



F.I.A. Recognition No. 16

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., RYTON-ON-DUNSMORE, COVENTRY.
Model SUNBEAM ALPINE. Year of Manufacture 1959
Serial No. of Chassis B.9000001
Engine B.9000001
Type of Coachwork Two Seater Sports with removable Hard Top.
Recognition is valid from 1st October, 1959. In category 4 & 5. G.T.

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 rear occasional seat.

Soft top hood. Hard top available as an extra.

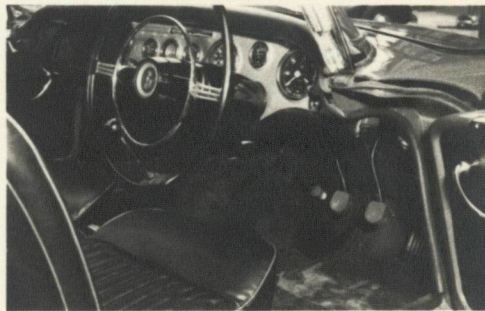
Two door.

Photographs to be affixed below.

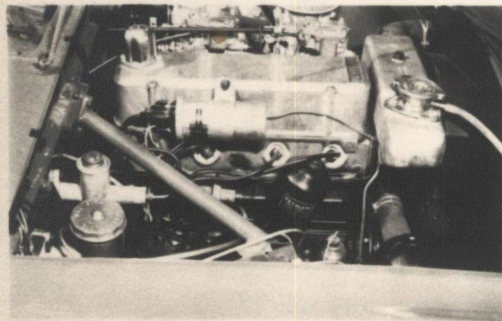
$\frac{3}{4}$ view of car from rear left.



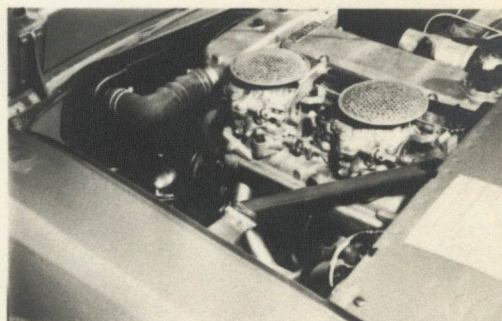
Interior view of car through driver's door.



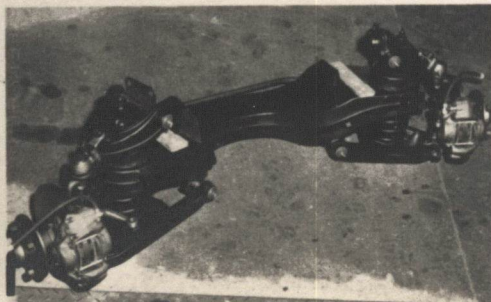
Engine unit with accessories from right.



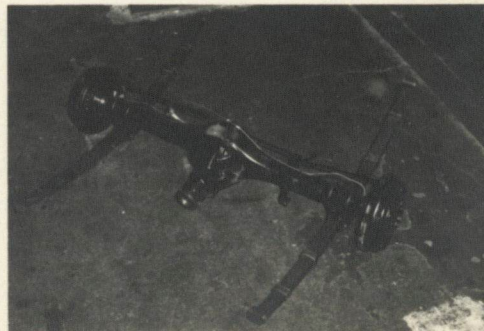
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



ENGINE

in line with of vehicle.

No. of cylinders 4 ~~in~~
 opposed

Cycle 4 stroke Firing order 1. 3. 4. 2.

Capacity 1494 c.c. Bore 79 m.m. Stroke 76.2 m.m.

Maximum rebore 80.016 Resultant capacity 1533 c.c.

Material of cylinder block C.I. 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 9.2 : 1

Material of piston Heplex. 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 Copper/Lead Indium Dia. 47.650/47.638 m.m.

Weights { Flywheel 10.64 kg.
 Crankshaft 16.3 kg.
 Connecting rod .759 kg. c/w brg. shells & small end.
 Piston with rings .396 kg.
 Gudgeon pin .102 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 36.77/36.37 m.m. Exhaust 29.87/29.77 m.m.

Diameter of port at valve seat: Inlet 33.3 m.m. Exhaust 26.9 m.m.
 at valve at valve

Tappet clearance for checking timing: Inlet .495 m.m. Exhaust .495 m.m.

Valves open: Inlet 14° B.T.D.C. Exhaust 56° B.B.D.C.

Valves close: Inlet 52° A.B.D.C. Exhaust 10° A.T.D.C.

Maximum valve lift: Inlet 9.42 m.m. Exhaust 9.40 m.m.

Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 148° Exhaust 144°
 ¾ Maximum lift: Inlet 96° Exhaust 92°

Valve springs: Inlet Exhaust
 Type Helical Coil. Helical Coil.
 No. per valve 2 2

Carburettor: Type Down draught No. fitted 2
 (up or down draft, horizontal)

Make Zenith Model 36/WIP/2.

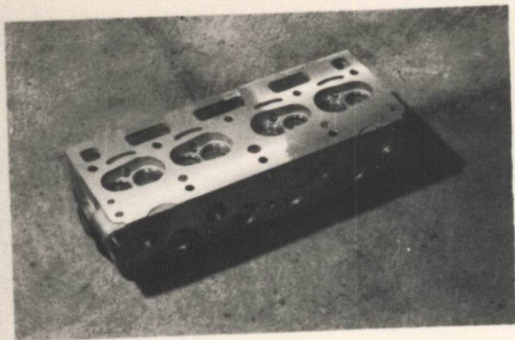
Flange diameter 36 m.m. Choke diameter 28 m.m.

Main jet identification No. 130

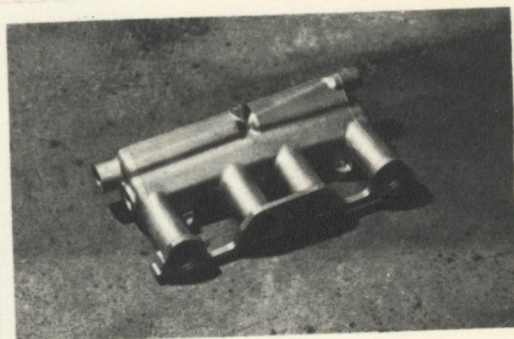
Air filter: Type Wire mesh. No. fitted 2

Inlet manifold:
Diameter of flange at carburettor 50.04 m.m.

Diameter of flange at port 50.8 m.m.



1 here.



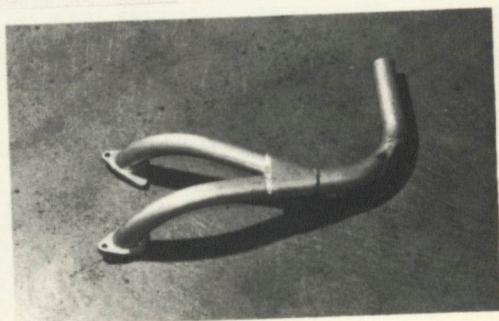
Exhaust manifold:

Diameter of flange at port 48.26 m.m.

Diameter of flange at connection to silencer inlet pipe No flange, clip only ~~40.00~~



1 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 distributor. coil or magneto

Make of ignition Lucas. Model Distributor DM.2.P4.

Method of advance and retard Centrifugal and vacuum.

Make of ignition coil Lucas. Model H.A.12.

No. of ignition coils One Voltage 12v.

Make of dynamo Lucas. Model C.40.

Voltage of dynamo 12v. Maximum output 22 amps.

Make of starter motor Lucas. Model M.35.G.

Battery: No. fitted One Voltage 12 Capacity 38 amp. hour

P.4447

Make **SUNBEAM**

Model **ALPINE.**

F.I.A. Recognition No.

TRANSMISSION

Make of clutch **Borg & Beck.** Type **Dry.**
 Diameter of clutch plate **8.0" O.Dia.** 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 of 6. Forward 1. Reverse with O/D.**
 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.	3.346	$\frac{29}{20} \times \frac{30}{13}$						
2.	2.141	$\frac{29}{20} \times \frac{31}{21}$						
3.	1.392	$\frac{29}{20} \times \frac{24}{25}$						
4.	1.000	Direct.						
Rev.	4.239	$\frac{29}{20} \times \frac{30}{13} \times \frac{19}{15}$						

Type of final drive **Hypoid bevel crown wheel and pinion.**
 Type of differential **Normal, full slip, spider and sun wheel.**
 Final drive ratio **3.8889** Alternatives **4.2222**
 No. of teeth **35/9** **38/9**
 Overdrive ratio, if fitted **.803 : 1** **(24.6%)**

WHEELS

Type **Steel dish or wire** Weight **13.15** kg.
 Method of attachment **4 Studs or centre lock.**
 Rim diameter **330.** m.m. Rim width **101.6** m.m.
 Tyre size: Front **5.60 x 13** or **5.90 x 13** Rear **5.60 x 13** or **5.90 x 13.**

BRAKES

Method of operation **Hydraulic**
 Is servo assistance fitted? **No**
 Type of servo, if fitted **-**
 No. of hydraulic master cylinders **One** Bore **17.8** m.m.

	Front		Rear	
No. of wheel cylinders	2		1	
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	241.3	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 volume	63.9	c.m. ³ m.m.	40.97	c.m. ³ m.m.
Width	54	m.m.	44.5	m.m.
Total area per brake	6645	m.m. ²	19484	m.m. ²

SUSPENSION

	Front	Rear
Type	Trailing wishbone	Beam axle.
Type of spring	Coil spring.	Semi-elliptical
Is stabiliser fitted?	Anti roll bar.	-
Type of shock absorber	Armstrong AT.7.	Armstrong DAS.8. RXPF.
No. of shock absorbers	2	2

STEERING

Type of steering gear	Burman Recirculating Ball.
Turning circle of car	16.06 m., approx.
No. of turns of steering wheel from lock to lock	3

CAPACITIES AND DIMENSIONS

Fuel tank	40.9	litres	Sump	4.5	litres
Engine and Radiator	7.95 or 8.53	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)	131	cm.	Hard and Soft Top.		
Distance from floor to top of windscreen:					
Highest point	92.7	cm.	Lowest point	89	cm.
Width of windscreen:					
Maximum width	122	cm.	Minimum width	104	cm.
Interior width	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	957	kgs.
	966	kgs. with Overdrive
	974	kgs. with Hardtop.

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. 4.44 Rear Axle.
2. S.U. Electrical Petrol Pump.
3. LONG DISTANCE TOURING TANK: CAPACITY 100 LITRES (22 galls)