



<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>	Sunbeam Alpine	<b>Model:</b>	Series I Series II
<b>Period of Original Manufacture:</b>	Series I – July 1959 – October 1960 Series II – October 1960 – March 1963		
<b>Motorsport Australia Historic Group:</b>	Sa		
<b>Date of Issue of this Document:</b>	30/6/2022		



***Update Log***

30/6/2022	Document layout

**SECTION 1 - CHASSIS**

**1.1. CHASSIS**

<b>Description:</b>	Platform – unitary construction
<b>Period of Manufacture:</b>	Series I – July 1959 – October 1960 Series II – October 1960 – March 1963
<b>Manufacturer:</b>	Rootes Group Ltd
<b>Chassis Number From:</b>	Series I – B9000001 – B9011904 Series II – B9100001 – B9119956
<b>Chassis Number location:</b>	Plate on top of bulkhead
<b>Material:</b>	Mild steel
<b>Comments</b>	None

**1.2. FRONT SUSPENSION**

<b>Description:</b>	Independent – wishbone		
<b>Spring Medium:</b>	Coil		
<b>Damper Type:</b>	Telescopic	<b>Adjustable:</b>	No
<b>Anti-sway bar:</b>	Fitted	<b>Adjustable:</b>	No
<b>Suspension adjustable:</b>	Yes	<b>Method:</b>	Shims
<b>Comments:</b>	None		

**1.3. REAR SUSPENSION**

<b>Description:</b>	Live axle		
<b>Spring Medium:</b>	Semi elliptic leaf		
<b>Damper Type:</b>	Lever	<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>	For and aft location may be improved		

**1.4. STEERING**

<b>Type:</b>	Recirculating ball	<b>Make:</b>	Burman “F”
<b>Comments</b>	None		

**1.5. BRAKES**

	<b>Front</b>	<b>Rear</b>
<b>Type:</b>	Disc	Drum
<b>Dimensions:</b>	242 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>		
<b>Material:</b>	Cast iron	
<b>Master cylinder make:</b>	Girling	
<b>Type:</b>	Single	
<b>Adjustable bias:</b>	No	
<b>Servo Fitted:</b>	Optional	
<b>Comments:</b>	Tandem or twin master cylinders allowed	

## SECTION 2 - ENGINE

### 2.1. ENGINE

<b>Make:</b>	Rootes Group		
<b>Model:</b>			
<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 - SI:</b>	79.0 mm	<b>Max allowed:</b>	80.5 mm
<b>Stroke – original - SI:</b>	76.2 mm	<b>Max allowed:</b>	76.2 mm
<b>Capacity – original – S1:</b>	1494 cc	<b>Max allowed:</b>	1550 cc
<b>Bore – Original - SII:</b>	81.5 mm	<b>Max allowed:</b>	83.0 mm
<b>Stroke – original - SII:</b>	76.2 mm	<b>Max allowed:</b>	76.2 mm
<b>Capacity – original – S1I:</b>	1592 cc	<b>Max allowed:</b>	1646 cc
<b>Identifying marks:</b>			
<b>Cooling method:</b>	Liquid		
<b>Comments:</b>	1725 engine is not eligible in SI/SII cars. Identified by oil dipstick located in block, as distinct from sump in 1500/1600 engines. Also has 5 grub screws along right side main oil gallery		

### 2.2. CYLINDER HEAD

<b>Make:</b>	Rootes Group		
<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>	One	<b>Location:</b> Block	<b>Drive:</b> Chain
<b>Valve actuation:</b>	Pushrod and rockers		
<b>Spark plugs/cylinder:</b>	One		
<b>Identifying marks:</b>	N/A		
<b>Comments:</b>	None		

### 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>	None		

### 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>	Zenith	<b>Model:</b>	WIA
<b>Carburettor Number:</b>	Two		
<b>Size:</b>	36 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>	None		

**SECTION 3 - TRANSMISSION**

**3.1. CLUTCH**

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

**3.2. TRANSMISSION**

<b>Type:</b>	Syncromesh (2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> )
<b>Make:</b>	Rootes
<b>Gearbox location:</b>	Behind engine
<b>No. forward speeds:</b>	Four
<b>Gearchange type and location:</b>	Central remote
<b>Case material:</b>	Cast iron
<b>Identifying marks:</b>	N/A
<b>Comments:</b>	Laycock De-Normanville overdrive optional

**3.3. FINAL DRIVE**

<b>Make:</b>	Rootes	<b>Model:</b>	
<b>Wheel drive method:</b>	Rear		
<b>Ratios:</b>	4.44, 4.22, 3.89, 3.7		
<b>Differential type:</b>	Hypoid bevel - Free		
<b>Comments:</b>	Replacement or rear axles assembly with MG type is not authorised		

**3.4. TRANSMISSION SHAFTS (EXPOSED)**

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

**3.5. WHEELS & TYRES**

<b>Wheel type - Original:</b>	Disc Wire spoke	<b>Material - Original:</b>	Steel
<b>Wheel type - Allowed:</b>	Disc Wire spoke	<b>Material - Allowed:</b>	Steel
<b>Fixture method:</b>	Studs Centre lock	<b>No. studs:</b>	4
<b>Wheel dia. &amp; rim width</b>	<b>FRONT</b>		<b>REAR</b>
<b>Original:</b>	4.0" x 13"		4.0" x 13"
<b>Allowed</b>	5.0" x 13"		5.0" x 13"
<b>Tyre Section:</b>			
<b>Original:</b>	5.60/5.90		5.60/5.90
<b>Allowed:</b>	185		185
<b>Aspect ratio - minimum:</b>	60% minimum aspect ratio.		
<b>Comments:</b>	Refer approved tyre list.		

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## SECTION 4 GENERAL

### 4.1. FUEL SYSTEM

<b>Tank Location:</b>	Rear	<b>Capacity:</b>	42 litres
<b>Fuel pump, type:</b>	Mechanical	<b>Make:</b>	AC
<b>Comments:</b>	None		

### 4.2. ELECTRICAL SYSTEM

<b>Voltage:</b>	Twelve	<b>Alternator fitted:</b>	Generator
<b>Battery Location:</b>	Behind driver's seat in battery box		
<b>Comments:</b>	None		

### 4.3. BODYWORK

<b>Type:</b>	Two seater roadster	<b>Material:</b>	Steel
<b>No. of seats:</b>	Two	<b>No. doors:</b>	Two
<b>Comments:</b>	None		

### 4.4. DIMENSIONS

<b>Track - Front:</b>	1295 mm	<b>Rear:</b>	1233 mm
<b>Wheelbase:</b>	2184 mm	<b>Overall length:</b>	3943 mm
<b>Dry weight:</b>	954 kg		
<b>Comments:</b>	None		

### 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations
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**Appendix**