



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:	Sprite Mark II Sprite Mark III Sprite Mark IV
Period of Original Manufacture:	Sprite Mark II – (948cc & 1098cc) – 1961 - 1962 Sprite Mark III – (1098cc – 1963) - 1966 Sprite Mark IV – (1275cc) 1966 –1974		
Motorsport Australia Historic Group:	Sb		
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Update Log

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SECTION 1 - CHASSIS

1.1. CHASSIS

Description:	Unitary construction
Period of Manufacture:	Sprite Mark II – (948cc & 1098cc) – 1961 - 1962 Sprite Mark III – (1098cc) – 1963 - 1966 Sprite Mark IV – (1275cc) 1966 –1974
Manufacturer:	BMC - Austin – Healey
Chassis Number From:	Sprite Mark II – HAN6-101 to 24731 Sprite Mark II – (1098cc) – HAN7-24732 to 38828 Sprite Mark III – HAN8-38829 to 64755 Sprite Mark IV – HAN9-64756 to 95286
Chassis Number location:	The Car Number and the Body Number are stamped on plates on the right-hand side of the firewall.
Material:	Steel
Comments	Bonnet must be steel

1.2. FRONT SUSPENSION

Description:	Independent by wishbones		
Spring Medium:	Coil		
Damper Type:	Armstrong – lever arm	Adjustable:	No
Anti-sway bar:	No	Adjustable:	N/A
Suspension adjustable:	No	Method:	N/A
Comments:	Spring rates and ride heights may be adjusted. Fitment of anti-sway bar permitted		

1.3. REAR SUSPENSION

Description:	Live rear axle		
Spring Medium:	Mark II & Mark III - Quarter elliptic Mark IV – semi – elliptic		
Damper Type:	Armstrong – lever arm	Adjustable	No
Anti-sway bar:	No	Adjustable:	N/A
Suspension adjustable:	No	Method:	N/A
Comments:	Spring rates and ride heights may be adjusted.		

1.4. STEERING

Type:	Rack and pinion	Make:	BMC
Comments	None		

1.5. BRAKES

	Front	Rear
Type – Mark II:	Drum	Drum
Dimensions:	178 mm x 32 mm	177 mm x 32 mm
Type – Mark III & IV:	Disc	Drum
Dimensions:	210 mm mm	177 mm x 32 mm
Material of drum/disc:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Two	One
Actuation:	Hydraulic	Hydraulic
Caliper make:	Lockheed	
Caliper type:	Fixed	
Material:	Cast iron	
Master cylinder make:	Lockheed	
Type:	Single	
Adjustable bias:	No	
Servo Fitted:	No	
Comments:	Dual or tandem master cylinders permitted. Servo permitted	

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Austin Healey		
Model:	"A" series		
No. cylinders:	Four	Configuration:	In line
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four
Bore – Original – M II (948cc):	62.94 mm	Max allowed:	64.58 mm
Stroke – original – Mk II (998cc):	76 mm	Max allowed:	76 mm
Capacity – original Mark II (998cc):	948 cc	Max allowed:	994 cc
Bore – Original – M II & Mk III (1098cc):	63 mm	Max allowed:	64.5 mm
Stroke – original – Mk II& Mk III (1098cc):	83.7 mm	Max allowed:	83.7 mm
Capacity – original Mk II & Mk III (1098cc):	1098 cc	Max allowed:	1149 cc
Bore – Original – Mk IV (1275cc):	70.7 mm	Max allowed:	72.1 mm
Stroke – original – Mk IV (1275cc):	81.3 mm	Max allowed:	81.3 mm
Capacity – original Mark IV (1275cc):	1275 cc	Max allowed:	1328 cc
Identifying marks:			
Cooling method:	Liquid		
Comments:	None		

2.2. CYLINDER HEAD

Make:	Austin Healey BMC "A" series		
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 and rockers		
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:	SU	Model:	Hs2
Carburettor Number:	Two		
Size:	1.125"		
Fuel injection Make:	N/A	Type:	N/A
Supercharged:	No	Type:	N/A
Comments:	Carburettor bore sizes are free. Single Weber DCOE45 13 permitted.		

SECTION 3 - TRANSMISSION

3.1. CLUTCH

Make:	Borg and Beck
Type:	Mk II - Coil spring Mk III - Coil spring Mk IV - Diaphragm
Diameter:	Mk II - 156 mm Mk III - 184 mm Mk IV - 159 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	Clutch and method of actuation are free

3.2. TRANSMISSION

Type:	4 speed synchromesh
Make:	BMC 'A' series
Gearbox location:	Behind engine
No. forward speeds:	Four
Gearchange type and location:	Central Floor
Case material:	Aluminium
Identifying marks:	
Comments:	Ratios are free

3.3. FINAL DRIVE

Make:	BMC	Model:	BMC 'A' series
Ratios:	Various		
Differential type:	Free		
Comments:	Limited slip differential permitted. Ratios free		

3.4. TRANSMISSION SHAFTS (EXPOSED)

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

3.5. WHEELS & TYRES

Wheel type - Original:	Disc Wire	Material - Original:	Steel
Wheel type - Allowed:	Period alloy	Material - Allowed:	Steel Period alloy
Fixture method:	Studs Knock off	No. studs:	Four
Wheel dia. & rim width	FRONT		REAR
Original:	Disc - 3.5" x 13" Wire - 4" x 13"		Disc - 3.5" x 13" Wire - 4" x 13"
Allowed	5" x 13"		5" x 13"
Tyre Section:			
Original:	5.20 x 13"		5.20 x 13"
Allowed:	165 x 13"		165 x 13"
Aspect ratio - minimum:	60% minimum aspect ratio.		
Comments:	Refer approved tyre list. Alloy wheels to be "Minilite" style		

SECTION 4 GENERAL

4.1. FUEL SYSTEM

Tank Location:	Under boot floor	Capacity:	27.3 litres
Fuel pump, type:	Mechanical	Make:	AC
Comments:	Fuel pumps are free		

4.2. ELECTRICAL SYSTEM

Voltage:	Twelve	Alternator fitted:	Mk II, Mk III - Generator Mk IV - Alternator
Battery Location:	Between engine and scuttle		
Comments:	None		

4.3. BODYWORK

Type:	Open 2 seater	Material:	Steel
No. of seats:	Two	No. doors:	Two
Comments:	None		

4.4. DIMENSIONS

Track - Front:	1160 mm	Rear:	1140 mm
Wheelbase:	2030 mm	Overall length:	3490 mm
Dry weight:	Mk II - 635 kg Mk IV - 685 kg		
Comments:	None		

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix