

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:	30/6/2022		





Update Log

30/6/2022	Document layout

### 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>>>
Chassis Number location:	Firewall
Material:	Steel
Comments	None

#### **1.2. FRONT SUSPENSION**

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

# 1.3. REAR SUSPENSION

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

# 1.4. STEERING

Туре:	Cam and peg	Make:	Austin
Comments	None		

# 1.5. BRAKES

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

# 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 сс	
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:	Pushroc	1			
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

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

# 2.5. FUEL SYSTEM

Carburettor Make:	SU	Model:	H4
Carburettor Number:	Two		
Size:	2″		
Fuel injection Make:	N/A	Туре:	N/A
Supercharged:	No	Туре:	N/A
Comments:	None		

### SECTION 3 - TRANSMISSION

### 3.1. CLUTCH

Make:	Borg and Beck
Туре:	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

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Wheel type - Original:	Wire	Materia	- Original:	Steel
Wheel type - Allowed:	Wire	Materia	- 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"		4" x 15"
Allowed	5″ x 15″		5″ x 15″	
Tyre Section:				
Original:				
Allowed:	195/60 x 15" 195/60 x 1		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.			

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

### 4.3. BODYWORK

Туре:	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	
Dry weight:	950 kg			
Comments:	Track may vary dependent upon wheels fitted			

# 4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix