

33A

Manufacturers Reference No. for Application

M.C.15960



F.I.A. Recognition No.

33A

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..... MONOCOQUE CHASSIS & BODY CO.LTD.

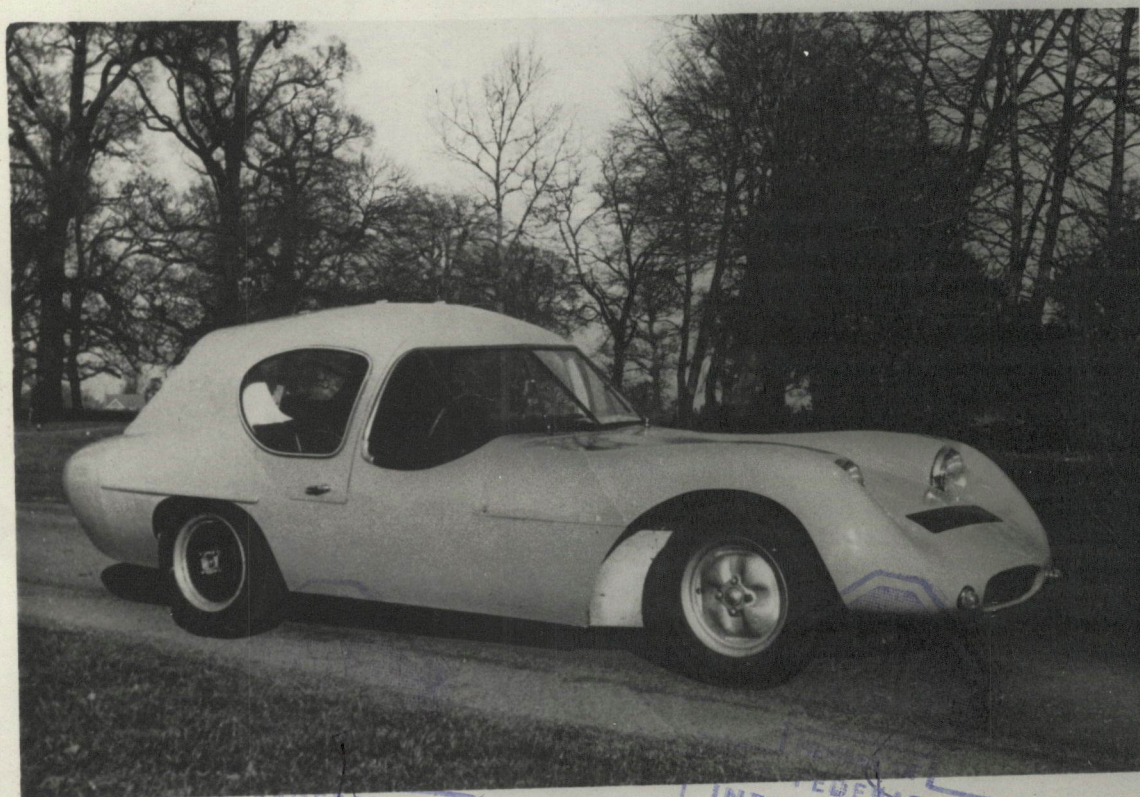
Model..... MARCOS G.T. Year of Manufacture..... 1961

Serial No. of Chassis..... MONO 1001

Engine..... 32A/53 XF

Type of Coachwork..... GRAND TOURISME

Recognition is valid from..... 10 JUIN 1961 In category..... G.T.



Handwritten signature
FEDERATION INTERNATIONALE de l'AUTOMOBILE

FEDERATION INTERNATIONALE de l'AUTOMOBILE

FEDERATION INTERNATIONALE de l'AUTOMOBILE

General description of car: Two seater Grand Touring automobile of less than 1000 c.c., having ample and comfortable accommodation for driver and passenger with a very large luggage compartment in keeping with the true spirit of the meaning G.T.

The accent is on cheap performance coupled with great reliability, hence the aircraft type structure of spruce and plywood used in the fullest meaning of the term Monocoque.

The structure is simple in the extreme, having therefore only moderate performance aerodynamically hence gullwing doors are fitted which however give easy access to the seats.

The suspension and power units are virtually standard parts which judiciously located and simply engineered give safe, fast and comfortable motoring.

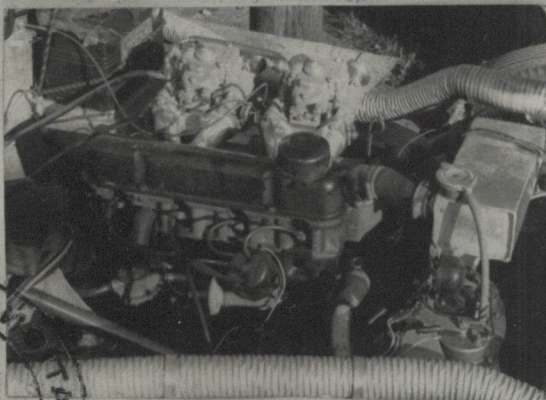
Photographs to be affixed below.



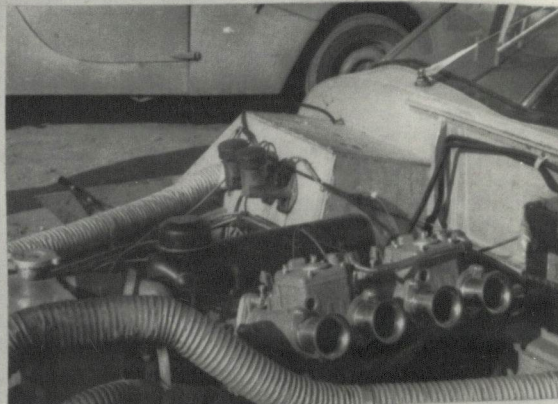
Engine unit with accessories from right.



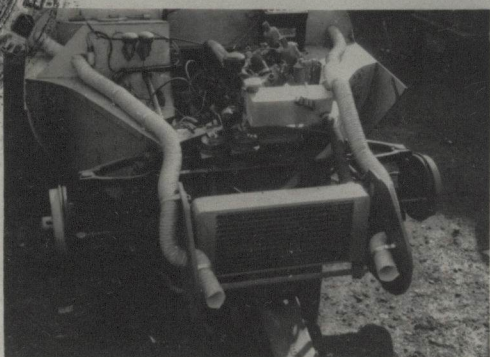
Engine unit with accessories from left.



Front axle complete (without wheels).



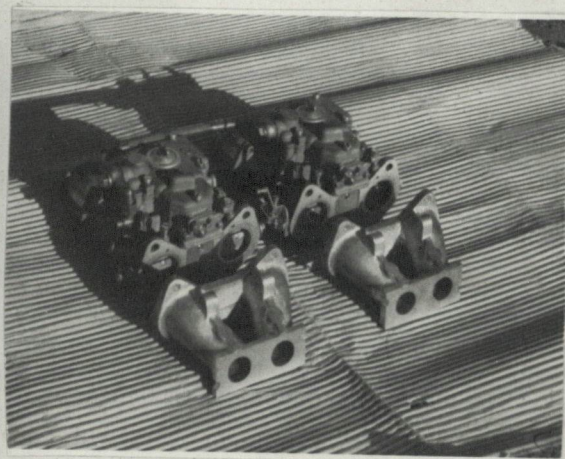
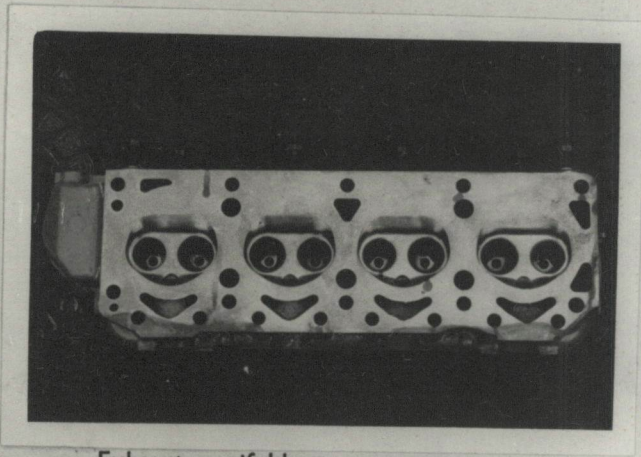
rear axle complete (without wheels).



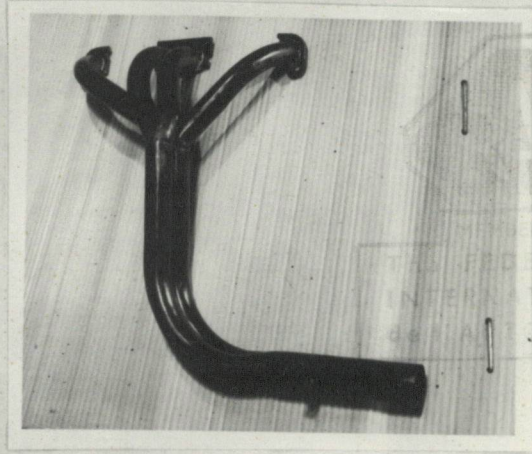
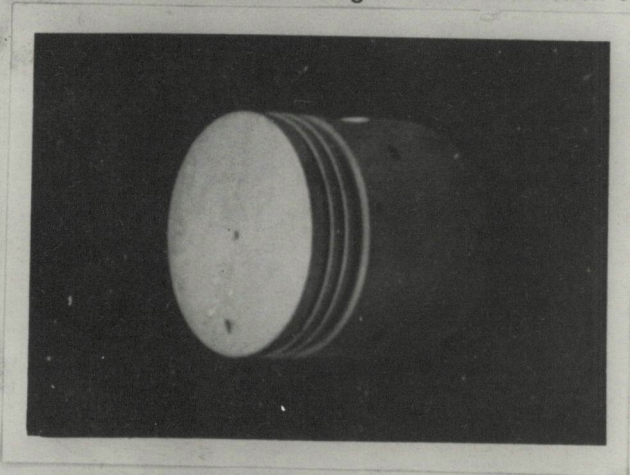
ENGINE

in line X
 No. of cylinders 4 in V
 opposed
 Cycle 4 Firing order 1.2.4.3.
 Capacity 996.6 c.c. Bore 80.9 m.m. Stroke 48.4 m.m.
 Maximum rebore .482 m/m Resultant capacity 1000 c.c.
 Material of cylinder block Cast iron Material of sleeves, if fitted not fitted
 Distance from crankshaft centre line to top face of block at centre line of cylinders 181 m.m.
 Material of cylinder head C.I. Volume of one combustion chamber c.c.
 Compression ratio 8.9:1
 Material of piston Autothermic Aluminium No. of piston rings 3
 Distance from gudgeon pin centre line to highest point of piston crown 90 m.m.
 Bearings { Crankshaft main bearings: Type Babbit Steel Back Dia. 53.8 m.m.
 Connecting rod big end: Type Sintered Copper Dia. 49.21 m.m.
 Flywheel 5.85 kg.
 Crankshaft 7.55 kg.
 Weights { Connecting rod .571 kg.
 Piston with rings .415 kg.
 Gudgeon pin .0975 kg.
 No. of valves per cylinder 2 Method of valve operation OHV Push Rod
 No. of camshafts 1 Location of camshafts Internal
 Type of camshaft drive Sprocket & chain
 Diameter of valves: Inlet 32.2 - 32.3 m.m. Exhaust 30.18 - 30.32 m.m.
 Diameter of port at valve seat: Inlet 27.7 m.m. Exhaust 22.6 m.m.
 Tappet clearance for checking timing: Inlet .203 cold m.m. Exhaust .456 cold m.m.
 Valves open: Inlet 10° BTDC Exhaust 44° BBDC
 Valves close: Inlet 50° ABDC Exhaust 10° ATDC
 Maximum valve lift: Inlet 73.5 m.m. Exhaust 73.8 m.m.
 Degrees of crankshaft rotation from zero to—
 Maximum lift: Inlet 120° Exhaust 120°
 $\frac{3}{4}$ Maximum lift: Inlet 87° Exhaust 87°
 Valve springs: Inlet Coil Exhaust Coil
 Type Coil No. per valve 1
 Carburettor: Type No. fitted
 (up or down draft, horizontal)
 Make WEBER Model 40 DCOE
 Flange hole diameter 31.7 m.m. Choke diameter 31.7 m.m.
 Main jet identification No. No.1

Air filter: Type None No. fitted.....
 Inlet manifold:
 Diameter of flange hole at carburettor..... 31.7 m.m.
 Diameter of flange hole at port..... 27.7 m.m.



Exhaust manifold:
 Diameter of flange hole at port..... 30.18 m.m.
 Diameter of flange hole at connection to silencer inlet pipe..... 41.2 m.m.



ENGINE ACCESSORIES

Make of fuel pump..... AC No. fitted..... 1
 Method of operation..... Eccentric on Camshaft
 Type of ignition system..... 12 volt coil or magnet ~~or~~
 Make of ignition..... Lucas Model D 3AM 4
 Method of advance and retard..... Centrifugal & Vacuum
 Make of ignition coil..... Lucas or AC Delco Model LA 12 (Lucas)
 No. of ignition coils..... 1 Voltage 12
 Make of dynamo..... Lucas Model C40 22704
 Voltage of dynamo..... 12 volt Maximum output..... amps.
 Make of starter motor..... Lucas Model 12 volt 3/4" inertia type
 Battery: No. fitted..... 1 Voltage 12v Capacity 32 a.m.p. hour

Make MARCOS Model GT F.I.A. Recognition No.

Manufacturers Reference No. of Application

TRANSMISSION

Make of clutch FORD 105E Type Single Plate
 Diameter of clutch plate 184 m/m No. of plates 1
 Method of operating clutch Hydraulic
 Make of gearbox Ford 105E Type Standard 105E
 No. of gearbox ratios 4 Forward & Reverse
 Method of operating gearshift Direct
 Location of gearshift In sloping fascia
 Is overdrive fitted? NO NA
 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.	4.118	16	2.917	16	1.80	22		
2.	2.396	22	1.697	22	1.472	25		
3.	1.412	28	1.280	25	1.21	27		
4.	1.000	32	1.000	28	1.1	30		
Reverse	5.404		5.404					

Type of final drive Hypoid
 Type of differential Standard Bevel Gears
 Final drive ratio 4.55 Alternatives 4.2 4.9 5.3 3.78
 No. of teeth 9/41 9.38 8.39 8.43 9.34
 Overdrive ratio, if fitted NA

WHEELS

Type Pressed Steel Weight 5 kg.
 Method of attachment 4 nuts
 Rim diameter 331 m.m. Rim width 90.5 m.m.
 Tyre size: Front 520 x 13 Rear 520 x 13

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? No
 Type of servo, if fitted None
 No. of hydraulic master cylinders 1 Bore 15.85 m.m.

	Front		Rear	
No. of wheel cylinders	4		2	
Bore of wheel cylinders	19.05	m.m.	19.05	m.m.
Inside diameter of brake drums	203	m.m.	178	m.m.
No. of shoes per brake	2		2	
Outside diameter of brake discs	NA	m.m.	NA	m.m.
No. of pads per brake	NA		NA	
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	196.2	m.m.	171.5	m.m.
	196.2	m.m.	171.5	m.m.
	31.7	m.m.	31.7	m.m.
Width		m.m.		m.m.
Total area per brake	6220	m.m. ²	5420	m.m. ²

SUSPENSION

	Front		Rear	
Type	Independent		Live axle	
Type of spring	Coil		Coil	
Is stabiliser fitted?	Yes		No	
Type of shock absorber	Armstrong		Armstrong	
No. of shock absorbers	2		2	

STEERING

Type of steering gear	Rack & Pinion		
Turning circle of car	11		m., approx.
No. of turns of steering wheel from lock to lock	2 2/3		

CAPACITIES AND DIMENSIONS

Fuel tank	26.2	litres	Sump	2.29	litres
Radiator	2.57	litres			
Overall length of car	384	cm.	Overall width of car	141	cm.
Overall height of car, unladen (with hood up, if appropriate)					
	122	cm.			
Distance from floor to top of windscreen:					
Highest point	85.5	cm.	Lowest point	85.5	cm.
Width of windscreen:					
Maximum width	110.2	cm.	Minimum width	91	cm.
*Interior width of car	114.5	cm.			
No. of seats	2				
Track: Front	122	cm.	Rear	122	cm.
Wheelbase	221	cm.	Ground clearance	13.2	mm.

*(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 495 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:—

Long Range Fuel Tank 32 Litres
2 x SU H2