

# Autocar ROAD TEST

NUMBER 2159



## M.G. MGC 2,912 c.c.

**AT A GLANCE.** New derivative of MGB with six-cylinder engine. Lack of low speed torque and engine reluctant to rev. Very noisy fan. New all synchromesh gearbox works well, but has odd choice of ratios with overdrive. Heavy fuel consumption. Light brakes, with some fade. Good ride; strong understeer; steering low geared. Lots of leg-room. Heater extra. Good finish.

**MANUFACTURER**  
MG Car Co. Ltd., MG Division, British Motor Corporation, Abingdon-on-Thames, Berkshire.

PRICES	
Basic .. .. .	£895 0s 0d
Purchase Tax .. ..	£206 16s 6d
Seat belts (pair) ..	£6 0s 0d
Total (in GB) .. ..	£1,111 16s 6d

EXTRAS (inc. P.T.)	
Overdrive .. .. .	£61 9s 2d
Wire wheels .. .. .	£30 14s 7d
Heater .. .. .	£15 1s 2d
Radio .. .. .	£20 0s 0d

PERFORMANCE SUMMARY	
Mean maximum speed	120 mph
Standing start ¼-mile..	17.7 sec
0-60 mph .. .. .	10.0 sec
30-70 mph (through gears) .. .. .	9.8 sec
Fuel consumption .. ..	19 mpg
Miles per tankful .. ..	228

**T**HERE has been talk of a new big sports car from BMC now for a couple of years. Rumours of a new big Austin-Healey with this or that kind of new engine, and of various coupés from the Abingdon stable have all been doing the rounds. After all these exciting stories, the new MGC must have come as a disappointment to many, because it looks just like the MGB and only a keen car spotter would notice the bulging bonnet hiding the six-cylinder engine. Inside there have been a few changes; all these also apply to the four-cylinder "B". Squeezing the bigger engine into the MGB shell has called for quite a number of engineering changes, so what in effect is much more than just the engine option it seems, adds £154 to the total price.

For the moment the Austin-Healey 3000 continues as a parallel model priced at £24 more than the MGC. In effect it shares the same engine, although that in the "C" has three extra main bearings and a revised cylinder block. Our issue of the 19 October described the new car in some detail, so we will run over only the essential statistics again here.

Basically the 3-litre engine has not

changed its layout; it still uses push-rods and rockers for its valve gear, but the block has been redesigned to make it shorter and a little lighter. Somewhere along the line a few horsepower have been lost (either in extra bearing friction or as windage losses from the reduced crank web clearances) and the MGC engine develops 145 bhp net compared with the Healey's 150. Maximum torque is about the same with 170 lb. ft. at 3,500 rpm.

To match the revised engine the gearbox has been brought up to date by adding synchromesh to first, and without overdrive the ratios are much the same as those of the MGB, with an appropriate raising of the final drive ratio from 3.91 to 3.07 to 1. With overdrive a 3.307 axle is used, and for a reason BMC have not explained to us, a much higher first gear is fitted as well, with only slightly raised other indirects. Our test car had the latter arrangement, and while the long-legged, easy cruising at 27 mph per 1,000 rpm in overdrive top was appreciated on the continent, the gap between second and third spoilt an otherwise excellent set of ratios. Even without overdrive the MGC revs at only 4,200 rpm at 100 mph, so

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**Make: M.G.**

**Type: MGC 2,912 c.c.**

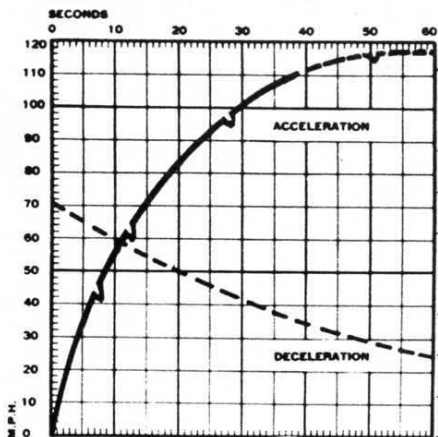
### TEST CONDITIONS

Weather: Sunny. Wind: 8 mph  
 Temperature: 11 deg. C. (53 deg. F.)  
 Barometer: 29.3in. Hg.  
 Humidity: 55 per cent  
 Surfaces: Dry concrete and asphalt

Figures taken at 2,900 miles by our own staff at the Motor Industry Research Association proving ground at Nuneaton.

### WEIGHT

Kerb weight 22.1 cwt (2,477lb-1,125kg)  
 (with oil, water and half-full fuel tank)  
 Distribution, per cent: F, 55.7; R, 44.3  
 Laden as tested: 25.5 cwt (2,853lb-1,294kg)

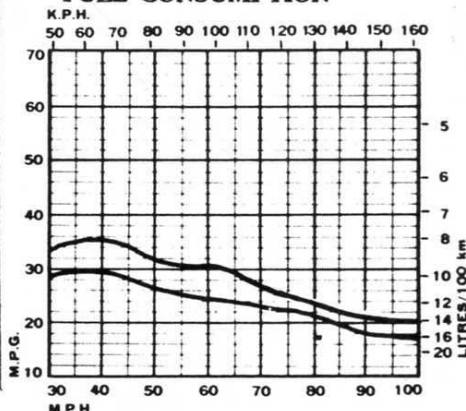


### MAXIMUM SPEEDS

Gear	mph	kph	rpm
OD			
Top (mean)	120	193	4,450
(best)	121	195	4,490
Top	120	193	5,450
OD 3rd	115	185	5,550
3rd	97	156	5,750
2nd	62	101	5,750
1st	44	71	5,750

Standing 1/4-Mile 17.7 sec 79 mph  
 Standing Kilometre 32 sec 103 mph

### FUEL CONSUMPTION



TIME IN SECONDS                      4.0   5.6   7.6   10.0   13.8   18.0   23.1   29.3   40.9

TRUE SPEED MPH                      30   40   50   60   70   80   90   100   110   120

INDICATED SPEED                      31   42   51   62   71   82   92   101   111   121

Mileage recorder 0.9 per cent over-reading.                      Test distance 1,031 miles.

### Speed range, gear ratios and time in seconds

mph	OD Top (2.68)	Top (3.31)	OD 3rd (3.54)	3rd (4.32)	2nd (6.82)	1st (9.86)
10-30	—	11.1	10.4	7.6	4.5	3.4
20-40	13.2	9.6	9.0	6.3	4.4	3.3
30-50	11.4	9.1	8.5	7.0	4.0	—
40-60	11.5	10.0	9.1	6.8	4.3	—
50-70	14.2	10.7	9.3	7.3	—	—
60-80	16.9	11.1	10.1	8.5	—	—
70-90	13.8	12.8	11.9	9.0	—	—
80-100	25.3	15.4	13.9	—	—	—
90-110	33.6	18.3	19.0	—	—	—

(At constant speeds—mpg)

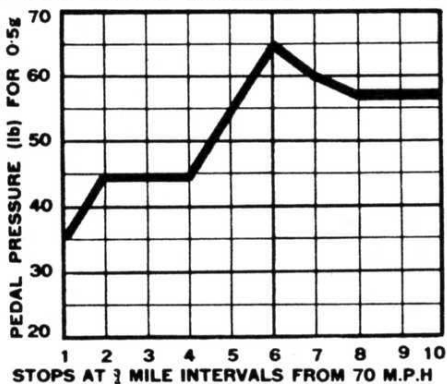
	OD Top	Top
30 mph	33.1	29.4
40	35.1	29.2
50	32.0	27.0
60	30.8	24.5
70	26.8	22.9
80	24.4	21.4
90	22.2	19.2
100	19.7	17.3

Typical mpg 19 (14.9 litres/100km)  
 Calculated (DIN) mpg 20.8 (13.6 litres/100km)

Overall mpg 17.5 (16.1 litres/100km)  
 Grade of fuel, Premium, 4-star (min 97RM)

### OIL CONSUMPTION

Miles per pint (SAE 20W/40) .. 1,000



### BRAKES (from 30 mph in neutral)

Load	g	Distance
25 lb	0.25	100 ft
50 "	0.58	52 "
75 "	0.98	30.7 "
100 "	1.03	29.2 "
Handbrake	0.36	84 "

Max. Gradient, 1 in 3

Clutch Pedal: 35lb and 5in.

### TURNING CIRCLES

Between kerbs L, 35ft 9in.; R, 35ft 9in  
 Between walls L, 36ft 9in.; R, 36ft 9in  
 Steering wheel turns, lock to lock .. 3.5

### HOW THE CAR COMPARES:

#### MAXIMUM SPEED (mean) MPH

100	110	120	130
MG MGC			
Austin-Healey 3000 Mk III			
MG MGB			
Reliant Scimitar 3-litre			
Triumph GT6			

#### 0-60 MPH (sec)

30	20	10
MG MGC		
Austin-Healey 3000 Mk III		
MG MGB		
Reliant Scimitar 3-litre		
Triumph GT6		

#### STANDING START 1/4-MILE (sec)

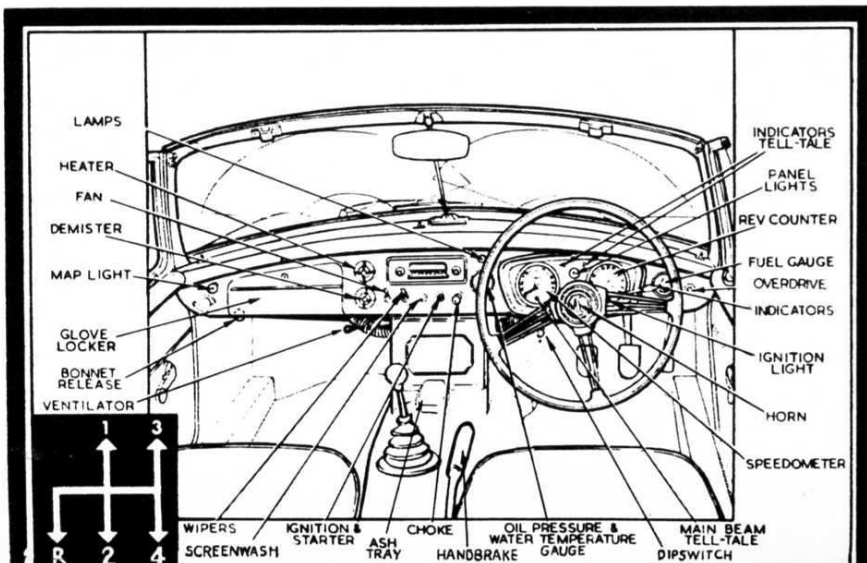
30	20	10
MG MGC		
Austin-Healey 3000 Mk III		
MG MGB		
Reliant Scimitar 3-litre		
Triumph GT6		

#### MPG OVERALL

10	20	30
MG MGC		
Austin-Healey 3000 Mk III		
MG MGB		
Reliant Scimitar 3-litre		
Triumph GT6		

### PRICES

MG MGC	£1,102
Austin-Healey 3000 Mk III	£1,126
MG MGB	£948
Reliant Scimitar 3-litre	£1,516
Triumph GT 6	£985



## M.G. MGC . . .

it is hard to see why this option is listed. For the first time there is the alternative of Borg-Warner automatic transmission.

The engine is something of an enigma. It is smooth and flexible, but completely lacking in sporty characteristics. Whilst it pulls evenly from very low revs (below 500 rpm in top), there is very little low speed torque and the engine seems reluctant to rev or develop much top end power. This impression is borne out by the top gear acceleration figures, which are less quick than those of MGB for every 20 mph increment up to 70 mph (20-40 mph: 8.6 sec MGB, 9.6 sec MGC; 30-50 mph: 8.7 sec MGB, 9.1 sec MGC; 40-60 mph: 9.1 sec MGB, 10.0 sec MGC). Overall through the gears, however, the new car is appreciably quicker with a 0 to 60 mph time of 10.0 sec (MGB: 12.9), and a fast standing quarter-mile in 17.7 sec (MGB: 18.9).

Usually the engine is sweet and docile, but once or twice we experienced slight plug fouling after fairly long spells in heavy traffic. For the first few minutes after a cold start it was particularly difficult to keep the engine from dying, and when accelerating hard oil surge caused clouds of blue smoke from the exhaust. A new moulded plastic cooling fan in a metal cowl whines and whirrs all the time very loudly, and at high revs the driver hears a loud noise like a supercharged vacuum cleaner. To avoid the fuss and bother of making the engine rev, one never goes much above 3,000 rpm for everyday driving, except for the occasional burn-up away from the lights.

Getting the car away from rest quickly was hampered by clutch slip when we tried over 3,500 rpm for take-offs, and by a definite lack of torque below these revs. Even so, a 0 to 100 mph time of under 30 sec is pretty brisk, and might even be faster on the non-overdrive car with better gearbox ratios. Our in-the-gears maxima of 44, 62 and 97 mph at an indicated 5,500 rpm (5,750 actual) show up the odd spacing mentioned earlier. Overdrive third takes the car on to 115 mph, and in both direct top and overdrive top we recorded mean maxima of 120 mph. The Laycock overdrive is operated by a little cranked toggle switch on the fascia under the wheel rim on the right; it engaged and disengaged very smoothly, but with a definite delay on the upward shift.

The gearbox has a firm and robust-feeling remote control with a nice large ball-shaped knob rather spoilt by a sharp-edged nut underneath it. Movements are very positive and the powerful synchromesh stood up perfectly to all the punishment we could



The 6-cyl. engine fills all the available space, but everything needing routine attention is easily reached, especially the oil filter, on the left of the block

give it during acceleration runs. The gate is very narrow and there is spring loading towards the first and second gear plane; this makes it harder to be sure one is in neutral, and initially the change up from second to third feels strange. All the indirect gears are very quiet, except for a slight whine on the over-run.

For maximum speed runs we took the MGC to Belgium and found it cruised very well at 100 mph with arrow-like stability. Wind roar round the hood drowns out all conversation and the radio, and anyone preferring to tour over long distances rather than have the option of fresh air would be better off with the alternative GT version.

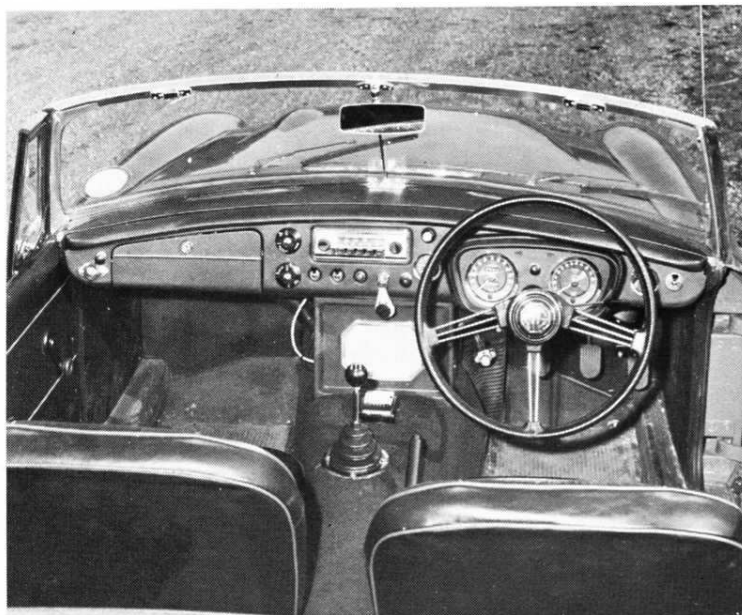
Compared with the Austin-Healey 3000, the new MG is slightly slower in both top speed (121 mph for the Healey) and acceleration (0 to 100 mph: 25.7 sec for the Healey). Fuel consumption is also not as good as that of the Healey and much heavier than the MGB's. Overall we man-

aged only 17.5 mpg with the MGC, although at a steady 70 mph, for example, it covers nearly 23 mpg in direct top and 26.8 mpg in overdrive; overall figures for comparison are 22.0 mpg for the MGB (with overdrive) and 20.3 mpg for the Healey (again with overdrive).

Of course, the new car is not as heavy as the Healey, but it weighs a full 350 lb more than the MGB. The six-cylinder engine is 210 lb heavier than the B-series unit, and the new gearbox is larger. Considering all this amounts to 16.4 per cent extra on the weight of the MGB, it must have been very hard for the manufacturers to keep the weight distribution reasonably balanced. The front-end weight is up from 52.6 to only 55.7 per cent of the total, and a corresponding increase in the recommended tyre pressure differential (from equal front and rear to a 4 psi front bias) restores handling. To lighten the steering load a lower geared rack is used and the king-pins have been de-castored.

The boot holds a remarkable amount of soft luggage, but there is no trimming. With the hood down the cover and irons take up a good deal of room. A strut has to be used to hold the lid open





Left: The facia layout is identical to the MGB's. The standards of fit and finish are very high, with leather on the seats and rubber floor mats. Right: There is a vast amount of adjustment on the seats. The flap type door handles are very neat and easy to use

Even so, the steering is heavy and it is by no means a delicate car to drive. For a start the steering wheel feels huge (it has a 16.5in. dia.) and there are now 3.5 turns needed for a 35ft 9in. turning circle instead of 2.9 turns for a 32ft 4in. one. It was no help that our car pulled strongly to the left and the steering wheel was not straight on its splines. It now has a stitched on leather glove over its rim.

Apart from the low-geared steering there is strong understeer which makes the front end slow to respond. In the low gears there is enough torque to help the back round, but on wet surfaces we found it very hard indeed to catch the tail if it got out of line, so we settled for a slow-in, fast-out (once it was straight) technique. The MGC lacks the "chuckability" of both the MGB and the Austin-Healey 3000; it is better suited to *Routes Nationales* than mountain cols.

MGC wheels are an inch bigger in diameter and an inch wider than those of the MGB, and Dunlop SP 41 radial-ply tyres are standard. Grip is good and it is virtually impossible to spin the rear wheels on wet roads. Once or twice, however, we locked a front wheel when braking hard. There is little thump from the tyres on ridges and catseyes, but they are prone to squeal during hard cornering, even in the wet.

To get the new engine in the MGB frame the front cross-member has been discarded, and to transfer the suspension loads back to the stiff scuttle area, longitudinal torsion bars replace the coil springs used on the "B". For a sports car the ride is quite soft and almost in the saloon car class for comfort. Firm damping retains something of the traditional taut feel, and there is no pitch and very little roll at any time. Only on very rough roads does the vertical motion become harsh, but even then there is surprisingly little body shake

and no scuttle flexing.

Braking has been revised to suit the new weight distribution and there is a vacuum servo. Pedal loads are light and progressive up to a maximum of over 1.0g at 80lb. Surprisingly for a sports car we measured a lot of fade during ten stops from 70 mph at  $\frac{1}{4}$ -mile intervals, and the front discs got very hot and smoked. The hand-brake is powerful and held the car on a 1-in-3 facing either way; the cranked brake lever, fitted in between the driving seat and the tunnel, is convenient to use and well placed.

Unlike most two-seater sports cars, the MG is built for big people. Even our 6ft testers did not need the seat right back; there is an abundance of legroom and enough foot room in spite of the wider tunnel. On the other hand, our shorter staff found that they sat too low in the car and therefore had difficulty in seeing enough of the bonnet to locate themselves on the road. By the latest

standards, the windscreen seems shallow, especially on a dark, wet night, and the wiper blades park on the screen obscuring some of the driver's view of the left-hand kerb. At last the wipers have two speeds.

Some features of the revised interior have been dictated by the new American safety requirements. The flush interior door handles are neat and practical, but the rubber knobs on the window winders repeatedly came off. The glove locker lid can be held shut only by locking it with its key, which also locks the boot. There is another key for the ignition and doors.

The heater is a £15 extra, and it is controlled by two rotary knobs on the left of the facia. The top one works a simple water valve, which seems to have no intermediate temperature between hot and cold, and the lower one directs the air to screen or footwells. There is no ram effect at all, so the single-speed fan must be used all the time heat or demisting is

Reversing lamps are built into the tail panel. From the rear, only the small MGC sign above the octagon badge shows which model this is



required. A separate cold-air intake is worked by a lever under the left of the fascia.

The hood is still one of those detachable pvc and tubular frame affairs which must be taken off and folded up before stowing it in the boot, or in settled climates leaving it at home. Putting it up in a hurry is quite quick, but experience helps a lot in reducing the frequent trips from side to side when doing this alone. Sealing round

the doors is not completely storm-proof.

We were amazed to find the boot has no self-propping strut for its lid, and this is a real nuisance when loading or unloading an armful of odds and ends. With the optional wire wheels one really needs several soft bags for luggage as the hub of the spare pokes up in the way of a normal suitcase.

Probably our impressions of the

MGC would have been more favourable if we had taken it for a holiday to the south of Spain and back. As it is, we were able to use it only around England and for a brief day trip to the Jabekke road in Belgium. The MGC is the latest example from a very famous factory which has regularly produced classic sports cars in the past; somewhere in the large BMC complex it has lost the "Abingdon touch."

**SPECIFICATION : M.G. MGC (FRONT ENGINE, REAR-WHEEL DRIVE)**

**ENGINE**

Cylinders .. 6, in line  
Cooling system .. Water; pump, fan and thermostat  
Bore .. 83.4mm (3.28in.)  
Stroke .. 88.9mm (3.50in.)  
Displacement .. 2,912 c.c. (177.7 cu. in.)  
Valve gear .. Overhead; pushrods and rockers  
Compression ratio 9-to-1; Min. octane rating: 98 RM  
Carburetors .. 2 SU HS6  
Fuel pump .. SU electric  
Oil filter .. Full flow, renewable element  
Max. power .. 145 bhp (net) at 5,250 rpm  
Max torque .. 170 lb. ft. (net) at 3,400 rpm

**TRANSMISSION**

Clutch .. Borg and Beck diaphragm spring, 9in. dia.  
Gearbox .. Four-speed, all synchromesh; overdrive on Third and Top.  
Gear ratios .. Top 1.0; OD Top 0.82 OD Third 1.07; Third 1.31; Second 2.06; First 2.98; Reverse 2.67  
Final drive .. Hypoid bevel, 3.31-to-1

**CHASSIS and BODY**

Construction .. Integral with steel body

**SUSPENSION**

Front .. Independent, torsion bars, wishbones, telescopic dampers, anti-roll bar

Rear .. Live axle, half-elliptic leaf springs, lever arm dampers

**STEERING**

.. Rack and pinion  
Wheel dia. 16.5in.

**BRAKES**

Make and type .. Girling discs front, drums rear  
Servo .. Girling vacuum type

Dimensions .. F, 11.06in. dia.; R, 9in. dia.  
2.5in. wide shoes

Swept area .. F, 226.2 sq. in.; R, 127.2 sq. in.  
Total 353.4 sq. in. (277.3 sq. in./ton laden)

**WHEELS**

Type .. Pressed steel disc standard—optional 72-spoke wire wheels on test car,  
5in. wide rim

Tyres —make .. Dunlop  
—type .. SP41 radial-ply tubed  
—size .. 165—15 mm.

**EQUIPMENT**

Battery .. 12-volt 58-amp. \*hr. (2 x 6-volt)  
Alternator .. Lucas 16AC 33-amp  
Headlamps .. Lucas sealed filament 100-180-watt (total)  
Reversing lamp .. 2 standard  
Electric fuses .. 2  
Screen wipers .. 2-speed, self-parking  
Screen washer .. Standard, manual plunger  
Interior heater .. Extra, water valve type  
Heated backlight .. Not applicable on roadster

Safety belts .. Extra, anchorages built in  
Interior trim .. Leather and pvc seats  
Floor covering .. Carpet and rubber mats  
Starting handle .. No provision  
Jack .. Screw pillar  
Jacking points .. One each side under sills  
Windscreen .. Laminated  
Underbody protection .. Phosphate treatment prior to painting

**MAINTENANCE**

Fuel tank .. 12 Imp. gallons (no reserve) (54.8 litres)  
Cooling system .. 18.5 pints (including heater) (10.5 litres)  
Engine sump .. 12.8 pints (7.2 litres) SAE 20W/40. Change oil every 6,000 miles; Change filter element every 6,000 miles  
Gearbox and overdrive .. 14.5 pints SAE 20W/40. Change oil every 6,000 miles  
Final drive .. 1.75 pints SAE 90EP. No oil change needed, check level every 6,000 miles  
Grease .. 4 points every 3,000 miles  
Tyre pressures .. F, 26; R, 22 p.s.i. (normal driving). F, 28; R, 32 p.s.i. (fast driving)

**PERFORMANCE DATA**

Top gear mph per 1,000 rpm .. 22.12  
Overdrive top mph per 1,000 rpm .. 26.95  
Mean piston speed at max power .. 3,060ft./min  
Bhp per ton laden .. 113.7

