~~Verification de poids~~

Manufacturers Reference No. for Application ADO.41/64

F.I.A. Recognition No. 161

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.I.

Federation Internationale de l'Automobile.

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

Manufacturer The Austin Motor Company Limited in association with Donald Healey Motor C. Ltd.

Model Austin Healey Sprite MK III Year of Manufacture 1964

Serial No. of Chassis HAN - 8

Engine 10CC -Da- H or L

Type of Coachwork G.T.

Recognition is valid from 11th April 1964 In category Grand Touring

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

Form: R.F.I.A.

Make Austin Healey Model Sprite MK III F.I.A. Recognition No.

General description of car:

Specify here material/s of chassis/body construction

Two seater G.T. of steel/aluminium unitary construction powered by 4 cylinder OHV engine driving hypoid final drive through synchromesh 4 speed gearbox. Front suspension 3/4 floating axle, semi elliptic leaf springs.

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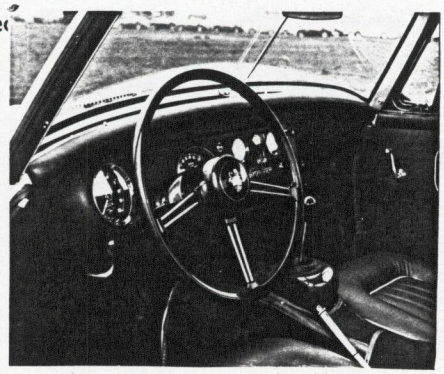

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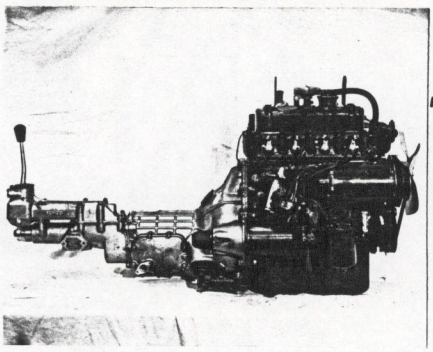

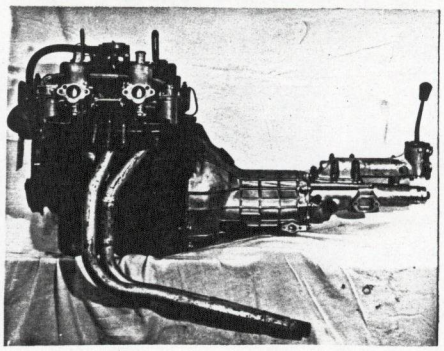

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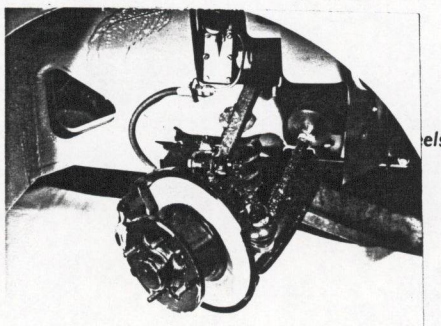

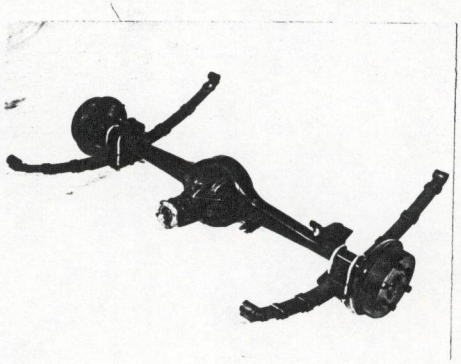

Make Austin Healey Model Sprite MKIIIF I.A. Recognition No.

ENGINE

in line Yes, Catalogued B.H.P. 61

No. of cylinders 4 in V , at R.P.M. 5750

opposed

Cycle 4 stroke Firing order 1, 3, 4, 2

Capacity 1098 c.c. Bore 64.58 m.m. Stroke 83.72 m.m.

Maximum rebore 1.2 mm Resultant capacity 1138 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 218.3 / 218.57 m.m.

Material of cylinder head Cast Iron Volume of one combustion chamber 28.29 c.c.

Compression ratio 8.9:1

Material of piston Aluminium Alloy No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 30.33 m.m.

Bearings { Crankshaft main bearings: Type Copper Lead Dia. 50.8 m.m.
Connecting rod big end: Type Copper Lead Dia. 41.28 m.m.

Weights { Flywheel 9.5 kg.
Crankshaft 10.0 kg.
Connecting rod 0.68 kg.
Piston with rings 0.183 kg.
Gudgeon pin 0.057 kg.

No. of valves per cylinder 2 Method of valve operation Push rod

No. of camshafts 1 Location of camshafts Cylinder block

Type of camshaft drive Chain

Diameter of valves:	Inlet	35.6 m.m.	Exhaust	30.9 m.m.
Diameter of port at valve seat:	Inlet	33.7 m.m.	Exhaust	28.9 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°
¾ Maximum lift:	Inlet	93°	Exhaust	93°

Valve springs:	*Inlet*	*Exhaust*
Type	Coil	Coil
No. per valve	2	2

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

Make S.U. Model HS2 or H4

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

Main jet identification No. 0.090"

Alternative carburettor equipment:-
Type - horizontal No. fitted - 1 Make - Weber
Model - 45DCOE Complete with manifold - AEA.603/4

Make Austin Healey Model Sprite MK III F.I.A. Recognition No.

Air filter: Type Dry replacement element No. fitted 2

Inlet manifold:

Diameter of flange hole at carburettor 33.33 m.m.

Diameter of flange hole at port 31.75 m.m.

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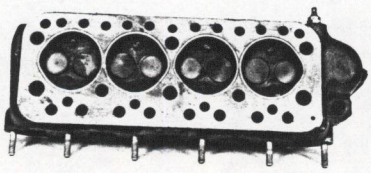

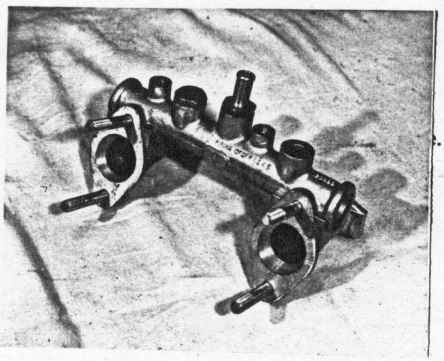

Exhaust manifold:

Diameter of flange hole at port Outer 22.2 x 26.9 Centre 25.4 x 26.98 m.m.

Diameter of flange hole at connection to silencer inlet pipe 38.1 m.m.

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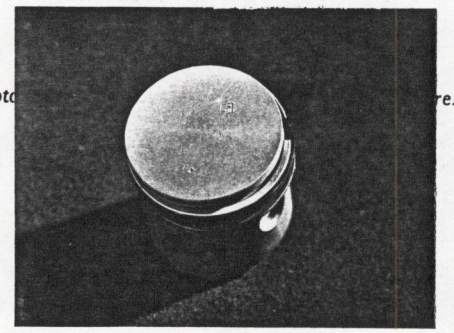

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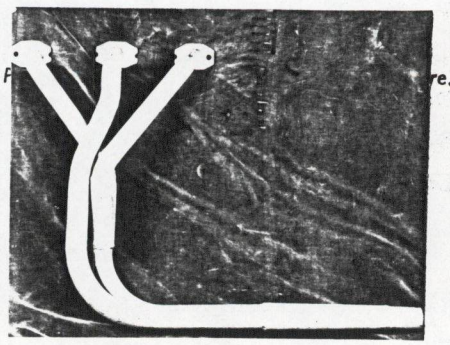


ENGINE ACCESSORIES

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 & vacuum

Make of ignition coil Lucas Model LA12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model C40

Voltage of dynamo 12 Maximum output 22 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 Austin Healey Model Sprite MK III F.I.A. Recognition No.

Manufacturers Reference No. of Application ADO.41/64

TRANSMISSION

Make of clutch Borg & Beck Type Single plate 7¼

Diameter of clutch plate 7¼" No. of plates 1

Method of operating clutch Hydraulic

Make of gearbox B.M.C. Type Synchro 2nd, 3rd, Top

No. of gearbox ratios 4 forward, 1 reverse

Method of operating gearshift Manual

Location of gearshift Central, between 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	$\frac{26}{20} \times \frac{32}{13}$	3.627:1	$\frac{28}{19} \times \frac{32}{13}$	2.93:1	$\frac{25}{21} \times \frac{32}{13}$		
2.	1.918:1	$\frac{26}{20} \times \frac{28}{19}$	2.374:1	$\frac{28}{19} \times \frac{29}{18}$	1.754:1	$\frac{25}{21} \times \frac{28}{19}$		
3.	1.357:1	$\frac{26}{20} \times \frac{24}{23}$	1.412:1	$\frac{28}{19} \times \frac{23}{24}$	1.242:1	$\frac{25}{21} \times \frac{24}{23}$		
4.	1.0:1		1.0:1		1.0:1			
R.	4.114:1	$\frac{20}{20} \times \frac{18}{13} \times \frac{32}{14}$	4.66:1	$\frac{28}{19} \times \frac{18}{13} \times \frac{32}{14}$	3.768:1	$\frac{25}{21} \times \frac{18}{13} \times \frac{32}{14}$		

Type of final drive Hypoid

Type of differential Bevel or limited slip

Final drive ratio 4.22:1 Alternatives 4.55:1, 5.375:1, 3.727:1, 3.9:1, 4.875:

No. of teeth 9/38 9/41, 8/43, 11/41, 10/39, 8/39

Overdrive ratio, if fitted

WHEELS

Type Disc or wire spoke Weight 5.209 kg.

Method of attachment 4 stud or centre lock cap

Rim diameter 330.2 m.m. Rim width 132.08 m.m.

Tyre size: Front 5.20 x 13 Rear 5.20 x 13

BRAKES

Method of operation Hydraulic

Is servo assistance fitted? No

Type of servo, if fitted

No. of hydraulic master cylinders 1 Bore 19.05 m.m.

Make Austin Healey Model Sprite MK III F.I.A. Recognition No.

	Front	Rear
No. of wheel cylinders	4	2
Bore of wheel cylinders	50.8 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	209.5 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	Approx. 58.9 m.m.	177.7 m.m.
	m.m.	m.m.
Width	Approx. 41.6 m.m.	31.8 m.m.
Total area per brake	Approx. 4900 m.m.²	11302. m.m.²

SUSPENSION

	Front	Rear
Type	Independent	Semi elliptic
Type of spring	Coil	Leaf
Is stabiliser fitted?	No	No
Type of shock absorber	Lever arm - hydraulic	Lever arm - hydraulic
No. of shock absorbers	2	2

STEERING

Type of steering gear Rack & pinion

Turning circle of car 9.6 m., approx.

No. of turns of steering wheel from lock to lock 2.25

CAPACITIES AND DIMENSIONS

Fuel tank 27.24 litres Sump 5.69 litres

Radiator 4.114 litres

Overall length of car 349.5 cm. Overall width of car 134.6 cm.

Overall height of car, unladen (with hood up, if appropriate) 126.4 cm.

Distance from floor to top of windscreen:

Highest point 91.44 cm. Lowest point 88.9 cm.

Width of windscreen:

Maximum width 118.75 cm. Minimum width 118.75 cm.

*Interior width of car 119.38 cm.

No. of seats 2

Track: Front 117.9 cm. Rear 114.9W or 111.12D cm.

Wheelbase 203.2 cm. Ground clearance 127.0 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 578.0 kgs.

Make Austin Healey Model Sprite MK III F.I.A. Recognition No.

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

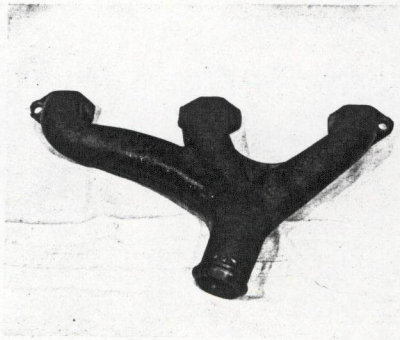
Make of pump..... Model or Type No.....

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

Location of injectors.....

Make Austin Healey Model Sprite MK III F.I.A. Recognition No.

Optional equipment affecting preceeding information:—



Low compression & touring equipment

Exhaust manifold - 12G.420

Cylinder head - Inlet valve diameter - 30.94 mm
Exhaust valve diameter - 25.4mm

Sump protection plate - Q 2338

Anti roll bar - AHA.7013

Fuel tank - 55 litres

Fuel tank - 85 litres

The Royal Automobile Club

Pall Mall, London, S.W.1

Please address all Communications to
THE SECRETARY
Quoting the following Reference:
C

Telegrams: AUTOMOBILE LONDON
Telephone: WHITEHALL 2345 (26 lines)

1st April 1964

AUSTIN-HEALEY SPRITE MARK III

MANUFACTURERS REFERENCE NO: OF APPLICATION FOR HOMOLOGATION

ADO.41/64

I certify that the necessary production of this car has been achieved to enable recognition as a Grand Touring car.

D. H. Delament
Manager, Competitions Department