### NUFFIELD ORGANIZATION

MORRIS - MG - RILEY - WOLSELEY - MORRIS-COMMERCIAL - NUFFIELD UNIVERSAL TRACTORS - S.U.

PLEASE ADDRESS ENQUIRIES TO THE PRESS RELATIONS SECTION, CENTRAL PUBLICITY DEPARTMENT, COWLEY, OXFORD
TELEPHONE: OXFORD 77777 EXTENSIONS 110 - 186 - 190

Please do not release until the

ANNOUNCEMENT DATE: 15th July, 1958.

#### 1. NEWS-SHEET

#### TWO-MILES-A-MINUTE M.G. ANNOUNCED

"M.G.A." With Twin Overhead Camshaft Engine and Disc Brakes

One of the most exciting sports cars to have appeared in recent years is announced to-day by the Nuffield Organization.

It is a special equipment version of the "M.G.A.", known as the "M.G.A.
Twin Cam".

#### Its features include:

- Twin OHC engine of 1589 c.c. delivering 97 b.h.p. at 5,000 r.p.m. and 108 b.h.p. at 6,700 r.p.m.
- Dunlop disc brakes on all four wheels.
- Dunlop centre-lock disc wheels.
- Maximum speed: 120 m.p.h. (approx.).
- \* Acceleration in the order of:
  - 0 100 m.p.h. in 31 seconds
  - 0 110 m.p.h. in 38 seconds
- Home list price (ex works): £180 extra + £90 tax \* £270

  (Total price open two seater, £1,265 17/)

  ( coupe, £1,357 7/)

No other car offers such performance at such a price.

Available in open and coupe form, the "Twin Cam" will be made initially in small numbers. It will not replace the current "M.G.A." models which will continue unchanged.

Similar in appearance to the "M.G.A.", this high performance version is recognizable by its centre-lock disc wheels and name on the boot lid and scuttle air exits.

The engine capacity has been increased to take full advantage of the International Touring Car Classification.

Since its introduction in 1955, the "M.G.A." has achieved an enviable reputation for stability, safety and road worthiness and it has been apparent that considerably increased acceleration and maximum speed were possible - without infringing upon the validity of "Safety Fast".

The new twin OHC engine gives the car exhilarating acceleration and speed. The new disc brakes - on all four wheels - ensure that it will stop in a convincing and consistent manner.

#### CONVERSION

Due to extensive modifications to the engine, chassis and body, it is impossible to convert a standard "M.G.A." to the specifications of the "Twin Cam". Disc brakes will not be made available for the basic "M.G.A."

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#### 2. BRIEF DETAILS

#### "TWIN CAM" INHERITS ALL M.G. FEATURES

The exciting new M.G. "M.G.A. Twin Cam" inherits all the traditional M.G. features of fine performance, good handling, precise steering, snap gear change and first class brakes.

And now, with its new and exceptional engine and braking power, the "Twin Cam" is the finest M.G. to come off the production lines at Abingdon.

#### ENGINE

The engine has been developed from the sturdy and reliable B.M.C.

B! series unit which is used in the M.G. "M.G.A." and "Magnette" and many other B.M.C. models.

The bore has been increased to provide a capacity of 1589 c.c. to take full advantage of the International Touring Car Classification.

The camshafts in the twin OHC head operate the valves at an angle of 80 degrees, the camshafts being driven by a Duplex roller chain from a half-speed shaft gear-driven from the crankshaft. The half-speed shaft is located where the camshaft is on the push-rod model.

The crankshaft has been stiffened and new pattern connecting rods and pistons fitted.

The engine, which has a compression ratio of 9.9: 1, developes 97 b.h.p. at 5,000 r.p.m. and 108 b.h.p. at 6,700 r.p.m., with 7,000 r.p.m. being the recommended maximum.

The sump is of cast aluminium and finned to help cooling.

#### PERFORMANCE

Using 6,500 r.p.m. as gear-change point, best use of the acceleration can be made.

The car will reach 100 m.p.h. from rest and 110 from rest in the order of 31 and 38 seconds respectively.

With the standard "M.G.A." rear axle ratio of 4.3: 1 and with Dunlop Roadspeed  $5.90 \times 15$  tyres, top speed at 7,000 r.p.m. is 121 m.p.h.

#### BRAKES

The brakes are the latest Dunlop disc type which are famous for their success in racing.

They give the "Twin Cam" stopping power in keeping with its acceleration and speed.

#### WHEELS

Centre-lock disc wheels by Dunlop have also been developed on the race track.

They retain the advantage of the knock-on wire wheel and, because of their "dished" shape, provide clearance for the brake assemblies.

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#### BACKGROUND

#### 35 YEARS OF KNOWLEDGE IN THE "TWIN CAM"

The high performance "Twin Cam" has been developed from knowledge gained by M.G. in 35 years of building sports, racing and speed record cars.

This incredible marque has built up an enviable reputation, including that of safety, on the world's competition grounds since the first M.G. was built in 1923.

The "M.G.A. Twin Cam" is a great British challenge to the world of motor sport and, with its speed of two miles a minute and disc brakes all round, will earn M.G. a brand new name in keeping with its old tradition.

### DEVELOPMENT OF THE TWIN OHC ENGINE

It is only three years since the B.M.C. 'B' Series engine first appeared in a prototype chassis and aerodynamically-bodied M.G. sports. Known as EX.182, the car ran at Le Mans in 1955 with quiet distinction soon after which the production version was announced bearing the name of "M.G.A.".

In the autumn of the same year, one of these cars ran at Dundrod in the T.T. race fitted with a twin overhead camshaft head and it put up some very fast times.

A year later, in 1956, other unsupercharged twin OHC engines were fitted to the then M.G. EX.179 and, at Utah, broke 62 International and American Class 'F' records which included the International 200 Miles at 154.30 m.p.h. and the International Flying 10 Miles at 170.15 m.p.h.

The engine was developed further for 12 months before being fitted to a new, streamlined record breaker known as EX.181, the most aerodynamically efficient M.G. so far.

Supercharged and with twin horizontal S.U. carburetters, the engine developed 290 b.h.p. at 7,300 r.p.m.

With Stirling Moss at the wheel, the car travelled at more than four miles a minute at Utah last August to create new records. The 1 km. record was taken at 245.64 m.p.h.

Within a year of these records comes the production version of the engine.

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#### 4. COMPETITION EXTRAS

#### ADDITIONAL EXTRAS FOR THE

#### "MGA TWIN CAM"

The new high performance "MGA Twin Cam" will make a tremendous impact on competition circles.

In the comprehensive list of optional extras announced by the factory, there are several items of special equipment which will bring the car to peak performance for serious competitive motoring.

These include de luxe seats which give added comfort and prevent fatigue in long distance events. Specially padded on tubular frames, these seats are designed to give maximum support combined with excellent lateral "hold".

A competition windscreen manufactured in shatter-proof plastic has also been developed. It has the same width as the standard screen but is only  $6\frac{1}{2}$  ins. deep thus reducing substantially the frontal area and drag at high speeds.

Development work on tuning stages for the twin OHC engine is now in hand and a selection of alternative rear axle and gearbox ratios is available.

A wood-rimmed steering wheel is also available. This has been designed along the lines of steering wheels used on Grand Prix racing cars and exclusive sports cars for many years.

An oil cooler can be provided. It will be found particularly suitable for use in hot countries or in events where high engine r.p.m. are needed in the intermediate gears for sustained periods.

Other equipment available includes a radiator blind, adjustable steering column, tonneau cover, twin high-note horns, windscreen washer, heater, fog lamps and radio.

#### PHOTOGRAPHS:

A selection is available on application to the Press Officer, showing:

- 1. Three-quarter front view of the car.
- 2. Under bonnet view.
- 3. Engine.
- 4. Disc brake, mounted.

With the compliments of the Nuffield Organization,