

Manufacturers Reference No. for Application

R/15/57



F.I.A. Recognition No.

1217

# 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 RILEY MOTOR LIMITED

Model RILEY ONE POINT FIVE.

Year of Manufacture 1957

Chassis R/HS2 or HSR1.

Serial No. of

Engine 15R-U-H or 15 RB.

Type of Coachwork SALOON - 4 door.

Recognition is valid from 9/5/63

In category Tourisme



ight.



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

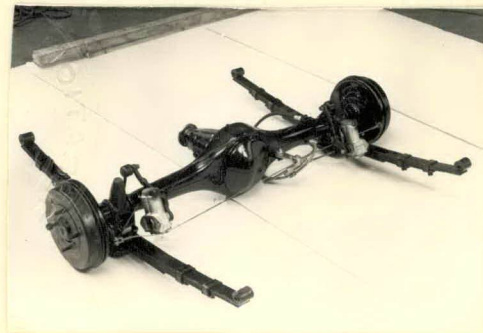
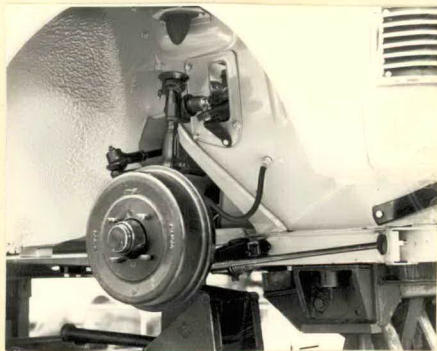
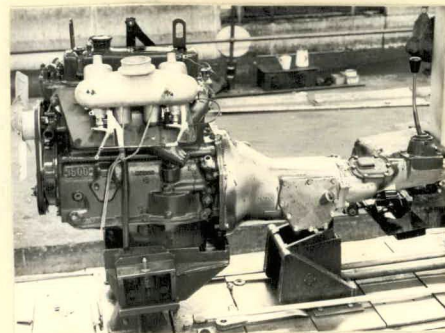
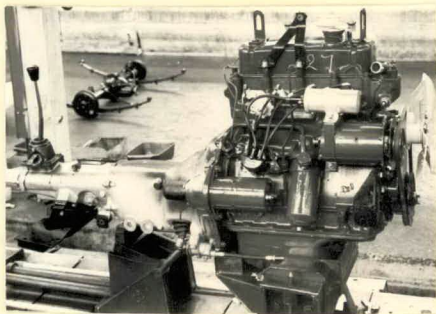
4 seater saloon of steel unitary construction  
powered by 4 cylinder OHV pushrod engine driving  
hypoid  $\frac{3}{4}$  floating axle through 4 speed synchromesh  
gearbox.  
Suspension by torsion bars at front and semi-elliptic  
leaf springs at rear.



graphs to be affixed bel



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**ENGINE**

in line Yes.

No. of cylinders 4 in V \_\_\_\_\_  
 opposed \_\_\_\_\_

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

Capacity 14.89 c.c. Bore 73.025 m.m. Stroke 88.9 m.m.

Maximum rebore 0.040" Resultant capacity 1531 c.c.

Material of cylinder block Cast Iron/ polished finish. Material of sleeves, if fitted \_\_\_\_\_

Distance from crankshaft centre line to top face of block at centre line of cylinders 251.8 m.m.

Material of cylinder head Cast Iron Volume of one combustion chamber 37.8 c.c.

Compression ratio 9.0:1

Material of piston Aluminium alloy No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 42.06 m.m.

Bearings { Crankshaft main bearings: Type White metal Dia. 50.82 m.m.  
 Connecting rod big end: Type Copper lead Dia. 47.66 m.m.

Weights { Flywheel 13.5 kg.  
 Crankshaft 13.15 kg.  
 Connecting rod 0.935 kg.  
 Piston with rings 0.290 kg.  
 Gudgeon pin 0.088 kg.

No. of valves per cylinder 2 Method of valve operation Push rod

No. of camshafts 1 Location of camshafts Cylinder block

Type of camshaft drive Chain

Diameter of valves: Inlet 39.8 m.m. Exhaust 34.23 m.m.

Diameter of port at valve seat: Inlet 33.33 m.m. Exhaust 29.37 m.m.

Tappet clearance for checking timing: Inlet 0.610 m.m. Exhaust 0.610 m.m.

Valves open: Inlet 24° BTDC Exhaust 59° BBDG

Valves close: Inlet 64° ABDC Exhaust 29° ATDC

Maximum valve lift: Inlet 9.5 m.m. Exhaust 9.5 m.m.

Degrees of crankshaft rotation from zero to—

Maximum lift: Inlet 165° Exhaust 165°

$\frac{3}{4}$  Maximum lift: Inlet 107° Exhaust 107°

Valve springs: Inlet Exhaust

Type Coil Coil

No. per valve 2 2

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

Make S.U. Model H4

Flange hole diameter 38.1 m.m. Choke diameter Variable m.m.

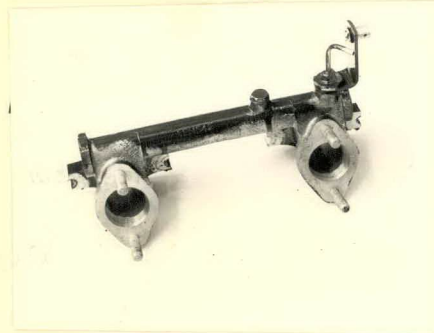
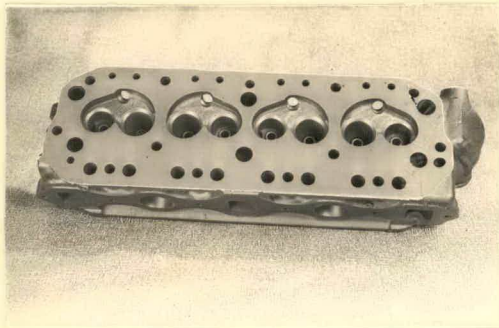
Main jet identification No. 0.090" Needle - AD standard

Air filter: Type Oil bath No. fitted One

Inlet manifold:

Diameter of flange hole at carburettor 38.89 m.m.

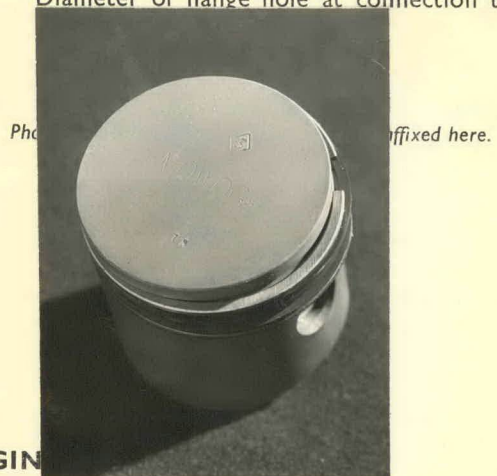
Diameter of flange hole at port 35.718 m.m.



Exhaust manifold:

Diameter of flange hole at port Outer 30.16 x 38.0 Centre 33.3 x 38.0 m.m.

Diameter of flange hole at connection to silencer inlet pipe 45.2 m.m.



## ENGINE

Make of fuel pump S.U. No. fitted 1

Method of operation Electric

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model DM2

Method of advance and retard Centrifugal & Vacuum

Make of ignition coil Lucas Model HA12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model C40/1

Voltage of dynamo 12 Maximum output 19 amps.

Make of starter motor Lucas Model M35G/1

Battery: No. fitted 1 Voltage 12 Capacity 58 at 20 Hrs. Rate hour

Oil Cooler (if fitted) type Capacity pints



Make Riley Model 1.5 F.I.A. Recognition No. ....  
 Manufacturers Reference No. of Application .....

**TRANSMISSION**

Make of clutch Borg & Beck Type A6-G.  
 Diameter of clutch plate 8" 20.3cm No. of plates 1  
 Method of operating clutch Hydraulic  
 Make of gearbox BMC Type Synchromesh 2nd, 3rd, 4th  
 No. of gearbox ratios 4 forward, 1 reverse  
 Method of operating gearshift Remote control  
 Location of gearshift Central 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.	3.637:1	$\frac{20}{31} \times \frac{11}{28}$	2.45:1	$\frac{25}{26} \times \frac{11}{28}$				
2.	2.215:1	$\frac{20}{31} \times \frac{20}{31}$	1.62:1	$\frac{25}{26} \times \frac{19}{32}$				
3.	1.373:1	$\frac{20}{31} \times \frac{26}{25}$	1.268:1	$\frac{25}{26} \times \frac{29}{22}$				
4.	1:1	Direct	1.00:1	Direct				
$\frac{5}{R}$	4.755:1		3.199:1					

Type of final drive Hypoid or limited slip  
 Type of differential Bevel  
 Final drive ratio 3.7:1 Alternatives 4.22, 4.55, 4.875, 3.9  
 No. of teeth 11/41 9/38, 9/41, 8/39, 11/43  
 Overdrive ratio, if fitted .....

**WHEELS**

Type Ventilated disc Weight 13.61 with tyre kg.  
 Method of attachment Four studs & nuts  
 Rim diameter 355.6 m.m. Rim width 76.2 m.m.  
 Tyre size: Front 5.60 x 14 Rear 5.60 x 14

**BRAKES**

Method of operation Hydraulic  
 Is servo assistance fitted? No  
 Type of servo, if fitted .....

No. of hydraulic master cylinders 1 Bore 19.05 or 22.22 m.m.

	Front		Rear
No. of wheel cylinders	4		2
Bore of wheel cylinders	19.05	m.m.	19.05
Inside diameter of brake drums	228.6	m.m.	203.0
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	219.9	m.m.	194.5
		m.m.	
Width	57.1	m.m.	38.1
Total area per brake	25110.	m.m. <sup>2</sup>	14820.
			m.m. <sup>2</sup>

### SUSPENSION

	Front		Rear
Type	Independent		Semi elliptic
Type of spring	Torsion bar		Leaf
Is stabiliser fitted?	No		No
Type of shock absorber	Hydraulic piston		Hydraulic piston
No. of shock absorbers	2		2

### STEERING

Type of steering gear Rack & Pinion

Turning circle of car 10.44 m., approx.

No. of turns of steering wheel from lock to lock 2 $\frac{2}{3}$

### CAPACITIES AND DIMENSIONS

Fuel tank 32 or 73 litres      Sump 4.5 litres

Cooling system ~~Radiator~~ 7.38 litres

Overall length of car 389.2 cm.      Overall width of car 155.0 cm.

Overall height of car, unladen (with hood up, if appropriate) 151.0 cm.

Distance from floor to top of windscreen:

Highest point 138.4 cm.      Lowest point 134.6 cm.

Width of windscreen:

Maximum width 114.9 cm.      Minimum width 114.9 cm.

\*Interior width of car 120.6 cm.

No. of seats 4

Track: Front 129.2 cm.      Rear 127.7 cm.

Wheelbase 218.5 cm.      Ground clearance 165.1 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 750 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:—

Supplementary fuel tank - ARH.106 - 9 gall./41 litres.  
Sump guard - AHH.5879

Touring Equipment -  
Camshaft - 1H.603 -

I.O. 5° BTDC      EX.O. 40° BBDC

I.C. 45° ABDC      EX.C. 10° ATDC.

Max Lift. 8.18 m.m.

Low compression pistons - 8.3:1 Compression ratio.

Part No. 1H.1087

Exhaust manifold. - ACH.8530

