



F.I.A. Recognition No. 99

# 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 M.G. CAR COMPANY LIMITED  
Model 'M.G.A. '1600' Year of Manufacture 1960  
Serial No. of Chassis GHN or GHNL (L.H.D.)  
Engine G.B.16/ G.A./ U  
Type of Coachwork Two Seater Sports.  
Recognition is valid from 17/9/59 In category Grand Touring

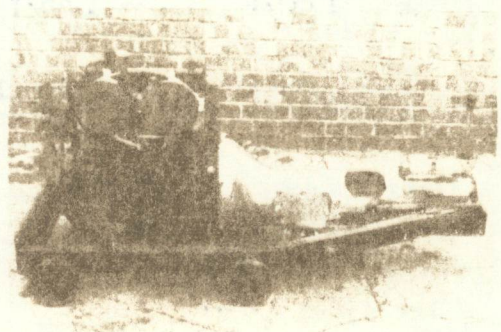
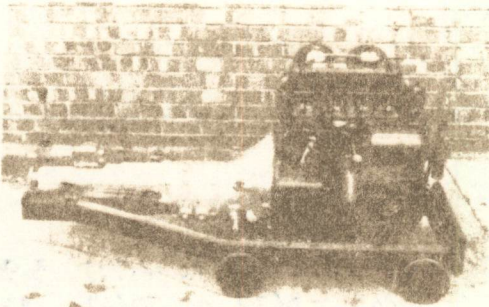
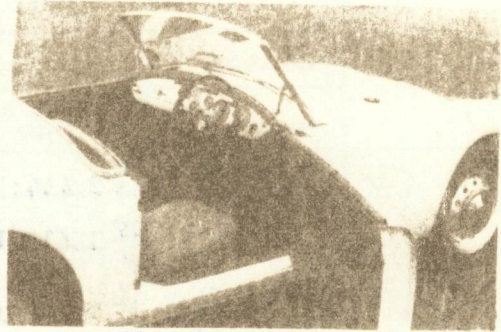
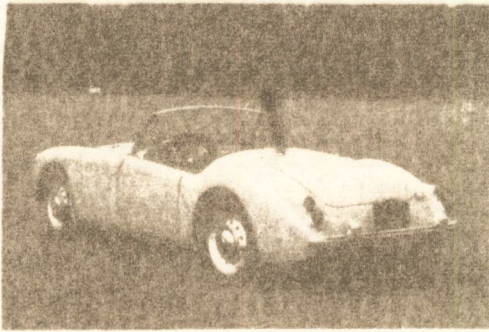
Ref. No. GA1600/60



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

General description of car:

Photographs to be affixed below.



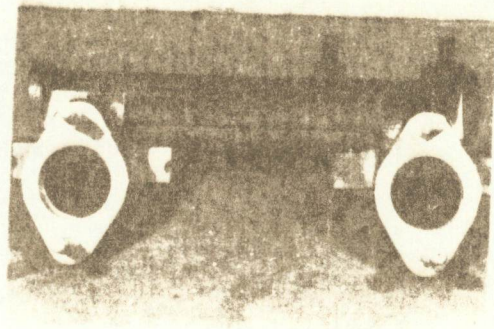
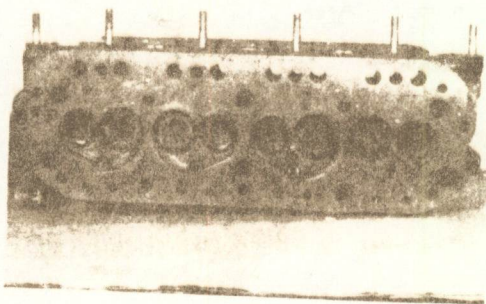
Lockheed Front Disc Brake - Standard.  
Dunlop Front Disc Brake - Optional.

Lockheed Rear Drum Brake - Standard.  
Dunlop Rear Disc Brake - Optional.

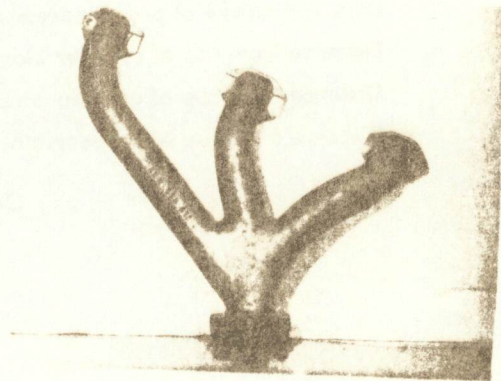
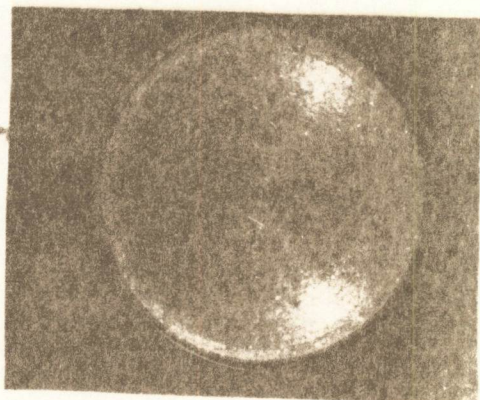
ENGINE

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.  
 Flywheel 11.793 kg. (13.49 with starter ring)  
 Weights { Crankshaft 13.154 kg.  
 Connecting rod .935 kg.  
 Piston with rings .33665 kg.  
 Gudgeon pin .0886 kg. Side camshaft with  
 No. of valves per cylinder Two Method of valve operation push rods & rockers.  
 No. of camshafts One Location of camshafts L.H. side of block.  
 Type of camshaft drive Endless roller 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.O. 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°  
 ½ Maximum lift: Inlet 74° Exhaust 74°  
 Valve springs: Inlet Exhaust  
 Type Helical Helical  
 No. per valve 2 2  
 Carburettor: Type Semi down draft No. fitted Two  
 (up or down draft, horizontal)  
 Make S.U. Model H.4.  
 Flange diameter 38.1 m.m. Choke diameter 38.1 m.m.  
 Main jet identification No. 6

Air filter: Type **Oil wetted element.** No. fitted **Two.**  
 Inlet manifold:  
 Diameter of flange at carburettor **38.9** m.m.  
 Diameter of flange at port **35.7** m.m.



Exhaust manifold: **3 Rectangulars : (Centre) 33.338 x 36.5126.**  
 Diameter of flange at port **(Outers) 30.16 x 36.51** m.m.  
 Diameter of flange at connection to silencer inlet pipe **57, 4** m.m.



### ENGINE ACCESSORIES

Make of fuel pump **S.O.** No. fitted **One.**  
 Method of operation **Electric.**  
 Type of ignition system **Coil**  
 Make of ignition **Lucas** Model **D.M.2. (Distributor).** oil or magneto  
 Method of advance and retard **Centrifugal and vacuum.**  
 Make of ignition coil **Lucas** Model **H.A. 12.**  
 No. of ignition coils **One.** Voltage **12**  
 Make of dynamo **Lucas** Model **C.39. P.V.2.**  
 Voltage of dynamo **12** Maximum output **19** amps.  
 Make of starter motor **Lucas** Model **M.35. G.1.**  
 Battery: No. fitted **2** Voltage **12** Capacity **51** amp. hour

Make M.G. Model M.G.A. \*1600\* F.I.A. Recognition No. 10-20-10788 171693

**TRANSMISSION**

Make of clutch Borg & Beck. Type 8° 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 and one Reverse.  
 Method of operating gearshift Manual.  
 Location of gearshift Cent' on Floor.  
 Is overdrive fitted? No.  
 Method of controlling overdrive, if fitted Not applicable.

	GEARBOX RATIOS		Competitions		ALTERNATIVE RATIOS		
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio
1.	3.637:1	$\frac{21}{32} \times \frac{11}{28}$	2.444:1	$\frac{25}{26} \times \frac{11}{28}$			
2.	2.215:1	$\frac{21}{32} \times \frac{20}{31}$	1.618:1	$\frac{25}{26} \times \frac{19}{32}$			
3.	1.573:1	$\frac{21}{32} \times \frac{26}{25}$	1.266:1	$\frac{25}{26} \times \frac{29}{22}$			
4.	1.00:1	Direct	1.00:1	Direct			
<u>Reverse</u>	4.755:1		3.199:1				

Type of final drive Hypoid.  
 Type of differential Bevel  
 Final drive ratio 4.5 Alternatives 4.3:1 4.875:1, 4.1:1, 3.909:1  
 No. of teeth 9/41 10/43, 8/39, 10/41, 11/43  
 Overdrive ratio, if fitted Not applicable.

**WHEELS**

Type Disc. Weight 6.804  
 Method of attachment 4 - 7/16" dia. studs.  
 Rim diameter 381.0 m.m. Rim width 101.6 m.m.  
 Tyre size: Front 5.60 x 15 Rear 5.60 x 15

**BRAKES**

Method of operation Hydraulic.  
 Is servo assistance fitted? No.  
 Type of servo, if fitted Not applicable.  
 No. of hydraulic master cylinders One Bore 22.225

	Front		Rear	
No. of wheel cylinders	Two		One	
Bore of wheel cylinders	53.97	m.m.	22.22	m.m.
Inside diameter of brake drums	-	m.m.	254.0	m.m.
No. of shoes per brake	-		Four	
Outside diameter of brake discs	279.4	m.m.	-	m.m.
No. of pads per brake	Four		-	
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	85	m.m.	243.84	m.m.
	55/55	m.m.	-	m.m.
Width	47.5	m.m.	44.45	m.m.
	13935	m.m. <sup>2</sup>	43354	m.m. <sup>2</sup>

### SUSPENSION

	Front		Rear
Type	Parallel wishbone,		Leaf
Type of spring	Coil		
Is stabiliser fitted?	No		
Type of shock absorber	8" Lever arm		5.3/16" lever arm.
No. of shock absorbers	Two		Two

### STEERING

Type of steering gear	Rack and Pinion.		
Turning circle of car	8.53		m., approx.
No. of turns of steering wheel from lock to lock	2.2/3		

### CAPACITIES AND DIMENSIONS

Fuel tank	45.46	litres	Sump	3.976	litres
Radiator	5.68	litres			
Overall length of car	396.24	cm.	Overall width of car	147.32	cm.
Overall height of car, unladen (with hood up, if appropriate)	127		cm.		
Distance from floor to top of windscreen:					
Highest point	96.52	cm.	Lowest point	71.12	cm.
Width of windscreen:					
Maximum width	111.76	cm.	Minimum width	101.6	cm.
Interior width	119.38 cm.				
No. of seats	Two				
Track: Front	120.65	cm.	Rear	123.82	cm.
Wheelbase	238.76	cm.	Ground clearance	152.4	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 914.4 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.<sup>2</sup>  
Size of exhaust port:  
Length measured around cylinder wall..... m.m.  
Height..... m.m. Area..... m.m.<sup>2</sup>  
Size of transfer port:  
Length measured around cylinder wall..... m.m.  
Height..... m.m. Area..... m.m.<sup>2</sup>  
Size of piston port:  
Length measured around piston..... m.m.  
Height..... m.m. Area..... m.m.<sup>2</sup>  
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:—

Wire Wheels. 60 spokes  
Centre Lock Disc Wheel.  
Oil Cooler.  
Road Speed Tyres 590 x 15.  
Fuel Tanks 90.92 Litre.  
Fuel Tanks 77.35 Litre.  
Fuel Tanks 68.25 Litre.  
Dunlop Disc Brakes all round.  
Alternative SU H6  
9.25:1 compression pistons



TELEPHONE:  
ABINGDON  
251 P. B. X.

  
**THE CAR  
COMPANY LTD**  
ABINGDON WORKS  
ABINGDON-ON-THAMES  
Proprietors - Morris Motors Limited

TELEGRAMS:  
EMGEE  
ABINGDON

Our Ref.

Your Ref.

FORM OF RECOGNITION

MANUFACTURER: M.G. CAR COMPANY LIMITED

MODEL TITLE: M.G.A. 1600

NUMBERS AND LETTER OF PREFIXES: (Engine: 2 Seater Coupe  
16GA 16GA  
(Chassis: G-HN G-HO

DESCRIPTION OF BODY: 2 Seater or Coupe

DESCRIPTION OF ENGINE: 4 cylinders in line. O.H.V. Push rod operated

DESCRIPTION AND POSITION OF CLUTCH AND GEARS - MATERIAL OF CASINGS:

Unit Construction Single Dry Plate. 8" Borg & Beck. 4 speed Gearbox Synchronesh  
in Aluminium case.

SUSPENSIONS: (Front: Independent, Coil spring  
(Rear: Semi-elliptic leaf spring

TOTAL WEIGHT WITH FUEL (Tolerance of 4% permitted) 2 Seater Coupe  
2068 lbs. 2127 lbs.

WHEEL-BASE: 94" TRACK, Front Disc  $47\frac{1}{2}$ " Rear:  $48\frac{3}{4}$ " WHEELS: DISC or WIRE  
" Wire  $47\frac{7}{8}$ " "  $48\frac{3}{4}$ "

TYRES: 5.60 x 15 INNER TUBES: 5.60 x 15 RIMS: 4J x 15

ENGINE (Desaxe or not): No. BORE: 75.39 m.m. MAXIMUM REBORE TOLERANCE: .040"

STROKE: 88.9.m.m. CYLINDER CAPACITY: 1588 c.c.

CARBURETTER TYPE: Semi-down draught NUMBER: 2 MAKE S.U. THROAT DIA.:  $1\frac{1}{2}$ "

IGNITION SYSTEM: Battery & Coil. TYPE: Automatic Advance MAKE: Lucas

P.T.O.

NUMBER OF RATIOS IN GEARBOX: 4 PLUS REVERSE

RATIO IN 1ST GEAR:	3.64	NO. OF GEARS IN GEAR:	4	NO. OF TEETH:	$\frac{21}{30} \times \frac{11}{28}$
" " 2ND "	2.214	" " " " " "	4	" " "	$\frac{21}{30} \times \frac{20}{31}$
" " 3RD "	1.37	" " " " " "	4	" " "	$\frac{21}{30} \times \frac{25}{26}$
" " 4TH "	1.00	" " " " " "	DIRECT	" " "	DIRECT

FINAL DRIVE: 4.3 - 4.1 & 4.55 OPTIONAL

OVERDRIVE: (if any) NONE

OPTIONAL EXTRAS:

Wire Wheels, White Wall Tyres, 5.90 x 15 Tyres, Adjustable Steering Column, Tonneau Cover, Radiator Blind, Heater and Demister, Twin Horns, Fog Lamp, De Luxe Seats, Radio, Windshield Washers, Detachable Hardtop, Competition Windshield, Luggage Carrier, Wing Driving Mirror, Cold Air Ventilation, Anti-roll Bar, Speedo For 4.55 Axle, Head Lamp Flasher Switch, Close Ratio Gear Box, Oil Cooler,

HIGH PERFORMANCE ALTERNATIVE EQUIPMENT

15 or 20 Gallon Fuel Tank, High Compression Pistons, Supplementary Fuel Pump, Circuit Control Box No. RB310 37204, High Output Dynamo 22290, Lucas Coil B.12.

4th September, 1959.