'MOTOR' ROAD TEST No. 7/66 ● M.G.B GT

MOTOR TESTED

More safety fast

'All this increase in carrying capacity has been achieved without any lessening in virility or sacrifice of the traditional M.G. virtues . . . astonishingly smooth and flexible engine . . .'

"STORK forces sale of M.G."—you must have seen those pathetic advertisements in the motoring magazines. So, quite obviously have B.M.C. for by introducing the M.G.B GT they have greatly extended their potential sports car market. With a small back seat and a large platform behind it, the new GT can convey two adults, two children up to the age of about eight and considerable quantities of luggage over longish distances. For the true Gran Turismo, the additional human freight ought perhaps to be limited to one child or, say, to a child in a carry-cot plus a toddler, since rear-seat legroom is a little limited even for children. The determined and enthusiastic private owner could modify the newly created space in several ways to suit his own particular combination of bairns and baggage.

All this increase in carrying capacity has been achieved without any lessening in virility or sacrifice of the traditional M.G. virtues. Although the car is two hundredweight heavier than the open sports version, its performance is very little inferior, while the handling of the GT car, which has an anti-roll bar as a standard fitting, is a good deal better than that of an open car to which the optional anti-roll bar has not been fitted. More surprisingly, the vintage aspect of the M.G. character has not been lost: there is a purposeful clatter when starting up; the steering is direct and feels very positive (though rather heavy) in the best vintage way; and the straight-cut bottom gear emits a loud whine.

An astonishingly smooth and flexible engine, a much reduced noise level and a taut, rigid structure justify the GT appellation and make long journeys effortless. With an overall fuel consumption of 20.9 m.p.g. of super premium grade the thirst of the M.G.B GT is reasonable considering the performance available. Many "elderly" ex-M.G. owners will be tempted to throw off their marital saloon car chains.

PRICE £825 plus £173 8s. 9d. equals £998 8s. 9d. Overdrive £60 8s. 4d. extra with tax; Wire wheels £30 4s. 2d. extra with tax; Heater £14 16s. 1d. extra with tax, and SP41 tyres £8 6s. 2d. extra with tax. Total of car as tested £1,112 3s. 6d.

Performance and economy

A turn of the starter-key first thing in the morning elicits an uncompromising clash of metal on metal followed by two or three revolutions of the engine—a collection of sounds reminiscent of an early Bentley. The choke has to be pulled right out for a cold start and, moving off, must be kept in that position for a mile or so before being progressively pushed in.

Quite marked detonation at anything up to 2,000 r.p.m. results from the use of 98 octane premium grade fuel but, once on its 101-octane diet, the M.G. shows itself to be outstandingly smooth and flexible. During our acceleration tests it was found that the engine would pull smoothly without pinking on full throttle at around 15 m.p.h. in overdrive top, or roughly 700 r.p.m. Despite

Continued on the next page

Conservative but pleasing in style, the M.G.B GT attracted a good deal of attention from passers-by.

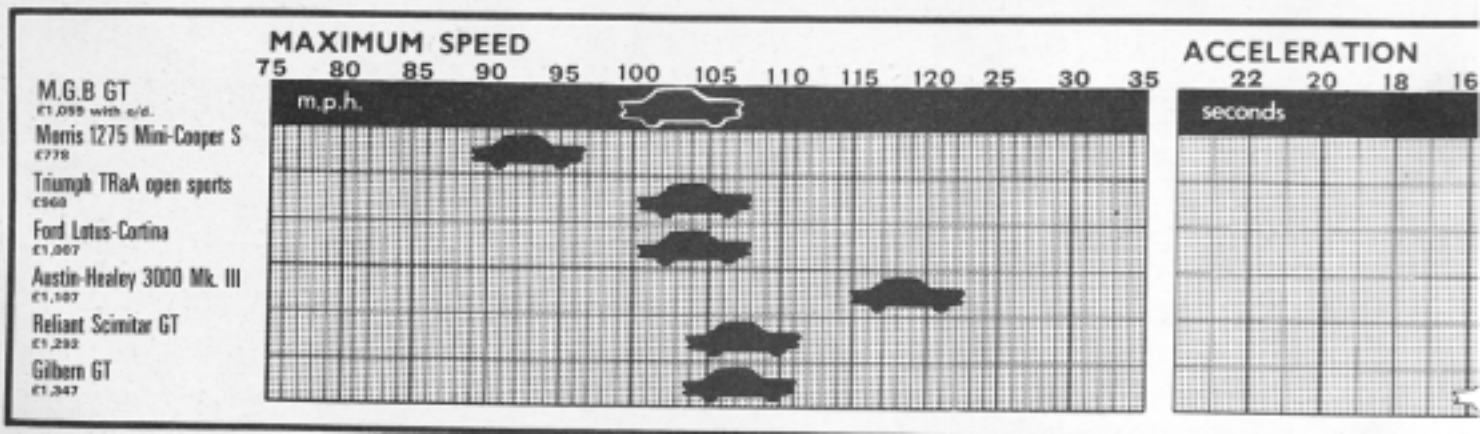
The large rear platform will take a good deal of luggage and can be extended by folding the rear seat backrest forward.

M.G.B GT *Continued*

being nearly two hundredweight heavier, the performance of the GT is little worse than that of its soft-topped brother: the 0-60 m.p.h. time is 13.2 sec. compared with 12.6 sec. for the open car, and although the GT begins to fall behind farther up the speed range—with an 0-90 m.p.h. time of 35.8 sec. instead of 30.9 sec.—the "maximile" speed (attained after a mile of acceleration) is virtually the same at 103.3 m.p.h. in place of 102.8 m.p.h., probably because at speeds above 90 m.p.h. the lower drag of the GT takes effect. On the road, therefore, it is doubtful if the difference in performance would be perceptible.

Although the M.G. was taken to Belgium during its test, shortness of time and excess of traffic prevented us from taking anything but a partial measurement of the maximum speed in overdrive top. Due to the recent imposition of 70 m.p.h. limits, therefore, the outright maximum speed of 107 in direct top (slightly faster than the open car) and the maximum speed in overdrive top of 103 m.p.h. have been estimated by extrapolation from the readings of instruments calibrated up to 100 m.p.h.—

Continued on page 20



Front seat room (left) is adequate but the range of rake adjustment—the driver's seat is fully back and the passenger's fully forward—needs to be increased and lateral support is poor.

Leg-room in the back seat is a little restricted, even for children.

Performance

Test Data: World copyright reserved; no unauthorized reproduction in whole or in part.

Conditions

Weather: Temperature 21°–24°F. Barometer 29.1–29.2 in. Hg.
Surface: Dry tarmacadam and concrete
Fuel: 101 octane (R.M.).

Maximum speeds

	m.p.h.
Mean speed (direct top gear)	107
	(estimated—see text)
O/d top gear	103
	(estimated—see text)
O/d 3rd gear	98.0
3rd gear	78.6
2nd gear	48.7
1st gear	29.6

"Maximile" speed: (Timed quarter mile after 1 mile accelerating from rest)

Mean	103.3
Best	103.3

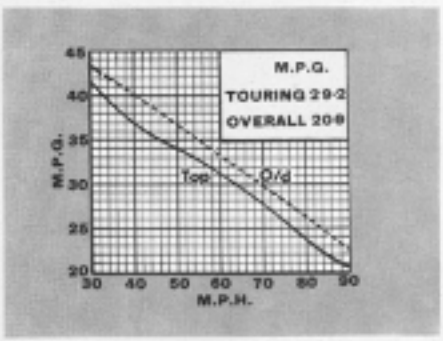
Acceleration times

m.p.h.	sec.
0-30	4.0
0-40	6.0
0-50	8.8
0-60	13.2
0-70	17.9
0-80	23.8
0-90	35.8
Standing quarter mile	19.5

m.p.h.	O/d Top sec.	Top sec.	3rd sec.
10-30	—	—	7.2
20-40	17.7	11.0	6.8
30-50	16.0	9.8	6.5
40-60	16.2	10.5	7.3
50-70	17.9	12.5	8.3
60-80	23.2	14.6	10.7
70-90	—	20.0	—

Fuel consumption

Touring (consumption midway between 30 m.p.h. and maximum less 5% allowance for acceleration) . . . . . 29.2 m.p.g.
Overall . . . . . 20.9 m.p.g.
= 13.5 litres/100 km.
Total test distance . . . . . 1,415 miles
Tank capacity (maker's figure) . . . . . 12 gal.



Steering

Turning circle between kerbs: ft.
Left 31½
Right 30
Turns of steering wheel from lock to lock . . 2.9
Steering wheel deflection for 50 ft. diameter circle = 0.8 turns

Clutch

Free pedal movement . . . . . = ⅜ in.
Additional movement to disengage clutch completely . . . . . = 2½ in.
Maximum pedal load . . . . . = 40 lb.

Speedometer

Indicated
10 20 30 40 50 60 70 80 90 100 110
True
11½ 20 26½ 36½ 46 55 64 74 82 92 101½
Distance recorder . . . . . 1.9% fast

Brakes

Pedal pressure, deceleration and equivalent stopping distance from 30 m.p.h.

lb.	g	ft.
25	0.26	115
50	0.45	66½
75	0.76	39½
100	0.98	30½
Handbrake	0.30	100

Fade Test

20 stops at ⅓g deceleration at 1 min. intervals from a speed midway between 30 m.p.h. and maximum speed (= 68.5 m.p.h.)

	lb.
Pedal force at beginning	66
Pedal force at 10th stop	67
Pedal force at 20th stop	67

Hill climbing

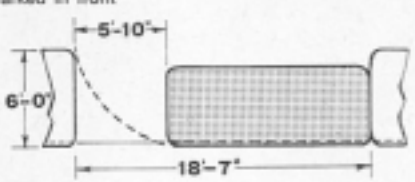
At steady speed		lb./ton
O/d	1 in 14.6	(Tapley 152)
Top	1 in 9.2	(Tapley 242)
O/d 3rd	1 in 8.3	(Tapley 267)
3rd	1 in 6.3	(Tapley 352)
2nd	1 in 4.0	(Tapley 540)

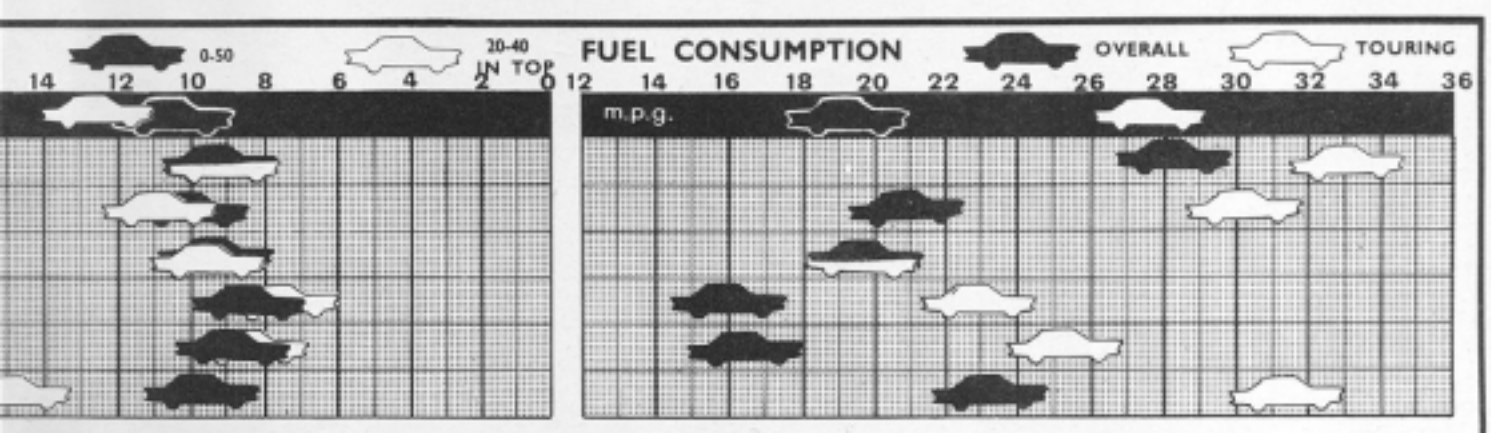
Weight

Kerb weight (unladen with fuel for approximately 50 miles) . . . . . 20.75 cwt.
Front/rear distribution 50/50
Weight laden as tested . . . . . 24.5 cwt.

Parkability

Gap needed to clear a 6 ft. wide obstruction parked in front





M.G.B GT *Continued*

the maximum steady speed which it was possible to hold on the banked track at the MIRA proving ground.

With an overall fuel consumption of 20.9 m.p.g. of super grade, compared to 21.3 m.p.g. for the open version, and a touring figure of 29.2 m.p.g. against 30.1 m.p.g., the thirsts of the two kinds of M.G.B are essentially the same. Clearly, whatever is lost by increased weight is regained by improved aerodynamics.

Handling and brakes

The large-diameter, black-rimmed and wire-spoked steering wheel which sits in the driver's lap feels very definitely and positively connected to the front wheels; responsive and quite heavy steering with strong castor gives the impression of being more direct than 2.9 turns from lock to lock would suggest. And just as the steering immediately puts the driver in sympathy with the car, so the nimble, responsive handling characteristics put the car in sympathy with the driver—the car is on the driver's side. From previous experience with various other M.G.Bs we are sure that a good deal of the credit for the excellence of these characteristics must go to the fitting of an anti-roll bar: one masterly wave of the Project Committee's agenda has reduced the roll angles, the initial understeer and the armful of helm that went with it. Overall cornering power is increased and final oversteer postponed. The Dunlop SP41 tyres (an optional extra) fitted to our car must also share some of the credit for this.

Improved in this way, understeer is mild, and the GT corners extremely well on smooth surfaces with little roll or tyre squeal. At times it seems that final oversteer has set in at a relatively early stage in the proceedings, but this is an illusion; a little analysis invariably reveals that the car was cornering far harder than was at first apparent, and that a favourite bend has just been taken a an unusually high speed. When the change to oversteer does arriv the responsive nature of the car and its steering make it easy t correct. Similarly, with the SP tyres, driving in the wet presents n problems. Naturally the M.G. cannot transcend the limitations c its live rear axle which hops if you corner hard on a bumpy roac

Giving almost exactly 0.01 g per lb. pedal force over a wide rang of pressures the brakes are very progressive and free of fad although at times the pedal pressures felt excessive in our test ca when braking hard from high speeds. The handbrake would hol the car on a 1-in-4 slope but could not manage 1-in-3.

Transmission

On the test car—which had only covered 2,500 miles when w received it—the gearbox was rather stiff with obstructiv synchromesh, so that changes could not be made with the rapidit appropriate to a car of this type. As is usual with most B.M.C gearboxes there is no synchromesh on bottom, which means tha engagement from rest can sometimes be difficult—a good tric is to engage second, and then to flick rapidly back into bottom The ratios of first and second are rather low for a sports car— wheelspin can easily be achieved when restarting on a 1-in- slope—leaving a gap between second and third which greatl reduces the pleasure of driving on winding roads. The heavyis clutch has a long total travel but is free from slip and engage smoothly.

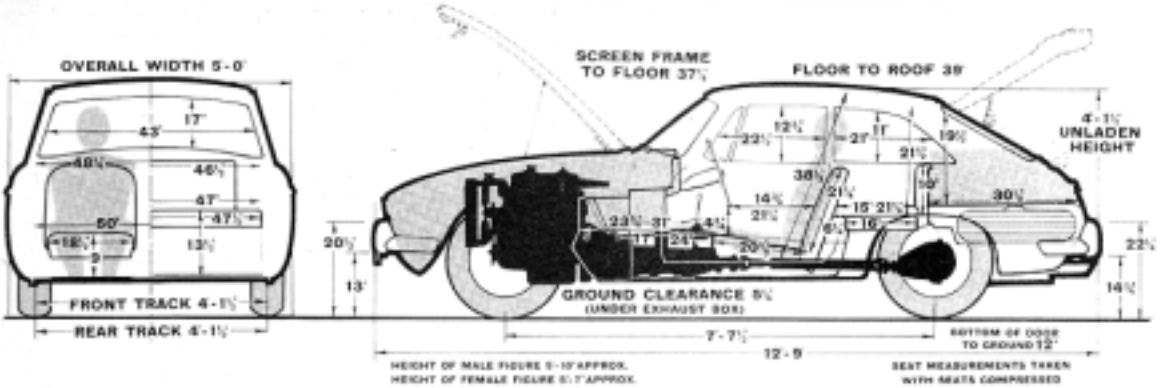
Comfort and controls

The ride of the M.G. has a good deal of pitch over rough surfaces and is one of its least endearing features. It is not redeemed by the seats, which few of our staff found comfortable. Fore-and-aft

The front of the M.G.B. remains substantially unchanged. Fog and spot lamps are extras.

Spare wheel and toolkit live in a compartment under the luggage platform which suffered badly from water leaks during our test.

Specification



Engine

Cylinders	4
Bore and stroke	80.26 mm. x 89 mm.
Cubic capacity	1,798 c.c.
Valves	Pushrod o.h.v.
Compression ratio	8.8:1 (8.0:1 optional)
Carburetter(s)	2 SU HS4
Fuel pump	SU electric
Oil filter	Tecalemit full-flow
Max. power (net)	95 b.h.p. at 5,400 r.p.m.
Max. torque (net)	110 lb. ft. at 3,000 r.p.m.

Transmission

Clutch	Borg and Beck 8 in. diaphragm
Top gear (s/m)	1:1 (overdrive 0.8:1)
3rd gear (s/m)	1.373:1 (overdrive 1.1:1)
2nd gear (s/m)	2.26:1
1st gear	3.65:1
Reverse	4.75:1
Overdrive	Laycock de Normanville
Final drive	3.91
M.p.h. at 1,000 r.p.m. in:—	
O/d top gear	22.4
Top gear	18.0
O/d 3rd gear	16.3
3rd gear	13.1
2nd gear	8.1
1st gear	4.9

Chassis

Construction	Unitary

Brakes

Type	Lockheed hydraulic, disc front, drum rear
Dimensions	10¾ in. diameter front; 10 in. rear
Friction areas:	
Front	20 sq. ins. of lining operating on 203.2 sq. ins. of disc
Rear	67.2 sq. ins. of lining operating on 106.8 sq. ins. of drum

Suspension and steering

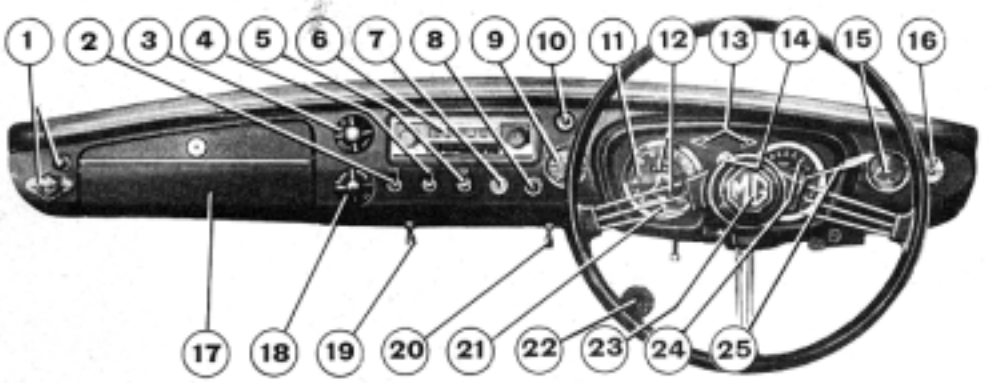
Front	Independent with coil springs, unequal length transverse wishbones and anti-roll bar
Rear	Live axle and semi-elliptic leaf springs
Shock absorbers:	
Front, Rear	Armstrong hydraulic lever
Steering gear	Rack and pinion
Tyres	165-14 tubed Dunlop SP41—optional (5.60-14 tubed Dunlop C41—standard)
Rim size	4½J (4J with standard disc wheels)

Coachwork and equipment

Starting handle	No
Jack	Screw, side
Jacking points	One on each side under door sill
Battery	2 x 6-volt, positive earth, 58 amp. hrs. capacity
Number of electrical fuses	2
Indicators	Self-cancelling, flashers
Screen wipers	Electric self-parking
Screen washers	Manual push-button
Sun visors	2
Locks:	
With ignition key	Side and rear doors
With other key	Glove compartment
Interior heater	Fresh air
Extras	Overdrive, wire wheels, heater, SP41 tyres
Upholstery	Leather and leathercloth
Floor covering	Carpet and PVC coated rubber mats
Alternative body styles	Open 2-seater

Maintenance

Sump	7½ pints S.A.E. 20W/30 or 10 W/30
Gearbox	4½ pints (5½ pints with overdrive) S.A.E. 20W/30 or 10W/30
Rear axle	1½ pints S.A.E. EP90 or EP80
Steering gear	EP90 or EP80
Cooling system	10 pints (drain taps 2)
Chassis lubrication	Every 3,000 miles to 7 points
Minimum service interval	3,000 miles
Ignition timing	10° b.t.d.c.
Contact breaker gap	0.014—0.016 in.
Sparking plug gap	0.024—0.026 in.
Sparking plug type	Champion N9Y
Tappet clearances (cold)	Inlet 0.015 in.; Exhaust 0.015 in.
Valve timing:	
Inlet opens	16° b.t.d.c.
Inlet closes	56° a.b.d.c.
Exhaust opens	51° b.b.d.c.
Exhaust closes	21° a.t.d.c.
Front wheel toe-in	1/16 - 1/8 in.
Camber angle	1° + ½°
Caster angle	7° + ½° - 2°
Kingpin inclination	8° + 1° - ½°
Tyre pressures	C41 tyres: Front 20 p.s.i., rear 24 p.s.i. Sp41 tyres: Front 24 p.s.i., rear 30 p.s.i.



1, map light and switch. 2, heater blower switch. 3, heater temperature control. 4, windscreen wiper switch. 5, lights switch. 6, radio. 7, ignition/starter switch. 8, choke. 9, oil pressure and water temperature gauge. 10, windscreen washer button. 11, speedometer. 12, total and trip mileometers. 13, indicator tell-tales. 14, panel light switch. 15, fuel gauge. 16, overdrive switch. 17, glove compartment. 18, heater distribution. 19, spotlamp switch. 20, foglamp switch. 21, main beam warning light. 22, dipswitch. 23, horn. 24, tachometer. 25, indicator/flasher stalk.

adjustment is good, but the very limited amount of rake adjustment needs to be increased so that the backrests can be tilted farther back; it would be much better still if the whole seats were tilted. Lateral support is barely acceptable at the hips and deteriorates with height up the squab until there is no support at the shoulders—the driver should not need to hang on to the steering wheel in a sports car. The rear seat, which can be tilted forward to give a clear platform is similarly too upright, and would become more versatile if the back rest could also be tilted back on to the platform. Children could then be allowed to lie back during a long journey: a useful gain in comfort with the typically vestigial sports car rear legroom.

Major controls such as the gear lever, handbrake and indicator/flasher stalk are generally well laid out, but the relationship between the steering wheel and the pedals is such that only a person with very long legs and very short arms could adopt the fashionable straight-armed driving position. The accelerator and brake are nearly in the same plane, so that the toe can be transferred from one to the other in one lightning movement without moving the heel; their positions make toeing and heeling possible but difficult.

Not so good is the layout of the minor controls. The rotary heater controls give no indication of their settings by feel for night driving as do the lever type, while the lights, windscreen wiper and heater blower switches are unlabelled and too close together—it is easy to operate the wrong one by mistake. Even worse is the floor dipswitch which requires the left foot to be moved into an unnatural position much nearer the driver.

Continued on the next page

M.G.B. GT *Continued*

Since the driver is sunk into the M.G. like a currant into a bun, it is not easy to see the four corners of the car for close manoeuvring in a car park. Open road visibility is good, however, both front and rear, the much deeper windscreen of the GT being a great improvement over the open car; the headlamps—aided by the optional spot lamps which were set to give a spread of light close to the car—gave a tremendous blaze of light.

When accelerating away from rest the harsh vibratory whine of bottom gear soon gives way not to a sports car snarl but to a loud throbbing hum as the needle of the rev-counter climbs round the dial in third gear: the noise has a singing note to it like a child's humming top. Once in top or overdrive top the car is pleasantly quiet; there is very little engine noise, not much road noise and no wind noise until 80 m.p.h. is reached when tearing sounds begin to emanate from a point on the roof near the driver's head, suggesting that B.M.C. have not quite done all the wind-tunnel homework that they should. They could then have used their results to add a useful little touch of luxury in the form of an extractor vent system to improve the heating and ventilation. Although the present system is reasonably adequate, the heater is absurdly quoted as an extra, at £14 16s. 1d.

Fittings and furniture

An optimistic speedometer and a rev-counter—both handsome and well marked out—a combined oil pressure gauge and water temperature gauge, a fuel gauge and ignition and main beam warning lights inform the driver of the digestive and sensory functions of the car. An ashtray caters for the addicted, a glove compartment and a rigid pocket by the front passenger's legs for the untidy. The rear platform is easy to get at through the lift-up door and provides ample luggage space for long-distance family touring without having to pile the cases so high as to restrict rear vision. Seat belt anchorages, crushable visors and a padded dash constitute the safety provisions, but the biggest safety provision of all is the performance of the car and its responsive, predictable handling.

Jacking is not difficult, but an excessive number of turns is needed to raise the car. Copper hammer in toolkit is for knock-off wheels.

Servicing and accessibility

All the major servicing points of the M.G. such as oil filler cap, dipstick, radiator filler cap, brake and clutch reservoirs, distributor, dynamo and carburetters are easy to reach. Maintenance is of a rather old-fashioned kind, with greasing to seven nipples being required every 3,000 miles and an oil change every 6,000. Jacking is easy, but the jack is rather low-geared and needs many turns to raise the car.

Maintenance Chart

A **Engine.** Every 3,000 miles—top-up carburetter dampers and lubricate carburetter linkage. Every 6,000 miles—change engine oil, renew oil filter, check and lubricate distributor, lubricate dynamo rear bearing, check fan belt tension and rocker clearances, clean and set sparking plugs. Every 12,000 miles—lubricate water pump.

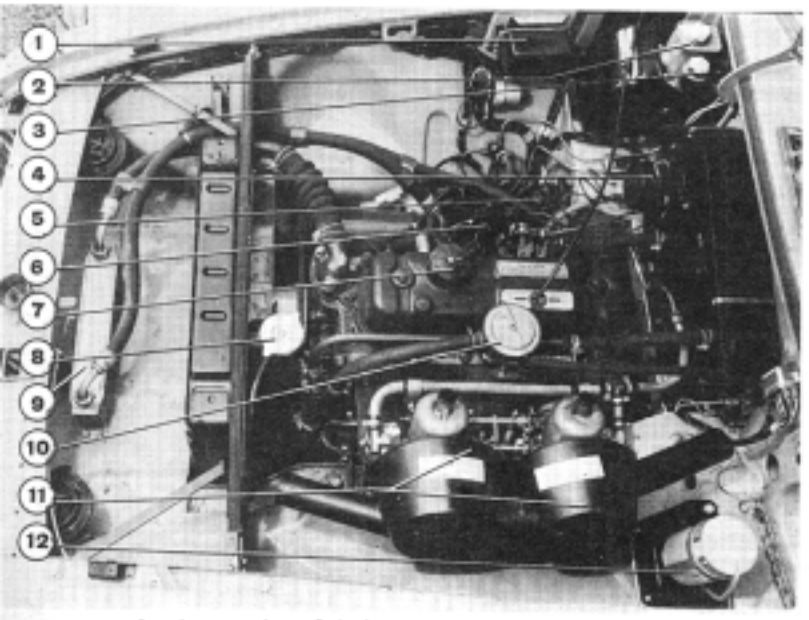
B **Transmission.** Every 3,000 miles—check clutch fluid level: lubricate propeller shaft universal joint. Every 6,000 miles—check and top-up gearbox and overdrive, check and top-up back axle. Every 12,000 miles—clean overdrive filter element.

C **Steering and suspension.** Every 3,000 miles—lubricate front suspension nipples. Every 6,000 miles—check and adjust wheel alignment. Every 12,000 miles lubricate rack and pinion.

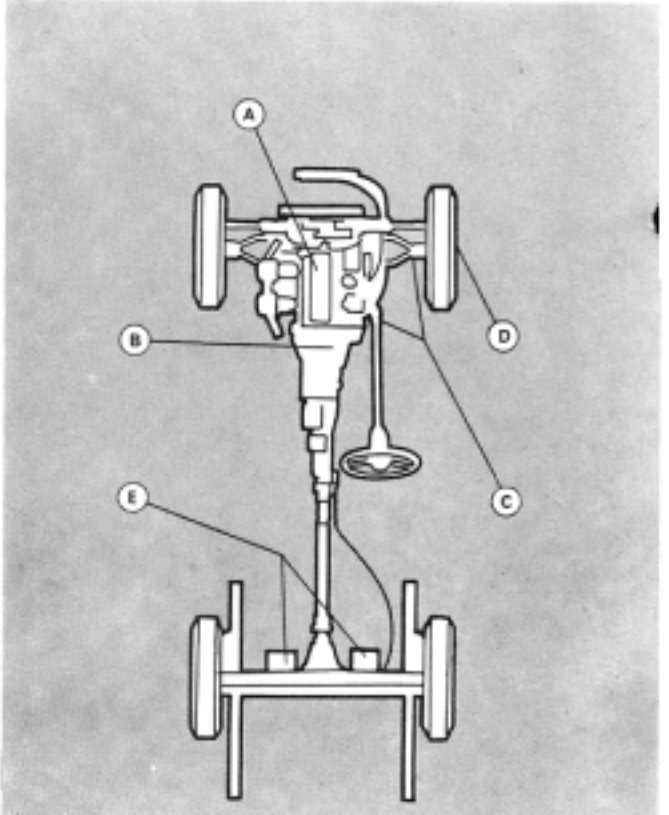
D **Brakes.** Every 3,000 miles—check and adjust if necessary, check fluid level in hydraulic reservoir, inspect lines and hoses. Every 6,000 miles inspect pads and linings.

E **Electrical.** Every 3,000 miles—check and top-up batteries. Every 6,000 miles—check battery specific gravity and inspect lamps.

PUNCH HERE TO FOLD



1, voltage regulator. 2, brake master cylinder. 3, clutch master cylinder. 4, heater unit. 5, steering universal joint. 6, dipstick. 7, oil filler cap. 8, radiator filler cap. 9, oil cooler (standard on GT). 10, crankcase breather valve. 11, carburetter air cleaners. 12, screen washer bottle.



MAKE M.G.: MODEL B GT: MAKERS M.G. Car Co., Ltd., Abingdon, Berks.