

The Motor

# ROAD TESTS OF 1956 CARS

7/6

NET

TEMPLE PRESS LIMITED

AUSTIN A30 COUNTRYMAN  
AUSTIN A90 WESTMINSTER DE LUXE  
(WITH OVERDRIVE)  
AUSTIN A105  
B.M.W. TYPE 501 V-8  
CITROEN 2CV (TYPE AZ) CABRIOLET  
FORD CONSUL MK. II SALOON  
FORD SQUIRE ESTATE CAR  
FORD ZODIAC MK. II  
HILLMAN NEW MINX DE LUXE SALOON  
HUDSON RAMBLER  
HUMBER HAWK ESTATE CAR  
HUMBER SUPER SNIPE SALOON  
(AUTOMATIC TRANSMISSION)  
JAGUAR 2.4 LITRE (WITH OVERDRIVE)  
M.G. SERIES - M.G.A. TWO-SEATER  
MORGAN 4/4 SERIES II  
MORRIS ISIS DE LUXE SALOON  
(WITH OVERDRIVE)

NASH METROPOLITAN HARD-TOP  
PACKARD CLIPPER  
PARAMOUNT 1½-LITRE ROADSTER  
ROLLS-ROYCE SILVER CLOUD  
ROVER "90" (WITH OVERDRIVE)  
ROVER "LAND ROVER 107" STATION  
WAGON DE LUXE  
STANDARD FAMILY EIGHT  
STANDARD FAMILY TEN  
(WITH ALEXANDER-LAYSTALL CONVERSION)  
STANDARD VANGUARD III  
(WITH OVERDRIVE)  
STANDARD VANGUARD SPORTSMAN  
TRIUMPH TR3 HARD-TOP COUPÉ  
(WITH OVERDRIVE)  
VAUXHALL CRESTA  
VOLKSWAGEN DE LUXE SALOON  
VOLVO 444K

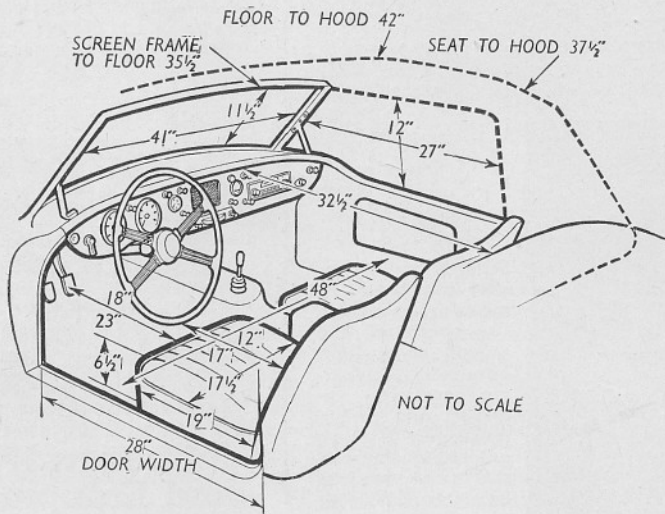
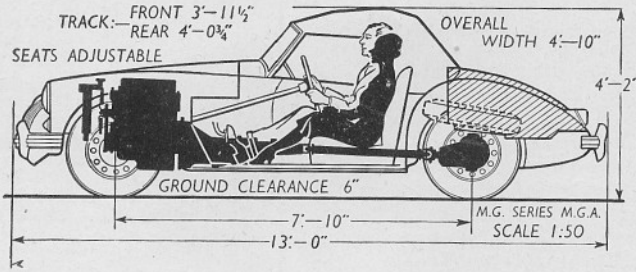
# The Motor Road Test No. 23/55 (Continental)

Make: M.G.

Type: M.G.A. Two-Seater

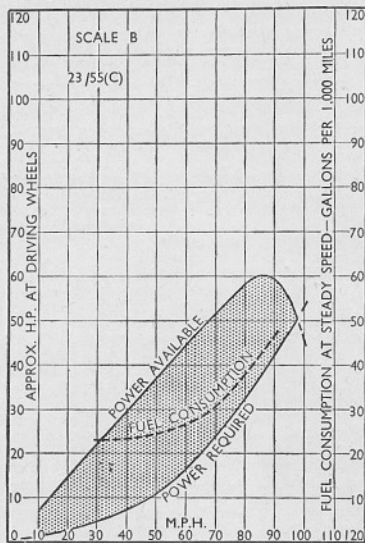
Makers: M.G. Car Co., Ltd., Abingdon-on-Thames.

## Test Data



### WEIGHT

Unladen kerb weight .. 18 1/2 cwt.  
 Front/rear weight distribution .. 53/47  
 Weight laden as tested .. 21 1/2 cwt



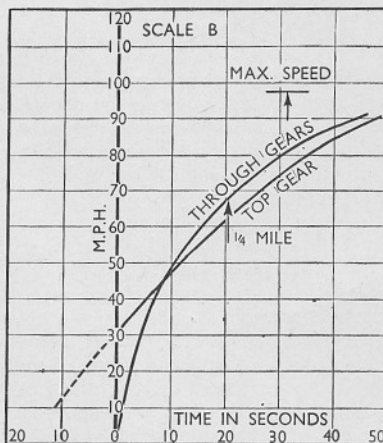
Drag at 10 m.p.h. .. 33 lb.  
 Drag at 60 m.p.h. .. 100 lb.  
 Specific Fuel Consumption when cruising at 80% of maximum speed (i.e. 78.2 m.p.h.) on level road, based on power delivered to rear wheels .. 0.74 pints/b.h.p./hr.

### HILL CLIMBING (At steady speeds)

Max. top gear speed on 1 in 20 .. 80 m.p.h.  
 Max. top gear speed on 1 in 15 .. 67 m.p.h.  
 Max. gradient on top gear .. 1 in 11.1 (Tapley 200 lb./ton)  
 Max. gradient on 3rd gear .. 1 in 7.5 (Tapley 295 lb./ton)  
 Max. gradient on 2nd gear .. 1 in 4.8 (Tapley 465 lb./ton)

### BRAKES at 30 m.p.h.

0.96g retardation .. (= 31 1/2 ft. stopping distance) with 95 lb. pedal pressure  
 0.83g retardation .. (= 36 1/2 ft. stopping distance) with 75 lb. pedal pressure  
 0.52g retardation .. (= 58 ft. stopping distance) with 50 lb. pedal pressure  
 0.30g retardation .. (= 100 ft. stopping distance) with 25 lb. pedal pressure



## Maintenance

Sump: 6 1/2 pints, S.A.E. 30. Gearbox: 4 pints, S.A.E. 30. Rear axle: 2 1/2 pints, Hypoid 90. Steering gear: Hypoid 90. Radiator: 10 pints (2 drain taps). Chassis Lubrication: By grease gun every 1,000 miles to 9 points. Ignition timing: 7° B.T.D.C. Spark plug gap: .019-.021 in. Contact breaker gap: .014-.016 in. Valve timing: I.O. 16° B.T.D.C.; I.C. 56° A.B.D.C.; E.O. 51° B.B.D.C.; E.C. 21° A.T.D.C. Tappet clearances: (Hot) .017 in. Front wheel toe-in: Nil. Camber angle: 1°. Castor angle: 4°. Tyre pressures: Front, 17 lb., rear, 20 lb. (fast driving, 18 lb. and 23 lb.) (see text). Brake fluid: Lockheed, Battery: Lucas SG9E, 12-v. Lamp bulbs: Head, 42/36 w. Side/indicator, 21/6 w. rear/indicator/stop, 21/6 w.

**CONDITIONS.** Weather: Hot with light wind (temperature 55°-75°F., barometer 29.9-30.0 in.) Surface: dry tarmac and concrete (Ostend-Ghent motor road). Fuel: British and Belgian premium petrol. Tested with hood and sidescrins erect.

### INSTRUMENTS

Speedometer at 30 m.p.h. .. 2% fast  
 Speedometer at 60 m.p.h. .. 7% fast  
 Speedometer at 90 m.p.h. .. 6% fast  
 Distance recorder .. Accurate

### MAXIMUM SPEEDS

Flying Quarter Mile  
 Mean of four opposite runs .. 97.8 m.p.h.  
 Best time equals .. 98.4 m.p.h.

### Speed in gears (at recommended maximum 5,500 r.p.m.)

Max. speed in 3rd gear .. 68 m.p.h.  
 Max. speed in 2nd gear .. 42 m.p.h.  
 Max. speed in 1st gear .. 26 m.p.h.

### FUEL CONSUMPTION

44 m.p.g. at constant 30 m.p.h.  
 44 m.p.g. at constant 40 m.p.h.  
 41 m.p.g. at constant 50 m.p.h.  
 38 m.p.g. at constant 60 m.p.h.  
 33 m.p.g. at constant 70 m.p.h.  
 26 1/2 m.p.g. at constant 80 m.p.h.  
 21 1/2 m.p.g. at constant 90 m.p.h.

Overall consumption for 941 miles 35.3 gallons = 26.7 m.p.g. (10.6 litres/100 km.). Fuel tank capacity 10 gallons.

### ACCELERATION TIMES Through Gears

0-30 m.p.h. .. 4.9 sec.  
 0-40 m.p.h. .. 6.8 sec.  
 0-50 m.p.h. .. 10.8 sec.  
 0-60 m.p.h. .. 16.0 sec.  
 0-70 m.p.h. .. 21.9 sec.  
 0-80 m.p.h. .. 30.0 sec.  
 0-90 m.p.h. .. 44.6 sec.  
 Standing Quarter Mile .. 20.4 sec.

### ACCELERATION TIMES on Two Upper Ratios

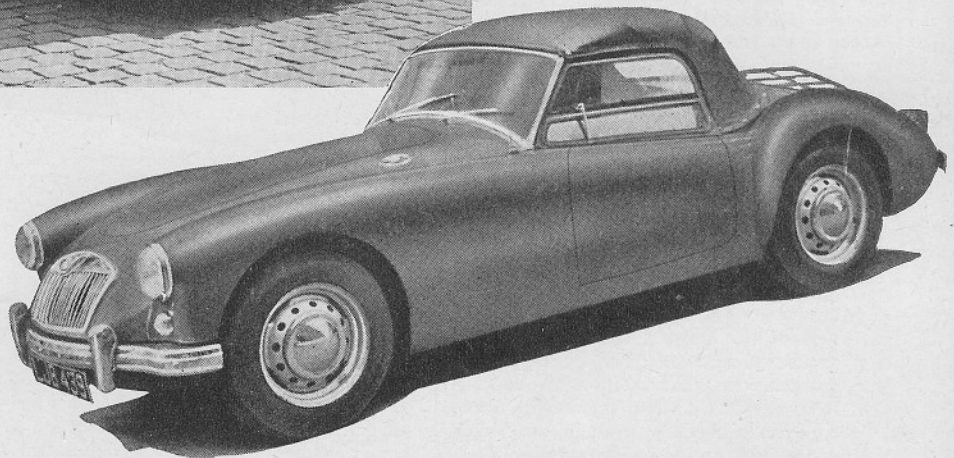
	Top	3rd
10-30 m.p.h.	11.0 sec.	8.6 sec.
20-40 m.p.h.	11.7 sec.	7.8 sec.
30-50 m.p.h.	11.4 sec.	7.8 sec.
40-60 m.p.h.	14.0 sec.	8.4 sec.
50-70 m.p.h.	14.9 sec.	9.6 sec.
60-80 m.p.h.	14.7 sec.	—
70-90 m.p.h.	21.4 sec.	—

# The M.G. Series-M.G.A. Two-seater



An Uncommonly  
Roadworthy  
1½-litre Sports  
Car of High  
Performance

Individual modern styling marks the new M.G.—and more than that. At 60 m.p.h. the M.G.A. requires 27% less power to maintain its speed than the TF Midget. Hood and sidescreens continue the smooth shape as far as is possible.



CARS, like people, are in their varying degrees martyrs to fashion, and whether the current dictates of fashion are a good or a bad thing sometimes makes little difference. Some are brought up to date almost year by year to embody the very latest in everything, others hold out until the very last before falling into line with the majority, and a few, after a period of resistance, change their fashion only for a new one entirely their own.

It is to the last group, oddly enough, that the M.G. "A" two-seater (described in *The Motor*, September 28, 1955) belongs. The new car has, to be sure, a smooth and good-looking body whose lines follow contemporary style, and a performance which

puts it at least on a competitive footing with the smaller fast sports cars to which we have become accustomed. There, however, the resemblance virtually ends, for alongside the small machines with moderately stressed engines of 2 or more litres there is now a car of comparable size with an engine capacity of 1,489 c.c. The fact is, of course, of primary importance to the competition driver as putting the car in the 1½-litre class; aside from competition, there are virtues in a small (and therefore light), engine which will be mentioned again later.

In its essence the M.G.A. although not in title a "Midget," is still small; it is compact, manoeuvrable and lively, regards the carriage of luggage as secondary to the sport of motoring, and responds to its driver's wishes in a way the larger car can seldom hope to do except at much greater expense.

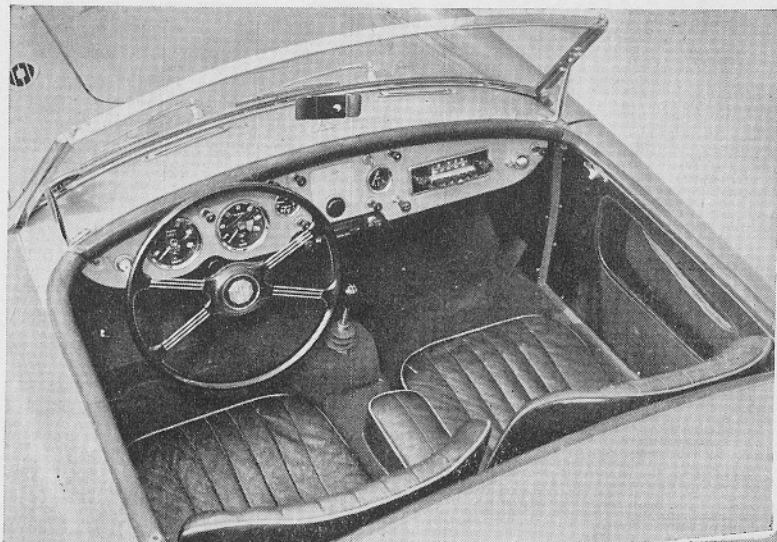
However good its intangible qualities, it is by performance that a sports car will inevitably be judged in the first instance, and the figures recorded on the opposite page, which were established as usual on the Belgian motor road, provide all the assurance that may be needed that the car can hold its own in good company. On the noisy side mechanically in com-

parison with present-day touring designs, the M.G. engine was prone to run-on if switched off quickly after a fast drive, but was otherwise tolerant of all premium-grade fuels. The exhaust note will obviously please many buyers, its loudness increasing progressively with engine speed and throttle opening.

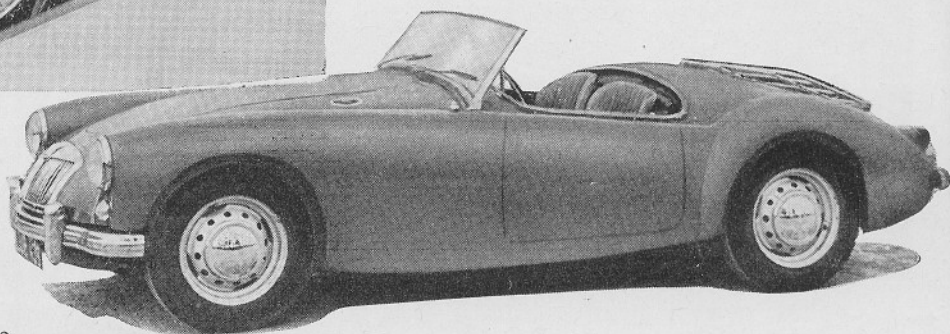
The special significance of a return to 1½ litres for a sports car lies in re-teaching an old lesson that the smaller the proportion of weight, and within limits the less the actual weight on the front wheels of a car, the more responsive will be its "handling"—a comprehensive term which needs no elucidation to the enthusiast. It will be seen that the M.G., without driver but ready for the road and with a small quantity of fuel in the tank, has some 53% of its weight carried by the front wheels, or only a few pounds more on the front than the back, while the position of seats and fuel tank ensures that the greater part of any additional load will bear on the back wheels. The total weight of the pre-production model supplied for test, which in contrast to subsequent production models had aluminium panelled doors and bonnet and boot lids, may raise a few eyebrows in a theoretical appraisal of power-weight ratios, but the majority verdict amongst

## In Brief

Price: £595 plus purchase tax £249 0s. 10d. equals £844 0s. 10d.	
Capacity	1,489 c.c.
Unladen kerb weight	18½ cwt.
Fuel consumption	26.7 m.p.g.
Maximum speed	97.8 m.p.h.
Maximum speed on 1 in 20 gradient	80 m.p.h.
Maximum top gear gradient	1 in 13.7
Acceleration:	
10-30 m.p.h. in top	11.0 sec.
0-50 m.p.h. through gears	10.8 sec.
Gearing: 17.0 m.p.h. in top at 1,000 r.p.m.; 72.8 m.p.h. at 2,500 ft. per min. piston speed.	

**The M.G. Series - M.G.A. - Contd.**

High-sided, the cockpit is unusually draught-free even in its most open condition. Instruments are where they should be, and the horn button on the fascia M.G.-fashion. Forethought is shown by wind-screen struts which do double-duty as grab handles.



pedal with too long a travel for heel-and-toe downward gear changes to be made.

There are, on the other hand, no half measures about the brakes. Ten-inch drums with a friction lining area of 134 sq. in. not only show excellent results on a Tapley meter with moderate pressure, but were almost unaffected by a series of deliberate hard applications in the rapid descent of a long French main road hill. If under extreme conditions further brake cooling were ever necessary, it should be provided by the wire wheels which are

the several members of our staff who drove the car was that the extra pounds put into a superlatively strong and rigid chassis were weight well spent.

To drive the M.G.A. on a winding open road is sheer enthusiast's delight. Rack and pinion steering and small cars have always gone well together, and the lightness of the steering with a small, four-spoked wheel is matched by a quickness and precision which might not be expected from the lock-to-lock figure (for a very compact lock) of  $2\frac{3}{4}$  turns. In this case the secret lies in an admirable example of useful and controllable oversteer. In point of fact an improvement in the handling was found possible by inflating the tyres from the recommended fast-driving pressures of 18 lb. front and 23 lb. for the rear wheels to approximately 26 lb. on all four. The effect of the oversteer then was merely that the driver, rather like a pilot in some types of aircraft, steered into a turn and then virtually centralized the wheel to keep the car on its course. It was notable that to some tastes at least the extra sponginess of the tyres at lower pressures did not make

for a more comfortable ride, and had the further disadvantage of causing tyre squeal on corners, otherwise entirely absent.

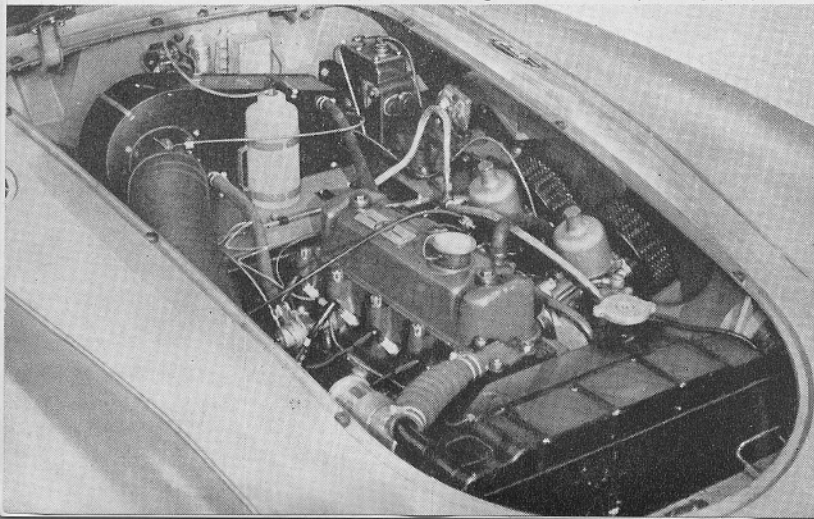
Quite apart from steering characteristics, the cornering power of the car is extremely good, holding it down in a manner to give the driver complete confidence, and seeming almost indifferent to the type of road surface. As is often the case a wet road gives an earlier indication of the car's behaviour when pressed to the limit on a corner, sliding of the rear wheels beginning quite gradually and being easily transformed into a controlled drift. Wheelspin is very quickly provoked in starting from rest in the wet, due possibly to the combination of a small, high-revving engine and a throttle control which on the left-hand drive model under test was awkward in the extreme. It is an unfortunate thing that a sports car should have its throttle opened by an enclosed cable (which is the same on left- or right-hand drive models), and a small source of joy to the sporting driver is denied him by an accelerator

optional equipment for the M.G. An effective fly-off handbrake lever is placed horizontally on the right-hand side of the transmission tunnel, convenient with right-hand drive but on a left-hand drive car close to the passenger's legs.

Like the brakes, the clutch is hydraulically operated by a hanging pedal, and most surprisingly is smooth even to the point of slipping under really brutal treatment. It may be observed that the latter was very much a feature of our acceleration tests, since the gearbox synchromesh was good enough to allow full-throttle "snatch" changes upwards through all the gears. The M.G. Company have always had a good name for the handiness of their remote-control gear levers, and this model is no exception, although an almost universal complaint amongst drivers, admittedly unused to changing gear with their right hands, was a difficulty in moving quickly from third to second gear. If the choice of ratios can be criticized it is in a second gear equivalent to only 42 m.p.h. at the maxi-

Power beneath a low bonnet has been obtained with practically no sacrifice of accessibility, excepting only the batteries which are carried behind the seats. The distributor is just out of sight below the sparking plugs.

Shallow and very much occupied by spare wheel and tools, the boot can carry a couple of soft grips if need be. A grid for more awkward luggage is an available accessory.





Less noise but still quite good weather protection is obtained with hood up and side-screens stowed away. Visibility to the rear is reasonable through a wide plastics window.

mum recommended engine speed of 5,500 r.p.m., but the willingness of the engine to rev freely up to and even occasionally beyond this limit largely makes up for the restriction. In the light of modern practice it is often a surprise to cruise in top-gear comfort and then discover that the engine is turning over at 4,500 r.p.m., and some form of higher gear is a tantalizing consideration for the long distance motorist.

**Driving Position**

Although the ride itself is remarkably comfortable, low slung seats result in a driving position needing a straight and unbraced left leg and a right knee (this again in the left-hand drive car) which, owing to proximity of the steering wheel rim, would have been happier with a universal joint, while all the assorted shapes of *The Motor* staff found a lack of support for the small of the back. The seats nevertheless are well sprung and well covered in leather, and excellently shaped to prevent passengers being flung about in fast cornering. The central bulge over the transmission is covered with padded leather. The low build ensures that tall drivers do not find themselves in the slipstream above the curved windscreen, which throws the airstream well to the side of the cockpit, and sidescreens with spring-hinged lower sections can help to make the car yet more snug even when open. Some advantage is indeed to be gained by driving in this trim in anything less than rain or snow, particularly if the very powerful heater is fitted, as the level of noise in the cockpit rises a great deal with the hood in place.

Mundane matters of convenience must weigh to some extent with the most sporting of car owners, and the virtues which largely give the M.G. its personality have been bought to some extent at the expense of creature comfort. To raise or even to lower the hood single-handed is an exercise in skill and patience, so that the full-length tonneau cover proved a most valuable "extra" on the test car. The space left free behind the seats when the hood is erect will,

however, take a fair number of parcels, which might otherwise have to be left at home. The sidescreens are normally carried in separate compartments of a bag in this space, and the spare wheel on the floor of the luggage locker. Tools in a large roll are strapped on top of the spare wheel, leaving enough luggage room for two canvas grips and smaller objects, but scarcely for hard suitcases. The list of extra items available for the car includes an external luggage carrier for the boot lid, one of which was fitted to the test car and proved rather frail. Maps, torches and the rest of the small oddments which go with travelling find a home in open door pockets.

Circular instrument dials, with markings which have suffered a little at the stylist's hands, are grouped where they may be easily seen by the driver; speedometer, rev counter, water thermometer and oil pressure and fuel gauges are included, but no ammeter. The distinctive M.G. feature of a convenient horn button on the centre of the fascia is preserved. Lights, starter, choke, windscreen wipers and a map-reading light for the passenger are controlled by pull-out switches, and a manual windscreen washer is part of the optional equipment. The accessibility of the engine and chassis for maintenance or servicing, often a question of personal interest to the driver of this type of car, is uniformly good with the sole and outstanding exception of the batteries; placed on either side of the car behind the seats, they can only be inspected on removal of a plate which is itself obstructed until the spare wheel is unclamped from the boot.

Lest there be any risk, however, of a number of small notes of criticism leaving a false impression, the newest M.G. must be summed up as enthusiastically as it was everywhere received. That the modern styling is generally approved there can be no doubt, but far more important is the introduction of a small car with a degree of roadworthiness high by any standards. The famous slogan of the factory has indeed never been better applied.

**Mechanical Specification**

<b>Engine</b>	
Cylinders ... ..	4
Bore ... ..	73.025 mm.
Stroke ... ..	89 mm.
Cubic capacity ... ..	1,489 c.c.
Piston area ... ..	25.97 sq.in.
Valves ... ..	Pushrod o.h.v.
Compression ratio ... ..	8.3/1
Max. power ... ..	68 b.h.p.
at ... ..	5,500 r.p.m.
Piston speed at max. b.h.p.	3,210 ft. per min.
Carburettors ... ..	2 inclined S.U. 1½-in.
Ignition ... ..	12-volt coil
Sparking plugs ... ..	14 mm. Champion NAB
Fuel pump ... ..	S.U. electrical, rear-mounted
Oil filter ... ..	Full-flow Tecalemit
<b>Transmission</b>	
Clutch ... ..	Single dry plate
Top gear (s/m) ... ..	4.3
3rd gear (s/m) ... ..	5.908
2nd gear (s/m) ... ..	9.52
1st gear ... ..	15.652
Propeller shaft ... ..	Open
Final drive ... ..	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	17.0
Top gear m.p.h. at 1,000 ft./min. piston speed ... ..	29.1
<b>Chassis</b>	
Brakes ... ..	Lockheed hydraulic (2 l.s. front)
Brake drum diameter ... ..	10 in.
Friction lining area ... ..	134.4 sq. in.
<b>Suspension:</b>	
Front ... ..	Coil and wishbone, i.f.s.
Rear ... ..	Semi-elliptic
<b>Shock absorbers:</b>	
Front ... ..	Armstrong incorporated in upper wishbone pivots
Rear ... ..	Armstrong hydraulic
Tyres ... ..	Dunlop 5.60-15
<b>Steering</b>	
Steering gear ... ..	Rack and pinion
Turning circle (between kerbs):	
Left ... ..	30½ ft.
Right ... ..	28½ ft.
Turns of steering wheel, lock to lock ... ..	
2½	
<b>Performance factors (at laden weight as tested):</b>	
Piston area, sq. in. per ton ... ..	24.1
Brake lining area, sq. in. per ton ... ..	125
Specific displacement, litres per ton mile ... ..	2,440
Fully described in <i>The Motor</i> , September 28, 1955	

**Coachwork and Equipment**

<b>Bumper height with car unladen:</b>	
Front (max.) 18 in., (min.) 9½ in.	
Rear (max.) 21 in., (min.) 12½ in.	
Starting handle ... ..	Yes
Battery mounting ... ..	Behind seats
Jack ... ..	Screw-type
Jacking points ... ..	Front wishbones and rear springs
<b>Standard tool kit:</b> Ring-type tappet spanner, wheelbrace (copper hammer with wire wheels), tappet gauge, sparking plug spanner, pliers, grease gun, adjustable spanner, 2 tyre levers, cylinder head nut spanner, tyre valve spanner, distributor screwdriver and gauge, tyre pump, 3 box spanners, 3 o/e spanners, screwdriver, recessed screwdriver, tommy bar, jack, brake bleeder tube, gearbox plug spanner, touch-up paint-pencil, tool roll.	
<b>Exterior lights:</b> 2 head, 2 side-indicator, 2 rear/brake/indicator.	
<b>Direction indicators:</b> Flashing type, self-cancelling.	
Windscreen wipers ... ..	Electric, self-parking
Sun visors ... ..	No
<b>Instruments:</b> Speedometer with decimal trip distance recorder, rev. counter, oil pressure gauge, water thermometer.	
Warning lights ... ..	Ignition, indicators, headlamp main beam
<b>Locks:</b>	
With ignition key ... ..	Ignition
With other keys ... ..	None
Glove lockers ... ..	None
Map pockets ... ..	2
Parcel shelves ... ..	None
Ashtrays ... ..	None
Cigar lighters ... ..	None
Interior lights ... ..	Instrument panel, map-reading light
Interior heater ... ..	Re-circulating or fresh-air type with de-mister
Car radio ... ..	Optional, H.M.V.
<b>Extras available:</b> Radio, heater, wire wheels, fog lamp, whitewall tyres, 4.55/1 axle gears, twin horns, external luggage carrier, overall tonneau cover, radiator blind, rim embellishers, telescopic steering column.	
Upholstery material ... ..	Leather over foam rubber
Floor covering ... ..	Carpet
<b>Exterior colours standardized:</b> Black, Orient red, Tyrolite green, Glacier blue, Old English white.	
Alternative body styles ... ..	None