

Manufacturers Reference No. for Application

ADO.50/13/64



F.I.A. Recognition No.

1300

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 in association with The Cooper Car Co. Ltd.

Model Morris/Austin Mini Cooper "S" 1275 Year of Manufacture 1964

Chassis C/A2S7 & K/A2S4

Serial No. of

Engine 9F/SA/Y

Type of Coachwork Saloon 2 - door

Recognition is valid from 11th April 1964 In category Tourisme



Phot

ight.



Hubert Schreyer

Stamp of F.I.A./R.A.C. to be
affixed here.

Form: R.F.I.A.

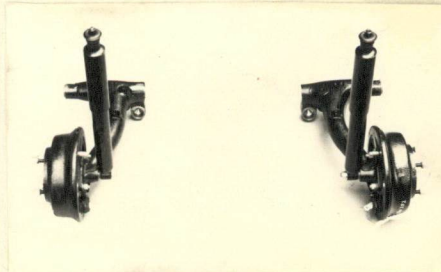
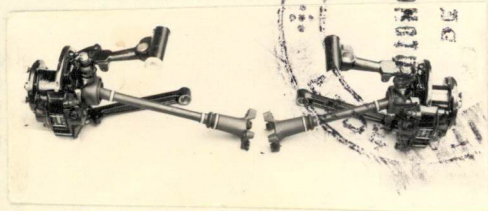
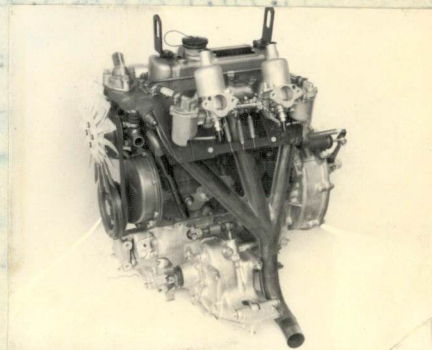
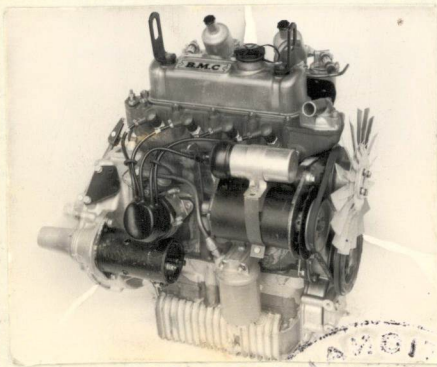
Cooper "S"

Make Morris/Austin Model 1275 F.I.A. Recognition No.

General description of car:

Specify here material/s of chassis/body construction

4 seater 2 door saloon of steel unitary construction powered by transverse engine in unit with gearbox and final drive, driving front wheels. Suspension, - all independent via rubber cone springs.



MOBILE

ENGINE

in line Yes Catalogued B.H.P. 78
 No. of cylinders 4 in V _____ at R.P.M. 5800
 opposed _____

Cycle 4 stroke Firing order 1 3 4 2

Capacity 1275 c.c. Bore 70.63 m.m. Stroke 81.33 m.m.

Maximum rebore +0.020" Resultant capacity 1293 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 225.7 m.m.

Material of cylinder head Cast iron/polished finish Volume of one combustion chamber 21.4 c.c.

Compression ratio 12.0 or 9.75:1

Material of piston Aluminium alloy No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 38.04 m.m.

Bearings { Crankshaft main bearings: Type Copper lead Dia 50.82 m.m.
 Connecting rod big end: Type Copper lead Dia 41.3 m.m.

Weights { Flywheel 6.8 kg.
 Crankshaft 10.8 kg.
 Connecting rod 0.68 kg.
 Piston with rings 0.29 kg.
 Gudgeon pin 0.09 kg.

No. of valves per cylinder 2 Method of valve operation Pushrod & rocker

No. of camshafts 1 Location of camshafts cylinder block

Type of camshaft drive Duplex chain

Diameter of valves: Inlet 35.58/37.71 m.m. Exhaust 30.84/30.96 m.m.

Diameter of port blended & polished
 at valve seat: Inlet 33.22/33.73 m.m. Exhaust 28.47/28.98 m.m.

Tappet clearance for checking timing: Inlet 0.41 m.m. Exhaust 0.41 m.m.

Valves open: Inlet 50° BTDC Exhaust 75° BBDC

Valves close: Inlet 70° ABDC Exhaust 45° ATDC

Maximum valve lift: Inlet 10.01 m.m. Exhaust 10.01 m.m.

Degrees of crankshaft rotation from zero to—

Maximum lift: Inlet 152° Exhaust 152°

$\frac{3}{4}$ Maximum lift: Inlet 93° Exhaust 93°

Valve springs: Inlet _____ Exhaust _____
 Type Coil _____ Coil _____

No. per valve 2 _____ 2 _____

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

Make S.U. Model HS2 or HL

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

Main jet identification No. 0.090"

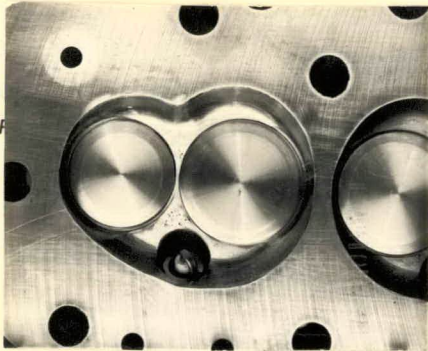
Make Morris/Austin Model Cooper "S" 1275 F.I.A. Recognition No.

Air filter: Type Dry replaceable element No. fitted 1

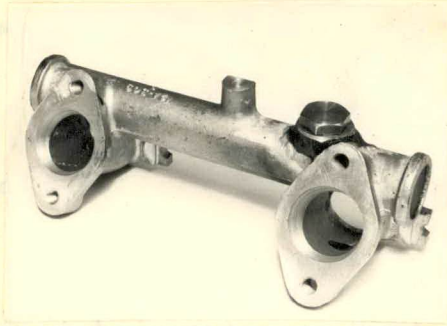
Inlet manifold:

Diameter of flange hole at carburettor 38.1 m.m.

Diameter of flange hole at port 33.99/34.24 m.m.



here.



Exhaust manifold:

Diameter of flange hole at port Outer 27.79 x 23.01 Centre 27.79 x 26.19 m.m.

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



if pistc



ed here.

9.75:1

12.0:1



ENGINE ACCESSORIES

Make of fuel pump S.U. No. fitted 1

Method of operation Electrical

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model 25D4

Method of advance and retard Centrifugal balance weights

Make of ignition coil Lucas Model HA12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model G40

Voltage of dynamo 12 Maximum output 28 amps.

Make of starter motor Lucas Model M35G

Battery: No. fitted 1 Voltage 12 Capacity 43 amp. hour

Oil Cooler (if fitted) type - Capacity - pints

Make Morris / Austin Mode Cooper "S" 1275 F.I.A. Recognition No.

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TRANSMISSION

Make of clutch Borg & Beck Type Diaphragm spring
 Diameter of clutch plate 184.0 mm No. of plates 1
 Method of operating clutch Hydraulic
 Make of gearbox EMC Type Synchro 2nd 3rd Top
 No. of gearbox ratios 4 forward 1 reverse
 Method of operating gearshift Manual
 Location of gearshift Central between front seats
 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.	3.2:1	$\frac{26 \times 32}{20 \times 13}$	3.07:1	$\frac{25 \times 32}{20 \times 13}$	2.56:1	$\frac{24 \times 32}{23 \times 13}$	2.57:1	$\frac{23 \times 32}{22 \times 13}$
2.	1.916:1	$\frac{26 \times 28}{20 \times 19}$	1.875:1	$\frac{25 \times 27}{20 \times 18}$	1.78:1	$\frac{24 \times 29}{23 \times 17}$	1.72:1	$\frac{23 \times 28}{22 \times 17}$
3.	1.357:1	$\frac{26 \times 24}{20 \times 23}$	1.307:1	$\frac{25 \times 23}{20 \times 22}$	1.24:1	$\frac{24 \times 25}{23 \times 21}$	1.25:1	$\frac{23 \times 24}{22 \times 20}$
4.	1.0:1		1.0:1		1.0:1		1.0:1	
∑ R.	3.2:1	$\frac{26 \times 18 \times 32}{20 \times 13 \times 18}$	3.07:1	$\frac{25 \times 18 \times 32}{20 \times 13 \times 18}$	2.56:1	$\frac{24 \times 18 \times 32}{23 \times 13 \times 18}$	2.57:1	$\frac{23 \times 18 \times 32}{22 \times 13 \times 18}$

Type of final drive Helical spur gear

Type of differential Bevel pinion

Final drive ratio 3.44:1 Alternatives 3.765:1, 3.938:1, 4.133:1, 4.26:1, 4.35:1

No. of teeth 18/62 Alternatives 17/64, 16/63, 15/62, 15/64, 15/65,

Overdrive ratio, if fitted 4.786:1, 67/14

WHEELS

Type Disc Weight 5.52 or 4.65 kg.

Method of attachment 4 studs & nuts

Rim diameter 254.0 m.m. Rim width 208.9 or 114.3 m.m.

Tyre size: Front 145 x 10 Rear 145 x 10

BRAKES

Method of operation Hydraulic

Is servo assistance fitted? Yes

Type of servo, if fitted Diaphragm servo

No. of hydraulic master cylinders 1 Bore 15.875 m.m.

Make Morris/Austin Model Cooper "S" 1275 F.I.A. Recognition No. _____

	Front		Rear
No. of wheel cylinders	<u>4</u>		<u>2</u>
Bore of wheel cylinders	<u>44.45</u> m.m.		<u>15.88</u> m.m.
Inside diameter of brake drums		m.m.	<u>177.8</u> m.m.
No. of shoes per brake			<u>2</u>
Outside diameter of brake discs	<u>190.5</u> m.m.		
No. of pads per brake	<u>2</u>		
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	<u>69.4</u> m.m.		<u>171.45</u> m.m.
		m.m.	
Width	<u>45.5</u> m.m.		<u>31.75</u> m.m.
Total area per brake	<u>5575.</u> m.m. ²		<u>10887.</u> m.m. ²

SUSPENSION

	Front		Rear
Type	<u>Transverse wishbone.</u>		<u>Trailing arm</u>
Type of spring	<u>Rubber cone</u>		<u>Rubber cone</u>
Is stabiliser fitted?	<u>No</u>		<u>No</u>
Type of shock absorber	<u>Telescopic</u>		<u>Telescopic</u>
No. of shock absorbers	<u>2</u>		<u>2</u>

STEERING

Type of steering gear Rack & pinion

Turning circle of car 9.45 m., approx.

No. of turns of steering wheel from lock to lock 2 $\frac{1}{3}$

CAPACITIES AND DIMENSIONS

Fuel tank 25 or 50 litres Sump 4.5 litres

Radiator 3.5 litres

Overall length of car 305.5 cm. Overall width of car 141.0 cm.

Overall height of car, unladen (with hood up, if appropriate) 135.0 cm.

Distance from floor to top of windscreen:

Highest point 105.0 cm. Lowest point 102.0 cm.

Width of windscreen

Maximum width 112.0 cm. Minimum width 105.0 cm.

*Interior width of car 116.8 cm.

No. of seats 4

Track: Front 120.7 or 124.2 ± 1.1 cm. Rear 117.6 or 120.3 ± .5 cm.

Wheelbase 203.5 cm. Ground clearance 162.0 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 620. kgs.

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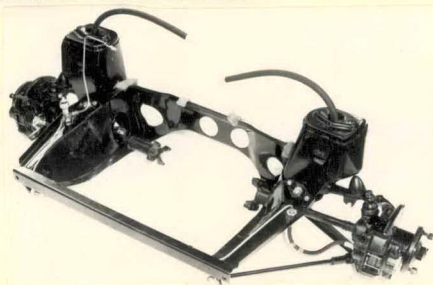
Federation Internationale de l'Automobile.

Amendment to Form of Recognition

Manufacturer The British Motor Corporation in association with The Cooper Car Company

Model Morris/Austin Mini Cooper "S" 1275

Introduction of Hydrolastic Suspension



Suspension

Front

Rear

Type

Transverse wishbone

Trailing arm

Type of spring

Hydrolastic Displacer

Hydrolastic Displacer

Is stabilizer fitted

No

No

Type of shock absorber

Incorporated in Displacer

Incorporated in Displacer

Optional Extra - Page 8.

Oil Cooler - ARO.9809

Capacity 0.53 pints



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

Date amendment is valid from

16 Nov 1964

Form: R.F.I.B.

Optional equipment affecting preceding information:—

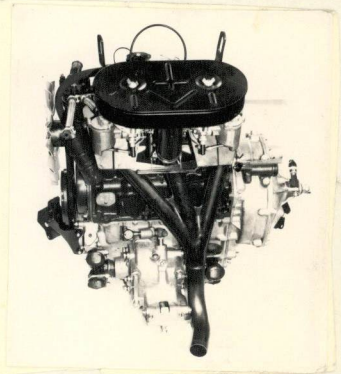
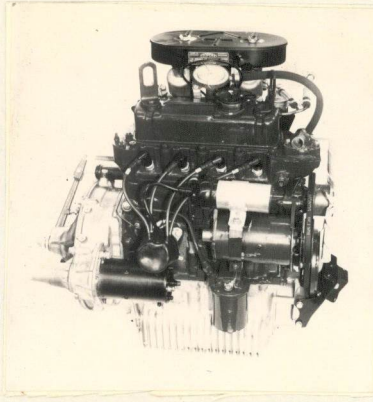
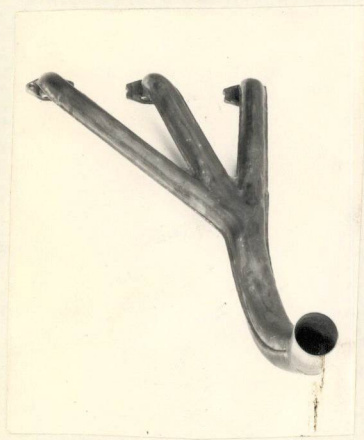
- Oil cooler - ARA.167
- Fuel tank - 60 litres - 21A.1469
- Sump guard - 21A.1340
- Fresh air heater
- Export radiator
- Export fan - 2A.997

Touring Equipment:-

- Camshaft - I.O. 5° BTDC EX.O. 51° BTDC
- I.C. 42° ABDC EX.C. 21° ATDC
- Maximum valve lift - 8.08 mm
- Degrees crankshaft rotation from zero to:-
- Max. lift - Inlet 110° ATDC
- Exhaust 105° BTDC
- $\frac{3}{4}$ max. lift - Inlet 62 $\frac{1}{2}$ ° ATDC
- Exhaust 157° 36' BTDC

Exhaust manifold -
Part No. 12G.615

Close-Circuit Breathing System



Manufacturers Reference No. for Application

ADO 50/13/64



F.I.A. Recognition No. 1300 /1/ET

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Amendment to Form of Recognition

Manufacturer The British Motor Corporation in association with The Cooper Car Company

Model Morris/Austin Mini Cooper "S" 1275

Closed-Circuit Breathing System.

Introduced intermittently to suit North America market requirements.

See photographs Page 8

Carburettor - details omitted from original Form of Recognition:-

Make S.U.

Model HS2 or H4

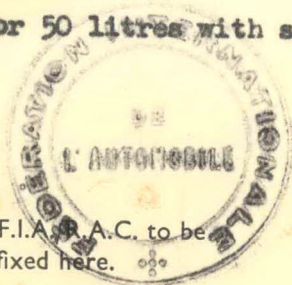
Flange Hole diam. 31.74 or 38.0mm

Choke diam. Variable

Capacities and Dimensions - explanation.

Fuel tank 25 or 50 litres with supplementary 25 litre tank fitted.

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



Date amendment is valid from

16 Nov. 1964

Form: R.F.I.B.

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F.I.A. Recognition No. 1300

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2/ET

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Manufacturer The British Motor Corporation in Association with
The Cooper Car Co. Ltd.
Model Morris/Austin Mini Cooper S 1275

Add to optional equipment

High Traction Differential

Steel Flywheel

Part No. C/AJJ 3303

Part No. AEG 421

Weight 5.03 kg



Hubert Phoenix

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Date amendment is valid from

1st April 1965
Form: R.F.I.B.

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1300 /B/V

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Model Morris/Austin Mini Cooper "S" 1275

Optional Extra:-

Cooling Fan - 6 blade - 2A.998



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Date amendment is valid from

1st June 1965

Form R.F.I.B.