



5TH CATEGORY - HISTORIC RACING  
**GROUP S**  
 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>	Lotus	<b>Model:</b>	7 – Series 1
<b>Period of Original Manufacture:</b>	1957 - 1960		
<b>Motorsport Australia Historic Group:</b>	Sa		
<b>Date of Issue of this Document:</b>	30/6/2022		
<b>NOTE</b>	Factory built competition variants of standard production cars, without an identifiable competition in the Group period will be accepted for classification in their originally purchased form. At all times, it will devolve upon the applicant to satisfy Motorsport Australia as to the bona fides of the specification of any such car		



***Update Log***

30/6/2022	Document layout

## SECTION 1 - CHASSIS

### 1.1. CHASSIS

<b>Description:</b>	Tubular steel space frame
<b>Period of Manufacture:</b>	1957 - 1960
<b>Manufacturer:</b>	Lotus components
<b>Chassis Number From:</b>	400/499, then 750/892
<b>Chassis Number location:</b>	ID plate on top of the driver's footbox
<b>Material:</b>	Mild steel tube
<b>Comments</b>	None

### 1.2. FRONT SUSPENSION

<b>Description:</b>	Independent front suspension –lower wishbone, upper radius arm and sway bar location		
<b>Spring Medium:</b>	Coil over damper		
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	Yes	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	No	<b>Method:</b>	N/A
<b>Comments:</b>	Spring rates and ride height are unrestricted		

### 1.3. REAR SUSPENSION

<b>Description:</b>	Live axle		
<b>Spring Medium:</b>	Coil over damper		
<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>	
<b>Comments:</b>	Spring rates and ride height are unrestricted Original rear axle of Standard "10" derivation may be replaced with BMC "A" type rear axle.		

### 1.4. STEERING

<b>Type:</b>	Rack and pinion	<b>Make:</b>	Alford and Alder
<b>Comments</b>	Early cars fitted with Burman Worm and nut. All Series 1 cars may fit Rack and pinion.		

### 1.5. BRAKES

	Front	Rear
<b>Type:</b>	Drum	Drum
<b>Dimensions:</b>	203 mm x 38 mm	203 mm x 38 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>	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. Series 1 cars are not permitted to fit disc brakes.	

## SECTION 2 - ENGINE

### 2.1. ENGINE

<b>Make:</b>	Ford		
<b>Model:</b>	100E		
<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 – BMC 948:</b>	62.9 mm	<b>Max allowed:</b>	64.4 mm
<b>Stroke – original – BMC 948:</b>	68.26 mm	<b>Max allowed:</b>	68.26 mm
<b>Capacity – original – BMC 948:</b>	848 mm	<b>Max allowed:</b>	889 mm
<b>Bore – Original – - FWA</b>	72.39 mm	<b>Max allowed:</b>	73.89 mm
<b>Stroke – original – FWA</b>	66.67 cc	<b>Max allowed:</b>	66.67 cc
<b>Capacity – original - FWA</b>	1098 cc	<b>Max allowed:</b>	1143 cc
<b>Bore – Original – 100E:</b>	63.5 mm	<b>Max allowed:</b>	65 mm
<b>Stroke – original – 100E:</b>	92.45 mm	<b>Max allowed:</b>	92.45 mm
<b>Capacity – original – 100E:</b>	1172 cc	<b>Max allowed:</b>	1226 cc
<b>Identifying marks:</b>			
<b>Cooling method:</b>	Liquid		
<b>Comments:</b>	Engine specifications may be 'maximised' provided the make of engine originally fitted to the subject car is retained.		

### 2.2. CYLINDER HEAD

<b>Make:</b>	BMC Coventry Climax Ford		
<b>No. of valves/cylinder:</b>	Two	<b>Inlet:</b> One	<b>Exhaust:</b> One
<b>No. of ports total:</b>	Five	<b>Inlet:</b> Two	<b>Exhaust:</b> Three
<b>No. of camshafts:</b>	One	<b>Location:</b> Block	<b>Drive:</b> Chain
<b>Valve actuation:</b>	Tappets		
<b>Spark plugs/cylinder:</b>	One		
<b>Identifying marks:</b>			
<b>Comments:</b>	Engine specifications may be 'maximised' provided the make of engine originally fitted to the subject car is retained.		

### 2.3. LUBRICATION

<b>Method:</b>	Wet sump	<b>Oil tank location:</b>	N/A
<b>Dry sump pump type:</b>	Gear	<b>Location:</b>	In sump
<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:</b>	SU	<b>Model:</b>	H2
<b>Carburettor Number:</b>	Two		
<b>Size:</b>	N/A		
<b>Fuel injection Make:</b>	N/A	<b>Type:</b>	N/A
<b>Supercharged:</b>	No	<b>Type:</b>	N/A
<b>Comments:</b>	All cars may fit twin period carburettors. Carburettor throat size unrestricted.		

## SECTION 3 - TRANSMISSION

### 3.1. CLUTCH

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

### 3.2. TRANSMISSION

<b>Type:</b>	Synchromesh (2 <sup>nd</sup> , 3 <sup>rd</sup> )
<b>Make:</b>	Ford 3 speed, & Austin A30 4 speed (Super Seven)
<b>Gearbox location:</b>	Behind engine
<b>No. forward speeds:</b>	Three & Four
<b>Gearchange type and location:</b>	Remote floor change
<b>Case material:</b>	Cast iron with separate cast iron bell housing
<b>Identifying marks:</b>	Refer Appendix A
<b>Comments:</b>	Three speed gearbox fitted only to 1172 cc Ford engine cars. Other Series 1 cars fitted BMC 4 speed gearbox. All cars except 1172 cc Ford engine cars may fit 4 speed gearbox. Ratios free.

### 3.3. FINAL DRIVE

<b>Make:</b>	Standard	<b>Model:</b>	Model 10
<b>Type</b>	Live rear axle		
<b>Wheel drive method</b>	Rear		
<b>Ratios:</b>	Various		
<b>Differential type:</b>	Hypoid bevel – free		
<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>	Steel Disc Wire spoke	<b>Material - Original:</b>	Steel
<b>Wheel type - Allowed:</b>	Steel Disc Wire spoke	<b>Material - Allowed:</b>	Steel
<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>	4" x 15"		4" x 15"
<b>Allowed</b>	4" x 15"		4" x 15"
<b>Tyre Section:</b>			
<b>Original:</b>	520 x 15		520 x 15
<b>Allowed:</b>	520 x 15		520 x 15
<b>Aspect ratio - minimum:</b>	60% minimum aspect ratio.		
<b>Comments:</b>	Refer approved tyre list. Centre lock wire wheels were optional and are permitted		

## SECTION 4 GENERAL

### 4.1. FUEL SYSTEM

<b>Tank Location:</b>	Rear	<b>Capacity:</b>	25 litres
<b>Fuel pump, type:</b>	Electrical or mechanical	<b>Make:</b>	
<b>Comments:</b>	Fuel pump free		

### 4.2. ELECTRICAL SYSTEM

<b>Voltage:</b>	Twelve	<b>Alternator fitted:</b>	Generator
<b>Battery Location:</b>	Rear		
<b>Comments:</b>	None		

### 4.3. BODYWORK

<b>Type:</b>	Two seat Clubman Sports	<b>Material:</b>	Aluminium
<b>No. of seats:</b>	Two	<b>No. doors:</b>	None
<b>Comments:</b>	Cycle type fenders fitted to all Series 1 cars. "Egg crate" grille.		

### 4.4. DIMENSIONS

<b>Track - Front:</b>	1194 mm	<b>Rear:</b>	1182 mm
<b>Wheelbase:</b>	2235 mm	<b>Overall length:</b>	3124 mm
<b>Dry weight:</b>	407 kg 436 kg Dependent on mechanical specifications		
<b>Comments:</b>	None		

### 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations
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**Appendix**