

Manufacturers Reference No. for Application

H22/1



F.I.A. Recognition No.

53

ROYAL AUTOMOBILE CLUB

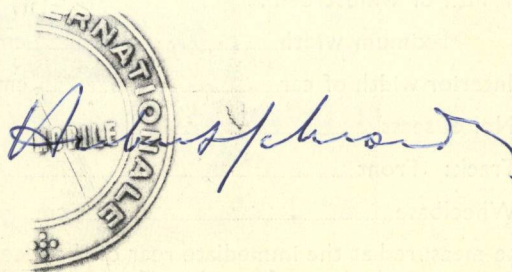
PALL MALL, LONDON, S.W.1.

Federation Internationale de l'Automobile.

Form of Recognition in accordance with
Appendix J to the
International Sporting Code.

Manufacturer..... FAIRTHORPE LTD.
Model..... ELECTRON II with FWA..... Year of Manufacture.....
Serial No. of Chassis.....
Engine.....
Type of Coachwork..... Sports.....
Recognition is valid from..... 1958..... In category..... Grand 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

Light Super Sports Car

Steel Chassis

Glass fibre body.

Photographs to be affixed below.

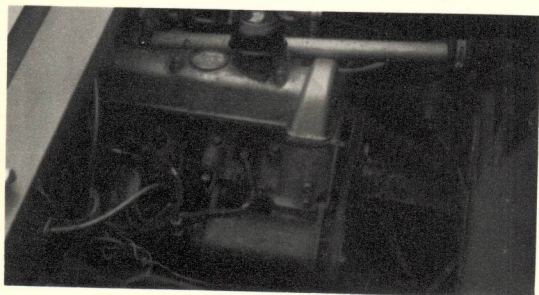
$\frac{3}{4}$ view of car from rear left.



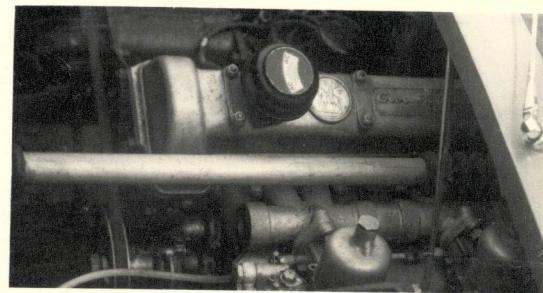
Interior view of car through driver's door.



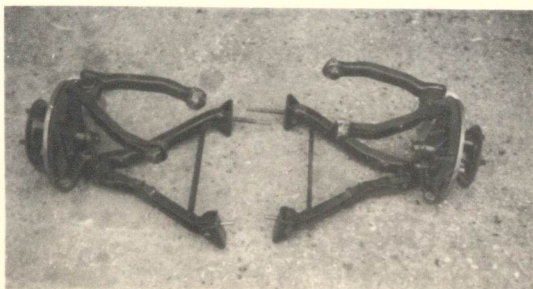
Engine unit with accessories from right.



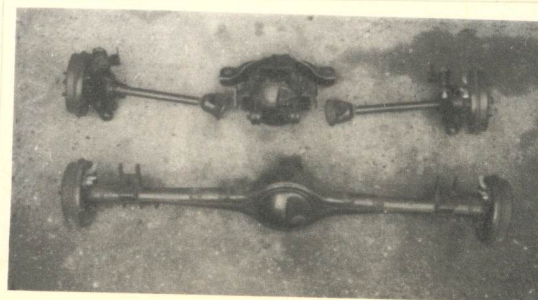
Engine unit with accessories from left.



Front axle complete (without wheels).



Rear axle complete (without wheels).



ENGINE

PWA

in line

No. of cylinders..... **4** in V
 opposed

Cycle..... **4 stroke** Firing order..... **1342**

Capacity..... **1098** c.c. Bore..... **72.4** m.m. Stroke..... **66.6** m.m.

Maximum rebore..... **N.A.** Resultant capacity..... **N.A.** c.c.

Material of cylinder block..... **Aluminium** Material of sleeves, if fitted..... **Steel**

Distance from crankshaft centre line to top face of block at centre line of cylinders..... **7.5"** m.m.

Material of cylinder head..... **Aluminium** Volume of one combustion chamber..... **272½** c.c.

Compression ratio..... **10.5**

Material of piston..... **Aluminium** No. of piston rings..... **3**

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

Bearings { Crankshaft main bearings: Type **Strip** Dia. **2.269"** m.m.
 Connecting rod big end: Type **Strip** Dia. **1.874"** m.m.

Weights { Flywheel..... **18½ lbs** kg.
 Crankshaft..... **25"** kg.
 Connecting rod..... **12½ oz.** kg.
 Piston with rings..... kg.
 Gudgeon pin kg.

No. of valves per cylinder..... **2** Method of valve operation..... **O.H. Cam**

No. of camshafts..... **1** Location of camshafts..... **Overhead**

Type of camshaft drive..... **Chain**

Diameter of valves: Inlet..... **1.35"** m.m. Exhaust..... **1.2"** m.m.

Diameter of port at valve seat: Inlet..... **1.125"** m.m. Exhaust..... **1.05"** m.m.

Tappet clearance for checking timing: Inlet..... **.010"** m.m. Exhaust..... **.010"** m.m.

Valves open: Inlet..... **30° b TDC** Exhaust..... **60° b BDC**

Valves close: Inlet..... **60° a BDC** Exhaust..... **30° a TDC**

Maximum valve lift: Inlet..... **.036** m.m. Exhaust..... **.036** m.m.

Degrees of crankshaft rotation from zero to— **(with .007" clearance)**

Maximum lift: Inlet..... **147°** Exhaust..... **147°**

$\frac{3}{4}$ Maximum lift: Inlet..... **85°** Exhaust..... **85°**

Valve springs: Inlet Exhaust

Type..... **Coil** **Coil**

No. per valve..... **2** **2**

Carburettor: Type..... **Horizontal** No. fitted..... **2**

(up or down draft, horizontal)

Make..... **S.U. (or Weber)** Model..... **H.4 (or DCOE)**

Flange hole diameter..... **1½"** m.m. Choke diameter..... m.m.

Main jet identification No.....

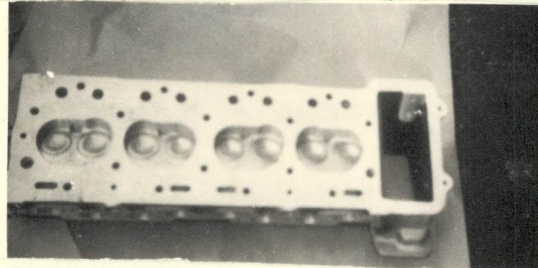
Air filter: Type Nil No. fitted -

Inlet manifold:

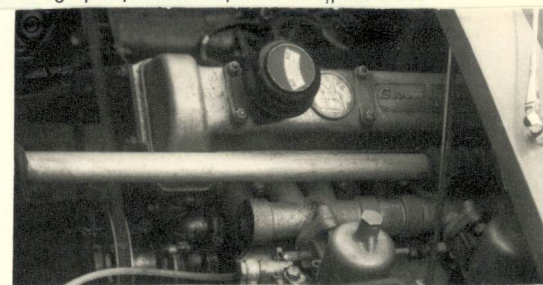
Diameter of flange hole at carburettor 1 1/2" m.m.

Diameter of flange hole at port 1.15" 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 1 1/4 or 1.1 m.m.

Diameter of flange hole at connection to silencer inlet pipe 1 1/2" 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 S U No. fitted 1

Method of operation Electric

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model

Method of advance and retard Centrifugal

Make of ignition coil Lucas etc. Model HA 12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model C 39 PVR 2

Voltage of dynamo 12 Maximum output 22 amps.

Make of starter motor Lucas Model MG 35 G-1

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

Oil Cooler (if fitted) type Capacity pints

Make FAIRTHORPE Model ELECTRON (TWA) F.I.A. Recognition No.
 Manufacturers Reference No. of Application

TRANSMISSION

Make of clutch Borg and Beck Type Dry Plate
 Diameter of clutch plate 7.1" No. of plates 1
 Method of operating clutch Hydraulic
 Make of gearbox Standard Triumph Type
 No. of gearbox ratios 4
 Method of operating gearshift Lever
 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
1.	3.54		4.27		3.75			
2.	2.1		2.46		2.1			
3.	1.38		1.45		1.38			
4.	1		1		1			
5.								

Type of final drive Hypoid Bevel
 Type of differential " " "
 Final drive ratio 4.11 Alternatives 4.55
 No. of teeth 9/37
 Overdrive ratio, if fitted

WHEELS

Type Disc Weight 13 lbs. kg.
 Method of attachment
 Rim diameter 13" m.m. Rim width 4 J m.m.
 Tyre size: Front 13" x 5.60 or 5.90" Rear 13/ x 5.60" (or 5.90")

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? No
 Type of servo, if fitted
 No. of hydraulic master cylinders 1 Bore 3/4" m.m.

	Front		Rear
No. of wheel cylinders	2		1
Bore of wheel cylinders	1.893" or 1.686"	m.m.	m.m.
Inside diameter of brake drums	-	m.m.	7"
No. of shoes per brake	-		2
Outside diameter of brake discs	9"	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
Length	2.3/8"	m.m.	7"
		m.m.	m.m.
Width	1 1/2"	m.m.	1 1/4"
Total area per brake	4 1/4 or 3 sq.in.	m.m. ²	17 1/2 sq.in.

SUSPENSION

	Front		Rear
Type	Wishbones		Wishbones & Links
Type of spring	Coil		Coil
Is stabiliser fitted?	Optional		
Type of shock absorber	Hydraulic Telescopic		Hydraulic Telescopic
No. of shock absorbers	2		2

STEERING

Type of steering gear Rack & Pinion

Turning circle of car 23 ft. m., approx.

No. of turns of steering wheel from lock to lock 2 3/4

CAPACITIES AND DIMENSIONS

Fuel tank 10 gallons litres Sump 1 gallon litres

Radiator & system 11 pints litres

Overall length of car 11' 5" ³⁴⁸ cm. Overall width of car 59" ¹⁵⁰ cm.

Overall height of car, unladen (with hood up, if appropriate) 49" cm.

Distance from floor to top of windscreen:

Highest point 49" cm. Lowest point 45" cm.

Width of windscreen:

Maximum width 45" cm. Minimum width 45" cm.

*Interior width of car 52" cm.

No. of seats 2 occasional 3

Track: Front 48 1/2" cm. Rear 48 1/2" cm.

Wheelbase 6' 10" cm. Ground clearance 7" 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 452 kgs. 997 lbs.

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:—

