

Manufacturers Reference No. for Application

SPRITE MK II



F.I.A. Recognition No. 52

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 Austin Motor Co. Ltd. in association with Donald Healey Motor Co. Ltd.

Model Austin Healey Sprite - Mk. II. Year of Manufacture 1961

Serial No. of Chassis H-AN6L, H-AN6 / 101

Engine 9CG-U-H & XSP.

Type of Coachwork Two Seater Sports

Recognition is valid from 15 FEB 1962 In category G.T.

Photograph to be affixed here $\frac{3}{4}$ view of car from front right.



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

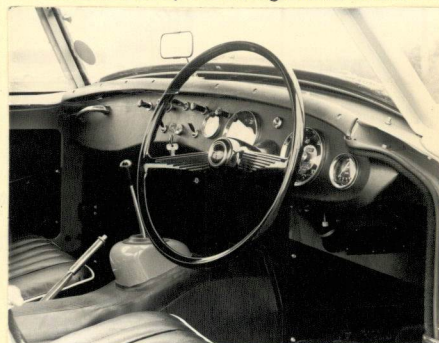
General description of car:

Photographs to be affixed below.

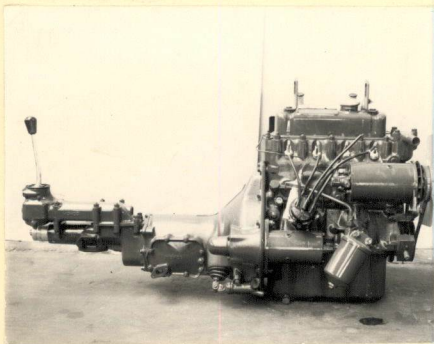
View of car from rear left.



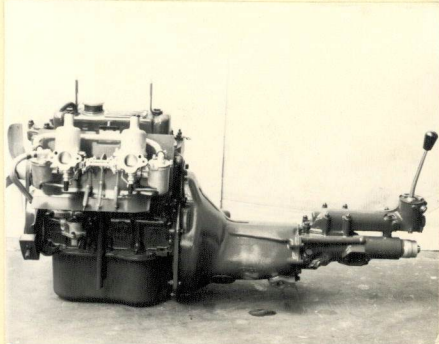
Interior view of car through driver's door.



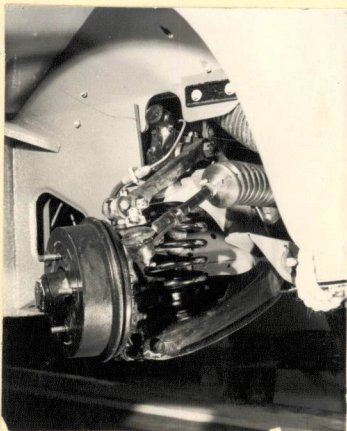
Engine unit with accessories from right.



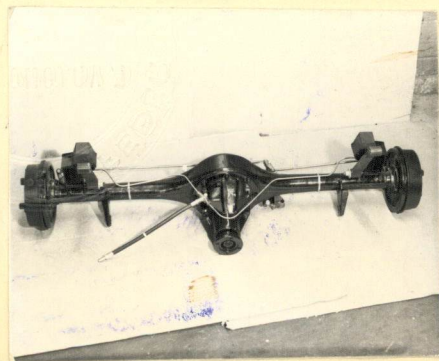
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).

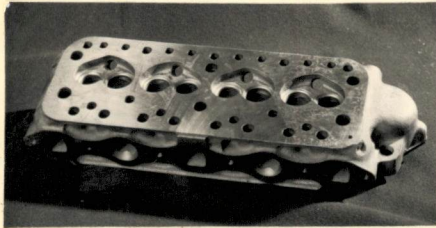


ENGINE

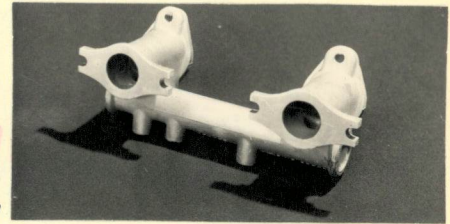
No. of cylinders.....4..... in line YES
 in V.....-.....
 opposed.....-.....
 Cycle.....Four Stroke..... Firing order.....1342
 Capacity.....948.9.....c.c. Bore.....62.94.....m.m. Stroke.....76.2.....m.m.
 Maximum rebore.....63.956..... Resultant capacity.....979.62.....c.c.
 Material of cylinder block.....Cast Iron..... Material of sleeves, if fitted.....Cast Iron
 Distance from crankshaft centre line to top face of block at centre line of cylinders.....218.44.....m.m.
 Material of cylinder head.....Cast Iron..... Volume of one combustion chamber.....29.598.....c.c.
 Compression ratio.....9.1 : 1
 Material of piston.....Aluminium Alloy..... No. of piston rings.....3
 Distance from gudgeon pin centre line to highest point of piston crown.....34.024.....m.m.
 Bearings { Crankshaft main bearings: Type.....Steel backed lead indium..... Dia.....44.47.....m.m.
 Connecting rod big end: Type.....Steel backed lead indium..... Dia.....41.29.....m.m.
 Weights { Flywheel.....9.513.....kg.
 Crankshaft.....9.17.....kg.
 Connecting rod......69.....kg.
 Piston with rings......224.....kg.
 Gudgeon pin......055.....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.....29.36.....m.m. Exhaust.....25.4.....m.m.
 Diameter of port at valve seat: Inlet.....26.19.....m.m. Exhaust.....23.019.....m.m.
 Tappet clearance for checking timing: Inlet.....0.533.....m.m. Exhaust.....0.533.....m.m.
 Valves open: Inlet.....5° BTDC..... Exhaust.....51° BBDC
 Valves close: Inlet.....45° ABDC..... Exhaust.....21° ATDC
 Maximum valve lift: Inlet.....7.97.....m.m. Exhaust.....7.97.....m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet.....130 degrees..... Exhaust.....136 degrees.....) .015"
 ¾ Maximum lift: Inlet.....81 degrees..... Exhaust.....83 degrees.....) clearance
 Valve springs: Inlet.....Coil..... Exhaust.....Coil.....) at valve
 Type.....Coil.....
 No. per valve.....2.....
 Carburettor: Type.....Semi - down draft..... No. fitted.....2
 (up or down draft, horizontal)
 Make.....S.U...... Model.....H.S.2 or H.4.
 Flange hole diameter.....31.75 or 38.1.....m.m. Choke diameter.....31.75 or 38.1.....m.m.
 Main jet identification No......090" Bore.

Air filter: Type Dry - Replaceable element No. fitted 2
 Inlet manifold:
 Diameter of flange hole at carburettor 33.337 m.m.
 Diameter of flange hole at port 30.1623 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.



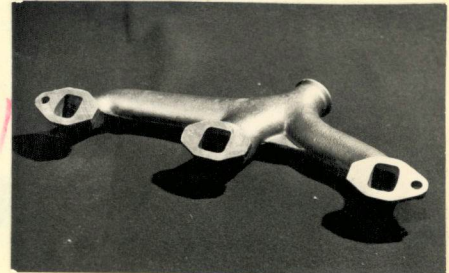
Centre 25.4 x 26.987
 Outers 22.2242 x 26.987

Exhaust manifold:
 Diameter of flange hole at port 28.575 m.m.
 Diameter of flange hole at connection to silencer inlet pipe 28.575 m.m.

Photograph of piston showing crown to be affixed here.



Photograph of exhaust manifold to be affixed here.



ENGINE ACCESSORIES

Make of fuel pump AC. Delco No. fitted 1
 Method of operation Mechanical diaphragm operated by camshaft
 Type of ignition system Coil coil or magneto
 Make of ignition Lucas Model DM 2
 Method of advance and retard Centrifugal and Vacuum
 Make of ignition coil Lucas Model 6 LA 12
 No. of ignition coils 1 Voltage 12
 Make of dynamo Lucas Model G 39 PV 2
 Voltage of dynamo 12 Maximum output 19 amps.
 Make of starter motor Lucas Model M 35 G
 Battery: No. fitted 1 Voltage 12 Capacity 43 amp. hour

Make Austin Healey Model Sprite F.I.A. Recognition No.
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TRANSMISSION

Make of clutch Borg and Beck Type 6.1/4 AG
 Diameter of clutch plate 6.1/4 ins. No. of plates 1
 Method of operating clutch Hydraulic
 Make of gearbox Austin. Type Synchromesh 2,3 & Top
 No. of gearbox ratios 4 forward 1 reverse
 Method of operating gearshift Remote control lever
 Location of gearshift Central floor
 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							
2.	1.916 : 1							
3.	1.357 : 1							
4.	1.00 : 1							
5.	4.114 : 1							

Type of final drive Hypoid
 Type of differential Bevel
 Final drive ratio 4.22 : 1 Alternatives -
 No. of teeth 9 / 38
 Overdrive ratio, if fitted -

WHEELS

Type Disc Weight 5.209 kg.
 Method of attachment 4 Studs
 Rim diameter 330.2 m.m. Rim width 132.08 ? m.m.
 Type 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 22.22 m.m.

	Front		Rear
No. of wheel cylinders	2		1
Bore of wheel cylinders	23.81 or 56.	m.m.	22.22
Inside diameter of brake drums	177.8	m.m.	177.8
No. of shoes per brake	2		2
Outside diameter of brake discs	221	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	171.45 OR 59	m.m.	171.45
	-	m.m.	-
Width	31.75 OR 42	m.m.	31.75
Total area per brake	-	m.m. ²	-

SUSPENSION

	Front		Rear
Type	Independent		Quarter elliptic
Type of spring	Coil		Leaf
Is stabiliser fitted?	No		No
Type of shock absorber	Lever arm		Lever arm
No. of shock absorbers	Two		Two

STEERING

Type of steering gear	Rack and pinion
Turning circle of car	9.60 m., approx.
No. of turns of steering wheel from lock to lock	2.25

CAPACITIES AND DIMENSIONS

Fuel tank	27.24	litres	Sump	3.69	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	92.71	cm.	Lowest point	91.44	cm.
Width of windscreen:					
Maximum width	108.585	cm.	Minimum width	106.68	cm.
*Interior width of car	119.38	cm.			
No. of seats	2				
Track: Front	116.2	cm.	Rear	113.8	cm.
Wheelbase	203.2	cm.	Ground clearance	127	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 690.4 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.....

Optional equipment affecting preceding information:—

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