Manufacturers Reference No. for Application ADO 159R/63

F.I.A. Recognition No. 1198

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 Motors Limited

Model Riley Elf MK II Year of Manufacture 1963

Serial No. of Chassis R/A2S2

Engine 9WR-U-H & 9WR-FAU-H

Type of Coachwork Saloon - 2 door

Recognition is valid from 9/5/63 In category Touring

Phot

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

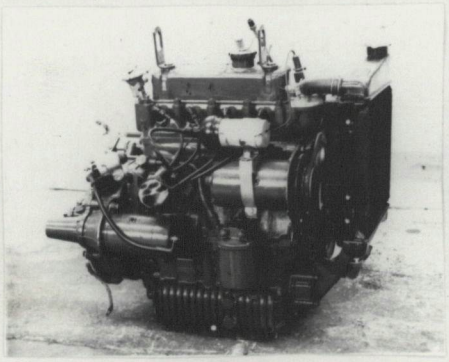
Form: R.F.I.A.

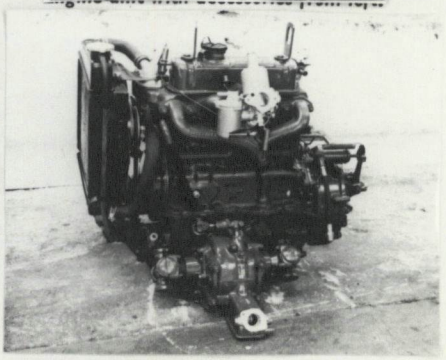
General description of car:

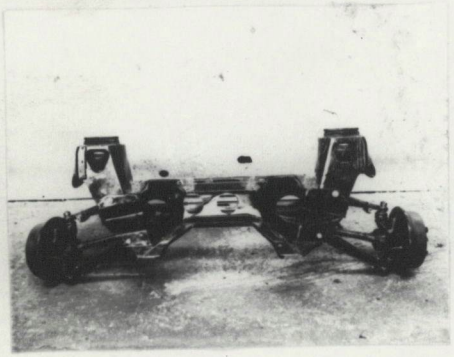
Specify here material/s of chassis/body construction

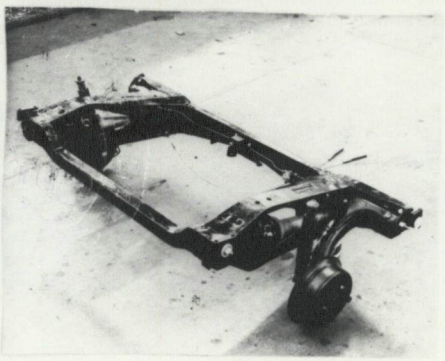
2 door saloon of unitary contruction powered by transversely mounted 4 cylinder OHV engine/transmission unit driving front wheels. All independent suspension via rubber cone springs.

Photographs to be affixed below.









ENGINE

in line In line

No. of cylinders 4 in V

opposed

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

Capacity 998 c.c. Bore 64.57/64.60 m.m. Stroke 76.20/76.33 m.m.

Maximum rebore + .020" Resultant capacity 1016 c.c. (Max)

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 218.31/218.57 m.m.

Material of cylinder head Cast Iron Volume of one combustion chamber 24.5 c.c.

Compression ratio 8.3:1

Material of piston Aluminium alloy No. of piston rings 4

Distance from gudgeon pin centre line to highest point of piston crown 33.96/34.09 m.m.

Bearings { Crankshaft main bearings: Type Copper lead Dia. 44.46 m.m.
Connecting rod big end: Type Copper Lead Dia. 41.28 m.m.

Weights { Flywheel 6.69 kg.
Crankshaft 9.5 kg.
Connecting rod .68 kg.
Piston with rings .18 kg.
Gudgeon pin .057 kg.

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

No. of camshafts 1 Location of camshafts In crankcase

Type of camshaft drive Chain

Diameter of valves:	Inlet 27.76/27.89 m.m.		Exhaust 25.4/25.5 m.m.	
Diameter of port at valve seat:	Inlet 24.34 m.m.		Exhaust 22.83/23.32 m.m.	
Tappet clearance for checking timing:	Inlet .48 m.m.		Exhaust .48 m.m.	
Valves open:	Inlet 5° BTDC		Exhaust 40° BBDC	
Valves close:	Inlet 45° ABDC		Exhaust 10° ATDC	
Maximum valve lift:	Inlet 7.15 m.m.		Exhaust 7.15 m.m.	

Degrees of crankshaft rotation from zero to—

Maximum lift:	Inlet 110° ATDC	Exhaust 75° ABDC
¾ Maximum lift:	Inlet 62½° ATDC	Exhaust 27½° ABDC

Valve springs:

	Inlet	*Exhaust*
Type	Coil	Coil
No. per valve	One	One

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

Make S.U Model H.S.2

Flange hole diameter 31.75 m.m. Choke diameter Variable m.m.

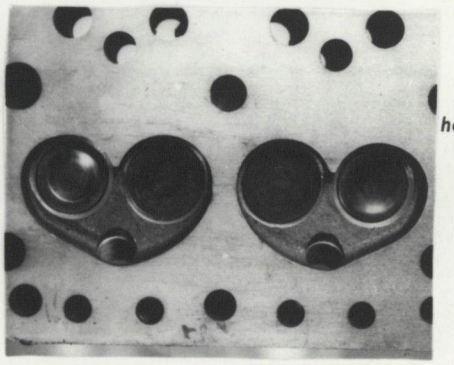
Main jet identification No. 0.090"

Air filter: Type Combined cleaner - silencer No. fitted One

Inlet manifold:

Diameter of flange hole at carburettor Less chamfer 31.75 m.m.

Diameter of flange hole at port Less chamfer 26.95 m.m.



here.

Exhaust manifold:

Diameter of flange hole at port Outer Ports 26.95 x 22.2

Centre Port 26.95 x 25.4 m.m.

Diameter of flange hole at connection to silencer inlet pipe 28.55 m.m.

Photograph of exhaust manifold to be affixed here.

Photograph of exhaust manifold to be affixed here.

ENGINE ACCESSORIES

Make of fuel pump S.U No. fitted One

Method of operation Electrical

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model 25D4

Method of advance and retard Automatic centrifugal & vacuum control

Make of ignition coil Lucas Model LA12

No. of ignition coils One Voltage 12

Make of dynamo Lucas Model C.40

Voltage of dynamo 12 Maximum output 19 amps.

Make of starter motor Lucas Model M.35G

Battery: No. fitted 1 Voltage 12 Capacity 43. amp. hour

Oil Cooler (if fitted) type Capacity pints

Make Riley Model Elf Mk II F.I.A. Recognition No.

Manufacturers Reference No. of Application ADO 159R/63

TRANSMISSION

Make of clutch BMC (Newton Bennett) (Clutch Plate) Type Direct operational

Diameter of clutch plate $7\frac{1}{8}$" No. of plates 1

Method of operating clutch Hydrualic

Make of gearbox BMC Type Synchromesh

No. of gearbox ratios 4 forward, 1 reverse

Method of operating gearshift Manual

Location of gearshift 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
C/Mesh 1.	3.627	28/19 32/13						
2.	2.172	28/19						
3.	1.412	23/24						
4.	1							
R Rev	3.627	32/13						

Type of final drive Helical spur gears

Type of differential Bevel gears

Final drive ratio 3.765 Alternatives 3.44:1

No. of teeth 64/17 18/62

Overdrive ratio, if fitted No

WHEELS

Type Disc Weight 3.175 kg.

Method of attachment Four studs & nuts

Rim diameter 254 m.m. Rim width 88.9 m.m.

Tyre size: Front 5.20 x 10 Rear 5.20 x 10

BRAKES

Method of operation Hydraulic system

Is servo assistance fitted? No

Type of servo, if fitted

No. of hydraulic master cylinders One Bore 17.78 m.m.

	Front	Rear
No. of wheel cylinders per brake	Two	One
Bore of wheel cylinders	20.32 m.m.	15.88 m.m.
Inside diameter of brake drums	177.8 m.m.	177.8 m.m.
No. of shoes per brake	Two	Two
Outside diameter of brake discs	m.m.	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	171.45 m.m.	171.45 m.m.
	m.m.	m.m.
Width	38.10 m.m.	31.75 m.m.
Total area per brake	13060 m.m.²	10887 m.m.²

SUSPENSION

	Front	Rear
Type	Transverse wishbone	Trailing arm
Type of spring	Rubber cone	Rubber cone
Is stabiliser fitted?	No	No
Type of shock absorber	Telescopic	Telescopic
No. of shock absorbers	One per wheel	One per wheel

STEERING

Type of steering gear Rack & Pinion

Turning circle of car 31 FT. 9.45 m., approx.

No. of turns of steering wheel from lock to lock $2\frac{1}{3}$

CAPACITIES AND DIMENSIONS

Fuel tank 25 litres Sump 5 .12 litres

Radiator 3.5 litres

Overall length of car 327.02 cm. Overall width of car 140.97 cm.

Overall height of car, unladen (with hood up, if appropriate) 134.62 cm.

Distance from floor to top of windscreen:

Highest point 101.6 cm. Lowest point 71.75 cm.

Width of windscreen:

Maximum width 113.39 cm. Minimum width 113.39 cm.

*Interior width of car 116.84 cm.

No. of seats 4

Track: Front 120.7 cm. Rear 117.66 cm.

Wheelbase 203.5 cm. Ground clearance 156.4 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 639 kgs.

Manufacturers Reference No. for Application

ADO 159R/63

F.I.A. Recognition No. 1198

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

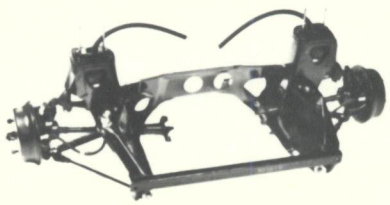
Federation Internationale de l'Automobile.

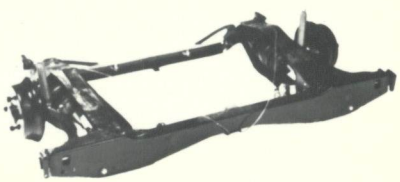
Amendment to Form of Recognition

Manufacturer Riley Motors Limited

Model Riley Elf MK II

Introduction of Hydrolastic Suspension





Suspension	Front	Rear
Type	Transverse wishbone	Trailing Arm
Type of Spring	Hydrolastic Displacer	Hydrolastic Displacer
Is stabilizer fitted?	No	No
Type of Shockabsorber	Incorporated in Displacer	Incorporated in Displacer

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

Date amendment is valid from .....

Form: R.F.I.B.

Optional equipment affecting preceeding information:—

Sump guard - 21A.1037

Manufacturers Reference No. for Application

ADO 159/R 63
159/W 63

F.I.A. Recognition No. 1198 1199 2/ET

ROYAL AUTOMOBILE CLUB

PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

Amendment to Form of Recognition

Manufacturer The British Motor Corporation

Model Riley Elf Mk II / Wolseley Hornet Mk II

Add to optional equipment

High Traction Differential Part No. C/AJJ 3303

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Date amendment is valid from 1st April 1965

Form: R.F.I.B.