

Manufacturers Reference No. for Application



F.I.A. Recognition No. 62

# 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 HERLEY MOTOR Co.

Model AUSTIN-HERLEY SPRITE SEBRING MkII Year of Manufacture 1962

Serial No. of Chassis A.N.G.

Engine 90 x 5A

Type of Coachwork OPEN 2 SEATER

Recognition is valid from 3 MAI 1962 In category B.T.

*Additional list n° 10  
to general list n° 9.*

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



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



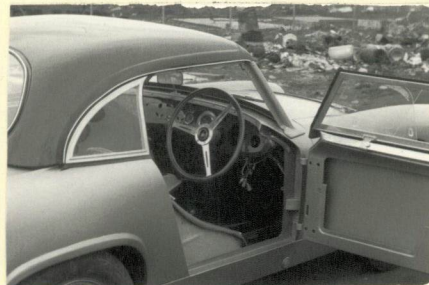
General description of car:

Photographs to be affixed below.

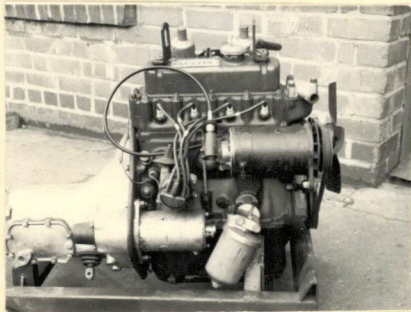
*¾ view of car from rear left.*



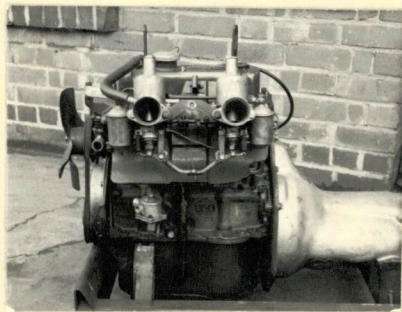
*Interior view of car through driver's door.*



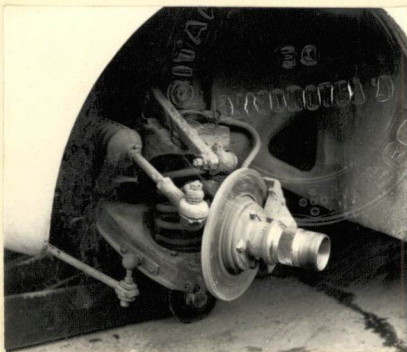
*Engine unit with accessories from right.*



*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 4 STROKE Firing order 1,3,4,2

Capacity 960 c.c. Bore 63.53 m.m. Stroke 76.2 m.m.

Maximum rebore +0.040" Resultant capacity 995 c.c.

Material of cylinder block CAST IRON Material of sleeves, if fitted N/A

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 24.5 c.c.

Compression ratio 9.3:1

Material of piston ALUMINIUM No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 34.03 m.m.

Bearings { Crankshaft main bearings: Type THINWALL HALF BEARINGS Dia. 44.5 m.m.  
 Connecting rod big end: Type THINWALL HALF BEARINGS Dia. 41.34 m.m.

Weights { Flywheel 6.35 kg.  
 Crankshaft 9.52 kg.  
 Connecting rod 0.695 kg.  
 Piston with rings 0.219 kg.  
 Gudgeon pin 0.0543 kg.

No. of valves per cylinder 2 Method of valve operation PUSH ROD

No. of camshafts 1 Location of camshafts IN CYLINDER BLOCK

Type of camshaft drive CHAIN

Diameter of valves: Inlet 31.6 m.m. Exhaust 27.8 m.m.

Diameter of port at valve seat: Inlet 29.2 m.m. Exhaust 25.5 m.m.

Tappet clearance for checking timing: Inlet 0.48 m.m. Exhaust 0.48 m.m.

Valves open: Inlet 16° B.T.D.C. Exhaust 51° B.B.D.C.

Valves close: Inlet 56° A.B.D.C. Exhaust 21° A.T.D.C.

Maximum valve lift: Inlet 7.94 m.m. Exhaust 7.94 m.m.

Degrees of crankshaft rotation from zero to—  
 Maximum lift: Inlet 104° Exhaust 104°  
 $\frac{3}{4}$  Maximum lift: Inlet 55° Exhaust 55°

Valve springs: Inlet Exhaust  
 Type COIL COIL  
 No. per valve 2 2

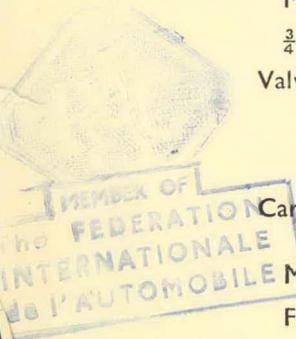
Carburettor: Type SEMI-DOWN DRAUGHT No. fitted 2  
 (up or down draft, horizontal)

Make S.U. Model H.A.

Flange hole diameter 38.1 m.m. Choke diameter 38.1 m.m.

Main jet identification No. 0.090 (A.J. NEEDLE)

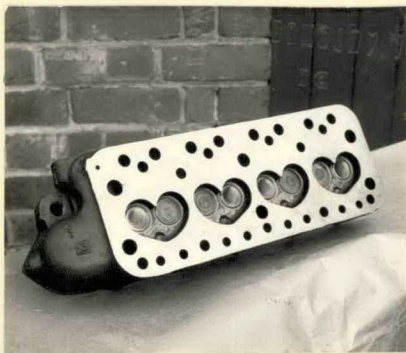
ALTERNATIVE CARBURETTOR EQUIPMENT ART 265.  
MAKE :- WEBER MODEL :- 45 DCOE9.  
FLANGE HOLE DIAMETER :- 45 m.m. CHOKE DIA :- 36 m.m.  
MAIN JET No :- 155.



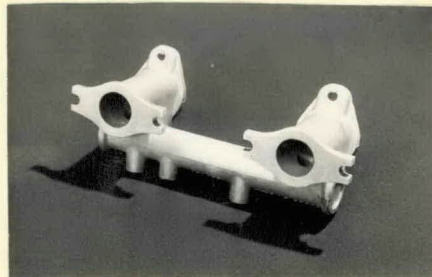


Air filter: Type..... — No. fitted..... —

Inlet manifold:  
Diameter of flange hole at carburettor..... **38.1**..... m.m.  
Diameter of flange hole at port..... **31.75**..... m.m.



ed here.



Exhaust manifold:

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



ked here.



Ph

re.

### ENGINE ACCESSORIES

Make of fuel pump..... **S.U OR LUCAS**..... No. fitted **2 OR 1**.....  
Method of operation..... **ELECTRIC**.....  
Type of ignition system..... **COIL**..... coil or magneto  
Make of ignition..... **LUCAS**..... Model **D.2.P.4**.....  
Method of advance and retard..... **CENTRIFUGAL AND VACUUM CONTROL**.....  
Make of ignition coil..... **LUCAS**..... Model **LA.12**.....  
No. of ignition coils..... **1**..... Voltage **12**.....  
Make of dynamo..... **LUCAS**..... Model **C39, P.V.2**.....  
Voltage of dynamo..... **12**..... Maximum output **19**..... amps.  
Make of starter motor..... **LUCAS**..... Model **M35G1**.....  
Battery: No. fitted..... **2**..... Voltage **6 V.**..... Capacity **32**..... amp. hour



Make A/H. SPRITE BEARING M/T Model A.N. 6 F.I.A. Recognition No. ....  
 Manufacturers Reference No. of Application .....

**TRANSMISSION**

Make of clutch BORG & BECK Type 6 1/4 AG.  
 Diameter of clutch plate 6 1/4" No. of plates 1.  
 Method of operating clutch HYDRAULIC.  
 Make of gearbox B.M.C. Type SYNCHROMESH 2ND-3RD-4TH.  
 No. of gearbox ratios 4 FORWARD - 1 REVERSE  
 Method of operating gearshift REMOTE CONTROL  
 Location of gearshift FLOOR CHANGE  
 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.	<u>3.627</u>	<u>29/19 x 32/13</u>	<u>3.198</u>	<u>26/20 x 32/13</u>	<u>2.93</u>	<u>25/21 x 32/13</u>		
2.	<u>2.374</u>	<u>28/19 x 29/18</u>	<u>1.911</u>	<u>26/20 x 28/19</u>	<u>1.754</u>	<u>25/21 x 28/19</u>		
3.	<u>1.412</u>	<u>28/19 x 23/24</u>	<u>1.357</u>	<u>26/20 x 24/23</u>	<u>1.242</u>	<u>25/21 x 24/23</u>		
4.	<u>1.000</u>		<u>1.000</u>		<u>1.000</u>			
<u>REVERSE</u>	<u>4.66</u>	<u>28/19 x 18/13 x 32/14</u>	<u>4.115</u>	<u>26/20 x 18/13 x 32/14</u>	<u>3.768</u>	<u>25/21 x 18/13 x 32/14</u>		

Type of final drive HYPOID  
 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 WIRE Weight 5.443 kg.  
 Method of attachment KNOCK ON HUB.  
 Rim diameter 330.2 m.m. Rim width 88.9 OR 101.6 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 22.225 m.m.



	Front		Rear
No. of wheel cylinders	4		2
Bore of wheel cylinders	38.1	m.m.	15.875
Inside diameter of brake drums	-	m.m.	203.2
No. of shoes per brake	-		2
Outside diameter of brake discs	215.9	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	47.6 APPROX	m.m.	196.85
	(SEMI-ELLIPTICAL)	m.m.	
Width	38.1	m.m.	38.1
Total area per brake	3662.4	m.m. <sup>2</sup>	14,999.97

### SUSPENSION

	Front		Rear
Type	INDEPENDENT		QUARTER ELLIPTIC
Type of spring	COIL		LEAF
Is stabiliser fitted?	YES		- -
Type of shock absorber	HYDRAULIC LEVER		HYDRAULIC LEVER
No. of shock absorbers	2		2

### STEERING

Type of steering gear..... RACK AND PINION

Turning circle of car..... 9.6..... m., approx.

No. of turns of steering wheel from lock to lock..... 2 1/3

### CAPACITIES AND DIMENSIONS

Fuel tank..... 27.3..... litres Sump..... 3.2..... litres

Radiator..... 5.69..... litres WITHOUT HEATER

Overall length of car..... 350..... cm. Overall width of car..... 135..... cm.

Overall height of car, unladen (with hood up, if appropriate)..... 126..... cm.

Distance from floor to top of windscreen:

Highest point..... 91.44..... cm. Lowest point..... 62.23..... cm.

Width of windscreen:

Maximum width..... 116.84..... cm. Minimum width..... 104.14..... cm.

\*Interior width of car..... 116.84..... cm.

No. of seats..... 2

Track: Front..... 116..... cm. Rear..... 114..... cm.

Wheelbase..... 203..... 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..... 568..... 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.<sup>2</sup>

**Size of exhaust port:**

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

Height.....m.m. Area.....m.m.<sup>2</sup>

**Size of transfer port:**

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

Height.....m.m. Area.....m.m.<sup>2</sup>

**Size of piston port:**

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

Height.....m.m. Area.....m.m.<sup>2</sup>

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:—

LARGE CAPACITY FUEL TANK

70 LITRES.

Q 2675.

DISC WHEEL CONVERSION

Q 2552.

HARDTOP.

RHR 3345

OIL COOLER

(NORMALLY FITTED STANDARD ON THIS CAR.)

TOURING CAMSHAFT.

REA 630



3/4 VIEW OF CAR FROM FRONT  
OPTIONAL BODY



3/4 VIEW OF CAR FROM REAR.  
OPTIONAL BODY.



INTERIOR VIEW OF CAR THROUGH DRIVERS  
DOOR. OPTIONAL BODY.



# DONALD HEALEY MOTOR COMPANY LTD.

WARWICK  
ENGLAND

## DRAWING ALTERATION NOTE

No.....FIA.62.....  
Drg. No.....FIA.62..... Issue.....3 MAY 62..... Date.....1 MAY 63.....  
Drg. Title.....Austin-Healey "Sprite" Sebring MK II..... Used on.....

---

Reason for Alteration:-

Form Incorrect

*68*  
*reports etc*  
*not for*  
*reference*  
*to be*  
*checked*

Description of Alteration:-

For "Valve Springs: No. per Valve 1"

Read "Valve Springs: No. per Valve 2"

*W. H. Healey*

Alteration to take effect IMMEDIATELY on work in progress  
All PREVIOUS issues of above drawing SUPERCEDED.

Copies to:-

R.A.C.

*W. H. Healey*

Signed.....  
Chief Draughtsman.





FEDERATION INTERNATIONALE DE L'AUTOMOBILE

AUSTIN HEALEY - SPRITE SEBRING <sup>HH</sup> "

MARQUE ET MODELE

5/62 -

VALIDITE HOMOLOGATION

62

FICHE NR.

*[Empty box]*

AT /

GROUPE / CLASSE

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES
A	-	<p>RESSORT DE SOUPAPES</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	

Autres homologations du modèle

Vérifiée le 26/1/96 par *[Signature]* visée ce jour le \_\_\_\_\_ par \_\_\_\_\_