



<b>5TH CATEGORY - HISTORIC RACING</b> <b>GROUP S</b> <b>APPROVED VEHICLE SPECIFICATION</b>
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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>	Lotus	<b>Model:</b>	7 – Series 4
<b>Period of Original Manufacture:</b>	1969 - 1972		
<b>Motorsport Australia Historic Group:</b>	Sc		
<b>Date of Issue of this Document:</b>	30/6/2022		
<b>NOTE</b>	Only Lotus built cars or Lotus kits assembled by Steel Bros (NZ) are eligible for classification in this Group. Later cars built by Steel Bros, commonly known as “New Zealand 7” with altered mechanical and body specifications are not eligible		



***Update Log***

30/6/2022	Document layout

## SECTION 1 - CHASSIS

### 1.1. CHASSIS

<b>Description:</b>	Tubular and sheet metal frame
<b>Period of Manufacture:</b>	1969 - 1972
<b>Manufacturer:</b>	Lotus components & Steel Bros (NZ)
<b>Chassis Number From:</b>	46/001 to 65/0001
<b>Chassis Number location:</b>	Firewall
<b>Material:</b>	Mild steel
<b>Comments</b>	Only those Steel Brothers cars built from Lotus supplied kits are eligible

### 1.2. FRONT SUSPENSION

<b>Description:</b>	Independent front suspension – upper and lower wishbones		
<b>Spring Medium:</b>	Coil		
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	Yes	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	Adjustable spring seats
<b>Comments:</b>	Spring rates and ride height are unrestricted		

### 1.3. REAR SUSPENSION

<b>Description:</b>	Live axle – Leading and trailing arms (4 link system)		
<b>Spring Medium:</b>	Coil		
<b>Damper Type:</b>	Telescopic	<b>Adjustable</b>	No
<b>Anti-sway bar:</b>	No	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	Adjustable spring seats
<b>Comments:</b>	Spring rates and ride height are unrestricted		

### 1.4. STEERING

<b>Type:</b>	Rack and pinion	<b>Make:</b>	Alford and Alder
<b>Comments</b>	None		

### 1.5. BRAKES

	Front	Rear
<b>Type:</b>	Disc	Drum
<b>Dimensions:</b>	218 mm	230 mm
<b>Material of drum/disc:</b>	Cast iron	Cast iron
<b>No. cylinders/pots per wheel:</b>	Two	Two
<b>Actuation:</b>	Hydraulic	Hydraulic
<b>Caliper make:</b>	Girling	
<b>Caliper type:</b>	Fixed	
<b>Material:</b>	Cast iron	
<b>Master cylinder make:</b>	Girling	
<b>Type:</b>	Single	
<b>Adjustable bias:</b>	No	
<b>Servo Fitted:</b>	No	
<b>Comments:</b>	Twin master cylinders permitted	

## SECTION 2 - ENGINE

### 2.1. ENGINE

<b>Make:</b>	Lotus/Ford		
<b>Model:</b>	Twin-cam, Cortina 1300 or 1600.		
<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>	82.5 mm	<b>Max allowed:</b>	84 mm
<b>Stroke - original:</b>	72.75 mm	<b>Max allowed:</b>	72.75 mm
<b>Capacity - original:</b>	1558 cc	<b>Max allowed:</b>	1613 cc
<b>Identifying marks:</b>	681F-6015BA or 701M-6105BA		
<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. Escort 1300cc and Cortina 1600cc engines also fitted.		

### 2.2. 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> Cylinder head	<b>Drive:</b> Chain
<b>Valve actuation:</b>	Direct from camshaft via buckets		
<b>Spark plugs/cylinder:</b>	One		
<b>Identifying marks:</b>	A26E311 & WM9403 adjacent to gasket face but visible on assembled engine		
<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.		

### 2.3. LUBRICATION

<b>Method:</b>	Wet sump	<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>	Oil cooler allowed		

### 2.4. IGNITION SYSTEM

<b>Type:</b>	Points, Coil and Distributor		
<b>Make:</b>	Lucas		
<b>Comments</b>	None		

### 2.5. FUEL SYSTEM

<b>Carburettor Make – Stage III:</b>	Weber	<b>Model:</b>	DCOE40
<b>Carburettor Number:</b>	Two		
<b>Size:</b>	40 mm		
<b>Fuel injection Make:</b>	N/A	<b>Type:</b>	N/A
<b>Supercharged:</b>	No	<b>Type:</b>	N/A
<b>Comments:</b>	Dellorto carburetors also fitted. All cars may use either Weber or Dellorto carburetors Carburettor throt size unrestricted.		

**SECTION 3 - TRANSMISSION**

**3.1. CLUTCH**

<b>Make:</b>	Ford
<b>Type:</b>	Diaphragm
<b>Diameter:</b>	190 mm
<b>No. of Plates:</b>	One
<b>Actuation:</b>	Hydraulic
<b>Comments:</b>	None

**3.2. TRANSMISSION**

<b>Type:</b>	Synchromesh
<b>Make:</b>	Ford – 2000E
<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 cast iron bell housing
<b>Identifying marks:</b>	Refer Appendix A
<b>Comments:</b>	

**3.3. FINAL DRIVE**

<b>Make:</b>	Ford	<b>Model:</b>	“English” Banjo type
<b>Type</b>	Live rear axle		
<b>Wheel drive method</b>	Rear		
<b>Ratios:</b>	Various		
<b>Differential type:</b>	Hypoid bevel		
<b>Comments:</b>	Ratios free Limited slip differential allowed		

**3.4. TRANSMISSION SHAFTS (EXPOSED)**

<b>Number:</b>	One
<b>Location:</b>	Gearbox to final drive
<b>Description:</b>	Tubular tailshaft with universal joints
<b>Comments:</b>	None

**3.5. WHEELS & TYRES**

<b>Wheel type - Original:</b>	Disc	<b>Material - Original:</b>	Steel or Alloy
<b>Wheel type - Allowed:</b>	Period alloy	<b>Material - Allowed:</b>	Steel or Alloy
<b>Fixture method:</b>	Bolt on	<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>Original:</b>	185 x 13		185 x 13
<b>Allowed:</b>	185 x 13		185 x 13
<b>Aspect ratio - minimum:</b>	60% minimum aspect ratio.		
<b>Comments:</b>	Refer approved tyre list.		

## SECTION 4 GENERAL

### 4.1. FUEL SYSTEM

<b>Tank Location:</b>	Rear	<b>Capacity:</b>	34 litres
<b>Fuel pump, type:</b>	Electrical	<b>Make:</b>	SU
<b>Comments:</b>	Fuel pump free		

### 4.2. ELECTRICAL SYSTEM

<b>Voltage:</b>	Twelve	<b>Alternator fitted:</b>	Alternator
<b>Battery Location:</b>	Engine compartment		
<b>Comments:</b>	None		

### 4.3. BODYWORK

<b>Type:</b>	Two seat Clubman Sports	<b>Material:</b>	GRP
<b>No. of seats:</b>	Two	<b>No. doors:</b>	None
<b>Comments:</b>	None		

### 4.4. DIMENSIONS

<b>Track - Front:</b>	1275 mm	<b>Rear:</b>	1356 mm
<b>Wheelbase:</b>	2285 mm	<b>Overall length:</b>	3716 mm
<b>Dry weight:</b>	Twin cam engine - 600 Kg		
<b>Comments:</b>	None		

### 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations
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## Appendix

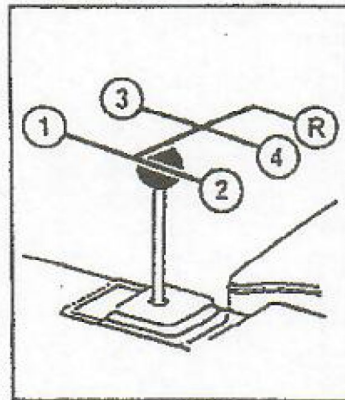
### Gearbox

2000E



#### Features:

- Three rail
- Reverse is next to top gear (RHS)



Gear Lever Positions

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