



5TH CATEGORY - HISTORIC RACING

GROUP Nb

APPROVED VEHICLE SPECIFICATION

This form details the approved specifications of individual vehicle models in the 5th Category Historic car group. To be issued with a 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 CAMS Manual of Motor Sport.

Make of Car: Austin / Morris
Model: Mini Cooper "S" Mk 1
Period of Original Manufacture: 1963 - 67
CAMS Historic Group: Nb
Date of issue of this document: September 2015
Specification changes introduced after 1/1/1965 are not eligible under Group Nb requirements



Refer to CAMS Manual of Motor Sport, Vehicle Eligibility, Historic Touring Cars, General Requirements & Nb Regulations for permitted modifications.

SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description: Uni – body
Period of Manufacture: 1963 – 67
Manufacturer: British Motor Corporation
Chassis no. from: K/A2S4**** or C/A2S7**** or YK2S2****
Chassis no. location: Various
Material: Steel

1.2 FRONT SUSPENSION

Description: Independent, Upper & lower arms with lower castor bar.
Spring Medium: Rubber cone
Damper Type: Telescopic **Adjustable:** No
Anti-sway bar: No
Suspension adjustable: No
Comments: Front suspension lower control arms and castor bars may be made adjustable.

1.3 REAR SUSPENSION

Description: Independent, with trailing arms
Spring medium: Rubber cone
Damper type: Telescopic **Adjustable:** No
Anti-sway bar: No
Suspension adjustable: No

1.4 STEERING

Type: Rack & pinion **Make:** BMC

1.5 BRAKES

	Front	Rear
Type:	Disc, solid	Drum, single leading shoe
Dimensions:	190 x 9.5 mm	178 x 31.75 mm
Material:	Cast iron	Cast iron
No. cylinders/pots per wheel:	Two	One
Actuation:	Hydraulic	Hydraulic
Caliper Make:	Lockheed	
Caliper Type:	Fixed	
Caliper Material:	Cast iron	
Master cylinder make:	Lockheed	Type: Single
Adjustable bias:	No	
Servo Fitted:	Yes	

SECTION 2 - ENGINE

2.1 ENGINE

Make:	BMC		
Model:	"A" series 9FSAY engine number prefix		
No. cylinders:	Four	Configuration:	In line
Cylinder block material:	Cast iron	Two/Four Stroke:	Four
Bore - Original:	70.61 mm	Max. allowed:	72.11 mm
Stroke - original:	81.28 mm		
Capacity - original:	1273 cc	Max. allowed:	1328 cc *
Cooling method:	Liquid		
Identifying marks:	N/A		
Comments:	Blocks from a Mk 2 prefix 9FXEY & 1100 prefix 12 (usually) allowed. Belt drive of camshaft permitted when retained within original chain cover.		

* Original stroke only. With reduced stroke, the bore is free and the max capacity is 1300 cc.

2.2 CYLINDER HEAD

Make:	BMC				
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 & rockers				
Spark plugs/cylinder:	One				
Identifying marks:	AEG163 or 126940, Eleven studs				

2.3 LUBRICATION

Method:	Wet sump		
Oil cooler standard:	Fitted	Location:	Behind grille

2.4 IGNITION SYSTEM

Type:	Coil & distributor
Make:	Lucas

2.5 FUEL SYSTEM

Carburettor Make:	SU	Model:	HS2
Carburettor number:	Two	Size:	1 ¼ inch

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make: Borg & Beck
Type: Diaphragm
Diameter: 185 mm
Actuation: Hydraulic
No. of Plates: One

3.2 TRANSMISSION

Type: Synchro – mesh, not on first*
Make: BMC
No. forward speeds: Four
Gearbox location: Below engine
Gear change type and location: Remote, centre floor
Case material: Alloy
Identifying marks: 22G 333, 22A 1522
Comments: Gearbox part numbers must be: 22G333, 22A1288 or 22G1128.
Comments: **None Synchronesh internals allowed (dog box)**
* 22G1128 gearbox has synchro on first

3.3 FINAL DRIVE

Make: BMC
Type: Combined as transaxle
Model:
Wheel drive method: Front
Ratios: Various
Differential type: Open / free

3.4 TRANSMISSION SHAFTS (EXPOSED)

Number: Two
Description: Halfshaft with Hardy-Spicer or donut rubber universal joints

3.5 WHEELS & TYRES

Wheel type - Original:	Disc	Material - Original:	Steel
Allowed:	Period cast	Allowed:	Alloy
Fixture method:	Studs	No. studs:	Four
Wheel dia. & rim width:	FRONT		REAR
Original:	10 x 4.5 inch		10 x 4.5 inch
Allowed:	10 x 5.5 inch		10 x 5.5 inch
Tyres original:	450 – 10		450 – 10
Tyres allowed:	60% minimum aspect ratio, refer approved tyre list.		

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank Location:	Boot, LHR Qrt panel	Capacity:	25 litres
Fuel pump type and location:	Electric, rear sub frame	Make:	SU AUF 201
Comments:	Optional RHR Qrt panel fuel tank permitted.		

4.2 ELECTRICAL SYSTEM

Voltage:	12	Generator:	Fitted
Battery Location:	Boot		

4.3 BODYWORK

Type:	Closed touring	Material:	Steel
No. of seats:	Four	No. doors:	Two

Comments:

Mk1 body shell permitted if fitted with sliding window doors & windscreen wipers 'park' to the RH bottom of the windscreen.

Full Cooper "S" badge work & trim required.

Cut – outs on front apron below bumper bar are from July 1963.

Standard seats, if used require frame & mounting reinforcements.

Speedo aperture opening modifications

The firewall may be modified to allow for the insertion of a carburettor box. The box to be adequate sealed. The dimensions of the aperture shall not exceed 175 mm high and 215 mm wide.

The instrument binnacle may be moved to accommodate the carburettor box. Not to protrude beyond a line between the front face of the parcel shelf and window surround base.

4.4 DIMENSIONS

Track - Front:	1233 mm	Rear:	1202 mm
Wheelbase:	2036 mm	Overall length:	3054 mm
Dry weight:	600 kg		

4.5 SAFETY EQUIPMENT

Refer applicable Group Regulations