

Manufacturers Reference No. for Application

1B/61



F.I.A. Recognition No.

32

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 Layton Sports Cars Ltd.

Model T.V.R. Grantura. Type M.G.A. Year of Manufacture 1960/61

Serial No. of Chassis.....

Engine.....

Type of Coachwork Two seater G.T. coupe

Recognition is valid from 29 AVR 1961 In category G.T.

Photograph to be affixed here in view of car from front right.



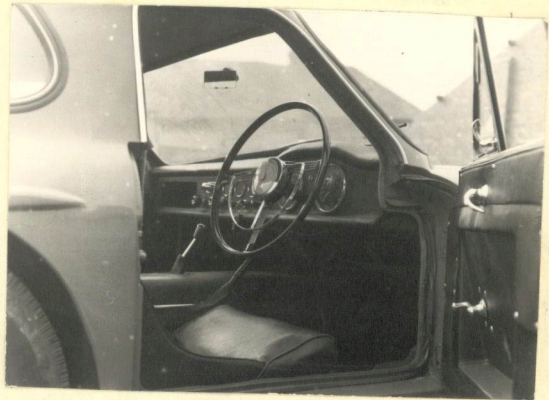
Hubert Schrod

Stamp of F.I.A. to be affixed here.

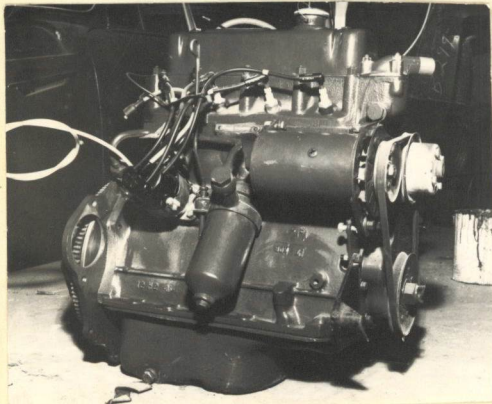


General description of car:

Photographs to be affixed below.

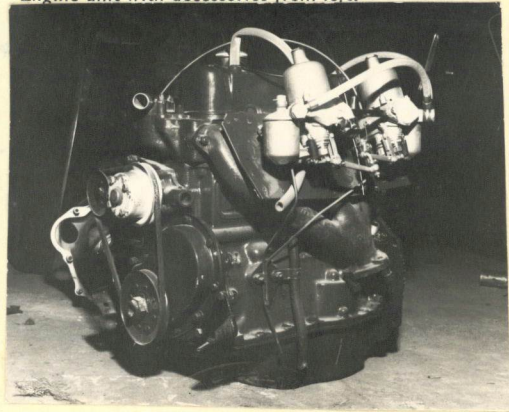


Engine unit with accessories from right.

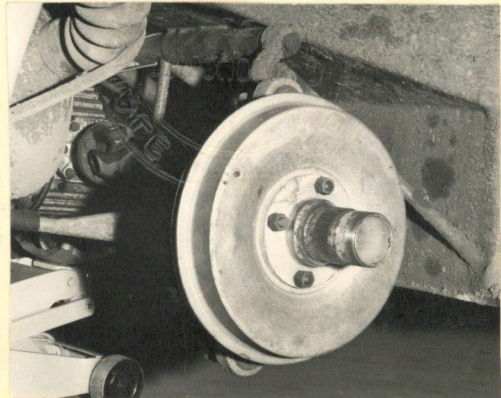
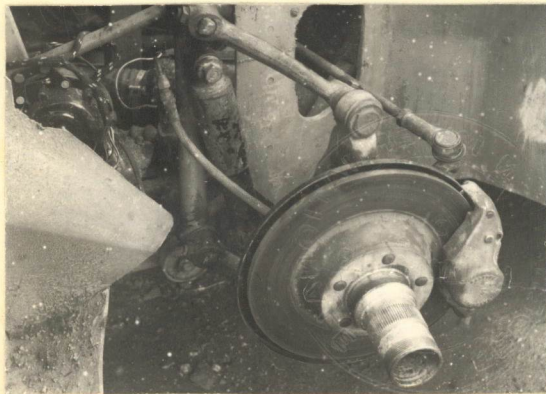


Front axle complete (without wheels).

Engine unit with accessories from left.



Rear axle complete (without wheels).

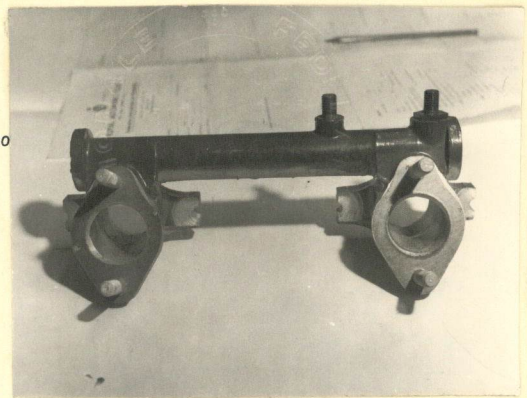
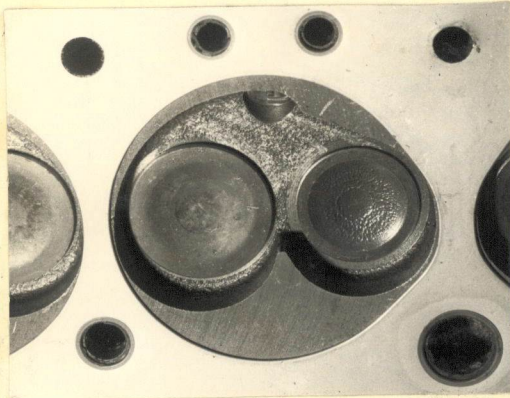


ENGINE

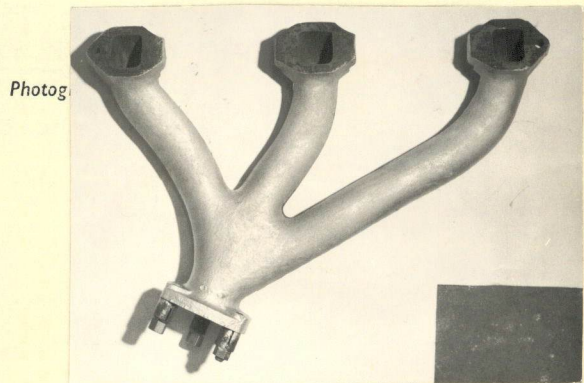
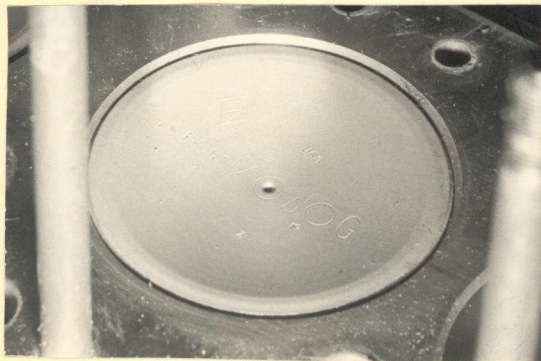
in line Yes
 No. of cylinders 4 in V
 opposed
 Cycle 4 Stroke Firing order 1,3,4,2.
 Capacity 1588 c.c. Bore 75.39 m.m. Stroke 88.9 m.m.
 Maximum rebore 76.406 Resultant capacity 1630 c.c.
 Material of cylinder block Cast Iron Material of sleeves, if fitted None
 Distance from crankshaft centre line to top face of block at centre line of cylinders 252.4 m.m.
 Material of cylinder head Cast Iron Volume of one combustion chamber 38.9 c.c.
 Compression ratio 8.3
 Material of piston Aluminium alloy No. of piston rings 4
 Distance from gudgeon pin centre line to highest point of piston crown 42.062 m.m.
 Bearings { Crankshaft main bearings: Type Shell Dia. 50.819 m.m.
 Connecting rod big end: Type Shell Dia. 51.3395 m.m.
 Weights { Flywheel 11.793 kg.
 Crankshaft 13.154 kg.
 Connecting rod .935 kg.
 Piston with rings .3366 kg.
 Gudgeon pin .0886 kg.
 No. of valves per cylinder Two Method of valve operation Side camshaft with
 No. of camshafts One Location of camshafts Cy. Block. & rockers
 Type of camshaft drive Chain
 Diameter of valves: Inlet 38.163 m.m. Exhaust 32.6 m.m.
 Diameter of port at valve seat: Inlet 33.321 m.m. Exhaust 29.717 m.m.
 Tappet clearance for checking timing: Inlet .533 m.m. Exhaust .533 m.m.
 Valves open: Inlet 5° B.T.D.C. Exhaust 40° B.B.D.C.
 Valves close: Inlet 45° A.B.D.C. Exhaust 10° A.T.D.C.
 Maximum valve lift: Inlet 8.89 m.m. Exhaust 8.89 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 126° Exhaust 126°
 $\frac{3}{4}$ Maximum lift: Inlet 74 Exhaust 74°
 Valve springs: Inlet Exhaust
 Type Helical Helical
 No. per valve 2 2
 Carburettor: Type Semi Down draught No. fitted 2
 (up or down draft, horizontal)
 Make S.U. Model H.4.
 Flange hole diameter 38.1 m.m. Choke diameter 38.1 m.m.
 Main jet identification No. 6

Air filter: Type..... **None** No. fitted..... **--**

Inlet manifold:
 Diameter of flange hole at carburettor..... **38.9** m.m.
 Diameter of flange hole at port..... **35.7** m.m.



Exhaust manifold: **3 Rectangulars - 33.33 x 36.512 (Centre)**
 Diameter of flange hole at port (Outers) **30.16 x 36.51** m.m.
 Diameter of flange hole at connection to silencer inlet pipe **57.54** m.m.



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.....	DM 2/P 4
Method of advance and retard.....	Centrifugal and vacuum		
Make of ignition coil.....	Lucas	Model.....	HA 12
No. of ignition coils.....	1	Voltage.....	12 V
Make of dynamo.....	Lucas	Model.....	C 39 PV2
Voltage of dynamo.....	12 V	Maximum output.....	20 amps.
Make of starter motor.....	Lucas	Model.....	M 35 G
Battery: No. fitted.....	1	Voltage.....	12
		Capacity.....	43 amp. hour

Make T.V.R. GRANTURA Model MGA F.I.A. Recognition No.
 Manufacturers Reference No. of Application 1B/61

TRANSMISSION

Make of clutch Borg & Beck Type A6-G
 Diameter of clutch plate 8" No. of plates Single
 Method of operating clutch Hydraulic
 Make of gearbox B.M.C. Type 4 speed synchromesh
 No. of gearbox ratios Four forward, 1 Reverse
 Method of operating gearshift Manual
 Location of gearshift Central on 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.	$3.637:1$	$\frac{21}{32} \times \frac{11}{28}$	$2.44:1$	$\frac{25}{26} \times \frac{11}{28}$				
2.	$2.215:1$	$\frac{21}{32} \times \frac{20}{31}$	$1.618:1$	$\frac{25}{26} \times \frac{19}{32}$				
3.	$1.373:1$	$\frac{21}{32} \times \frac{26}{25}$	$1.266:1$	$\frac{25}{26} \times \frac{29}{22}$				
4.	$1.00:1$	Direct	$1.00:1$	Direct				
5R	$4.755:1$		$3.199:1$					

Type of final drive Hypoid
 Type of differential BMC type 'B'
 Final drive ratio 4.3 Alternatives 4.1, 4.55, 4.875.
 No. of teeth 10 - 43
 Overdrive ratio, if fitted ---

WHEELS

Type Spoke Weight 6.6 kg.
 Method of attachment Knock on
 Rim diameter 380 m.m. Rim width 102 m.m.
 Tyre size: Front 560 x 15 Rear 560 x 15

BRAKES

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

	Front		Rear
No. of wheel cylinders	2	.....	1
Bore of wheel cylinders	48	..... m.m.	19
Inside diameter of brake drums	--	..... m.m.	280
No. of shoes per brake	--	.....	2
Outside diameter of brake discs	290	..... 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	60	..... m.m.	245
	Segmental	..... m.m.	--
Width	48	..... m.m.	44
Total area per brake	5760	..... m.m. ²	21600

SUSPENSION

	Front		Rear
Type	Trailing arm	.....	Trailing arm
Type of spring	Torsion bar (2)	.....	Torsion bar (2)
Is stabiliser fitted?	No	.....	No
Type of shock absorber	Telescopic	.....	Telescopic
No. of shock absorbers	2	.....	2

STEERING

Type of steering gear..... **Worm and Peg**.....

Turning circle of car..... **9**..... m., approx.

No. of turns of steering wheel from lock to lock..... **2**.....

CAPACITIES AND DIMENSIONS

Fuel tank..... **40**..... litres Sump..... **3.976**..... litres

Radiator..... **8 $\frac{1}{2}$** litres

Overall length of car..... **350**..... cm. Overall width of car..... **162.5**..... cm.

Overall height of car, unladen (with hood up, if appropriate)..... **122**..... cm.

Distance from floor to top of windscreen:

Highest point..... **96**..... cm. Lowest point..... **65**..... cm.

Width of windscreen:

Maximum width..... **134**..... cm. Minimum width..... **122**..... cm.

*Interior width of car..... **132**..... cm.

No. of seats..... **2**.....

Track: Front..... **132**..... cm. Rear..... **132**..... cm.

Wheelbase..... **2.3.5**..... cm. Ground clearance..... **152**..... 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..... **650**..... 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 preceeding information:—

Light alloy disc.wheels. 15".

Adjustable shock absorbers.

Light alloy cross flow head.

Weber carburettors. Type 40 DCOE