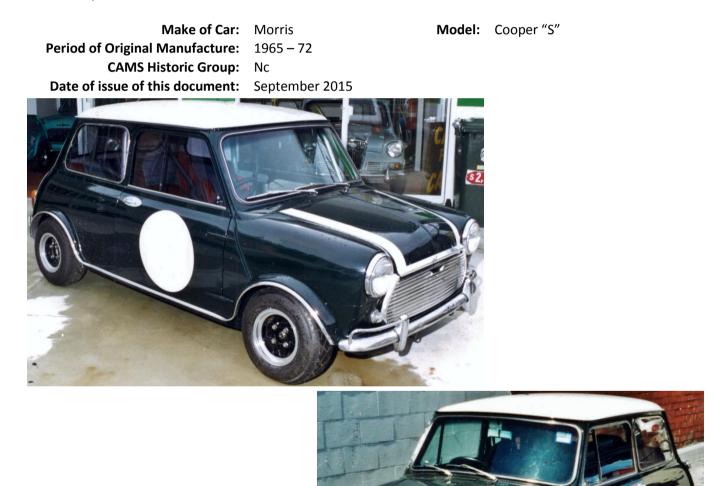


**5TH CATEGORY - HISTORIC RACING** 

## **GROUP** Nc

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.



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

# **SECTION 1 - CHASSIS**

## 1.1 CHASSIS FRAME

Description:Uni – bodyPeriod of Manufacture:Jan 1965 to end of 1971Manufacturer:British Motor CorporationChassis no. from:YKG2S2\*\*\*\* or YKG2S4\*\*\*\*Chassis no. location:VariousMaterial:Steel

## **1.2 FRONT SUSPENSION**

Description:	Independent, Upper & lower arms with lower castor bar.		
Spring Medium:	Rubber cone or Hydrolastic		
Damper Type:	Telescopic	Adjustable:	No
Anti-sway bar:	Fitted	Adjustable:	No
Suspension adjustable:	No		
Comments:			

### **1.3 REAR SUSPENSION**

Description:	Independent, with trailing arm	S	
Spring medium:	Rubber cone or Hydrolastic		
Damper type:	Telescopic	Adjustable:	No
Anti-sway bar:	Fitted	Adjustable:	No
Suspension adjustable:	No		

#### 1.4 STEERING

Type: Rack & pinion

Make: BMC

	1.5 BRAKES		
	Front		Rear
Туре:	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 9FS	AY 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 сс	Max. allowed:	1328 сс
Cooling method:	Liquid		
Identifying marks:	N/A		
Comments:	Blocks from an	Mk 2 prefix 9FXEY & 1100S pr	efix 12 allowed.

### 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, E	leven studs		

#### 2.3 LUBRICATION

Method:	Wet sump
Oil cooler standard:	No

### 2.4 IGNITION SYSTEM

Type:Coil & distributorMake:Lucas

### 2.5 FUEL SYSTEM

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

## **SECTION 3 - TRANSMISSION**

3.1 CLUTCH

Make:Borg & BeckType:DiaphragmDiameter:185 mmNo. of Plates:Actuation:Hydraulic

### 3.2 TRANSMISSION

Туре:	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		
Comments:	Gearbox part numbers must be 22G333, 22A1288 or 22G1128.		
Comments:	None Synchromesh internals allowed (dog box)		
*	22C1120		

\* 22G1128 gearbox has synchro on first

### 3.3 FINAL DRIVE

Generator: Fitted

Make:BMCType:Combined as transaxleWheel drive method:FrontRatios:VariousDifferential type:Open / free

#### 3.4 TRANSMISSION SHAFTS (EXPOSED)

Number:TwoDescription:Halfshaft with Hardy-Spicer or Dunlop Universal Joints, and C/V<br/>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 inc	ch	10 x 4.5 inch
Allowed:	10 x 6.0 in	ch	10 x 6.0 inch
Tyres original:	450 - 10		450 – 10
Tyres allowed:	60 % minimum aspec	t ratio, refer approved t	tyre list.

## SECTION 4 - GENERAL

#### 4.1 FUEL SYSTEM

Tank Location:	Boot, Qrt panels Capac	ity:	25 litres x 2
Fuel pump type and location:	Electric, rear sub frame Ma	ke:	SU AUF 201
Comments:			

#### 4.2 ELECTRICAL SYSTEM

Voltage: 12 Battery Location: Boot

#### 4.3 BODYWORK

Туре:	Closed touring	Material:	Steel & aluminium
No. of seats:	Four	No. doors:	Two

#### Comments:

When viewed from above, the maximum width between the outside edge of the flares shall not exceed Front 1475 mm, Back 1435 mm.

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.

Part Numbers for Flares, Perspex, and Aluminium Panels are as follows: Aluminium Doors : # C/A JJ 3379, Aluminium Boot/Bonnet: # C/A JJ 3380, Flare Kit: # C/A JJ 3316, Flare Kit: # C/A JJ 3353, Perspex Window: # C/A JJ 3363.

A non-opening perspex window kit is permissible, subject to the use of appropriate window seals.

Track - Front:1233 mmWheelbase:2036 mmDry weight:600 kg

Rear: 1202 mm Overall length: 3054 mm

## 4.5 SAFETY EQUIPMENT Refer applicable Group Regulations

Historic Group Nc - Mini Cooper Mk1 and MkII - Additional Notes

These notes are intended to assist Eligibility Officers in assessing candidate cars for classification under Group Nc regulations.

The Cooper 'S' as a model continued to be subject to technical development over a number of years – FIA Group 2 Variants were being documented as late as 1970.

**September 1965 :** Cooper S Mark 1 in production in Australia with two fuel tanks giving 11 gallons (50 litres) capacity, laminated windscreen and seat belts of the approved type for racing with Three – point fixing. It in production until April 1969. Engine was 1.275 litre with twin SU's

October 1965 : Australian cars were fitted with wind up windows, 1967 : Cooper S Mark II introduced in UK, with oval S badge and bolt on wheel arch flares. May 1969: Mark 11 introduced in Australia.
1970 : UK Mk 3 cars were fitted with an updated grille. August 1971 : Body design updated and the new

model sold as a clubman . Cooper S was replaced by Clubman GT 1275 .

Cars with wind up windows should represent Australian cars and have a heater, twin tanks and short number plate indentation.

Cars with sliding windows should represent UK cars with optional heater, optional twin tanks and long number plate indentation.

The use of Aluminium door skins is permitted only on sliding window types. Aluminium bonnet and boot options from the era may be used only in their complete form.

Most Series Production cars were Aust. built Mk.1 & Mk 2, with Hydro.suspension, wind up windows, heater, and 2 tanks. Improved Production cars were usually English spec. ie: Dry suspension, sliding windows, optional heater, optional tanks and long number plate indentation.

An Austin Cooper "S" is permissible in Nc form with the following provisions: Single fuel tank, English Mk. II or Mk III style grille (Same as Morris, except for wavy slats), Clubman style tail lights. Plus all badge work, chrome work, interior cosmetics are applicable to that model. All other specifications shall apply as per Morris Cooper 'S'.