Make: M.G.
Makers: M.G. Car Co., Ltd., Abingdon-on-Thames, Berkshire.

Test Data

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INSTRUMENTS
- Speedometer at 30 m.p.h. ... accurate
- Speedometer at 60 m.p.h. ... 95% fast
- Speedometer at 90 m.p.h. ... 95% fast
- Distance recorder ... accurate

WEIGHT
- Kerb weight (unaltered, but with oil, coolant and fuel for approx. 50 miles) ... 181 cwt.
- Front/rear distribution of kerb weight ... 53/47
- Weight laden as tested ... 22 cwt.

MAXIMUM SPEEDS
- Firing Lap of Banked Circuit ... 96.1 m.p.h.
- Best one-way 1-mile on straight ... 100 m.p.h.
- "Maximills" Speed (Timed quarter mile after 3 m.p.h. acceleration from rest) ...
  - Mean of four opposite runs ... 94.1 m.p.h.
  - Best 4-mile time equals ... 96.3 m.p.h.

- Speed in Gears (at 6,000 r.p.m. recommended limit)
  - Max. speed in 3rd gear ... 74 m.p.h.
  - Max. speed in 2nd gear ... 48 m.p.h.
  - Max. speed in 1st gear ... 28 m.p.h.

FUEL CONSUMPTION
- 292 m.p.g. at constant 30 m.p.h. on level
- 314 m.p.g. at constant 40 m.p.h. on level
- 322 m.p.g. at constant 50 m.p.h. on level
- 291 m.p.g. at constant 70 m.p.h. on level
- 277 m.p.g. at constant 90 m.p.h. on level
- 23 m.p.g. at constant 90 m.p.h. on level

Overall Fuel Consumption for 1,028 miles, 42.2 gallons equals 24.4 m.p.g. (11.6 litres/100 km).

Touring Fuel Consumption (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 25.7 m.p.g.

Fuel tank capacity (maker's figure) 10 gallons.

STEERING
- Turning circle between kerbs: Left ... 291 ft.
- Right ... 281 ft.
- Turns of steering wheel from lock to lock 2

BRAKES from 30 m.p.h.
- 1.00 g retardation (equivalent to 30 ft. stopping distance) with 100 lb. pedal pressure.
- 0.02 g retardation (equivalent to 26 ft. stopping distance) with 75 lb. pedal pressure.
- 0.5 g retardation (equivalent to 56 ft. stopping distance) with 50 lb. pedal pressure.
- 0.29 g retardation (equivalent to 104 ft. stopping distance) with 25 lb. pedal pressure.

HILL CLIMBING at sustained steady speeds
- Max. gradient on top gear ...
- Max. gradient on 3rd gear ...
- Max. gradient on 2nd gear ...

ACCELERATION TIMES from standstill
- 0-30 m.p.h. ...
- 0-40 m.p.h. ...
- 0-50 m.p.h. ...
- 0-60 m.p.h. ...
- 0-70 m.p.h. ...
- 0-80 m.p.h. ...
- Standing quarter mile ...

ACCELERATION TIMES on Upper Ratios
- 10-30 m.p.h. ...
- 20-40 m.p.h. ...
- 30-50 m.p.h. ...
- 40-60 m.p.h. ...
- 50-70 m.p.h. ...
- 60-80 m.p.h. ...

The M.G. A 1600 Two-Seater

Extra Acceleration and Retardation for a Popular Sporting Car

FAMILIAR since the autumn of 1955 as a sporting two-seater of notable strength and roadworthiness, the M.G. A has now been endowed with extra acceleration by an increase in cylinder bore, and with improved retardation by disc-pattern Lockheed front brakes. Involving no price increase whatever, and accompanied by other minor refinements, these two important changes increase the attractiveness of what is already a very popular model.

Enlargement of the engine by 65% without any alteration in the 4:3:1 axle ratio has produced a welcome improvement in the acceleration of the M.G. A which extends throughout its speed range. From 30 m.p.h. to 50 m.p.h. in top gear, the latest car took 10.6 sec., whereas the original M.G. A of September 1955 took 11.4 sec, and the M.G. A Coupé which we tested in August 1957 took 13.8 sec.; from 50 to 70 m.p.h. the latest car takes 15.3 sec. as against 14.9 sec. for the 2-seater in 1955 and 13.7 sec. for the hardtop in 1955. Acceleration from a standstill through the gears benefits very markedly from the extra engine torque, rest to 50 m.p.h. and 70 m.p.h. times of 9.1 sec. and 17.7 sec. comparing with 10.8 sec. and 21.9 sec. for the earlier 2-seater, 10.8 sec. and 21.4 sec. for the former coupé.

It may at first glance seem surprising that the engine changes which have resulted in such markedly improved acceleration through the gears have not raised the top speed of the car. With full silencing as installed in the car, however, the new engine develops peak power at 5,300 r.p.m. corresponding to approximately 89-90 m.p.h. in top gear, the timed mean speed of just over 96 m.p.h. being well within the 6,000 r.p.m. limit suggested by a red sector on the tachometer dial but 7% beyond the peak of the power curve. Raised tyre pressures, and/or the use of Road Speed tyres which are an optional extra, in place of the tubeless touring-quality tyres fitted to our test model, would no doubt have reduced drag and lifted the top speed—so, judging by our experience of other M.G. cars, would some additional running-in of an engine which was quiet mechanically and used, very little oil indeed.

What matters about the M.G. A 1600 is not, however, its ultimate speed, but the ease and rapidity with which 80 m.p.h. can be reached and exceeded whenever there is a slight break in the traffic on ordinary main roads.

Complete docility characterizes the enlarged engine, as witness our recording of top gear acceleration times from a mere 10 m.p.h., and it runs happily on ordinary Premium grades of petrol without demanding 100-octane, but it does not feel to pull its full weight below 2,500 r.p.m. In the warm summer weather which prevailed during our test, the choice was never needed for starting from cold, even after the car had stood in the open throughout rainy nights. The engine can seem rather harsh when accelerated hard in the gears, an effect which is difficult to define exactly as neither exhaust nor mechanical noise levels are high for a sports car. Fuel economy proved rather inferior to smaller-engined preceding models, our checks showing between 23½ m.p.g. and 25½ m.p.g. in varied (but always fast) road driving.

In Brief

Price £663 plus purchase tax £177 7s. 6d., equals £940 7s. 6d.

Capacity ... 1,588 c.c.

Unladen kerb weight ... 18½ cwt.

Acceleration:

20-40 m.p.h. in top gear ... 11.0 sec.
0-50 m.p.h. through gears ... 9.1 sec.

Maximum top gear gradient ... 1 in 10.9

Maximum speed ... 96.1 m.p.h.

"Maximile" speed ... 94.1 m.p.h.

Touring fuel consumption ... 29.7 m.p.g.

Gearing: 17.0 m.p.h. in top gear at 1,000 r.p.m.; 29.1 m.p.h. at 1,000 ft./min. piston speed.

COMFORT and convenience have been well studied in the layout and equipment of the cockpit: the two bucket seats have a central armrest between them, on the propeller-shaft tunnel, just to the rear of the short gear lever. Rev. counter and speedometer are two large circular dials immediately in front of the driver, with smaller dials for fuel gauge, oil pressure and water thermometer on the left.
Provision of Lockheed 11-inch disc brakes behind the bolt-on front wheels has given this car an immense reserve of stopping power. There is outstandingly good balance between front and rear brakes, so that the car can be checked from 95 m.p.h. down to a standstill at virtually the limit of tyre adhesion without any fuss or excitement whatever. An extended series of stops from 60 m.p.h., at the closest intervals permitted by very good acceleration, produced no perceptible fade but merely a slight and entirely temporary loss of the usual perfect balance between the four brakes. As we have noted on some other disc-braked cars, a form of brake squeal could be induced by extremely gentle brake application at town speeds, a trivial price to pay for smoothly progressive stopping power which inspired utter confidence at all times. The fly-off handbrake works very effectively upon the rear drums, location of the pull-up lever on the right of the transmission tunnel being reasonably convenient for tall drivers but awkward when the driving seat was adjusted further forwards.

Apart from the new braking system, no chassis changes in this model have been announced, nor was there any reason to expect them. Exceptional strength characterizes a box-section frame of which the scuttle structure is an integral part, and although 18-inch wheels are heavy for a 1.6-litre sports 2-seater, stamina is known to go with the appreciable weight, and if the gearbox is used properly, acceleration can be very brisk indeed. Factory recommendations on the subject of tyre pressures cover rather a wide range, but we found the highest recommended pressures to be best suited to everyday use of this sporting car, which otherwise took town corners to an accompaniment of loud tyre squeal.

Even with quite high tyre pressures, the coil-spring F.S. and semi-elliptic rear springs are very far from harsh, and in fact a certain amount of body roll is evident during fast cornering, despite the low build of the M.G.A. Around town, there is not quite the same cushioned ride as many present-day touring cars provide, but the suspension is extremely well suited to comfortably "flat" riding at the brisk pace which is natural to this car on country roads of all kinds. There is certainly no cause to be shy of taking the M.G.A onto really rough surfaces.

Like other M.G. two-seaters for a considerable number of years past, this model has a rack-and-pinion steering gear which is extremely positive in action, without any of the backlash or flexibility which spoil the precision of all too many steering installations based upon worm or screw gearing. In conjunction with a chassis which seems never to "put a foot wrong," steering gear precision makes this a very brisk car from point to point, especially on the secondary roads which in Britain often serve as traffic voiders.

At the extremes of the speed range, it must be noted that the fully reversible rack-and-pinion steering, slightly damped by a friction device which makes it self-adjusting for wear, does reveal shortcomings. Below 25 m.p.h. the friction is evident enough to cause a slight amount of "wander," and above 60 m.p.h. road reac-

**ALTHOUGH the smooth bonnet falls away to a very low front, the engine compartment is not cramped and access for routine maintenance is good.**

**HOLDING the spare wheel, the boot has room only for soft luggage; those contemplating serious touring can obtain a grid to fit the boot lid.**
Distinguished from earlier models by rigid sliding side-screens and deeper plinths to accommodate filler units separately from the rear lamps, the M.G. A 1600 retains such useful features as a large rear window and quarter lights in the hood, stout bumpers and smooth, easy-to-clean bodywork.

Simply and marvelously a two-seater, the sleek body of this car is no more difficult to enter than any comparable low-built models. The floor is flat and the doors open down to floor level, but the sturdy structure, even so, does not detract from the rear extend far enough forward for utmost ease of entry. Once entered, this car offers an exceptionally high standard of comfort and convenience, the individual seats with their "wrap around" backrests having an adjustable range which even the very tall find satisfactory. Between the seats, a cushioned armrest covers the propeller shaft tunnel, and hollowed-out doors provide quite generous elbow width in the cockpit as well as very capacious pockets. The facia is laid in panel onto which instruments and controls have been crowded with little pretense at "styling" but with a great deal of practical common sense—the speedometer and matching tachometer face the driver directly, a combined oil pressure gauge and coolant thermometer is close beside them and the fuel gauge is not far away. Unusual but convenient once a driver is accustomed to them, are facia-panel locations of the horn button (on the driver's left) and turn-indicator time switch (on the driver's right), the horn button being touch-sensitive so that a gentle cautionary note or a strident warning can be given at will. Rheostat-controlled lighting is provided for the instruments, a map reading light in front of the passenger, and a spare switch is provided for a foglamp if this extra is specified.

All-weather equipment takes the form of two side-screens and a hood, all of which can in fine weather be stowed safely and invisibly behind the seats. These removable items really do keep out wet weather, and stay firmly in place at the car's maximum speed—the curved glass windscreen has brassing struts which serve also as grab handles, the hood fastens to the windscreen at three points, and when the doors are closed, rubber-cushioned fittings on the side-screens hold them in rattle-free contact with the windscreen. Each side-screen has a sliding half-panel to provide ventilation, and in striking contrast with the one-time austerity of sporting cars is the inclusion of a fresh air cockpit heater and windscreen de-mister in this comparatively priced model's extensive range of optional built-in extras.

The two criticisms which must be made of the M.G. A are that the car becomes very much noisier to drive when it is in use owing to wind-induced flutter of the roof fabric, and that the multiple joints which let a really rigid hood frame fold away so neatly make reasonably rapid erection or folding of the hood a skillful task. By some people's standards of judgement, the luggage locker also is criticized as being of rather modest size.

With its share of the imperfections from which no car ever altogether escapes, this remains a very attractive and versatile sporting two-seater. Sturdy, well finished and probably built with more thorough care than most of its contemporaries, it travels fast and is enjoyable to drive or ride in, yet can also serve as a reliable and weatherproof form of everyday transportation.

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### Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Values</th>
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<tbody>
<tr>
<td><strong>Engine</strong></td>
<td></td>
</tr>
<tr>
<td>Cylinders</td>
<td>4</td>
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<tr>
<td>Bore</td>
<td>75.39 mm.</td>
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<tr>
<td>Stroke</td>
<td>88.9 mm.</td>
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<tr>
<td>Cubic capacity</td>
<td>1,588 c.c.</td>
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<td>Piston area</td>
<td>27.68 sq. in.</td>
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<td>Valves</td>
<td>Pushrod h.o.</td>
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<td>Compression ratio</td>
<td>6.5:1</td>
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<tr>
<td>Carburettors</td>
<td>Twin S.U. type H4</td>
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<tr>
<td>Fuel pump</td>
<td>5.5 electrica</td>
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<tr>
<td>Ignition timing control</td>
<td>Centrifugal</td>
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<tr>
<td>Oil filter</td>
<td>Full-flow Teflon or Filterator</td>
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<tr>
<td>Max. power (net)</td>
<td>75.5 b.h.p. at 5,500 r.p.m.</td>
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<thead>
<tr>
<th>Transmission</th>
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<tbody>
<tr>
<td>Clutch</td>
<td>Borg and Beck 8 in. s.a.p.</td>
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<tr>
<td>Top gear</td>
<td>1:1</td>
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<tr>
<td>3rd gear</td>
<td>1:2</td>
</tr>
<tr>
<td>2nd gear</td>
<td>1:3</td>
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<tr>
<td>1st gear</td>
<td>1:4</td>
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<tr>
<td>Reverse</td>
<td>20.468</td>
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<tr>
<td>Propeller shaft</td>
<td>Hardy Spicer, open</td>
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<td>Final drive</td>
<td>Hypoid bevel</td>
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<tr>
<td>Top gear m.p.h. at 1,000 r.p.m.</td>
<td>17.0</td>
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<tr>
<td>Top gear m.p.h. at 6,000 r.p.m.</td>
<td>59.1</td>
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<tr>
<th>Chassis</th>
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<tr>
<td>Brakes</td>
<td>Lockheed hydraulic—disc front, drum rear</td>
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<tr>
<td>Brake diameter</td>
<td>Disc 11 in. drum 10 in.</td>
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<tr>
<td>Friction lining area</td>
<td>87 sq. in.</td>
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<tr>
<td>Suspension</td>
<td></td>
</tr>
<tr>
<td>Front</td>
<td>Independent coil springs and wishbones</td>
</tr>
<tr>
<td>Rear</td>
<td>Rigid axle with half elliptic leaf springs</td>
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<tr>
<td>Shock absorbers</td>
<td>Armstrong</td>
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<tr>
<td>Steering</td>
<td>Hydraulic lever arm</td>
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<tr>
<td>Gear ratio</td>
<td>3.60:15</td>
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