## IN THE M.G. TRADITION

The Series-MGA Coupe Constitutes a Safe Fast Car, with First-Class Handling Qualities, Excellent Brakes and Decidedly Useful Performance



ANCIENT AND MODERN.—A cameraportrait emphasising the lasting beauty of old architecture and the pleasing appearance of the M.G. MGA coupe. For those who think of other things beside cars, the church is at Lavenham, Suffolk.

T was Motor Sport's pleasure during April to carry out a lengthy road-test of the modern M.G. sports car, in the form of a white MGA coupé with red upholstery. This little 1½-litre sports two-seater was driven by various experienced drivers for a total distance of over 1,200 miles and their collective opinions can be summarised by stating that the M.G. MGA is fun to drive, that it handles extremely well, possesses such adequate brakes as to fully justify the manufacturer's slogan "Safety Fast," and that the performance provided by the 72-b.h.p. engine in this 18½-cwt. coupé is sufficient to enable high average speeds to be maintained in a quite unobtrusive manner.

For the young man with a girl-friend but no children, or as a second-car to the family sedan the MGA fulfills a useful function and, as has been proved convincingly, it also constitutes an admirable rally car. It is, of course, available in two-seater and hard-top forms and, stripped of its full-width windscreen, it is by no means inadequate for club sprints and races.

## TECHNICALITIES

The M.G. Series-MGA has evolved from a long line of descendants—M.G. Midgets of various types. The design is entirely conventional. The four-cylinder 1,489-c.c. long-stroke push-rod o.h.v. engine is provided with twin S.U. semi-downdraught carburetters and, with a compression-ratio of 8.3 to 1, pushes out 72 b.h.p. at its safe sustained speed of 5,500 r.p.m. The crankshaft is counterbalanced and runs in three bearings, cooling is by belt-driven pump and six-bladed fan, with thermostatic temperature control of the 10 pints of water, and the lubrication system incorporates an eccentric-rotor pump and full-flow oil filter, The pressed-steel sump has a capacity of seven pints. Ignition is looked after by a Lucas oil-filled 12-volt coil, fully-automatic distributor with vacuum and centrifugal advance control, and suppressed 14-mm. Champion sparking plugs.

This engine is in unit with a hydraulically-operated 8-in. single dry-plate Borg and Beck clutch and a four-speed and reverse gearbox having synchromesh on the three upper ratios and holding four pints of lubricant. The drive passes via an open propeller-shaft with needle-bearing universal joints to a \(\frac{3}{4}\)-floating hypoid-bevel 4.3-to-1 back axle, which contains 2\(\frac{3}{4}\) pints of lubricant.

The chassis is of box-section, upswept over the back axle, which is sprung on fairly stiff ½-elliptic hydraulically-damped leaf springs. At the front there is softer coil-spring and wishbone i.f.s., again damped hydraulically, and steering is by rack-and-pinion. Lockheed 10-in. hydraulic brakes are used all round and twin Lucas batteries behind the seats supply the 12-volt electrical system.

The body was re-vamped for the MGA, the "real" radiator shell and slab fuel tank giving way to a streamlined nose and a small, conventional luggage boot. This body is made by the Bodies Branch of Morris Motors, Ltd., in Coventry. The car is no longer festooned with M.G. octagon badges, but we are inclined to think that a small octagonal air-entry would make a better nose-piece than the existing oblong grille. (However, after witnessing with horror the vintage-looking radiator shell of a modern M.G. Magnette rise up into the air with the alligator-bonnet when the latter was opened while the owner looked at the dip-stick, we will not carp over the fixed radiator grille of the MGA!)

To reveal the engine a wire hook under the facia is pulled and after the safety-catch is released the bonnet panel can be raised, and supported on a prop. Its lid is liberally sound-proofed. Accessibility within the engine compartment is commendable, the oil-filler consisting of a (wire-secured) cap on the valve cover and the water-filler of a bayonet-cap on the radiator header-tank. The car tested had a Smith's heater-unit and its long, big-diameter hose-pipe is matched by a shorter piece on the opposite side, which rather casually conveys air from the nose-grille to somewhere in the vicinity of the carburetter air-intakes, which are fitted with individual air-cleaners. Throttle control is by a Bowden cable to a very dodgy-looking anchorage on a metal bracket on the inlet manifold, to which it is secured merely by a tiny split-pin. Fuel is fed efficiently from a 10-gallon rear tank by means of a rear-mounted S.U. electric pump, which primes adequately, if noisily, from a low level. The electrical fuses etc., are well placed on the bulkhead and there are plenty of underbonnet data plates, but the dip-stick is rather short and the batteries are buried in the tail.

## BEHIND THE WHEEL

The coupé version of the M.G. MGA is an attractive proposition for those who no longer enjoy large volumes of fresh air or for the business motorist who craves a sports car but who hasn't the time or inclination to erect a hood and sidescreens every time a shower falls to wet his City suit and the appurtenances of his trade.

It is difficult to provide a coupé top on a small car which is both practical and good to look upon. The M.G. stylists have got away with it reasonably well. The wrap-round screen is of Triplex laminated glass (praise be!) and does not normally distort the driver's vision; the large wrap-round back window is of Triplex toughened glass. The result is good forward and sideways vision, marred only slightly by the pillars behind the doors when glancing \(\frac{3}{2}\)-rearwards and more seriously because the large rear-view mirror,

splendidly as it fulfills its function, is mounted on the facia-sill right in the near-side line of vision of a driver of average height. The obvious solution is to throw this inconveniently-sited mirror over the hedge and fit the wing-mirror offered as an extra.

The roof, of pressed-steel welded to the body, is not particularly thickly padded, so provides reasonable head room. The doors trail and have neat pull-up exterior handles. The windows wind down fully with  $1\frac{1}{2}$  turns of their handles, good hanging "pulls" are provided, and there are hinged  $\frac{1}{4}$ -lights with quite good, but not thief-proof, catches. The interior of the MGA coupé is tastefully upholstered in leather, the test car having red seats and trim, offset by white leather-cloth on the facia and door sills. The use of dull leather-cloth on the wide facia-sill obviates dazzle. The backs of the bucket seats fold, which facilitates the stowage of coats, etc., behind them but isn't really necessary. The seats, although small, are extremely comfortable and possess adequate adjustment for a tall driver and passenger. A "crash pad" lines the scuttle, as on many modern cars but the base of the rigid facia and the top of the screen, which cause just as much injury on impact, are not so protected.

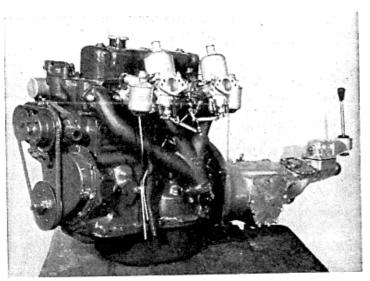
Accommodation in this M.G. is strictly for two, as the spare wheel protrudes partially into the space behind the seats. No door pockets are provided, but there are generous open-topped scuttle stowages and the wide shelf behind the seats is lipped to retain parcels, etc. The luggage boot lid, released by pulling out a wire hook behind the passenger's seat, lifts to reveal a shallow boot in which the greater part of the spare wheel protrudes and the tool-roll is accommodated. Squig-bags rather than suitcases are the order of the day but, thus equipped, a week-end couple should be able to take adequate luggage, especially in these days of nylon undies. For longer-duration excursions an external luggage carrier is available. The boot lid has to be propped open with a stowable stay and requires slamming to shut it; the rubber sealing was already coming adrift from it.

The passenger's door carries a lock, which the ignition-key fits. Between the seats there is a padded rest which serves to hold the occupants securely and a lidded ash-tray can be provided on the propeller-shaft tunnel. The doors require a slam to shut them otherwise they tend to bounce open. Altogether this body earns good marks, for chic appearance and well-thought-out detail work, and it is commendably free from rattles. It scores a big black mark, however, when all but the more agile first try to enter it or leave it. The doors are large and quite properly trail, but they do not open more than about 45 deg., which, with the low floor and low roof line, renders dignified exit from an MGA virtually impossible for the elderly, who are in imminent danger of rupture or a slipped-disc unless care and thought is applied to the manoeuvre. Less anxiety is caused by the absence of anti-dazzle vizors, but there are times when they would be appreciated.

Although the test-car did not possess the telescopic steering column which may be ordered as an extra, the driving position is excellent and both front wings are in full view, or would be were the aforesaid mirror sensibly located. The pendant pedals, although small, are well placed and there is room for the left foot beneath clutch pedal. The accelerator action is light but not entirely consistent over the entire range.

The remote gear-lever is a delight, being 100 per cent. rigid, well placed, and ideal for really rapid cog-swopping. The movements are conventional and very short, especially across the gate. It is possible to beat the synchromesh, on which, however, few M.G. drivers will wish to rely; if any criticism is merited it is that the gear-change is slightly on the harsh side, possibly because the test-car had not completed 4,000 miles. Bottom gear, as on other B.M.C. gearboxes, is occasionally difficult to engage. The indirect gears are quiet and due to hydraulic actuation the clutch action is light; a trace of clutch slip is discernible when making snatch gear-changes, perhaps due to weak clutch springs.

The engine of the MGA was set to idle at 800 r.p.m. and begins to sound busy beyond 4,000 r.p.m. The rev.-counter has a warning area between 5,500 and 6,000 r.p.m. and to go beyond 6,000 r.p.m. is unwise. However, without exceeding 5,000 r.p.m. this M.G. provides adequate performance for fast travel on English roads. The maxima are about 26 m.p.h. in first gear, 44 m.p.h. in second and 74 m.p.h. in third gear. By using the lower gears excellent acceleration, in the order of 0.50 m.p.h. in 11 sec. and 0.70 m.p.h. in 20 sec., is available. So readily does the engine respond that the "red" is approached very quickly in second gear and a rapid change into third is necessary, which momentarily kills the surge of progressive acceleration. From this aspect second gear is rather too low but for all practical purposes the gear ratios are well chosen. Moreover, a higher second gear would kill some of punch available, which makes this gear so very useful for getting past slowly-moving



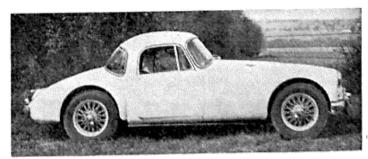
MOTOR SPORT

POWER FOR THE MGA.—The B.M.C. B-Series power unit with twin S.U. carburetters and remote gear-lever, etc., as installed in the M.G. sports cars.

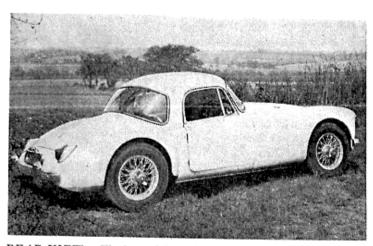
obstructions. The overall ratios could be better chosen, however, but perhaps the use of standardised components constitutes a difficulty.

Although most owners will make very considerable use of the engine's willingness to run up to really high r.p.m., being encouraged to do so by the excellent gear-change, if an elderly parent borrows the M.G. to run down to the post he or she will find it perfectly amiable at an absurdly staid gait in top cog. Such sorry treatment brings to light that the engine is virtually "pink-proof" (only a trace occurring when picking up from low speed in second gear), but a more useful aspect of the MGA's docility is the absence of exhaust noise, so that, with the revs. kept within decent limits, this sports car will slip through towns without drawing unwanted attention to its presence. The tyres are less satisfactory in this respect, being prone to imitate an accident in the happening as the car is driven gently through a roundabout or acute bend. However, at higher speeds cornering fails to produce more than a murmur from the "Road Speeds." This is a matter of tyre pressures. The car was handed to us with these set for fast driving, with rather more air in the front tyres (rear 23 lb./sq. in., front 20 lb./sq. in.) than the handbook recommends. However, we found that by inflating the "Road "Speeds" on the back wheels to 30 lb. cold, tyre noise at lowspeed was cured completely, without impairing comfort on good roads it is possible that this might result in loss of adhesion on wet surfaces.

From the foregoing comments the reader will be left in no doubt as to the ability of the M.G. coupé to dispose of most things on the road and to make effective use of such gaps and opportunities as occur in the heavy traffic on our inadequate highways. Speed and acceleration are only half the battle when it comes to setting up satisfactory average speeds under such conditions, but the M.G. has other qualities equally as useful. For instance, roadholding is of a very high standard. The car inspires confidence from the outset but only by experimenting on open bends can a driver previously unacquainted with the MGA realise how very fast this car will go round corners. The suspension is firm, but not so stiff as to give an unpleasant ride, except over attrocious by-roads. The M.G. sits down well and hugs the verge round long bends in a manner which inspires immediate confidence, while the "quick" steering, asking



A FULL SIDE VIEW of the M.G. MGA coupe. Apparently it offers rather less drag than the two-seater, even when hood and side-screens are erect on the latter. As tested, the car costs £1,126 13s.



REAR VIEW.—The boot of the MGA is considerably restricted by the spare wheel. The lid is released by a control inside the car, so that a key is not required.

only  $2\frac{3}{4}$  turns lock-to-lock in conjunction with a small (28-ft.) turning circle, enables rapid changes of direction to be made. There is no pronounced over- or understeering tendency but if anything the former predominates. The steering is fairly light, free from sponginess or lost motion, and only just misses being 100 per cent. positive. The large-diameter (14½-in.) wheel with narrow-X spring spokes is pleasant to handle and there is no very pronounced column or scuttle shake, although considerable kick-back is transmitted to the driver's hands over rough roads. There is powerful castor self-centring action. Wheelspin can be provoked by vicious take-off in bottom gear; tail slides, if they occur, are instantly responsive to steering correction. There is so little roll and so responsive is the steering that quick changes of direction, so useful for rapid overtaking and essential in rally driving tests, are considerably facilitated. The stiff ½-elliptic springs locate the back axle effectively; even with the back tyres at high pressure bumps encountered on fast bends did not materially affect roadholding.

To these highly desirable handling characteristics add the impeccable braking provided by the Lockheed 2LS system. From maximum speed these brakes provide extremely powerful retardation and a straight-line stop in an emergency is possible not once, but repeatedly, because, at all events on the wire-wheel-equipped car, brake-fade is absent. So powerful are these brakes for so light a pedal pressure that they have to be used with discretion at low speeds or the passenger will be flung into the screen. Initial lostmotion on the pedal aggravated this fierce action. A slight squeal when applied lightly soon wore off and at the end of our strenuous test there was no loss of retardation from these very powerful and reassuring brakes. The hand-brake lever, nestling beside the tunnel by the driver's left leg, has the traditional M.G. fly-off action with push-button to lock it on, and thus ranks as one of the few really sensible hand-brakes found on modern cars. It held like a leech.

The foregoing represents an analysis of the M.G. MGA coupé as we came to know it under varied conditions of usage. On paper it is difficult to convey the charm of a long journey behind the wheel of this little sporting car. It does not possess the extreme of performance, but it steers and corners impeccably, with those splendid brakes in reserve should difficult situations arise. It has very useful acceleration, particularly as this can be maintained to well beyond 70 m.p.h. in third gear if desired; on the other hand, earlier upward changes may be made because after 50 m.p.h. or so the top-gear performance is excellent. Emphasis is lent to the M.G.'s top-gear abilities by an acceleration time in that ratio of 14 sec., from 50 to 70 m.p.h. Another aspect of the top-gear performance is an ability to cruise unconcernedly at 80 m.p.h. with the engine turning over at 4,700 r.p.m.—in comparison, sixty is a mere crawl, with the power unit idling at just beyond 3,500 r.p.m.

In sheer maximum speed this 1½-litre M.G. cannot compete with larger-engined sports cars which the flat-rate taxation system has encouraged. But on any reasonably straight piece of road the MGA is up to 80 m.p.h. as a matter of course and 85-90 m.p.h. is easily attained on British roads. The absolute maximum is of less importance but under favourable conditions it is a few m.p.h. over or under 100 m.p.h., depending on the run available.

Petrol consumption, driving hard but not abnormally hard, in a test which also embraced a cold start and some town-traffic, came out at 27½ m.p.g. The range is thus in the order of 275 miles. Gentle handling would no doubt lift these figures to around 30 m.p.g.

## THE M.G. SERIES-MGA COUPÉ

Engine: Four cylinders, 73 by 89 mm. (1,489 c.c.). Push-rod operated o.h. valves. 8.3-to-1 compression-ratio; 72 b.h.p. at 5,500 r.p.m.

Gear ratios: First, 15.652 to 1; second, 9.520 to 1; third, 5.908 to 1; top, 4.3 to 1.

Tyres: 5.90 by 15 Dunlop "Road Speed" on centre-lock wire wheels.

Weight: 18 cwt. 2 qtr. (without occupants but ready for the road, with approximately half-a-gallon of petrol).

Fuel capacity: 10 gallons. Range approximately 275 miles.
Wheelbase: 7 ft. 10 in.

Track: Front, 3 ft. 117 in.; rear, 4 ft. 03 in.

Dimensions: 13 ft. 0 in. by 4 ft. 10 in. by 4 ft. 2 in. (high). Price (with extras as tested): £751 11s. 6d. (£1,126 13s. inclusive of purchase tax).

Makers: The M.G. Car Company, Ltd., Cowley, Oxford, England.

and 300 miles. A later check confirmed that even under the exacting conditions of covering 350 miles in a day surveying a rally-route, in towns, very largely in country lanes and with really fast driving on main roads, the consumption did not rise above 27 m.p.g., using a variety of petrols. The engine had a slight tendency to run-on after a spell of slow driving when the ignition was cut. It always started very readily and showed a maximum of 70 lb./sq. in. oil pressure (pressure varies with engine speed) and a water temperature of 170 deg. F., rising to 190 deg. F. only when becalmed in Oxford Street, W., during the "April summer." The sump level fell to the danger level after the test had proceeded for some 700 miles, when three pints of Castrol XL brought the level back to "max." A later check after some fast driving confirmed that oil consumption is in the region of 2,000 m.p.g. No water was required. On the subject of fluids-replenishment, the petrol filler cap on the tail has a lift-up quick action, but is woefully small.

Going over the minor controls and detail work, they seem in keeping with the car's character and, as M.G. fans will realise, are

in the Abingdon tradition.

Pendant pedals are used, with a heel-mat for the driver. Black (lettered) knobs on the leather-cloth-covered facia control the selfparking screen wipers, fog-lamp (not fitted on the test-car), starter, choke, and panel lighting, the last-named knob turning to provide rheostat control. Another knob on the extreme left switches on a useful map-lamp before the passenger. The choke can be held out in various degrees by locking it with its serrated stem, but this also opens the throttles, which can be inconvenient. There is a separate but uninformative fuel gauge and a combined oil-pressure and watertemperature dial. Before the driver and easily read are the matching 31-in. Jaeger rev.-counter and speedometer, the former reading to 7,000 r.p.m. (but with the red area from 6,000 to 7,000 r.p.m.), the latter reading to 120 m.p.h. and possessing trip with decimal and total mileage readings. The needles of both these instruments are commendably steady and it is pleasing to find them travelling in the same plane. All the dials are, indeed, in good view of the driver; the steering wheel tends to blank the "flashers" warning light and if an M.G. badge is supplied with the ignition key this obscures the petrol gauge-which, these days, is no bad thing!

The gear-lever knob has the positions marked on it; reverse is back, outside second, and strongly spring-loaded. The horn button for the commendably loud horn is large and recessed in the centre of the facia; we prefer it in the centre of the steering wheel. No cubbyhole is provided but there is provision on the facia for radio, if

required.

The car tested had a heater unit, controlled by a sliding knob set neatly below the centre of the facia, with knobs to left and right of it for air control and demist, respectively. The supply of cool air, even with the blower running, is insufficient, so that a choice has to be made between objectionable air noise with the windows open or a stuffy interior with them shut. An ignition warning light is incorporated in the rev.-counter, a headlamps-beam warning light in the speedometer dial. On the extreme right of the facia a rather wobbly but reasonably convenient lever operates the self-cancelling direction "flashers," with a warning light beside it. Another extra on the test-car was a screen-washer, which refused to function. Fluid for it is contained in a plastic bottle, which cannot freeze. The ignition key is separate and detachable; the wipers only function if the ignition is

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IN THE M.G. TRADITION-continued from page 296

"on." The interior carpets have press-button fastenings and fit well where chassis members intrude, and the upholstery is securely attached.

The appearance of the car we borrowed for test was enhanced by centre-lock wire wheels. Besides these the M.G. owner has the choice of H.M.V. radio, whitewall tyres, a lower (4.55-to-1) back-axle ratio, twin horns, rim embellishers, radiator blind, and, for the two-seater, tonneau cover, badge bar, detachable hard-top, and de luxe sidescreens, besides the "extras" already mentioned, i.e., demister and heater, ash-tray, telescopic steering-column, wire wheels, cockpit ventilator, "Road Speed" tyres, wing mirror, external luggage carrier, fog-lamp and windshield washer. He or she can specify black, orient red, tyrolite green, glacier blue or old English white finish, with various choice of upholstery colour.

Taking a last look at this convenient and economical fast car, which we returned with reluctance, naturally there are bumpers front and back, a badge-bar above the front one, the rear lamps rather vulnerable above the back one. On each side of the scuttle hot air escapes via apertures with MGA motifs and, naturally again, the Lucas headlamps are in-built. The lamps provide a good beam, but driving after dark brings the realisation that the nose dips to some extent under braking or over bad roads, whereas in the day-time this slight pitching is not apparent. The foot dipper is set too high, the foot having to leave the floor to operate it. This M.G. has a ground clearance of 6 in. and further details of the car as tested appear in the panel on page 296.

Summing up, the MGA is every inch an M.G. and Abingdon has obviously exercised considerable ingenuity in blending various standardised B.M.C. components into a sports car which is a worthy descendant of the race-bred cars which preceded it, inasmuch as it possesses impeccable road manners and adequate performance, combining these with an eye-stopping appearance. The starting price of the M.G. MGA coupé, before "extras" are ordered, is £699, which purchase tax inflates to £1,049 17s.; with "extras," as tested, the total price is £1,126 13s.—W. B.