

Manufacturers Reference No. for Application

SUN. RAP III B



F.I.A. Recognition No. [REDACTED]

1151

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

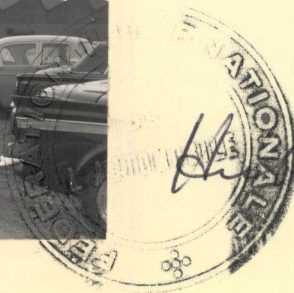
Federation Internationale de l'Automobile.

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

Manufacturer Sunbeam Talbot Ltd.,
Model Sunbeam Rapier III B Year of Manufacture 1963
Serial No. of Chassis B.305400/HHO
Engine B.3054001/HHO
Type of Coachwork 2-door 4 seater saloon.
Recognition is valid from [REDACTED] In category Touring

9/5/63

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



Handwritten signature

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

General description of car:

2 Door 4 Seater Hard Top Saloon
Convertible Model also available.

Photographs to be affixed below.

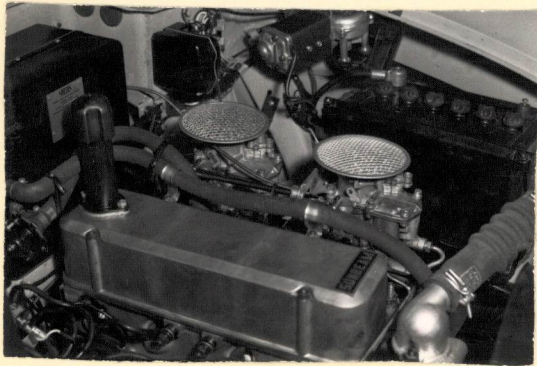
$\frac{3}{4}$ view of car from rear left.



Interior view of car through driver's door.



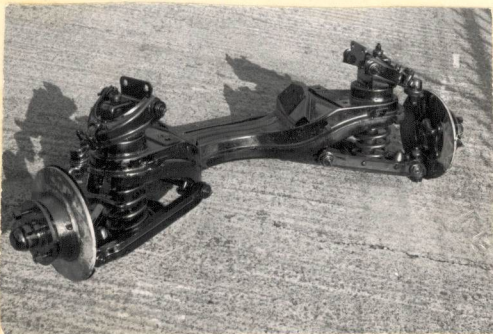
Engine unit with accessories from right.



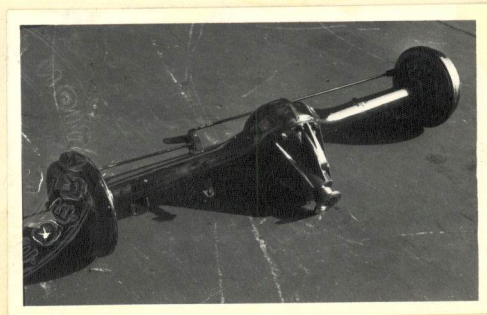
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



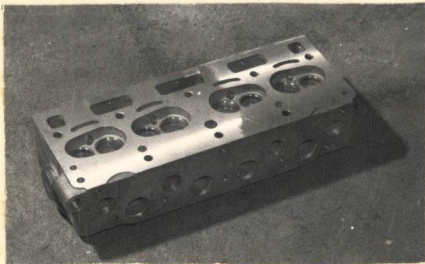
ENGINE

in line in line
 No. of cylinders 4 in V
 opposed

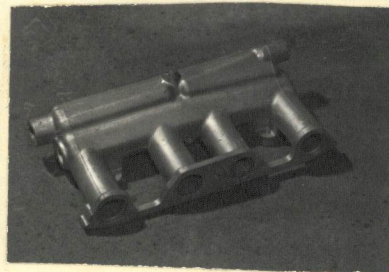
Cycle 4 Stroke Firing order 1,3,4,2.
 Capacity 1592 c.c. Bore 81.534 m.m. Stroke 76.2 m.m.
 Maximum rebore 82,296 Resultant capacity 1599 c.c.
 Material of cylinder block C.1 Material of sleeves, if fitted none fitted
 Distance from crankshaft centre line to top face of block at centre line of cylinders 231.8 m.m.
 Material of cylinder head aluminium Volume of one combustion chamber 38 c.c.
 Compression ratio 9: 1
 Material of piston aluminium No. of piston rings 3
 Distance from gudgeon pin centre line to highest point of piston crown 47 m.m.
 Bearings { Crankshaft main bearings: Type white metal Dia. 57.137/57.125 m.m.
 { Connecting rod big end: Type aluminium tin Dia. 50.83/50.81 m.m.
 Weights { Flywheel 8.64 kg.
 { Crankshaft 16.1 kg.
 { Connecting rod .69 kg.
 { Piston with rings .42 kg.
 { Gudgeon pin .13 kg.
 No. of valves per cylinder 2 Method of valve operation pushrod
 No. of camshafts 1 Location of camshafts cylinder block
 Type of camshaft drive chaindrive from crankshaft
 Diameter of valves: Inlet 38.37 m.m. Exhaust 29.77 m.m.
 Diameter of port at valve seat: Inlet 34.3 m.m. Exhaust 26.9 m.m.
 Tappet clearance for checking timing: Inlet .427 m.m. Exhaust .498 m.m.
 Valves open: Inlet 25° BTDC Exhaust 63° BBDC
 Valves close: Inlet 59° ABDC Exhaust 21° ATDC
 Maximum valve lift: Inlet 11.02 m.m. Exhaust 11.00 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 159° Exhaust 151°
 $\frac{3}{4}$ Maximum lift: Inlet 107° Exhaust 101°
 Valve springs: Inlet Exhaust
 Type Coil Coil
 No. per valve 2 2
 Carburettor: Type downdraft No. fitted 2
 (up or down draft, horizontal)
 Make Zenith Model 36 W.I.A./W.I.P.
 Flange hole diameter 36 m.m. Choke diameter 28 m.m.
 Main jet identification No. 112

Air filter: Type Wire gauze No. fitted 2
 Inlet manifold:
 Diameter of flange hole at carburettor 50.04 m.m.
 Diameter of flange hole at port 50.3 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.

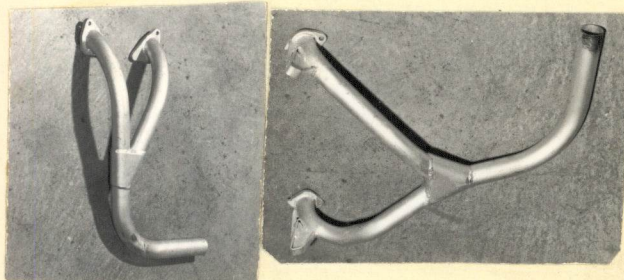


Exhaust manifold:
 Diameter of flange hole at port 28.26 m.m.
 Diameter of flange hole at connection to silencer inlet pipe No flange clip only m.m.

Photograph of piston showing crown to be affixed here.



Photograph of exhaust manifold to be affixed here.



ENGINE ACCESSORIES

Make of fuel pump A.C. No. fitted 1
 Method of operation mechanical
 Type of ignition system coil and distributor coil or magneto
 Make of ignition Lucas Model DM.2
 Method of advance and retard centrifugal and vacuum.
 Make of ignition coil Lucas Model HA 12.
 No. of ignition coils One Voltage 12
 Make of dynamo Lucas Model C 40
 Voltage of dynamo 12 Maximum output 22 amps.
 Make of starter motor Lucas Model M35C
 Battery: No. fitted 1 Voltage 12 Capacity 38 cr 51 amp. hour

Make SUNBEAM Model Rapier F.I.A. Recognition No. _____
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TRANSMISSION

Make of clutch Borg & Beck Type Dry
 Diameter of clutch plate 8" No. of plates One
 Method of operating clutch mechanical thro' hydraulic slave cylinder
 Make of gearbox Rootes Type constant
 No. of gearbox ratios 4 forward and reverse.
 Method of operating gearshift manual
 Location of gearshift central floor lever
 Is overdrive fitted? optional
 Method of controlling overdrive, if fitted electrical solenoid.

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	3.346	$\frac{29}{20} \times \frac{30}{13}$	3.32	$\frac{21}{27} \times \frac{31}{12}$				
2.	2.141	$\frac{29}{20} \times \frac{31}{21}$	1.9	$\frac{21}{27} \times \frac{31}{21}$				
3.	1.392	$\frac{29}{20} \times \frac{24}{25}$	1.24	$\frac{21}{27} \times \frac{24}{25}$				
4.	1.0	Direct						
<u>Rev.</u>	4.329	$\frac{29}{20} \times \frac{30 \times 19}{13 \times 15}$						

Type of final drive hypoid
 Type of differential 4 bevel pinion.
 Final drive ratio 4.22:1 Alternatives 4.86:1 4.44:1 3.70:1
 No. of teeth 38.9
 Overdrive ratio, if fitted 24.6

WHEELS

Type Steel disc Weight 12.86 kg.
 Method of attachment 4 stud
 Rim diameter 381 m.m. Rim width 101.6 m.m.
 Tyre size: Front 5.60" x 15" Rear 5.60 x 15"

BRAKES

Method of operation hydraulic
 Is servo assistance fitted? optional
 Type of servo, if fitted Lockheed
 No. of hydraulic master cylinders 1 Bore 19 m.m.

	Front		Rear
No. of wheel cylinders	2		1
Bore of wheel cylinders	54	m.m.	22.2
Inside diameter of brake drums	-	m.m.	-
No. of shoes per brake	-		2
Outside diameter of brake discs	275	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	30.7	CM ³ m.m.	43.5
	-	m.m.	-
Width	49.1	m.m.	44.5
Total area per brake	6450	m.m. ²	19484

SUSPENSION

	Front		Rear
Type	Trailing wishbone		Beam axle
Type of spring	Coil spring		Semi-elliptic leaf
Is stabiliser fitted?	Anti roll bar		None
Type of shock absorber	Telescopic		Telescopic
No. of shock absorbers	2		2

STEERING

Type of steering gear	Burman recirculating ball.
Turning circle of car	10.97 m., approx.
No. of turns of steering wheel from lock to lock	3

CAPACITIES AND DIMENSIONS

Fuel tank	45.4	litres	Sump	4.55	litres
Radiator	6.95	litres			
Overall length of car	413	cm.	Overall width of car	155	cm.
Overall height of car, unladen (with hood up, if appropriate)	148.5	cm.			
Distance from floor to top of windscreen:					
Highest point	108	cm.	Lowest point	104.7	cm.
Width of windscreen:					
Maximum width	115.5	cm.	Minimum width	108	cm.
*Interior width of car	128.3	cm.			
No. of seats	4				
Track: Front	126.2	cm.	Rear	125	cm.
Wheelbase	244	cm.	Ground clearance	146	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 900 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:—

1. Oil cooler RG. 416
2. Long range fuel tank capacity 100 litres. RG. 0410.
3. Powr lock differential assy. RG. 1041.
4. Lightweight seats R.G.M. 6.