

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:	Austin Healey	Model:	BN1
			BN2
			100M
Period of Original Manufacture:	5/1953 – 7/1956		
Motorsport Australia Historic Group:	Sa		
Date of Issue of this Document:	31/12/2024		





#### Update Loa

	op 3.300 = 09				
30/6/2022	Document layout				
31/12/2024	Inclusion of kerb and minimum racing weights				

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

## 1.1. CHASSIS

Description:	Steel Box section ladder frame with cruciform bracing
Period of Manufacture:	1953 - 1956
Manufacturer:	Austin
Chassis Number From:	138031 >>>
<b>Chassis Number location:</b>	Firewall
Material:	Steel
Comments	None

# 1.2. FRONT SUSPENSION

Description:	Independer	Independent front suspension, Upper and lower wishbone			
Spring Medium:	Coil	Coil			
Damper Type:	Armstrong -	– lever arm	Adjustable:	No	
Anti-sway bar:	Yes	Yes		Optional	
Suspension adjustable:	No	Method:	N/A		
Comments:	Spring rates	Spring rates and ride heights may be adjusted			

# 1.3. REAR SUSPENSION

Description:	Live axle	Live axle				
Spring Medium:	Semi elliptio	Semi elliptic leaf				
Damper Type:	Armstrong -	Armstrong – lever arm Adjustable No				
Anti-sway bar:	No	No		N/A		
Suspension adjustable:	No	No Method:				
Comments:	Spring rates	Spring rates and ride heights may be adjusted.				
	Fore and aft	location improvemen	nts allowed			

## 1.4. STEERING

Type:	Cam and peg	Make:	Austin
Comments	None		

# 1.5. BRAKES

	Front	Rear		
Type:	Drum	Drum		
Dimensions:	280 mm	280 mm		
Material of drum/disc:	Cast iron	Cast iron		
No. cylinders/pots per wheel:	Two	One		
Actuation:	Hydraulic	Hydraulic		
Caliper make:	Girling			
Caliper type:	Fixed	Fixed		
Material:	Cast iron	Cast iron		
Master cylinder make:	Girling	Girling		
Туре:	Single			
Adjustable bias:	No	No		
Servo Fitted:	No	No		
Comments:	Dual or tandem master cylinders permitted			

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

## 2.1. ENGINE

Make:	Austin	Austin		
Model:				
No. cylinders:	Four	Configuration:	In line	
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four	
Bore - Original:	87.3 mm	Max allowed:	88.8 mm	
Stroke - original:	111 mm	Max allowed:	111 mm	
Capacity - original:	2660 cc	Max allowed:	2748 cc	
Identifying marks:				
Cooling method:	Liquid			
Comments:	Reproduction alloy	Reproduction alloy blocks not permitted		

#### 2.2. CYLINDER HEAD

Make:	Austin				
No. of valves/cylinder:	Two	Inlet:	One	Exhaust:	One
No. of ports total:	Five	Inlet:	Two	Exhaust:	Three
No. of camshafts:	One	Location:	Block	Drive:	Chain
Valve actuation:	Pushrod				
Spark plugs/cylinder:	One				
Identifying marks:					
Comments:	Reproduction alloy/iron heads not permitted				

# 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:	SU	Model:	H4	
<b>Carburettor Number:</b>	Two			
Size:	2"			
Fuel injection Make:	N/A	Type:	N/A	
Supercharged:	No	Type:	N/A	
Comments:	None	·		

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

## 3.1. CLUTCH

Make:	Borg and Beck	
Type:	Dry plate	
Diameter:	229 mm	
No. of Plates:	One	
Actuation:	Mechanical	
Comments:	Clutch and method of actuation are free	

## 3.2. TRANSMISSION

Type - BN1:	3 speed syncromesh (Laycock and de Normanville overdrive)		
Type – BN2:	4 speed syncromesh (Laycock and de Normanville overdrive)		
Make:	Austin		
Gearbox location:	Behind engine		
No. forward speeds:	Three or four		
Gearchange type and location:	Floor remote		
Case material:	Cast iron		
Identifying marks:	N/A		
Comments:	BN1 may use a 4 speed gearbox		

# 3.3. FINAL DRIVE

Make:	Austin	Model:	
Ratios:	Various		
Differential type:	Hypoid from chassis 221536		
Comments:	None		

# 3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	One
Location:	Overdrive to final drive
Description:	Tubular with universal joints
Comments:	None

# 3.5. WHEELS & TYRES

Wheel type - Original:	Wire	Material - Original:		Steel	
Wheel type - Allowed:	Wire	Material	- Allowed:	Steel	
	Steel disc			Period alloy	
	Period alloy				
Fixture method:	Central hub	No. stud	s:	N/A	
	Bolt				
Wheel dia. & rim width	FRONT	REAR		REAR	
Original:	4" x 15"		4" x 15"		
Allowed	5" x 15"	5" x 15"		5" x 15"	
Tyre Section:					
Original:					
Allowed:	195/60 x 15"		95/60 x 15"		
Aspect ratio - minimum:	60% minimum aspect ratio.				
Comments:	Refer approved tyre list.				
	Rim size limited to combination that will fit under standard wheel				
	arch.				
	Alloy wheels should be Minilite type.				

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#### **SECTION 4 GENERAL**

# 4.1. FUEL SYSTEM

Tank Location:	Rear	Capacity:	54 litres
Fuel pump, type:	Electrical	Make:	SU
Comments:	Fuel pumps are free		

## 4.2. ELECTRICAL SYSTEM

Voltage:	Twelve 2 x 6 volt	Alternator fitted:	Generator
Battery Location:	Behind seats		
Comments:	None		

# 4.3. BODYWORK

Type:	Two seat roadster	Material:	Steel	
No. of seats:	Two	No. doors:	Two	
Comments:	BN2 has slightly larger front wheel arches, different rear axle.			
	100M had front suspension stiffened and the bonnet gained louvres, along			
	with a bonnet belt.			

## 4.4. DIMENSIONS

Track - Front:	1270 mm	Rear:	1285 mm
Wheelbase:	2290 mm	Overall length:	3830 mm
Approved Manufacturer's	915 kg		
kerb weight:			
Approved minimum racing	830 kg		
weight:			
Comments:	Track may vary dependent upon wheels fitted		

# 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

# Appendix