

Manufacturers Reference No. for Application

EL.1622/3/1



F.I.A. Recognition No.

104

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.....Trojan Limited

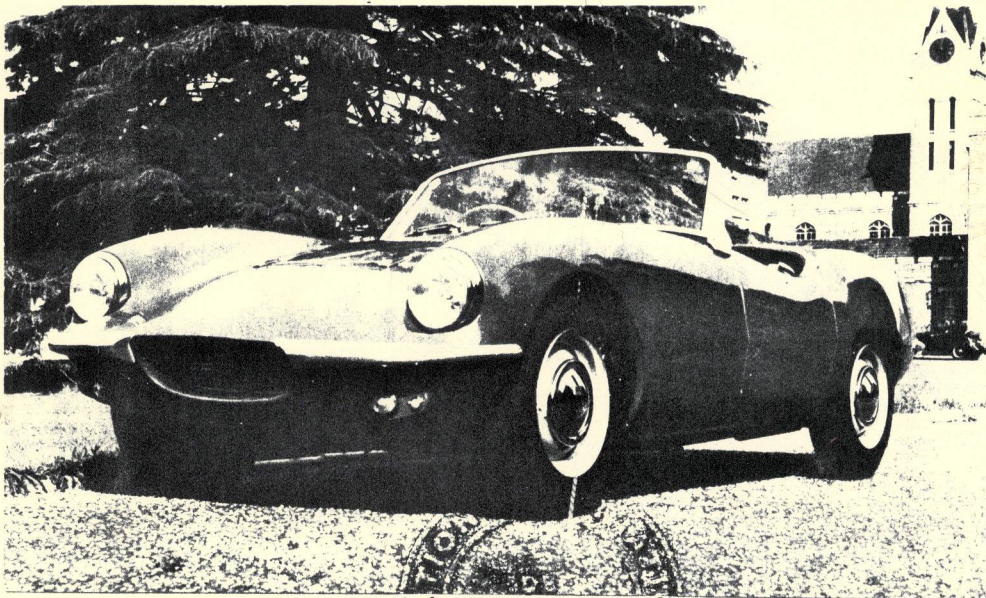
Model.....Elva Courier Mark III.....Year of Manufacture.....1963

Chassis.....E.1026

Serial No. of Engine.....48G214RS20346

Type of Coachwork.....Sports two-seater

Recognition is valid from.....9/5/63.....In category.....GT



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

Form: R.F.I.A.

General description of car:

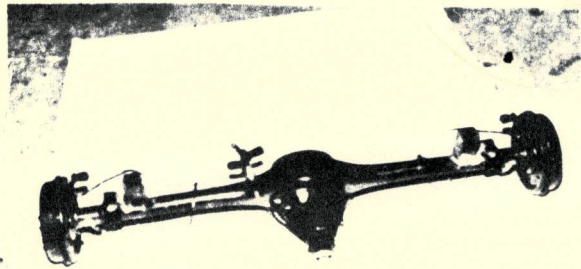
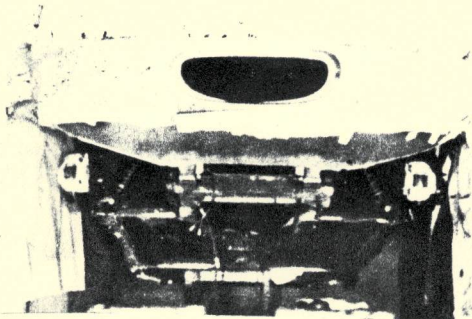
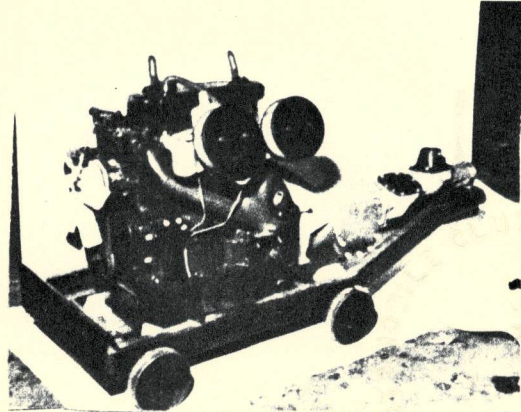
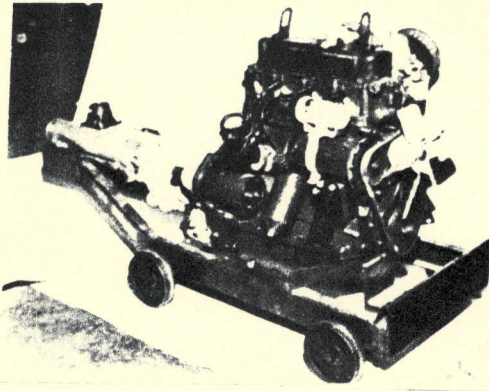
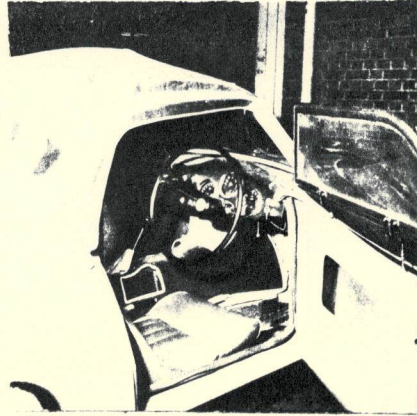
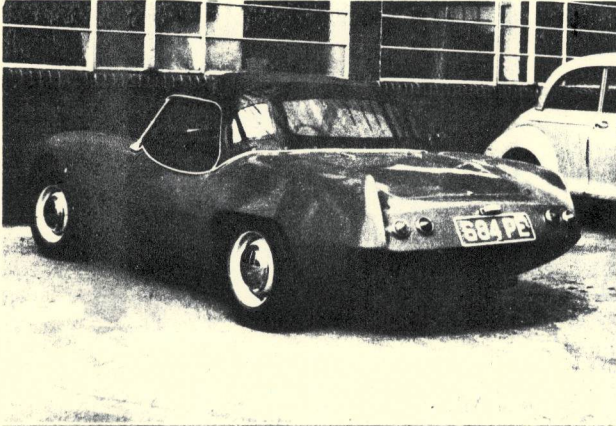
Specify here material/s of chassis/body construction

2-Seater sports - glass fibre body bonded to steel chassis frame.

4 cylinder OHV pushrod engine in unit with 4 speed synchromesh Gearbox.

Driving rear wheels through three-quarter floating hypoid axle.

Disc brakes are fitted front - drums rear.

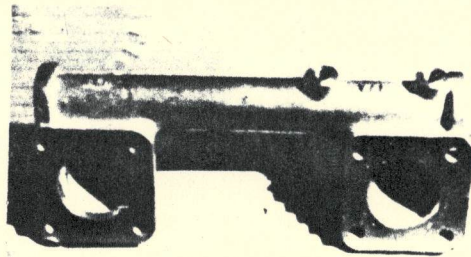
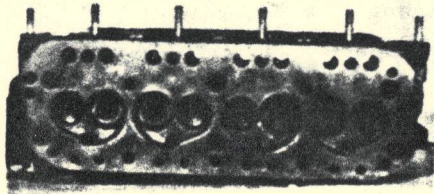


ENGINE

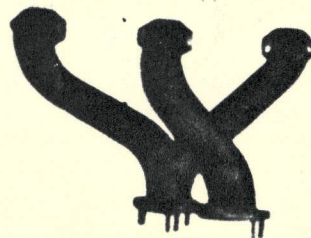
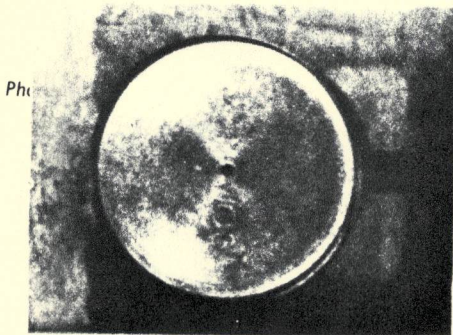
in line Yes
 No. of cylinders 4 in V -
 opposed -
 Cycle 4 stroke Firing order 1,3,4,2
 Capacity 1622 c.c. Bore 76.2 m.m. Stroke 68.9 m.m.
 Maximum rebore 0.040" Resultant capacity 1666 c.c.
 Material of cylinder block Cast iron Material of sleeves, if fitted Cast iron
 Distance from crankshaft centre line to top face of block at centre line of cylinders 252.273/252.527 m.m.
 Material of cylinder head Cast iron Volume of one combustion chamber 42.5/43.5 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 42.07 m.m.
 Bearings { Crankshaft main bearings: Type Copper lead Dia. 50.82 m.m.
 Connecting rod big end: Type Copper lead Dia. 47.66 m.m.
 Weights { Flywheel 13.5 kg.
 Crankshaft 14.9 kg.
 Connecting rod 1.02 kg. - with bearing (AEH.642/4)
 Piston with rings36 kg. - less gudgeon pin
 Gudgeon pin113 kg.
 No. of valves per cylinder 2 Method of valve operation Pushrod
 No. of camshafts 1 (AEH.714) Location of camshafts Cylinder block
 Type of camshaft drive Chain
 Diameter of valves: Inlet 39.8 m.m. Exhaust 33.7 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° BBDC
 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°
 ¾ Maximum lift: Inlet 107° Exhaust 107°
 Valve springs: Inlet Exhaust
 Type Coil Coil
 No. per valve 2 2
 Carburettor: Type Semi D.D. No. fitted 2
 (up or down draft, horizontal)
 Make SU Model H6
 Flange hole diameter 44.5 m.m. Choke diameter 41.0 m.m.
 Main jet identification No. 0.100" KW needles
 Alternative carburettor equipment - Art. 265. Appendix 'J'.
 Make - Weber, Model - 45DGOE9, No. fitted - 1, Choke dia. - 45 mm.
 Inlet Manifold - Part No. 713/37.

Air filter: Type Pancake - dry element No. fitted 2

Inlet manifold:
 Diameter of flange hole at carburettor 44.7 m.m.
 Diameter of flange hole at port 36.0 m.m.



Exhaust manifold:
 Diameter of flange hole at port Ends-30.1626x35.5126-Centre 33.338-36.5126 m.m.
 Diameter of flange hole at connection to silencer inlet pipe 41.275 m.m.



ENGINE ACCESSORIES

Make of fuel pump SU No. fitted 1

Method of operation Electrical

Type of ignition system Coil coil or magneto

Make of ignition Lucas Model P4

Method of advance and retard Centrifugal and Vacuum

Make of ignition coil Lucas Model HA12

No. of ignition coils 1 Voltage 12

Make of dynamo Lucas Model 040/1

Voltage of dynamo 12 Maximum output 22 amps.

Make of starter motor Lucas Model M3501

Battery: No. fitted 1 Voltage 12 Capacity 58 amp. hour

Oil Cooler (if fitted) type - Capacity - pints

Make Elva Model Mark III F.I.A. Recognition No. XX.1622/3/X
 Manufacturers Reference No. of Application EL.1622/3/1.

TRANSMISSION

Make of clutch Borg & Beck Type 8A6G
 Diameter of clutch plate 8" No. of plates One
 Method of operating clutch Hydraulic
 Make of gearbox EMC Type Synchromesh 2nd, 3rd, Top
 No. of gearbox ratios 4 Forward 1 Reverse
 Method of operating gearshift Manual
 Location of gearshift Remote control 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. | 3.636:1 | $\frac{21}{32} \times \frac{11}{28}$ | 2.44:1 | $\frac{25}{26} \times \frac{11}{28}$ | | | | |
| 2. | 2.214:1 | $\frac{21}{32} \times \frac{20}{31}$ | 1.618:1 | $\frac{25}{26} \times \frac{19}{32}$ | | | | |
| 3. | 1.373:1 | $\frac{21}{32} \times \frac{26}{25}$ | 1.266:1 | $\frac{25}{26} \times \frac{29}{22}$ | | | | |
| 4. | 1.0:1 | | 1.0:1 | | | | | |
| XX R | 4.755:1 | | 3.199:1 | | | | | |

Type of final drive Hypoid - limited slip
 Type of differential Bevel
 Final drive ratio 3.71 Alternatives 3.9
 No. of teeth 11-41 4.2
 Overdrive ratio, if fitted - 4.5

WHEELS

Type Centre lock disc Weight 7.7 kg.
 Method of attachment 4 peg location
 Rim diameter 330.2 m.m. Rim width 114.3 m.m.
 Tyre size: Front 560 x 13 Rear 560 x 13

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? No
 Type of servo, if fitted -
 No. of hydraulic master cylinders 2 Bore 22.225 m.m.

| | Front | | Rear |
|---|---------|-----------------------|------------------------|
| No. of wheel cylinders | 1 | Caliper set per wheel | 1 Slave unit per wheel |
| Bore of wheel cylinders | 38.1001 | m.m. | 14.2875 m.m. |
| Inside diameter of brake drums | - | m.m. | 203.2 m.m. |
| No. of shoes per brake | - | | 2 |
| Outside diameter of brake discs | 228.6 | m.m. | - 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 | 53.975 | m.m. | 196.85 m.m. |
| | | m.m. | m.m. |
| Width | 31.75 | m.m. | 38.1 m.m. |
| Total area per brake | 3428 | m.m. ² | 15006 m.m. ² |

SUSPENSION

| | Front | Rear |
|------------------------|----------------------|---------------------------|
| Type | Unequal wishbone | Beam Axle - Trailing Link |
| Type of spring | Coil Spring | Coil Spring |
| Is stabiliser fitted? | Yes | No |
| Type of shock absorber | Armstrong Telescopic | Armstrong Telescopic |
| No. of shock absorbers | 1 per wheel | 1 per wheel |

STEERING

| | |
|--|-----------------|
| Type of steering gear | Rack & Pinion |
| Turning circle of car | 10 m., approx. |
| No. of turns of steering wheel from lock to lock | 3 $\frac{1}{3}$ |

CAPACITIES AND DIMENSIONS

| | | | | | |
|---|--------|--------|----------------------|-------|--------|
| Fuel tank | 40 | litres | Sump | 3.976 | litres |
| Radiator | 4 | litres | | | |
| Overall length of car | 396.2 | cm. | Overall width of car | 152 | cm. |
| Overall height of car, unladen (with hood up, if appropriate) | 125 | cm. | | | |
| Distance from floor to top of windscreen: | | | | | |
| Highest point | 89 | cm. | Lowest point | 80 | cm. |
| Width of windscreen: | | | | | |
| Maximum width | 129 | cm. | Minimum width | 112 | cm. |
| *Interior width of car | 126 | cm. | | | |
| No. of seats | 2 | | | | |
| Track: Front | 123.50 | cm. | Rear | 127 | cm. |
| Wheelbase | 228.6 | cm. | Ground clearance | 139.7 | 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 661 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:—

6 Gallon Auxiliary Fuel Tank Part No. 932764.
Oil Cooler ARH.113.
Cylinder Block No. 486159 } 1588 c.c.
Pistons 9.25:1
14" Wheels.

Touring
Equipment

{ Exhaust Manifold - 48G143
- { Touring camshaft - 1H729 --- I.O. 16°BTDC E.O. 51°BBDC
{ Distributor - I.C. 56°ABDC E.C. 21°ATDC
{ Inlet manifold - AEH660 Max. Valve Lift - 9.5 mm.
{ ~~HK~~ 1½" SU Carburettors



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

TRAJAN - ELVA COURIER HV III

MARQUE ET MODELE

3/63

VALIDITE HOMOLOGATION

104

FICHE NR.

GT/2000

GROUPE / CLASSE

| EXTENSIONS | DEBUT VALIDITE | DESCRIPTION | NOTES |
|------------|----------------|-------------|-------|
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Autres homologations du modèle

Vérifiée le 26/2/96 par [Signature] visée ce jour le _____ par _____