Manufacturers Reference No. for Application .....

F.I.A. Recognition No. 106

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 Ltd. in association with Donald Healey Motor Co.

Model Austin-Healey Sprite Mk.II. (1098). Year of Manufacture 1962.

Serial No. of Chassis AN7.

Engine 10CG. or XSP.

Type of Coachwork Two Seater Sports.

Recognition is valid from 9/5/63 In category Grand Touring

Photograph to be affixed here ¾ view of car from front right.

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

Form: R.F.I.A.

General description of car:

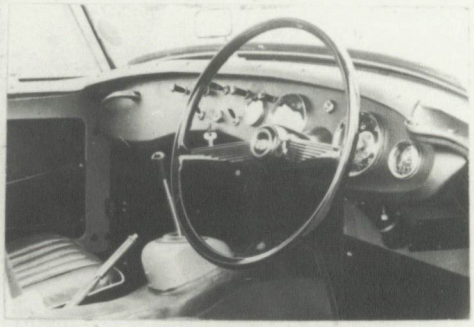
Specify here material/s of chassis/body construction

Two seater sports of steel/aluminium unitary construction powered by 4 cylinder OHV. engine driving hypoid final drive through synchromesh 4 speed gearbox.
Front suspension independent, rear suspension $\frac{3}{4}$ floating axle using $\frac{1}{4}$ elliptic leaf springs.

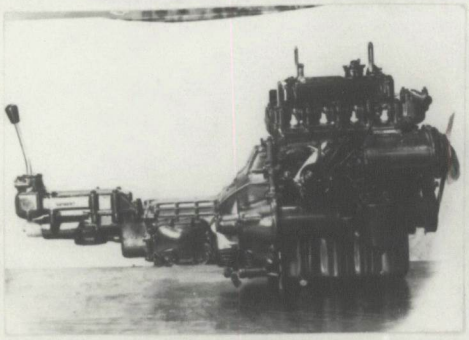
Photographs to be affixed below.

$\frac{3}{4}$ view of car from rear left.

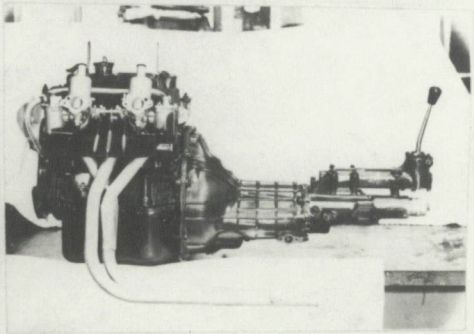
Interior view of car through driver's door.



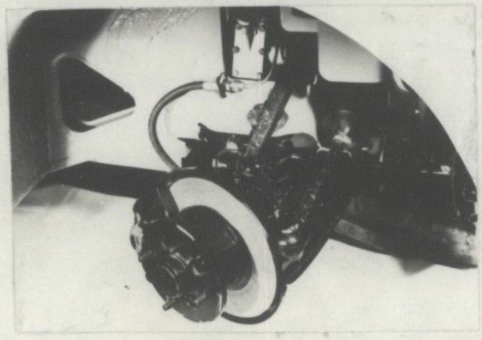
Engine unit with accessories from right.



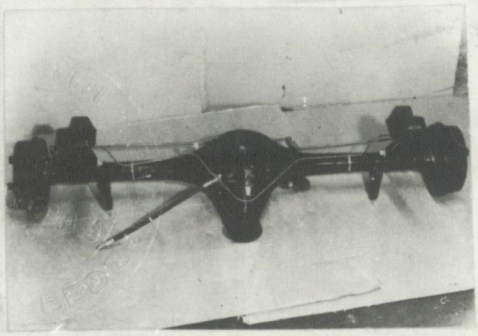
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



ENGINE

in line Yes.

No. of cylinders 4. in V -

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. 44.46 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 32.5 m.m.		Exhaust 29.3 m.m.	
Diameter of port at valve seat:	Inlet 29.2 m.m.		Exhaust 26.2 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 8.01. m.m.		Exhaust 8.01. 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 31.75 m.m.

Main jet identification No. 0.090".

Alternative Carburetter Equipment - Art. 265.
Type: Horizontal. No.fitted: 1. Make: Weber.
Model: 45DCOE. complete with Manifold - AEA. 603/4.

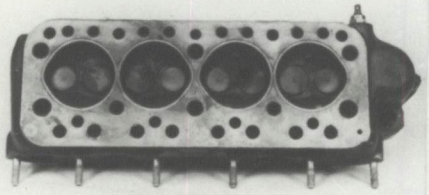
Air filter: Type Dry Replaceable Element. No. fitted

Inlet manifold:

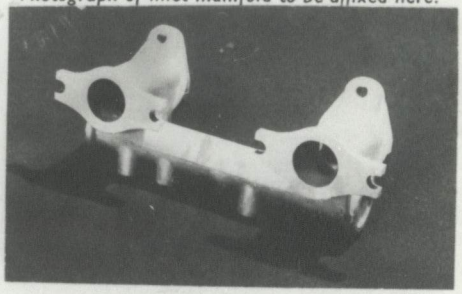
Diameter of flange hole at carburettor 33.33 m.m.

Diameter of flange hole at port 31.75 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.



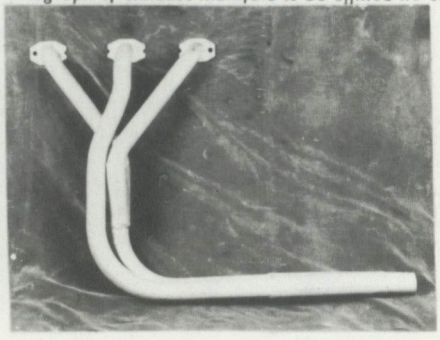
Exhaust manifold:

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.

Photograph of piston showing crown to be affixed here.

Photograph of exhaust manifold to be affixed here.



ENG

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 DM2.

Method of advance and retard Centrifugal and Vacuum.

Make of ignition coil Lucas. Model HA12.

No. of ignition coils 1. Voltage 12.

Make of dynamo Lucas. Model C40/1.

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 Q.2342. Capacity .7 pints

Make Austin-Healey. Model Sprite. (1098). F.I.A. Recognition No.

Manufacturers Reference No. of Application

TRANSMISSION

Make of clutch Borg and Beck. Type Single Plate $7\frac{1}{4}$.

Diameter of clutch plate $7\frac{1}{4}$". No. of plates 1.

Method of operating clutch Hydraulic.

Make of gearbox B.M.C. Type Synchromesh - 2nd. 3rd. Top.

No. of gearbox ratios 4 - Forward : 1 - Reverse.

Method of operating gearshift Manual.

Location of gearshift Central.

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. or Limited Slip.

Type of differential Bevel.

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

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 88.9 or 101.6 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.

	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	11302.0. m.m.²

SUSPENSION

	Front	Rear
Type	Independent.	Quarter Eliptic.
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 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: 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: 92.7 cm. Lowest point: 91.4 cm.

Width of windscreen:

Maximum width: 108.5 cm. Minimum width: 106.6. cm.

*Interior width of car: 119.38 cm.

No. of seats: 2.

Track: Front: 117.5 cm. Rear: 115.6 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: 578. 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 preceeding information:—

Low Compression and Touring Equipment.

Exhaust Manifold.	- Part No.	- 12A.191.		
Cylinder Head.	- In.valve	- 29.4 mm.		Ex.valve - 25.4 mm.
L. C. Pistons.	- 8.2 : 1.	- 8G.2362.		
Camshaft.	- 2A.948	- I.O. 16°	BTDC.	Ex.O. 51° BBDC.
		- I.C. 56°	ABDC.	Ex.C. 21° ATDC.
	Max.lift.	- 7.94 mm.		
Camshaft.	- AEA.630.	- I.O. 5°	BTDC.	Ex.O. 51° BBDC.
		I.C. 45°	ABDC.	Ex.C. 21° ATDC.
	Max.lift.	- 7.97 mm.		
Sump Protection Plate	- Q.2338.			
Anti-Roll Bar Kit.	- Q.2315.			
Fuel Tank.	- 55 litres.			
Fuel Tank.	- 85 litres.			