



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.

<b>Make of Car:</b>	Ford	<b>Model:</b>	Lotus Cortina Mark 1
<b>Period of Original Manufacture:</b>	1963-1966		
<b>Motorsport Australia Historic Group:</b>	Nb		
<b>Date of Issue of this Document:</b>	1 January 2024		



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

**SECTION 1 - CHASSIS**

**CHASSIS**

<b>Description:</b>	Unitary construction
<b>Period of Manufacture:</b>	1963-1965
<b>Manufacturer:</b>	Ford
<b>Chassis Number From:</b>	Z74C002368K (not applicable for "specification only" cars)
<b>Chassis Number location:</b>	On I/D plate in engine compartment
<b>Material:</b>	Steel with aluminium-alloy skinned swinging panels
<b>Comments</b>	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**

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

**REAR SUSPENSION**

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

**STEERING**

<b>Type:</b>	Recirculating ball 2.5 turns lock to lock	<b>Make:</b>	Ford
<b>Comments</b>	Original form including rod ends must be retained		

**BRAKES**

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

**SECTION 2 - ENGINE**

**ENGINE**

<b>Make:</b>	Ford		
<b>Model:</b>	Pre - cross flow type		
<b>No. cylinders:</b>	Four	<b>Configuration:</b>	In-line
<b>Cylinder Block-material:</b>	Cast iron	<b>Two/Four Stroke:</b>	Four
<b>Bore - Original:</b>	82.55 mm	<b>Max allowed:</b>	84.05 mm
<b>Stroke - original:</b>	72.8 mm	<b>Max allowed:</b>	72.8 mm
<b>Capacity - original:</b>	1558 cc	<b>Max allowed:</b>	1616 cc
<b>Identifying marks:</b>	120E-6015		
<b>Cooling method:</b>	Liquid		
<b>Comments:</b>	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 Part number M-6010-16L.		

**CYLINDER HEAD**

<b>Make:</b>	Lotus Ford		
<b>No. of valves/cylinder:</b>	Two	<b>Inlet:</b> One	<b>Exhaust:</b> One
<b>No. of ports total:</b>	Eight	<b>Inlet:</b> Four	<b>Exhaust:</b> Four
<b>No. of camshafts:</b>	Two	<b>Location:</b> Overhead	<b>Drive:</b> Chain
<b>Valve actuation:</b>	Direct from camshaft via buckets		
<b>Spark plugs/cylinder:</b>	One		
<b>Identifying marks:</b>	Lotus part number A26E311 & foundry batch number (e.g., WM9403 - the William Mills Foundry cast the heads) adjoin the gasket surface on the exhaust side (visible on an assembled engine using a mirror).		
<b>Comments:</b>	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 acceptable. The Group Nb regulations allow the use of any original production Lotus twin cam cylinder head, including those manufactured for the Escort Twin Cam (renamed Escort GT 1600 in Australia circa 1970).		

**LUBRICATION**

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

**IGNITION SYSTEM**

<b>Type:</b>	Points, coil and distributor
<b>Make:</b>	Lucas/Autolite
<b>Comments</b>	Breakerless electronic ignition permitted

**FUEL SYSTEM**

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

**SECTION 3 - TRANSMISSION**

**CLUTCH**

<b>Make:</b>	Ford
<b>Type:</b>	Dry plate
<b>Diameter:</b>	203 mm
<b>No. of Plates:</b>	One
<b>Actuation:</b>	Hydraulic
<b>Comments:</b>	None

**TRANSMISSION**

<b>Type:</b>	Synchromesh
<b>Make:</b>	Ford – Type 2000E with remote shifter (118E/Lotus is the stamp number) Refer Appendix A
<b>Gearbox location:</b>	Behind engine
<b>No. forward speeds:</b>	Four
<b>Gearchange type and location:</b>	Remote change in extension housing
<b>Case material:</b>	Cast iron with separate alloy bell housing
<b>Identifying marks:</b>	N/A
<b>Comments:</b>	Aluminium drive line components Homologated for MK 1 Lotus Cortinas are not legal for other models.

**FINAL DRIVE**

<b>Make:</b>	Ford	<b>Model:</b>	'English 'Banjo type
<b>Type:</b>	Live rear axle, Semi floating hypoid		
<b>Ratios:</b>	Various		
<b>Differential type:</b>	Semi floating hypoid		
<b>Comments:</b>	None		

**TRANSMISSION SHAFTS (EXPOSED)**

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

**WHEELS & TYRES**

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

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## SECTION 4 GENERAL

### FUEL SYSTEM

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

### ELECTRICAL SYSTEM

<b>Voltage:</b>	12	<b>Alternator fitted:</b>	Alternator
<b>Battery Location:</b>	Right side of luggage compartment.		
<b>Comments:</b>	None		

### BODYWORK

<b>Type:</b>	Closed touring	<b>Material:</b>	Steel. Swinging panels aluminium skinned
<b>No. of seats:</b>	Four	<b>No. doors:</b>	Two
<b>Comments:</b>	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

<b>Track - Front:</b>	1310 mm plus or minus 25 mm	<b>Rear:</b>	1275 mm plus or minus 25mm
<b>Wheelbase:</b>	2499 mm plus or minus 25mm	<b>Overall length:</b>	4275 mm
<b>Approved Manufacturer's kerb weight:</b>	824 kgs		
<b>Approved minimum racing weight:</b>	799 kgs		
<b>Comments:</b>	None		

### SAFETY EQUIPMENT

Refer applicable Group Regulations
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## 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.

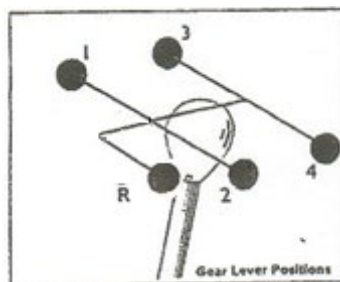
### Gearboxes

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