

Manufacturers Reference No. for Application

SUNALP IV



F.I.A. Recognition No.

164

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..... ALPINE IV

Year of Manufacture..... 1964

Serial No. of Chassis..... B.9400001

Engine..... B.9400001

Type of Coachwork..... 2-SEATER

Recognition is valid from..... 10th April 1964..... In category GRAND TOURING

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



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



Herbert Schmid

Form: R.F.I.A.

General description of car:

Specify here material/s of chassis/body construction

Two Seater Sports Tourer with Rear Occasional Seat - Two Door only - Hard Top or Soft Top can be fitted - Body Constructed of Steel and Aluminium.

Photographs to be affixed below.

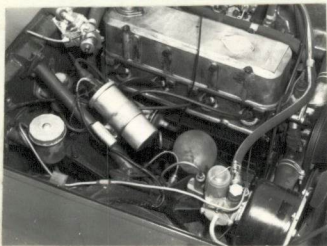
¾ view of car from rear left.



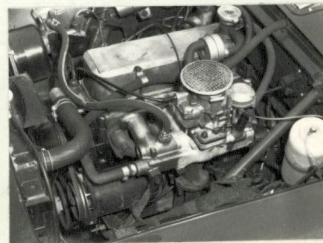
Interior view of car through driver's door.



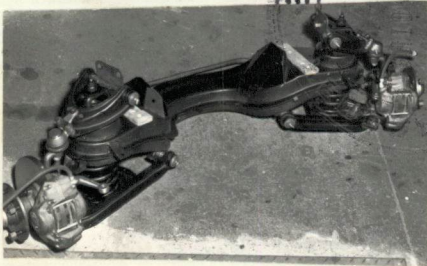
Engine unit with accessories from right.



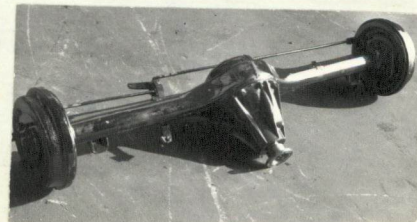
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



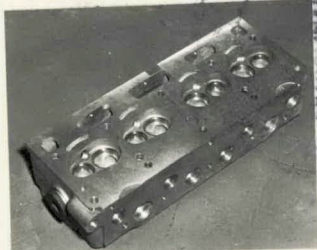
ENGINE

in line Yes
 No. of cylinders 4 in V -
 opposed -
 Cycle 4-Stroke Firing order 1.3.4.2.
 Capacity 1592 c.c. Bore 81.5 m.m. Stroke 76.2 m.m.
 Maximum rebore 1.016 m.m. Resultant capacity 1630 c.c.
 Material of cylinder block Cast Iron Material of sleeves, if fitted None
 Distance from crankshaft centre line to top face of block at centre line of cylinders 231 mm m.m.
 Material of cylinder head Aluminium Volume of one combustion chamber 38 c.c.
 Compression ratio 9.1:1
 Material of piston Aluminium No. of piston rings 3 per piston
 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 Al/Sn or Cu/Pb Dia. 50.825/50.813 m.m.
 Weights { Flywheel 9.48 kg.
 Crankshaft 17.07 kg.
 Connecting rod 0.709 kg.
 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 In Block
 Type of camshaft drive Duplex Chain
 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 0.427 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 12.0 m.m. Exhaust 12.0 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 159 Exhaust 151
 ¾ Maximum lift: Inlet 107 Exhaust 101
 Valve springs: Inlet Exhaust
 Type Coil Coil
 No. per valve 2 2
 Carburettor: Type Down draft/Horizontal No. fitted 1 or 2
 (up or down draft, horizontal)
 Make Solex/Weber Model 32 PAIA/40 DCOE2
 Flange hole diameter 32/40 m.m. Choke diameter 29/30 m.m.
 Main jet identification No. 120-155/115

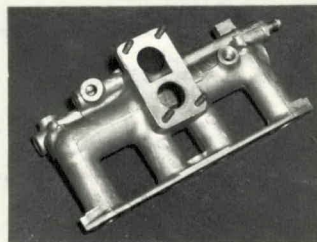
Air filter: Type Wire Mesh No. fitted 1

Inlet manifold:
Diameter of flange hole at carburettor 32/40 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 m.m.
Clip only

Photograph of piston showing crown to be affixed here.



Photograph of exhaust manifold to be affixed here.



ENGINE ACCESSORIES

Make of fuel pump AC 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 H.A.12
No. of ignition coils One Voltage 12
Make of dynamo Lucas Model G.40
Voltage of dynamo 12 Maximum output 25 amps.
Make of starter motor Lucas Model M 35c
Battery: No. fitted 1 Voltage 38 or 51 amp. hour
Oil Cooler (if fitted) type Radiator Capacity 2 pints

Make SUNBEAM Model ALPINE IV 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 Hydraulic and Mechanical
 Make of gearbox Rootes Type Constant Mesh
 No. of gearbox ratios 4-Forward 1-Reverse
 Method of operating gearshift Manual
 Location of gearshift Centre Floor Lever
 Is overdrive fitted? Optional
 Method of controlling overdrive, if fitted Electrical

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	3.346	$\frac{29 \times 30}{20 \times 15}$	3.32	$\frac{27 \times 30}{21 \times 15}$				
2.	2.141	$\frac{29 \times 31}{20 \times 21}$	1.9	$\frac{27 \times 31}{21 \times 21}$				
3.	1.392	$\frac{29 \times 24}{20 \times 25}$	1.24	$\frac{27 \times 24}{21 \times 25}$				
4.	1.00	-	1.00	-				
REV 5.	4.329	$\frac{29 \times 30 \times 19}{20 \times 13 \times 15}$						

Type of final drive Hypoid
 Type of differential 6 Bevel Pinion with Power Locking
 Final drive ratio 3.89:1 Alternatives 3.70 4.22 4.44 4.86
 No. of teeth 35/9 37/10 38/9 40/9 34/7
 Overdrive ratio, if fitted .803:1

WHEELS

Type Pressed Steel Disc Weight _____ kg.
 Method of attachment Four Stud 7/16 UNF
 Rim diameter 330.2 m.m. Rim width 1.5 m.m.
 Tyre size: Front 600 x 13 Rear 600 x 13

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? Yes
 Type of servo, if fitted Girling Vacuum
 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
Inside diameter of brake drums	-	m.m.	228.6
No. of shoes per brake	-		2
Outside diameter of brake discs	250.2	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	77	m.m.	215
		m.m.	m.m.
Width	54	m.m.	44.5
Total area per brake	6645	m.m. ²	19484
		m.m. ²	m.m. ²

SUSPENSION

	Front		Rear
Type	Wishbone		Live Axle
Type of spring.	Coil		Semi-Elliptical
Is stabiliser fitted?	Yes		-
Type of shock absorber	Telescopic		Telescopic
No. of shock absorbers	2		2

STEERING

Type of steering gear..... Recirculating Ball

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

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)..... 135 cm.

Distance from floor to top of windscreen:

Highest point..... cm. Lowest point..... 87 cm.

Width of windscreen:

Maximum width..... 122 cm. Minimum width..... 104 cm.

*Interior width of car..... 12 cm.

No. of seats.....

Track: Front..... 131 cm. Rear..... 125 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.

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 available.
2. Long Range Fuel Tank available 100 litres.
3. 4 Bevel Bevel Differential available.
4. Composite Exhaust Manifold available.

