Manufacturers Reference No. for Application

SUNRAP IIIA

F.I.A. Recognition No. 1065

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. RYTON ON DUNSMORE COVENTRY

Model SUNBEAM RAPIER III A Year of Manufacture 1961.

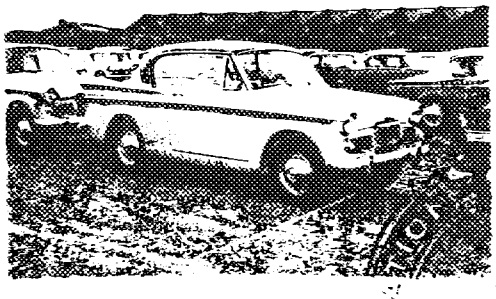
Serial No. of Chassis B 3050001

Engine B 3050001

Type of Coachwork Two door four seater saloon

Recognition is valid from 1st May, , 1961. In category Touring

Photograph to be affixed here ¾ view of car from front right.



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

General description of car:

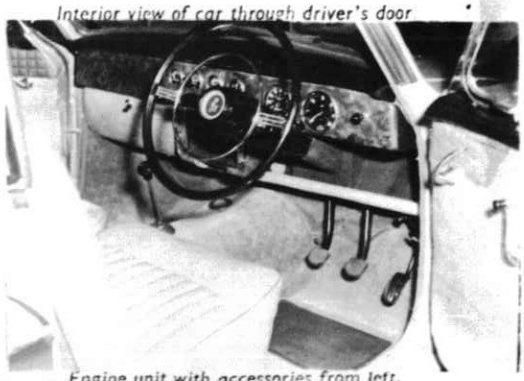
Two door hard top saloon - Four seater.

Convertible model also available.

Photographs to be affixed below.

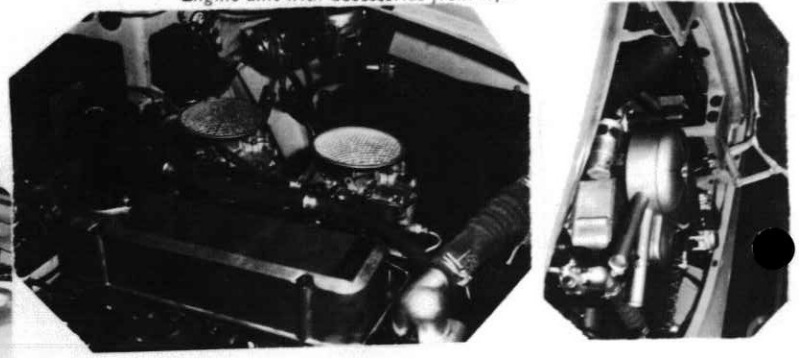
¾ view of car from rear left.

Interior view of car through driver's door

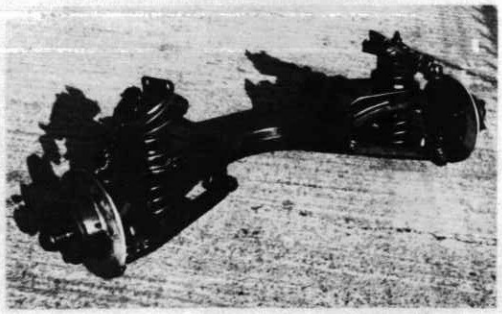


Engine unit with accessories from right.

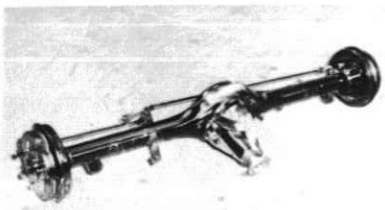
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels)



ENGINE

No. of cylinders 4 — L in line with C of vehicle

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 1621 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 Aluminuim — Volume of one combustion chamber 38 c.c.

Compression ratio 9.1

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. 50.83/50.81 m.m.

Weights
- Flywheel 10.64 kg.
- Crankshaft 17.1 kg.
- Connecting rod .71 kg.
- Piston with rings .44 kg.
- Gudgeon pin .14 kg.

No. of valves per cylinder 2 — Method of valve operation Pushrod

No. of camshafts 1 — Location of camshafts Cylinderblock

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.
Tappet clearance for checking timing:	Inlet	.427 at valve m.m.	Exhaust	.498 at valve C 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 Downdraught (up or down draft, horizontal) — No. fitted 2

Make Zenith — Model 36.W.I.A

Flange hole diameter 36 m.m. — Choke diameter 28 m.m.

Main jet identification No. 112

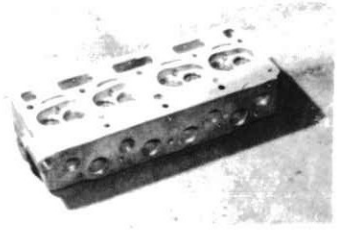
Air filter: Type Dry Filter No. fitted 1

Inlet manifold:

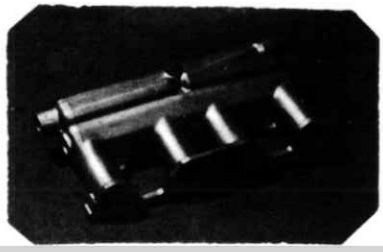
Diameter of flange hole at carburettor 30.04 m.m.

Diameter of flange hole at port 30.2 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.



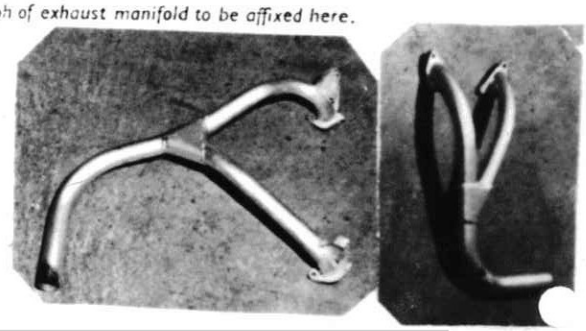
Exhaust manifold:

Diameter of flange hole at port 43.26 m.m.

Diameter of flange hole at connection to silencer inlet pipe To flange, slip 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 AC No. fitted 1

Method of operation Mechanical

Type of ignition system Coil and distributor coil or magneto

Make of ignition Lucas Model Distributor 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 v

Make of dynamo Lucas Model C.40

Voltage of dynamo 12 v Maximum output 22 amps.

Make of starter motor Lucas Model M.35.G

Battery: No. fitted One Voltage 12 Capacity 38 or 51 amp. hour at 10 Hour Rate

Make SUNBEAM Model RAPIER F.I.A. Recognition No.

Manufacturers Reference No. of Application SUNRAP III A

TRANSMISSION

Make of clutch Borg and Beck Type Dry

Diameter of clutch plate 8.0" dia No. of plates One

Method of operating clutch Mechanical through hydraulic slave cylinder

Make of gearbox Humber Type Constant

No. of gearbox ratios 4 forward and 1 reverse

Method of operating gearshift Manual

Location of gearshift Centre floor lever

Is overdrive fitted? optional

Method of controlling overdrive, if fitted Electrical 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	29x30 / 20 13						
2.	2.141	29x31 / 20 21						
3.	1.392	29x24 / 20 25						
4.	1.0	Direct						
~~xxx~~ Rev.	4.329	~~29x30x19~~ / ~~20 13 15~~						

Type of final drive Hypoid

Type of differential 4 Bevel pinion

Final drive ratio 4.22:1 Alternatives 4.86:1 Overdrive when fitted.

No. of teeth 38/9 4.44:1 34/7

40/9

Overdrive ratio, if fitted 24.6 %

WHEELS

(1 wheel and tyre)

Type Steel disc Weight 15.43 kg.

Method of attachment 4 Stud

Rim diameter 381 m.m. Rim width 101.6 m.m.

Tyre size: Front 5.60 x 15 in Rear 5.60 x 15 in.

BRAKES

Method of operation Hydraulic

Is servo assistance fitted? No

Type of servo, if fitted -

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	m.m.
Inside diameter of brake drums	-	m.m.	228.6	m.m.
No. of shoes per brake	-		2	
Outside diameter of brake discs	275	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	
Available Volume	30.7	c.m.³	43.5	c.m.³
		m.m.		m.m.
		m.m.		m.m.
Width	49.1	m.m.	44.5	m.m.
Total area per brake	6450	m.m.²	19484	m.m.²

SUSPENSION

	Front	Rear
Type	Trailing wishbone	Beam Axle
Type of spring	Coil spring	Semi-elliptic leaf
Is stabiliser fitted?	Anti Roll bar	
Type of shock absorber	Armstrong AT 9	Girling or Woodhead Munroe
No. of shock absorbers	Telescopic 2	Telescopic 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

Engine & Fuel tank: 45.4 litres Sump: 4.55 litres

Radiator: 6.95 litres 3

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: 123 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: 1026 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 preceeding information:—

1. Petrol tank shield. Overseas Market - Africa, Australia New Zealand.
2. S.U. Electrical Pump
3. Competition seats available
4. Alternative exhaust system available.
5. Separate air filters available.
6. Oil Cooler.
7. Sports camshaft available
8. Long range fuel tank available 22 Gall. capacity (100 litres)

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

SUMBEAM - RAPIER III A	5/61	1065
MARQUE ET MODELE	VALIDITE HOMOLOGATION	FICHE NR.

	TVR/1600
	GROUPE / CLASSE

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES

Autres homologations du modèle

Vérifiée le 26/10/95 par _____ visée ce jour le _____ par _____