Approved Manufacturer's	800 kgs		
kerb weight:			
Approved minimum racing	776 kgs		
weight:			
Comments:	None		

# SAFETY EQUIPMENT

Refer applicable Group Regulations

## Appendix A

# Suspension

## Front

Adjustable strut top mounts and dampers permitted. Spring platform location may be changed; adjustable spring platforms are permitted. Spring height adjustment is permitted.

## Rear

Additional lateral and longitudinal linkages permitted; adjustable dampers permitted. Spring height adjustment permitted.

## Gearboxes

Type 2000E with remote shifter



### Features:

- Console must be fitted to cover remote shifter.
- Aluminium drive line components Homologated for MK 1 Lotus Cortinas are not legal for other models.
- Three rail
- Reverse is next to second



- Case and tail housing are cast iron
- Starter motor on driver's side
- 7/8" x 20 spline input shaft