Manufacturers Reference No. for Application AD050/61

F.I.A. Recognition No. 45

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

Form of Recognition in accordance with Appendix J to the International Sporting Code.

Manufacturer The British Motor Corporation Limited

Model Austin 7 Cooper/Morris Mini Cooper Year of Manufacture 1961

Serial No. of Chassis C-A2S7 & K-A2S4

Engine 9F-SA-H

Type of Coachwork 2 door saloon

Recognition is valid from 31 OCT [illegible] In category Grand Touring

Stamp of F.I.A. to be affixed here.

AD050/61

General description of car:

4 seater, 2 door saloon transverse engine, with unit gearbox and final drive mounted forward and driving front wheels

Suspension - Independent all round via rubber cone springs.

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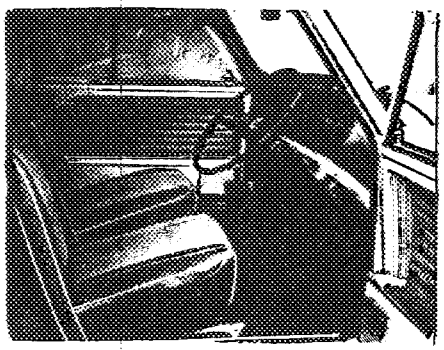

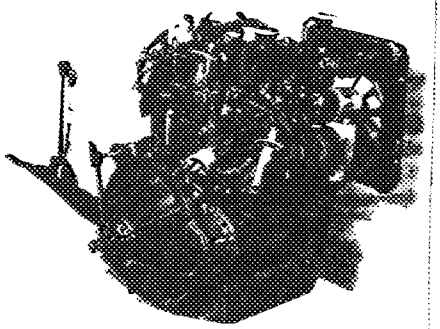

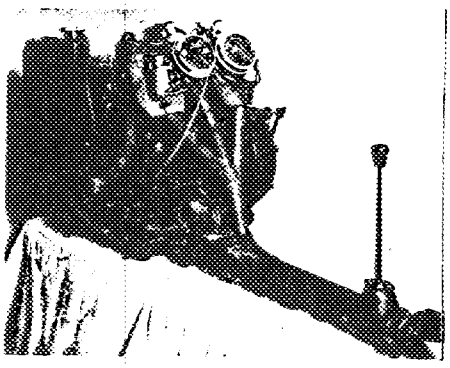

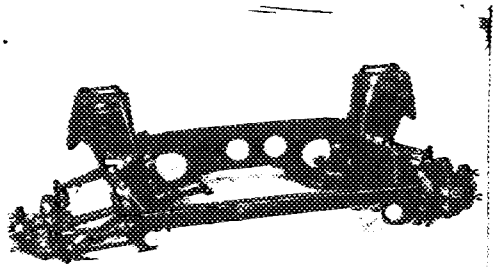

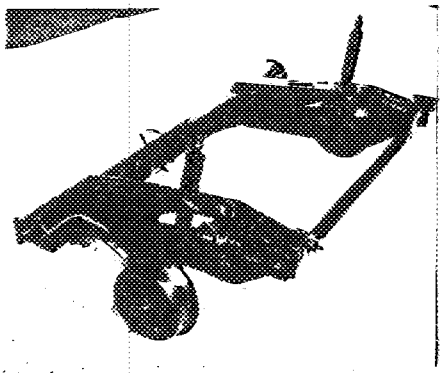

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ENGINE

in line Yes

No. of cylinders 4 in V -

opposed -

Cycle 4 stroke Firing order 1.3.4.2.

Capacity 997 c.c. Bore 62.43 m.m. Stroke 81.3 m.m.

Maximum rebore 0.040" Resultant capacity 1029 c.c.

Material of cylinder block Cast Iron Material of sleeves, if fitted -

Distance from crankshaft centre line to top face of block at centre line of cylinders 218.4 m.m.

Material of cylinder head Cast iron Volume of one combustion chamber 26.36 c.c.

Compression ratio 9.0/1

Material of piston Aluminium alloy No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 31.54 m.m.

Bearings { Crankshaft main bearings: Type Copper Lead Dia. 44.47 m.m.
Connecting rod big end: Type Copper Lead Dia. 40.89 m.m.

Weights { Flywheel 6.7 kg.
Crankshaft 10.43 kg.
Connecting rod .695 kg.
Piston with rings .202 kg.
Gudgeon pin .054 kg.

No. of valves per cylinder 2 Method of valve operation Push Rod & Rockers

No. of camshafts One Location of camshafts Crankcase

Type of camshaft drive Roller chain

Diameter of valves:	Inlet 29.37 m.m.		Exhaust 25.4 m.m.	
Diameter of port at valve seat:	Inlet 27.127 m.m.		Exhaust 23.09 m.m.	
Tappet clearance for checking timing:	Inlet .48 m.m.		Exhaust .48 m.m.	
Valves open:	Inlet 16° BTDC		Exhaust 51° BBDC	
Valves close:	Inlet 56° ABDC		Exhaust 21° ATDC	
Maximum valve lift:	Inlet 7.94 m.m.		Exhaust 7.94 m.m.	
Degrees of crankshaft rotation from zero to—				
Maximum lift:	Inlet 110° ATDC		Exhaust 255° ATDC	
¾ Maximum lift:	Inlet 58° ATDC		Exhaust 203° ATDC	

Valve springs:	*Inlet*	*Exhaust*
Type	Coil	Coil
No. per valve	One	One

Carburettor: Type Semi-down draught No. fitted 2
(up or down draft, horizontal)

Make S.U. Model HS2 or Alternative H4

Flange hole diameter 31.75 m.m. Choke diameter 31.75 m.m.

Main jet identification No. 0.090" - standard needle - GZ

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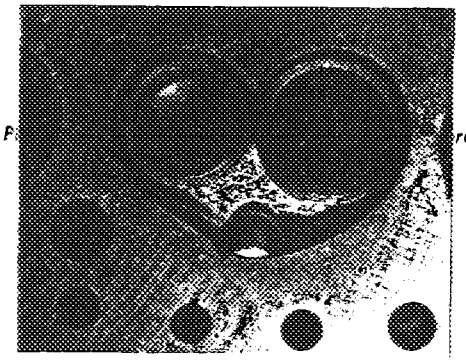
Air filter: Type Pancake type No. fitted 2

Inlet manifold:

Diameter of flange hole at carburettor 38.1 m.m.

Diameter of flange hole at port 33.4 m.m.



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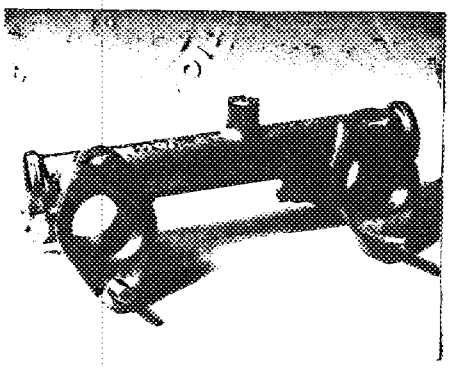
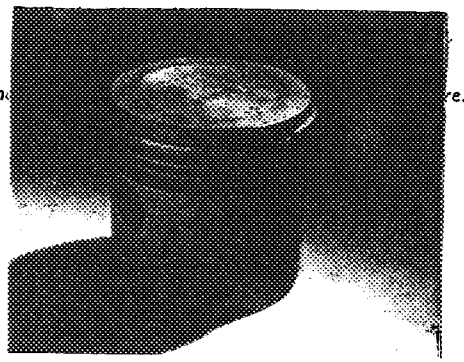


Exhaust manifold:

Rectangular

~~Diameter~~ of flange hole at port 2 outer 23.07x27.7 centre 26.1x27.7 m.m.

Diameter of flange hole at connection to silencer inlet pipe 42.06 m.m.



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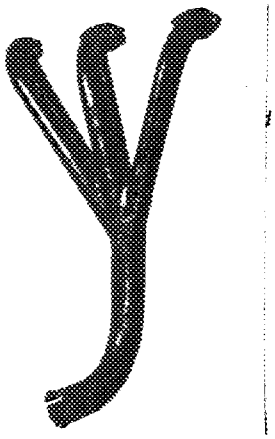

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ENGINE ACCESSORIES

Make of fuel pump S.U. No. fitted One

Method of operation Electrical

Type of ignition system Coil and distributor coil or magneto

Make of ignition Lucas Model DM2

Method of advance and retard centrifugal and vacuum

Make of ignition coil Lucas Model HA12

No. of ignition coils One Voltage 12

Make of dynamo Lucas Model C40

Voltage of dynamo 12 Maximum output 22 amps.

Make of starter motor Lucas Model M35

Battery: No. fitted One Voltage 12 Capacity 43 a.mp. hour

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Make Austin/Morris Model Cooper F.I.A. Recognition No.

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TRANSMISSION

Make of clutch B.M.C. Type Dry plate

Diameter of clutch plate 181mm No. of plates One

Method of operating clutch Hydraulic, to toggle lever, to direct ball thrust

Make of gearbox B.M.C. Type Synchromesh, 2nd, 3rd, top

No. of gearbox ratios 4 forward, 1 reverse

Method of operating gearshift Remote control

Location of gearshift Through floor just forward of seat

Is overdrive fitted? No

Method of controlling overdrive, if fitted -

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	3.20:1	$\frac{26}{20} \times \frac{32}{13}$	3.627:1	$\frac{28}{19} \times \frac{32}{13}$				
2.	1.916:1	$\frac{26}{20} \times \frac{28}{19}$	2.172:1	$\frac{28}{19} \times \frac{28}{19}$				
3.	1.355:1	$\frac{26}{20} \times \frac{24}{23}$	1.412:1	$\frac{28}{19} \times \frac{23}{24}$				
4.	1:1	Direct	1:1	Direct				
R	3.20:1	$\frac{26 \times 18 \times 32}{20 \quad 13 \quad 18}$	3.627:1	$\frac{28 \times 18 \times 32}{19 \quad 13 \quad 18}$				

Type of final drive Single Helical Spur Gear

Type of differential Bevel pinion

Final drive ratio 3.765/1 Alternatives 3.44/1, 4.26/1

No. of teeth 17-64 18-62 15-64

Overdrive ratio, if fitted -

WHEELS

Type Disc, with safety ledge rim Weight 3.175 kg.

Method of attachment 4 Stud

Rim diameter 254 m.m. Rim width 88.8 m.m.

Tyre size: Front 5.20 x 10 Rear 5.20 x 10

BRAKES

Method of operation Hydraulic

Is ~~servo~~ assistance fitted? Intensifier, operating on frontbrakes only

Type of servo, if fitted Intensifier, Lockheed hydraulic

No. of hydraulic master cylinders One Bore 19.05 m.m.

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	Front		Rear	
No. of wheel cylinders	2 per Brake		1 per Brake	
Bore of wheel cylinders	41.2	m.m.	19.05	m.m.
Inside diameter of brake drums	-	m.m.	177.8	m.m.
No. of shoes per brake	-		2	
Outside diameter of brake discs	178	m.m.	-	m.m.
No. of pads per brake	2		-	

Dimensions of brake linings per shoe or pad (if all shoes or pads in each brake are not of same dimensions, specify each)

	Front		Rear	
Length	55	m.m.	171.45	m.m.
	-	m.m.	-	m.m.
Width	38	m.m.	31.75	m.m.
Total area per brake	3860	m.m.²	10,887	m.m.²

SUSPENSION

	Front	Rear
Type	Transverse wishbone	Trailing arm
Type of spring	Rubber Cone	Rubber Cone
Is stabiliser fitted?	No	NO
Type of shock absorber	Telescopic	Telescopic
No. of shock absorbers	1 per wheel	1 per wheel

STEERING

Type of steering gear Rack & pinion

Turning circle of car 9.2 m., approx.

No. of turns of steering wheel from lock to lock 2½

CAPACITIES AND DIMENSIONS

Fuel tank 25 litres Sump 5.12 litres

Radiator Coolant 3.5 litres

Overall length of car 305.5 cm. Overall width of car 141 cm.

Overall height of car, unladen (with hood up, if appropriate) 134.6 cm.

Distance from floor to top of windscreen:

Highest point 105 cm. Lowest point 102 cm.

Width of windscreen:

Maximum width 112 cm. Minimum width 105 cm.

*Interior width of car 116.8 cm.

No. of seats 4

Track: Front 122 cm. Rear 116.5 cm.

Wheelbase 203.5 cm. Ground clearance 162 m.m.

*(To be measured at the immediate rear of the steering wheel, and the width quoted to be maintained in a vertical plane of not less than 25 cms.)

Overall weight with water, oil and spare wheel, but without fuel 584.8 kgs.

Additional information for cars fitted with two-cycle engines

System of cylinder scavenging.....

Type of lubrication.....

Size of inlet port:

Length measured around cylinder wall.....m.m.

Height.....m.m. Area.....m.m.²

Size of exhaust port:

Length measured around cylinder wall.....m.m.

Height.....m.m. Area.....m.m.²

Size of transfer port:

Length measured around cylinder wall.....m.m.

Height.....m.m. Area.....m.m.²

Size of piston port:

Length measured around piston.....m.m.

Height.....m.m. Area.....m.m.²

Method of pre-compression.....

Bore and stroke of pre-compression cylinder, if fitted.....m.m.

Distance from top of cylinder block to lowest point of inlet port.....m.m.

Distance from top of cylinder block to highest point of exhaust port.....m.m.

Distance from top of cylinder block to highest point of transfer port.....m.m.

Drawing of cylinder ports.

Supercharger, if fitted

Make..... Model or Type No.....

Type of drive..... Ratio of drive.....

Fuel injection, if fitted

Make of pump..... Model or Type No.....

Make of injectors..... Model or Type No.....

Location of injectors.....

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Optional equipment affecting preceeding information:—

Coolant capacity without heater - 3 litres
Twin Fuel tanks, giving total capacity - 45 litres
Sump guard - AD034/64
Oil cooler - DEV2769
Recirculatory or fresh air heater
Radio

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

MARQUE ET MODELE	VALIDITE HOMOLOGATION	FICHE NR.
AUSTIN COOPER / MORRIS MINI COOPER	10/61 - 1/62	45

	GROUPE / CLASSE
	GT/1000

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES

Autres homologations du modèle HOMOLOGUEE GR 1 fiche 1095

Vérifiée le 22/7/95 par [signature] visée ce jour le _____ par _____