

Manufacturers Reference No. for Application

TLW/AR/VH/COMP/2



F.I.A. Recognition No. 107

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 The Reliant Engineering Co. (Tamworth) Limited.

Model Sabre Six Year of Manufacture 1962/3

Serial No. of Chassis SS.300001/SS.300112

Engine S167751E / S287709E

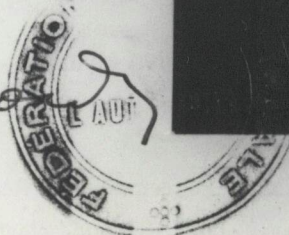
Type of Coachwork G.T. fixed head coupe (Additional coachwork open 2 str. and hard top 2 str) Grand touring cars.

Recognition is valid from 9/5/63 In category ~~Group 3~~
GT

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



Hubert de...



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

Form: R.F.I.A.

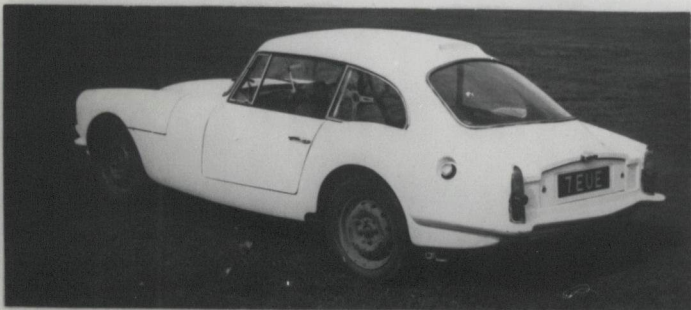
General description of car:

Specify here material/s of chassis/body construction

BOXED STEEL CHASSIS WITH GLASS FIBRE BODY.

Photographs to be affixed below.

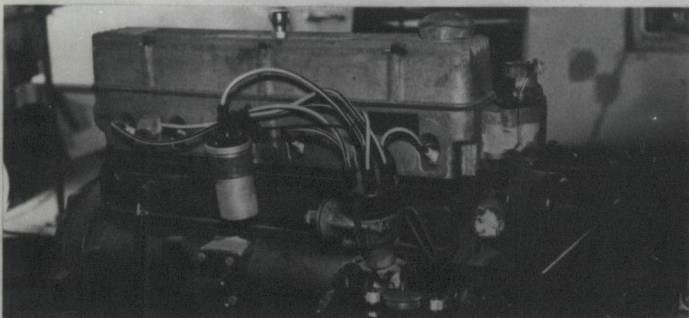
¾ view of car from rear left.



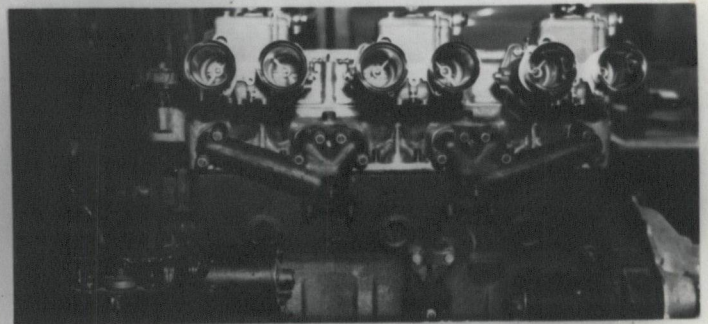
Interior view of car through driver's door.



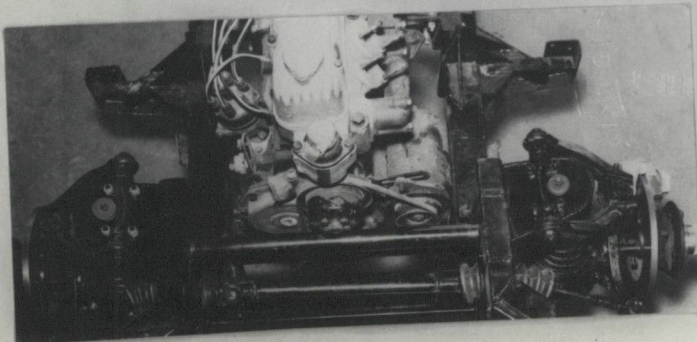
Engine unit with accessories from right.



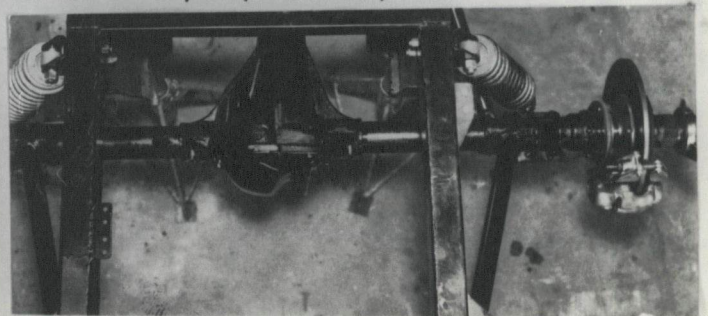
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



ENGINE

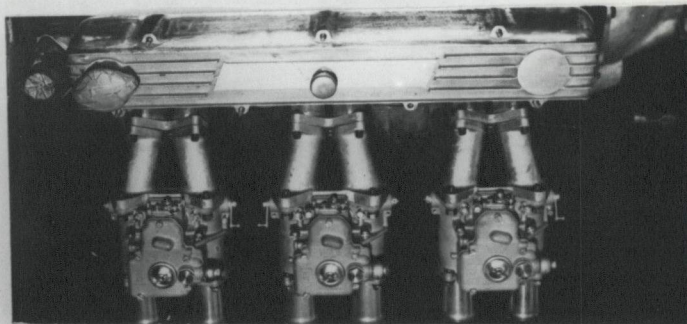
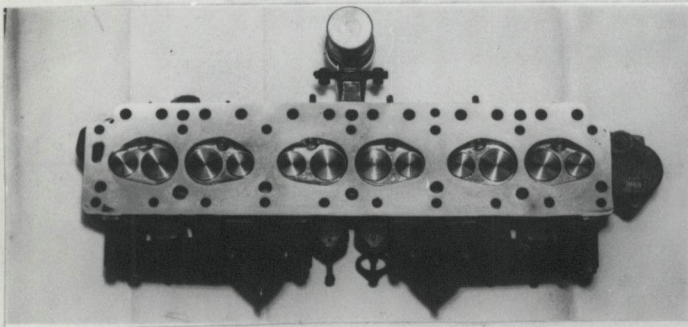
in line Yes
 No. of cylinders 6 in V
 opposed
 Cycle 4 Stroke Firing order 1,5,3,6,2,4
 Capacity 2553 c.c. Bore 82.55 m.m. Stroke 79.5 m.m.
 Maximum rebore 0.508 mm Resultant capacity 2584 c.c.
 Material of cylinder block Cast iron Material of sleeves, if fitted
 Distance from crankshaft centre line to top face of block at centre line of cylinders 221.48 m.m.
 Material of cylinder head Alum Alloy Volume of one combustion chamber 50 c.c.
 Compression ratio 9.5:1
 Material of piston Alum alloy No. of piston rings 3
 Distance from gudgeon pin centre line to highest point of piston crown 45.5 m.m.
 Bearings { Crankshaft main bearings: Type Steel backed lead bronze or copper Dia. 60.4 m.m.
 Connecting rod big end: Type -do- Dia. 57.1 m.m.
 Weights { Flywheel 10.25 kg.
 Crankshaft 41.34 kg.
 Connecting rod 0.354 kg.
 Piston with rings 0.4395 kg.
 Gudgeon pin 0.1275 kg.
 No. of valves per cylinder 2 Method of valve operation Push rod
 No. of camshafts 1 Location of camshafts Side of Block.
 Type of camshaft drive Chain
 Diameter of valves: Inlet 42 m.m. Exhaust 32.5 m.m.
 Diameter of port at valve seat: Inlet 36.5 m.m. Exhaust 28.5 m.m.
 Tappet clearance for checking timing: Inlet 0.3556 m.m. Exhaust 0.3556 m.m.
 Valves open: Inlet 17° B.T.D.C. Exhaust 49° B.B.D.C.
 Valves close: Inlet 51° A.T.D.C. Exhaust 19° A.T.D.C.
 Maximum valve lift: Inlet 8.86 m.m. Exhaust 8.86 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 124° Exhaust 124°
 ¾ Maximum lift: Inlet 68° Exhaust 68°
 Valve springs: Inlet Exhaust
 Type coil coil
 No. per valve 2 2
 Carburettor: Type Horizontal No. fitted 3
 (up or down draft, horizontal)
 Make Weber Model 45 DCOE.9
 Flange hole diameter 45 m.m. Choke diameter 28 m.m.
 Main jet identification No. 100

Air filter: Type Reliant No. fitted 6

Inlet manifold:

Diameter of flange hole at carburettor 45 m.m.

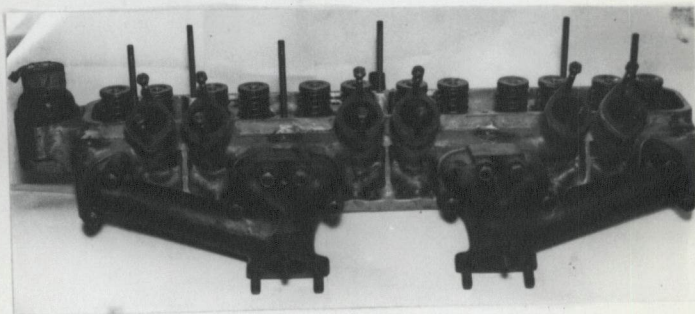
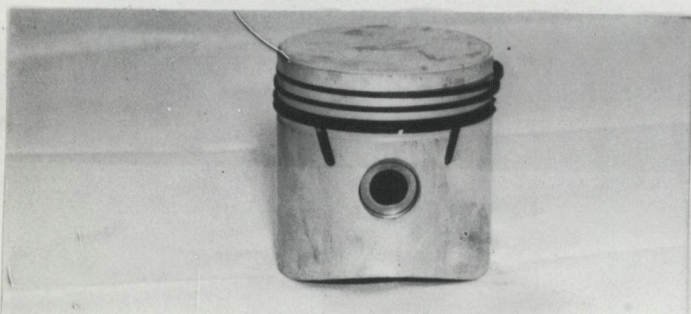
Diameter of flange hole at port 36 m.m.



Exhaust manifold:

Diameter of flange hole at port 30 m.m.

Diameter of flange hole at connection to silencer inlet pipe 42 m.m.



ENGINE ACCESSORIES

Make of fuel pump S.U. No. fitted 2

Method of operation Electric

Type of ignition system coil coil or magneto

Make of ignition Lucas Model DA12

Method of advance and retard Automatic with vacuum suction advance

Make of ignition coil Lucas Model 250

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model C 40 R

Voltage of dynamo 12 Maximum output 23 amps.

Make of starter motor Lucas Model M 35GR

Battery: No. fitted 1 Voltage 12 Capacity 56 amp. hour

Oil Cooler (if fitted) type Honeycomb Capacity 3 pints

Make Reliant Model Sabre Six F.I.A. Recognition No. _____
 Manufacturers Reference No. of Application TLW/AR/VH/COMP/2.

TRANSMISSION

Make of clutch Berg & Beck Type Dry Plate
 Diameter of clutch plate 216 mm No. of plates 1
 Method of operating clutch Hydraulic
 Make of gearbox Jaguar (or Ford) Type JS/GBN/CR (or 214E)
 No. of gearbox ratios 4 forward 1 reverse
 Method of operating gearshift MANUAL
 Location of gearshift Central floor mounting.
 Is overdrive fitted? Yes
 Method of controlling overdrive, if fitted Electric

	GEARBOX RATIOS		ALTERNATIVE RATIOS					
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1.	3.37		2.98		3.163	30		
2.	1.86		1.74		2.214	27		
3.	1.28		1.21		1.412	22		
4.	1.00		1.00		1.00	21		
5.	JAGUAR JS GBN JS		JAGUAR GBN CR		FORD			

Type of final drive Hypoid
 Type of differential Limited slip.
 Final drive ratio 3.58:1 Alternatives 4.56:1 - 4.1 - 3.91 - 3.73
 No. of teeth 12/43 9/41 10/41 11/43 11/41
 Overdrive ratio, if fitted Jaguar 0.72 or 0.78 (Ford 0.77)

WHEELS

Type Wire spoke Weight 9.75 kg.
 Method of attachment Centre Lock
 Rim diameter 381 m.m. Rim width 140 m.m.
 Tyre size: Front 1.85 x 15 Rear 1.85 x 15

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? No
 Type of servo, if fitted _____
 No. of hydraulic master cylinders 2 Bore 19 m.m.

	Front	Rear
No. of wheel cylinders	6	6
Bore of wheel cylinders	56.75	
Inside diameter of brake drums		
No. of shoes per brake		
Outside diameter of brake discs	266.7	273
No. of pads per brake	2	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	90.2	63.5
Width	50.4	50.4
Total area per brake	916.2	645.6

SUSPENSION

	Front	Rear
Type	Independent	live
Type of spring	coil	coil
Is stabiliser fitted?	no	no
Type of shock absorber	Telescopic dia.	Telescopic dia.
No. of shock absorbers	2	2

STEERING

Type of steering gear..... Rack and Pinion.

Turning circle of car..... 10.7 m., approx.

No. of turns of steering wheel from lock to lock..... 3

CAPACITIES AND DIMENSIONS

Fuel tank..... 90 litres Sump..... 5.5 litres

Radiator..... 14.75 litres

Overall length of car..... 401 cm. Overall width of car..... 155 cm.

Overall height of car, unladen (with hood up, if appropriate)..... 132 cm.

Distance from floor to top of windscreen :

 Highest point..... 87.1 cm. Lowest point..... 82.6 cm.

Width of windscreen :

 Maximum width..... 117.6 cm. Minimum width..... 99.1 cm.

*Interior width of car..... 116.3 cm.

No. of seats..... 2

Track: Front..... 132.1 cm. Rear..... 124 cm.

Wheelbase..... 231 cm. Ground clearance..... 150 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..... 787 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

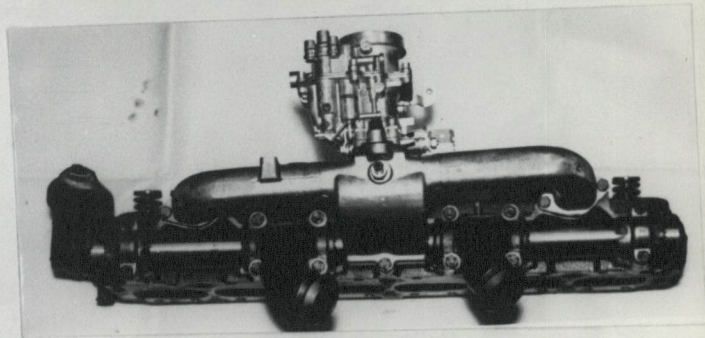
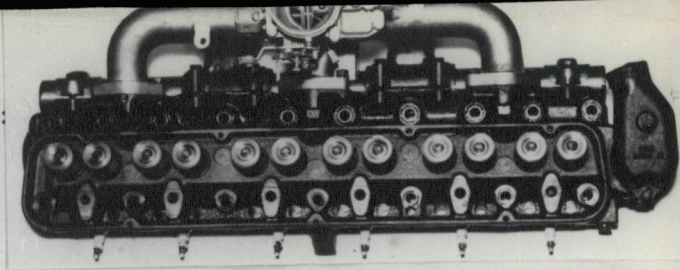
Make of pump..... Model or Type No.....

Make of injectors..... Model or Type No.....

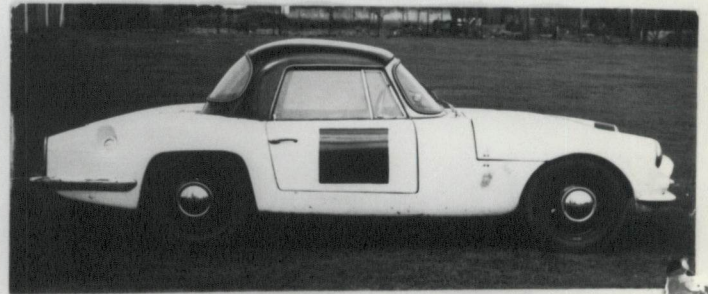
Location of injectors.....

Optional equipment affecting preceding information:

- (1) Cast Iron cylinder Head.
compression ratio 8.3:1
- (2) Zanith Carburettor 42 WIA 2
Choke size .36 mm
Main jet 170
Flange hole diameter 44mm
- (3) Drum rear wheel brakes
diameter: 228.6 mm
No. of shoes per brake 2.
Lining length 219 mm
" Width 44 mm
" Area 19.272 mm²
- (4) Fuel tank .54 litres
- (5) Bolt on perforated disc wheels.
- (6) Radiator 13.75 - litres



HARD TOP



2-SEATER

