

Manufacturers Reference No. for Application

CHAMOIS I.



F.I.A. Recognition No.

1358

# 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 SINGER MOTOR CAR COMPANY LIMITED.

Model CHAMOIS. Year of Manufacture 1964.

Serial No. of Chassis B.43-1-000001  
Engine B.43-1-000001

Type of Coachwork SALOON TWO DOOR.

Recognition is valid from 16th Nov 1964 In category 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.

Form: R.F.I.A.

**General description of car:**

*Specify here material/s of chassis/body construction*

2 DOOR FOUR SEATER SALOON CAR.

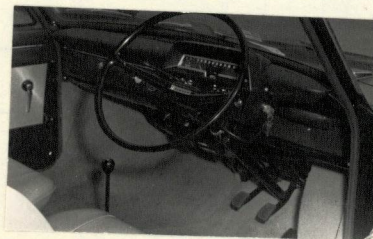
All steel integral chassis/body unit.

Photographs to be affixed below.

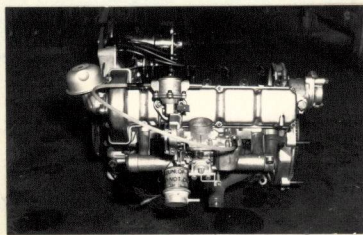
$\frac{3}{4}$  view of car from rear left.



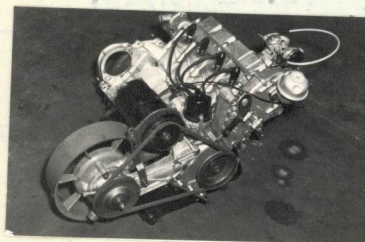
Interior view of car through driver's door.



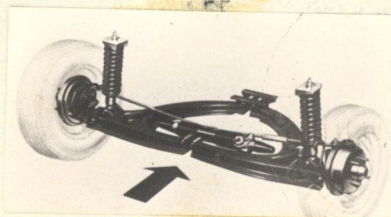
Engine unit with accessories from right.



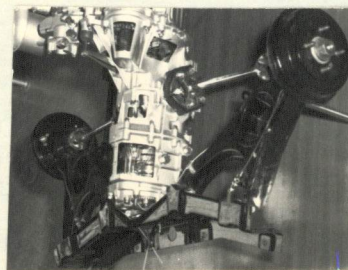
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



**ENGINE**

in line in line.  
 No. of cylinders 4 in V -  
 opposed -  
 Cycle 4 Firing order 1.3.4.2  
 Capacity 875 c.c. Bore 68.0 m.m. Stroke 60.3 m.m.  
 Maximum rebore 0.762 Resultant capacity 896 c.c.  
 Material of cylinder block Aluminium Material of sleeves, if fitted Cast Iron.  
 Distance from crankshaft centre line to top face of block at centre line of cylinders 161.925 m.m.  
 Material of cylinder head Aluminium. Volume of one combustion chamber 21.1 c.c.  
 Compression ratio 10:1  
 Material of piston Aluminium No. of piston rings 3 or 4  
 Distance from gudgeon pin centre line to highest point of piston crown 26.606 m.m.  
 Bearings { Crankshaft main bearings: Type Shell. Dia. 47.6 m.m.  
 Connecting rod big end: Type Shell. Dia. 41.5 m.m.  
 Weights { Flywheel 5.707 kg.  
 Crankshaft 8.601 kg.  
 Connecting rod 0.49 kg.  
 Piston with rings 0.189 kg.  
 Gudgeon pin 0.567 kg.  
 No. of valves per cylinder 2 Method of valve operation Direct Tappet.  
 No. of camshafts 1 Location of camshafts Overhead.  
 Type of camshaft drive Single Stage Chain.  
 Diameter of valves: Inlet 27.987 m.m. Exhaust 26.654 m.m.  
 Diameter of port at valve seat: Inlet 26.135 m.m. Exhaust 25.765 m.m.  
 Tappet clearance for checking timing: Inlet 0.254 m.m. Exhaust 0.254 m.m.  
 Valves open: Inlet 15° BTDC Exhaust 53° BTDC  
 Valves close: Inlet 53° ABDC Exhaust 15° BTDC.  
 Maximum valve lift: Inlet 6.0122 m.m. Exhaust 6.0122 m.m.  
 Degrees of crankshaft rotation from zero to—  
 Maximum lift: Inlet 116° Exhaust 116°  
 ¾ Maximum lift: Inlet 650 Exhaust 640  
 Valve springs: Inlet Exhaust  
 Type Coil. Coil.  
 No. per valve 2. 2.  
 Carburettor: Type Downdraft. No. fitted 1.  
 (up or down draft, horizontal)  
 Make Solex. Model 30 PIHT.  
 Flange hole diameter 30 m.m. Choke diameter 20 m.m.  
 Main jet identification No. 105.

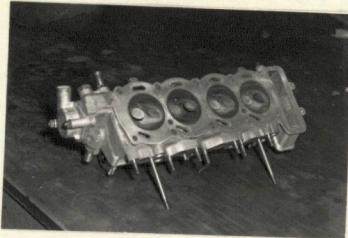
Air filter: Type Paper Element. No. fitted 1.

Inlet manifold:

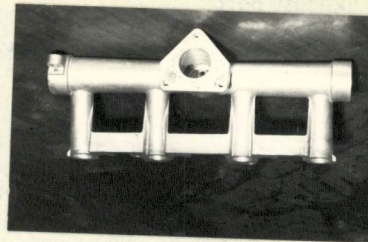
Diameter of flange hole at carburettor 30 m.m.

Diameter of flange hole at port 24.584 m.m.

Photograph of combustion chamber to be affixed here.



Photograph of inlet manifold to be affixed here.



Exhaust manifold:

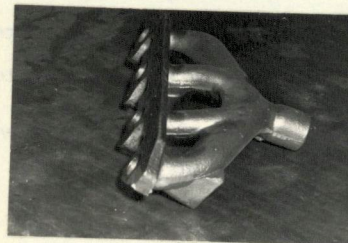
Diameter of flange hole at port 21.32 m.m.

Diameter of flange hole at connection to silencer inlet pipe 26.40 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. coil or magneto

Make of ignition Lucas Model 25D.

Method of advance and retard Centrifugal and Vacuum.

Make of ignition coil Lucas. Model HA.12.

No. of ignition coils 1 Voltage 12.

Make of dynamo Lucas. Model C.40.

Voltage of dynamo 12. Maximum output 23 amps.

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

Battery: No. fitted 1. Voltage 12 Capacity 38 amp. hour

Oil Cooler (if fitted) type ..... Capacity ..... pints

Make SINGER Model CHAMOIS F.I.A. Recognition No. \_\_\_\_\_  
 Manufacturers Reference No. of Application CHAMOIS.I

**TRANSMISSION**

Make of clutch Laycock. Type Diaphragm.  
 Diameter of clutch plate 5.5" No. of plates 1.  
 Method of operating clutch Hydraulic  
 Make of gearbox Rootes Type Indirect Constant Mesh.  
 No. of gearbox ratios 4 Forward and Reverse.  
 Method of operating gearshift Manual.  
 Location of gearshift On Floor.  
 Is overdrive fitted? No.  
 Method of controlling overdrive, if fitted \_\_\_\_\_

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	3.416	41/12						
2.	1.831	33/18						
3.	1.166	28/24						
4.	0.851	23/27						
<u>5</u> Rev.	2.841	37/13.						

Type of final drive Hypoid.  
 Type of differential Bevel Gear.  
 Final drive ratio 4.857 Alternatives 4.714 5.142  
 No. of teeth 7 - 34 7 - 33 7 - 36  
 Overdrive ratio, if fitted \_\_\_\_\_

**WHEELS**

Type Pressed Steel. Weight 4.87 kg.  
 Method of attachment 4 Studs.  
 Rim diameter 304 m.m. Rim width 114 m.m.  
 Tyre size: Front 5.50" + 12" Rear 5.50" + 12"

**BRAKES**

Method of operation Hydraulic.  
 Is servo assistance fitted? Optional.  
 Type of servo, if fitted Girling.  
 No. of hydraulic master cylinders 1. Bore 178 m.m.

	Front		Rear
No. of wheel cylinders	2		2
Bore of wheel cylinders	178	m.m.	191
Inside diameter of brake drums	2040	m.m.	2040
No. of shoes per brake	2		2
Outside diameter of brake discs		m.m.	
No. of pads per brake			
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	160.0	m.m.	160.0
		m.m.	m.m.
Width	38.1	m.m.	38.1
			m.m.
Total area per brake	6080	m.m. <sup>2</sup>	6080
			m.m. <sup>2</sup>

### SUSPENSION

	Front		Rear
Type	Swing axle		Trailing arm
Type of spring	Coil		Coil
Is stabiliser fitted?	Optional		Optional
Type of shock absorber	Telescopic		Telescopic
No. of shock absorbers	2		2

### STEERING

Type of steering gear Back and pinion

Turning circle of car 8.5 m., approx.

No. of turns of steering wheel from lock to lock 2.75

### CAPACITIES AND DIMENSIONS

Fuel tank 27.276/48.483 litres Sump 2.84 litres

Radiator 3.692 litres

Overall length of car 352.81 cm. Overall width of car 151.77 cm.

Overall height of car, unladen (with hood up, if appropriate) 136.13 cm.

Distance from floor to top of windscreen:

Highest point 101.6 cm. Lowest point 97.79 cm.

Width of windscreen:

Maximum width 111.76 cm. Minimum width 106.68 cm.

\*Interior width of car 121.92 cm.

No. of seats 4

Track: Front 124.66 cm. Rear 121.67 cm.

Wheelbase 208.28 cm. Ground clearance 13.97 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 712,00 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.<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:—





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1A/V

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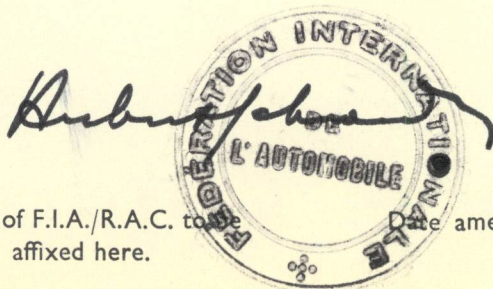
Amendment to Form of Recognition

Manufacturer..... Singer Motor Car Company Limited.

Model..... Chamois.

1. Manual Choke Carburettor now fitted to this model as standard equipment - Model Solex 30 PIH - B 15355. Part No. 7100560.
2. Optional gearbox now available giving ratios of:-

1st 3.416	No. of teeth.	41/12.
2nd 1.831	" " "	33/18.
3rd 1.273	" " "	22/28.
4th .923	" " "	26/24.
Rev. 2.841	" " "	37/13.
3. Alternative final drive ratios previously homologated of 4.714 and 5.142:1 are no longer available.



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

Date amendment is valid from

1st June 1965

Form: R.F.I.B.

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CHAMOIS 1.



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/B

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Amendment to Form of Recognition

Manufacturer..... Singer Motor Car Company Limited.

Model..... Chamois.

The track measurements quoted on the original Recognition Form are incorrect and should read as follows:-

Track : Front 125.7 cms.      Rear 123.1 cms.

The following equipment is now available for this car.

1. Magnesium alloy wheels 304.8 x 127 mm.

Part No. 7096101, no resulting increase in track of car.

2. Long range fuel tank, capacity 10 gallons (45 litres).

Part No. 6674525.

Change of Title (Certain European Export Territories only).

The car, identical in every way except badges is called

"Sunbeam Chamois".

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

Date amendment is valid from

1st December 1965

Form: R.F.I.B.

hist 13/5

