

Manufacturers Reference No. for Application

SUNALP III



F.I.A. Recognition No. 103

# 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 LIMITED

Model ALPINE III Year of Manufacture 1963

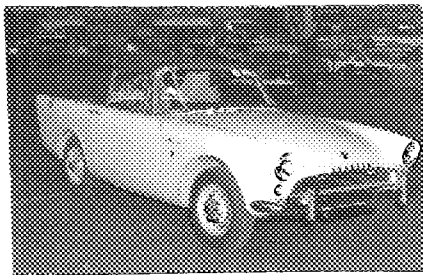
Serial No. of Chassis B 9200001 /HRC  
Engine B 9200001 /HRC

Type of Coachwork Open 2 Seater

Recognition is valid from ~~1/1/62~~ 9/5/63 In category Grand Touring

*[Handwritten signatures and initials]*

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



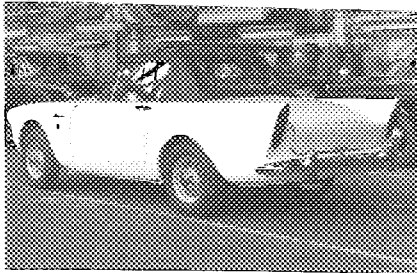
Stamp of F.I.A. to be  
affixed here.

General description of car:

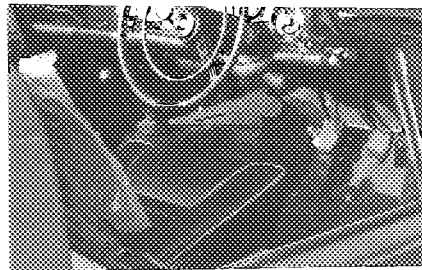
Two seater sports car with read occasional seat. Soft Top Hood. Hard top available as an extra. Two door.

Photographs to be affixed below.

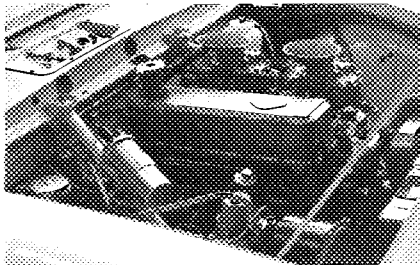
*¾ view of car from rear left.*



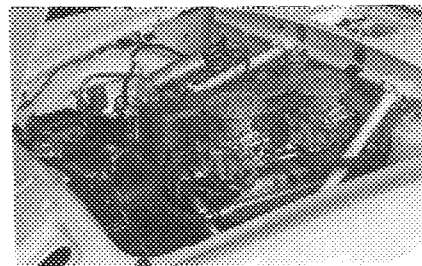
*Interior view of car through driver's door.*



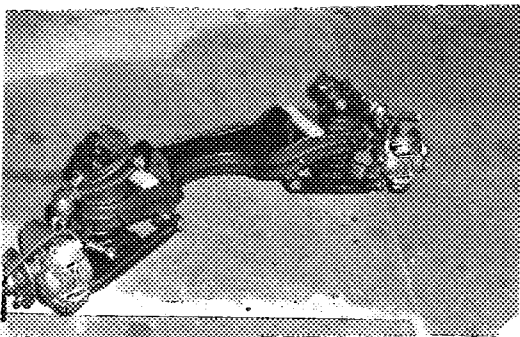
*Engine unit with accessories from right.*



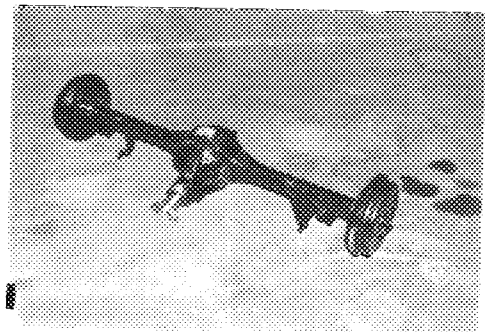
*Engine unit with accessories from left.*



*Front axle complete (without wheels).*



*Rear axle complete (without wheels).*

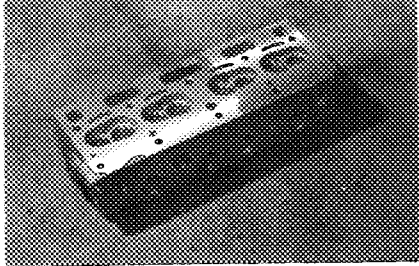


**ENGINE**

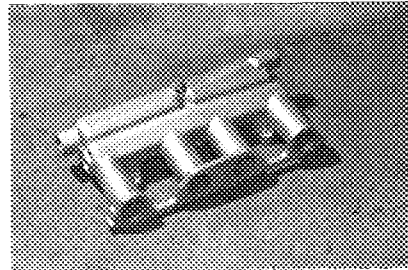
in line in line  
 No. of cylinders 4 stroke in V —  
 opposed —  
 Cycle 4 stroke Firing order 1.3.4.2.  
 Capacity 1592 c.c. Bore 81.5 m.m. Stroke 76.2 mm m.m.  
 Maximum rebore 1.016 mm Resultant capacity 1630 c.c.  
 Material of cylinder block Cast Iron Material of sleeves, if fitted none fitted  
 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 9.1:1  
 Material of piston Heplex No. of piston rings 3 per piston  
 Distance from gudgeon pin centre line to highest point of piston crown 57.1377 <sup>47</sup> m.m.  
 Bearings { Crankshaft main bearings: Type White metal Dia. 57.125 m.m.  
 Connecting rod big end: Type — Dia. 50.825/50.813 m.m.  
 Weights { Flywheel 9.48 kg.  
 Crankshaft 17.07 kg.  
 Connecting rod 0.709 kg. c/w small end bush & bolts  
 Piston with rings 0.29 kg.  
 Gudgeon pin 0.141 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 chain drive from crankshaft  
 Diameter of valves: Inlet 37.48/37.38 m.m. Exhaust 29.87/29.77 m.m.  
 Diameter of port at valve seat: Inlet 34.9 m.m. Exhaust 26.9 m.m.  
 Tappet clearance for checking timing: Inlet 0.305 m.m. Exhaust 0.356 m.m.  
 Valves open: Inlet 14° BTDC Exhaust 56° BBDC  
 Valves close: Inlet 52° ABDC Exhaust 10° ATDC  
 Maximum valve lift: Inlet 9.29 m.m. Exhaust 9.24 m.m.  
 Degrees of crankshaft rotation from zero to—  
 Maximum valve lift: Inlet 148° Exhaust 143°  
 $\frac{3}{4}$  Maximum valve lift: Inlet 96° Exhaust 92°  
 Valve springs: Inlet Exhaust  
 Type Helical coil Helical coil  
 No. per valve 2 2  
 Carburettor: Type Downdraft No. fitted 2  
 (up or down draft, horizontal)  
 Make Zenith/Weber Model 36.W.I.P.-3 /40 DCOE 2  
 Flange hole diameter 36/40 m.m. Choke diameter 29/30 m.m.  
 Main jet identification No. 127/115

Air filter: Type Wire Mesh No. fitted 2  
 Inlet manifold:  
 Diameter of flange hole at carburettor 50.04 m.m.  
 Diameter of flange hole at port 50.8 m.m.

Photograph of combustion chamber to be affixed here.

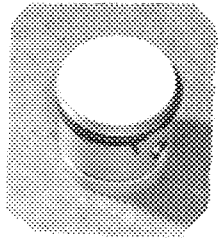


Photograph of inlet manifold to be affixed here.

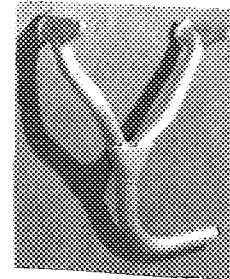
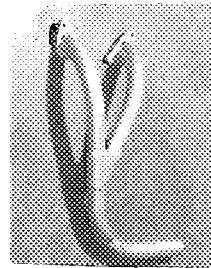


Exhaust manifold:  
 Diameter of flange hole at port 35 m.m.  
 Diameter of flange hole at connection to silencer inlet pipe No flange, clip only m.m.

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 Camshaft, on Relay Arm  
 Type of ignition system Coil and Distributer coil or magneto  
 Make of ignition Lucas Model 25 D4  
 Method of advance and retard Centrifugal and Vacuum  
 Make of ignition coil Lucas Model HA 12  
 No. of ignition coils One Voltage 12V  
 Make of dynamo Lucas Model C40L  
 Voltage of dynamo 12V Maximum output 25 amps.  
 Make of starter motor Lucas Model M 35G  
 Battery: No. fitted One Voltage 12 Capacity 38 amp. hour

Make SUNBEAM Model ALPINE IIIF.I.A. Recognition No.  
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**TRANSMISSION**

Make of clutch Borg & Geck Type Dry  
 Diameter of clutch plate 8.0Inch No. of plates One  
 Method of operating clutch Mechanical through Hydraulic slave cylinder  
 Make of gearbox Humber Type Constant Mesh  
 No. of gearbox ratios 4 Forward 1 reverse & 6 forward 1 reverse with overdrive  
 Method of operating gearshift Remote control - manual  
 Location of gearshift Centre of Floor  
 Is overdrive fitted? Optional  
 Method of controlling overdrive, if fitted Electrical solenoid switch on steering Column

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	2.967	$\frac{27 \times 30}{21 \times 13}$						
2.	1.898	$\frac{27 \times 31}{21 \times 21}$						
3.	1.234	$\frac{27 \times 24}{21 \times 25}$						
4.	1.000	Direct						
Rev <sup>5</sup>	3.758	$\frac{27 \times 30 \times 14}{21 \times 13 \times 15}$						

Type of final drive Hypoid Bevel Crown Wheel and Pinion  
 Type of differential Normal, Full Slip, spider and sun wheel  
 Final drive ratio 3.889:1 Alternatives \_\_\_\_\_  
 No. of teeth 35/9  
 Overdrive ratio, if fitted 0.803:1 (24.6%) Optional Extra

**WHEELS**

Type Steel Disc or wire Weight 12.5 kg.  
 Method of attachment 4 studs or centre lock  
 Rim diameter 330 m.m. Rim width 116.5 m.m.  
 Tyre size: Front 6.00x13 Rear 6.00x13

**BRAKES**

Method of operation Hydraulic  
 Is servo assistance fitted? Yes  
 Type of servo, if fitted Girling  
 No. of hydraulic master cylinders 1 Bore 22.1 m.m.

	Front		Rear
No. of wheel cylinders	2 per wheel		1 per wheel
Bore of wheel cylinders	54 m.m.		22.2 m.m.
Inside diameter of brake drums	- m.m.		228.6 m.m.
No. of shoes per brake	-		2
Outside diameter of brake discs	250.2 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 Available	63.9 cm		40.97 cm
Volume	-		-
Width	55.2 m.m.		44.5 m.m.
Total area per brake	2096 m.m. <sup>2</sup>		19484 m.m. <sup>2</sup>

### SUSPENSION

	Front		Rear
Type	Trailing wishbone		Beam axle
Type of spring	Coil		Semi-elliptical
Is stabiliser fitted?	Anti Roll Bar		-
Type of shock absorber	Armstrong A.T 7		Armstrong A.T 7
No. of shock absorbers	2		2

### STEERING

Type of steering gear	Burman 'F' Type
Turning circle of car	10.36 m., approx.
No. of turns of steering wheel from lock to lock	3

### CAPACITIES AND DIMENSIONS

Fuel tank	52 litres	Sump	4.5 Inc Oil Filter litres
Engine & Radiator	6.02 or 6.59 with heater litres		
Overall length of car	395 cm.	Overall width of car	153.5 cm.
Overall height of car, unladen (with hood up, if appropriate)	133 cm.	with hardtop	
Distance from floor to top of windscreen:		131 cm	with softtop
Highest point	92.7 cm.	Lowest point	87 cm.
Width of windscreen:			
Maximum width	122 cm.	Minimum width	104 cm.
*Interior width of car	128 cm.		
No. of seats	2		
Track: Front	129.5 cm.	Rear	124 cm.
Wheelbase	218 cm.	Ground clearance	105 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	928	kgs. std Soft top
	<del>937</del>	kgs O/D soft top
	1006	kgs G.T. Model
	1015	kgs O/D G.T Model

**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:—

1. Oil Cooler Available
2. Long Range Fuel Tank Capacity 100 Litres
3. Power Lock differential assembly available.



