

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.

Make of Car:	Lotus	Model:	Elan – 1500
			Elan – 1600
			S1, S2, S3, S4
Period of Original Manufacture:	1962 - 1973		
Motorsport Australia Historic Group:	Sb		
Date of Issue of this Document:	31/12/2024		





**Update Log** 

30/6/2022	Document layout
31/12/2024	Inclusion of kerb and minimum racing weights

#### **SECTION 1 - CHASSIS**

#### 1.1. CHASSIS

Description:	Backbone
Period of Manufacture:	1962 – 1973
Manufacturer:	Lotus
Chassis Number From:	26/0001 -7302.09
Chassis Number location:	Bulkhead, engine bay, exhaust side
Material:	Mild steel
Comments	None

# 1.2. FRONT SUSPENSION

Description:	Independen	Independent front suspension – twin wishbones		
Spring Medium:	Coil	Coil		
Damper Type:	Tubular	Tubular Adjustable: No		
Anti-sway bar:	Yes	Yes		No
Suspension adjustable:	No	No Method:		
Comments:	Spring rates	Spring rates and ride height are unrestricted		

### 1.3. REAR SUSPENSION

Description:	Independer	Independent rear suspension – Chapman strut		
Spring Medium:	Coil	Coil		
Damper Type:	Tubular	Tubular Adjustable No		
Anti-sway bar:	No	No		N/A
Suspension adjustable:	No	No Method:		
Comments:	Spring rates	Spring rates and ride height are unrestricted		

# 1.4. STEERING

Type:	Rack and pinion	Make:	Alford and Alder
Comments	None		

#### 1.5. BRAKES

	Front	Rear	
Type:	Disc	Disc	
Dimensions:	241 mm	254 mm	
Material of drum/disc:	Cast iron	Cast iron	
No. cylinders/pots per wheel:	One	One	
Actuation:	Hydraulic	Hydraulic	
Caliper make:	Girling		
Caliper type:	Fixed		
Material:	Cast iron		
Master cylinder make:	Girling		
Type:	Single		
Adjustable bias:	No		
Servo Fitted:	No		
Comments:	Dual master cylinder allowed		
	Servo allowed		

#### **SECTION 2 - ENGINE**

#### 2.1. ENGINE

Make:	Lotus Ford	Lotus Ford		
Model:				
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:	73.0 mm	Max allowed:	73.0 mm	
Capacity - original:	1558 cc	Max allowed:	1617 cc	
Identifying marks:				
Cooling method:	Liquid			
Comments:	None			

#### 2.2. CYLINDER HEAD

Make:	Lotus				
No. of valves/cylinder:	Two	Inlet:	One	Exhaust:	One
No. of ports total:	Eight	Inlet:	Four	Exhaust:	Four
No. of ports total (Stromberg):	Six	Inlet:	Two	Exhaust:	Four
No. of camshafts:	Two	Location:	Head	Drive:	Chain
Valve actuation:	Overhead camshafts				
Spark plugs/cylinder:	One				
Identifying marks:		•			
Comments:	None				

#### 2.3. LUBRICATION

Method:	Wet sump	Oil tank location:	N/A
Dry sump pump type:	N/A	Location:	N/a
Oil cooler standard:	No	Location:	N/A
Comments:	Oil cooler allowed		

# 2.4. IGNITION SYSTEM

Type:	Points, Coil and Distributor		
Make:	Lucas		
Comments	None		

# 2.5. FUEL SYSTEM

Carburettor Make:	Weber	Model:	40DCOE
Carburettor Make:	Stromberg	Model:	176D25
Carburettor Make:	Dellorto	Model:	DHLA40
Carburettor Number:	Two		
Size:			
Fuel injection Make:	N/A	Туре:	N/A
Supercharged:	No	Туре:	N/A
Comments:	Bore size unrestricted		

#### **SECTION 3 - TRANSMISSION**

#### 3.1. CLUTCH

Make:	Borg and Beck
Type:	Diaphragm
Diameter:	203 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	None

#### 3.2. TRANSMISSION

Type:	Type 2000E
Make:	Ford
Gearbox location:	Behind engine
No. forward speeds:	Four
Gearchange type and location:	Floor remote
Case material:	Cast iron
Identifying marks:	
Comments:	Ratios free

#### 3.3. FINAL DRIVE

Make:	Lotus	Model:
Wheel drive method	Rear	
Ratios:	Various	
Differential type:	Hypoid bevel	
Comments:	Ratios free	
	Limited slip differential allowed	

# 3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	Two
Location:	Halfshafts
Description:	Tubular with "Rotoflex" donut type universal joints
Comments:	C/V joints not allowed
	Hardy Spicer Type 26R drive shafts and universal joints allowed

#### 3.5. WHEELS & TYRES

3.5. WHEELS & TYKES	-	-		
Wheel type - Original:	Disc	Material - Original:	Steel	
Wheel type - Allowed:	Cast alloy	Material - Allowed:	Aluminium alloy	
Fixture method:	Bolt on	No. studs:	Four	
	Centre lock			
Wheel dia. & rim width	FRONT		REAR	
Original:	4.5" x 13"	4.5" x 13"		
	5.5" x 13"	5.5" x 13"		
	6" x 13"	6" x 13"		
Allowed	6" x 13"		6" x 13"	
Tyre Section:		·		
Original:	5.20 x 13" 5.20 x 13"		5.20 x 13"	
Allowed:	175 x 13		175 x 13	
Aspect ratio - minimum:	60% minimum aspect ratio.			
Comments:	Refer approved tyre list.			
	Rim size and tyre size limited to combination that will fit under			
	standard wheel arch.			
	Alloy wheel should be 4 spoke 26R tyre			

#### **SECTION 4 GENERAL**

### 4.1. FUEL SYSTEM

Tank Location:	Under boot	Capacity:	35 litres
Fuel pump, type:	Mechanical	Make:	AC
Comments:	None		

#### 4.2. ELECTRICAL SYSTEM

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

### 4.3. BODYWORK

Туре:	Open sports Fixed head coupe	Material:	GRP
No. of seats:	Two	No. doors:	Two
Comments:	Hardtop allowed		

### 4.4. DIMENSIONS

Track - Front:	1400 mm	Rear:	1410 mm
Wheelbase:	2150 mm	Overall length:	3700 mm
Approved Manufacturer's	680 kg – S2		
kerb weight:	685 kg – S3		
	690 kg – S4		
Approved minimum racing	608 kg – S2		
weight:	612 kg – S3		
	617 kg – S4		
Comments:	None	_	

### 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

# Appendix