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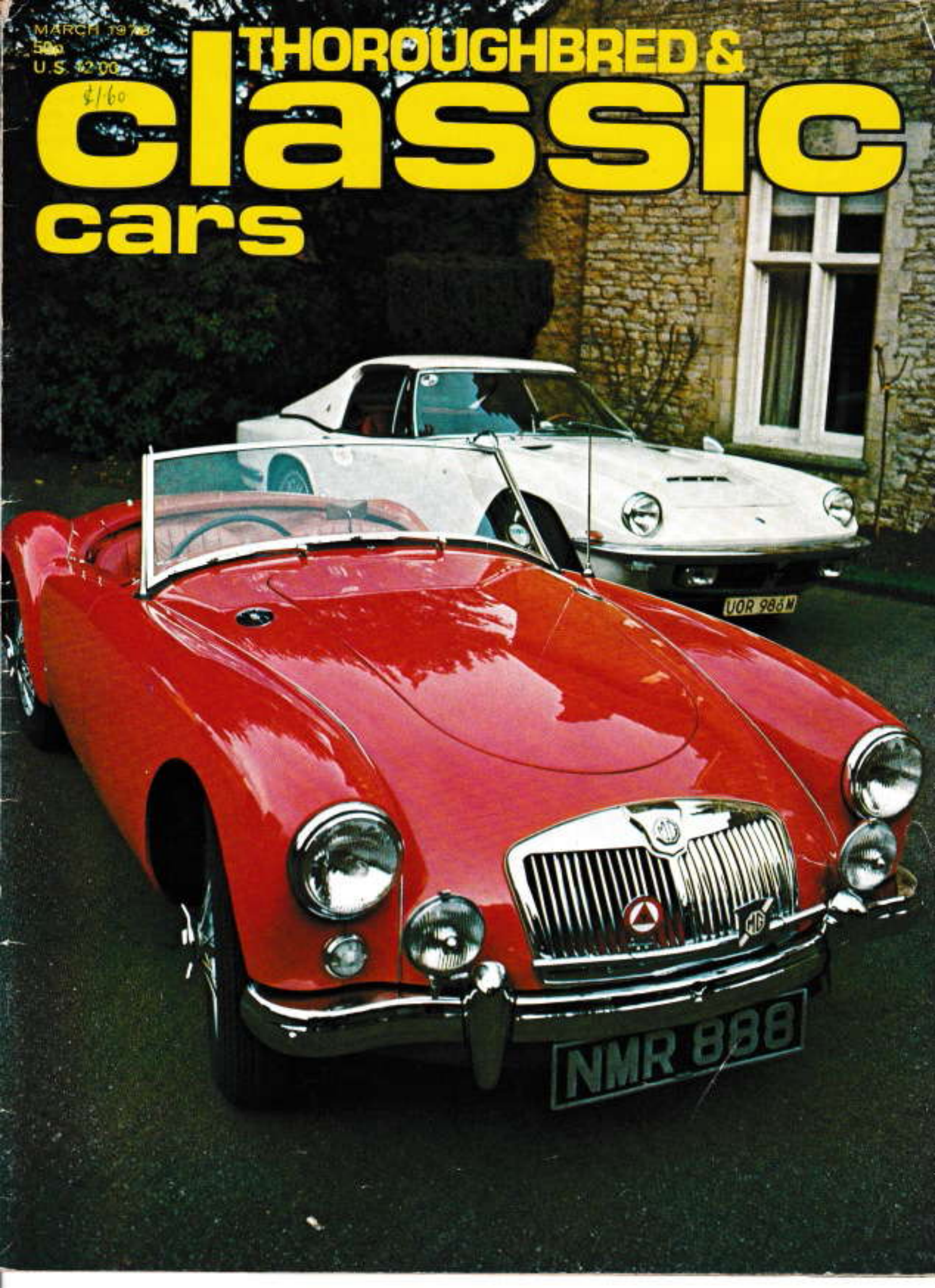

MGA

classic choice

The MGA is practical and fun – Jonathan Wood helps you pick a good one. Mini-Manuals on the MGA 1500 and the Twin Cam are available at 50p each from Mrs J Skilleter, T&CC, Dorset House, Stamford St, London SE1 – cheques made out to IPC Business Press please.

NINETEEN FIFTY-FIVE was one of the most significant post-war years for the MG Car Company. For that September they introduced their new sports car, the MGA, and bid farewell to the TF model with its traditional, though anachronistic body style that had served the company well since the J2 of 1932. Out went the spartan lines, square radiator and bolster tank of the earlier model, to be replaced by the A with its low, graceful full width bodywork endorsing a design concept already successfully exploited in Britain by Jaguar, Healey and Triumph.

The A was destined to be MG's then best selling sports car, 101,081 being built between 1955 and 1962 when it was replaced by the still current MGB. This figure includes 2111 cars fitted with the controversial twin overhead camshaft engined variant made between 1958 and 1960.

Before examining the points to look for when confronted with a secondhand example of one of these distinctive motor cars, it would perhaps be appropriate to reflect briefly on the model's pedigree, and an impressive one it is.

The first "prototype" A was a special TD, built for George Phillips to race at Le Mans in 1951. Although using a modified TD chassis, the bodywork bore a striking resemblance to the production A of 1955. However, as far as the race went, it was soon over for the car when it retired early on with engine trouble. The first pukka MGA prototype was built the following year, being designated Ex 175, while a spare chassis formed the basis of Ex 179, the record breaking car that set up new records at Utah in 1954. Thus body and chassis were well proven, though the engine eventually chosen to power the new model was the Austin BMC "B" series engine that was already fitted to the "Z" series Magnette saloons, parts rationalisation and spares availability no doubt being the overwhelming consideration. While the chassis followed closely that used in Ex 179, the front cross member and suspension were from the TF, while the rear axle and brakes came from the current Magnette. The new model received a competitive baptism at Le Mans in 1955 when three aluminium bodied prototypes (designated Ex 182) were entered, two finishing fifth and sixth in their class. It was to be another four months before the model was officially launched.

The open roadster model, which remained in production until May 1959, was powered by a 1489cc version of the aforementioned B series engine, being fitted with Lockheed drum brakes all round, while a coupé version was introduced in September 1956. July 1958 saw the appearance of a twin overhead camshaft variant of the A, but this model only remained in production until early 1960. May of that year saw the coupé and roadster cars sporting a more powerful 1588cc engine while the drum brakes at the front gave way to Lockheed discs. A de luxe version of this pushrod 1600cc car appeared briefly in 1960 having a twin cam chassis; only a few being made. A Mark II version of the A finally appeared in June 1961, the engine size being stretched again, this time to 1622cc, the model being distinguished by a recessed radiator grille. These roadster and coupé options remained in production until the model was phased out in September 1962. (See "Case History" section at the end of this article for full details of model changes). The foregoing information applies to the pushrod versions only, as twin cam version is dealt with separately.

Bodywork

Although the MGA does have a chassis (it was the last MG to have a separate frame), close scrutiny of the bodywork is of vital importance. Steel predominates, though the bonnet, doors and boot lid are made of aluminium. Starting at the front of the car, pay particular attention to the bottom of the front wings, which is a favourite mud trap. The nearby door pillars are another vulnerable area. You can check their condition by opening the doors and checking whether they move up and down! The front of the rear wheel arches should be examined for evidence of rust or filler, while the extreme rear of the boot floor is another suspect place. On the coupé, the area where the fixed head joins the body also rusts, the cracking being caused by body flexing. Also carefully examine the condition of the radiator grille on the 1600cc cars. If it's in poor condition you may have to pay as much as £50 for a replacement.

Now to the all important chassis frame. This is, on the whole, fairly sound, although the most likely areas for rusting are found on the side members inside the car, immediately adjacent to the wooden floor boards. A difficult check point this, because the section is usually covered by carpeting. The plywood boards are often in a poor state by this time, but this is hardly a major structural disaster. The battery carriers deserve a check and also that part of the chassis where the cross tubes are welded to the side members. You may find that the car's petrol tank is simply held in position by rust, as the metal straps securing it have often rusted through. And while you're under the car, check the angle of the rear spring hangers; they should both be at the same inclination. If not, this may be a memento of some long forgotten shunt.

Engine and gearbox

The faithful and viceless B series engine has no obvious drawbacks, so an oil pressure check is your most important consideration. This should not be less than 50psi at 50mph (hot). Fuel economy represents a big plus with this four-cylinder power unit. Most versions (except the twin cam) return consumptions in excess of 29mpg and in my own case (1961 1600), I'm getting a healthy average of 32mpg. This obviously depends, to a great degree, on the condition and synchronisation of the twin H4 SU carburettors. Again, the A's gearbox is a sturdy and, on the whole, reliable unit although the chances are that synchromesh on second gear has failed. Fortunately spares are readily available.

Steering, suspension and brakes

The A's rack and pinion steering live right out at the front of the chassis, so check the rubber gaiter for splits or tears. The A is particularly prone to front suspension wear and to check this jack the car up under the appropriate wishbone. (Never carry out this check with the jack position under the centre of the car. This simply allows the coil springs to expand, taking up any wear there may be present.) Now hold the wheel with one hand on the twelve o'clock position, and the other on the six, and wobble the wheel. If there's any wear present in the links, you'll soon feel it.

New suspension parts are now available, by the way. Also remember that the lower link spacer tube

Replacement steering parts are now being re-manufactured – these items are marketed by Motobuild.

Above, rot in chassis side member; below, door shut face showing rust traps.

and washers are the same as those used on the MGB. Regular lubrication is vital for these parts. They should be greased every two or three months! For wear in the steering gear, carry out the same routine, but with your hands on the wheel at the nine and three o'clock positions. The chances are that the front shock absorbers will be badly worn, though the rear units should last the life of the car. The drum brakes on the pre-1959 cars shouldn't present any problems, while pads, discs and callipers for the Lockheed discs are still obtainable. A word of warning though. The chromium plated pistons on these brakes are particularly prone to seizure, so if you're contemplating a car that's even been off the road for a fairly short time, check this point, which is usually revealed by a binding wheel and scored discs. Rear springs are prone to breakage, so keep an eye open for broken leaves.

The Twin cam version

Bodywork

The same remarks apply to the twin cam cars, in this section, as the pushrod engined cars.

Engine and gearbox

Naturally spare parts for this engine are rather more of a problem than the ubiquitous B series power unit. When the model was first available, in July 1958, the first 345 examples used pistons fitted with chromium plated rings. However, this resulted in excessive bore wear and the plating was dropped. (It is extremely unlikely that there are any cars still in circulation with these original pistons, though.) Another important modification came at engine number 1587 when the tappet buckets were steel sleeved into the aluminium cylinder head. Prior to that they had run with a sleeve and wear took place. And while on the subject of tappets, another twin cam shortcoming is that the buckets crack across the top and then jam, with consequently dire results! When you come to adjust the tappets (they're the shim and bucket variety, as you'd expect, with this engine), don't lose the camshaft bearings, replacements don't exist.

The twin cam's original compression ratio was 9·9 to 1, though this was later dropped to 8·3 to 1. If you've a Gold Seal replacement engine in your example, it will be this lower ratio, making the engine more suitable for three-star petrol. It's also best to run the engine without a vacuum advance connection. A non vacuum advance distributor was one of the last modifications made to the engine, as excessive advance made its inevitable contribution to burnt out pistons. The all important oil pressure reading should be no less than 50psi at 2500rpm (about 35mph). Be prepared for an oil consumption in the region of 200 miles per pint, incidentally.

You'll also be in trouble with one of the early cars when it comes to a fan belt change. The radiator has to be removed, so you can get to the bottom adjusting nut on the dynamo. Detachable panels were later fitted in the wheel arches of the later cars. You should get between 20 and 25mpg from the twin 1¾in SU carburettors on this engine. Any improvement on this figure should be avoided at all costs as weakening the mixture can result in burnt out pistons. The twin cam runs happiest on Champion N4 plugs, we are assured.

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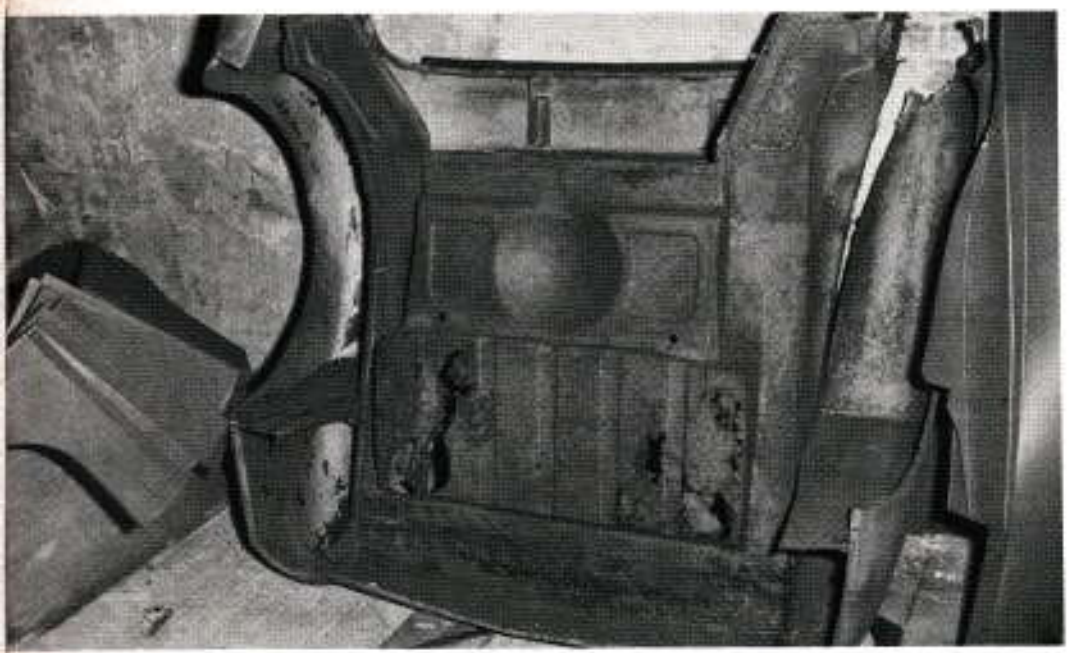
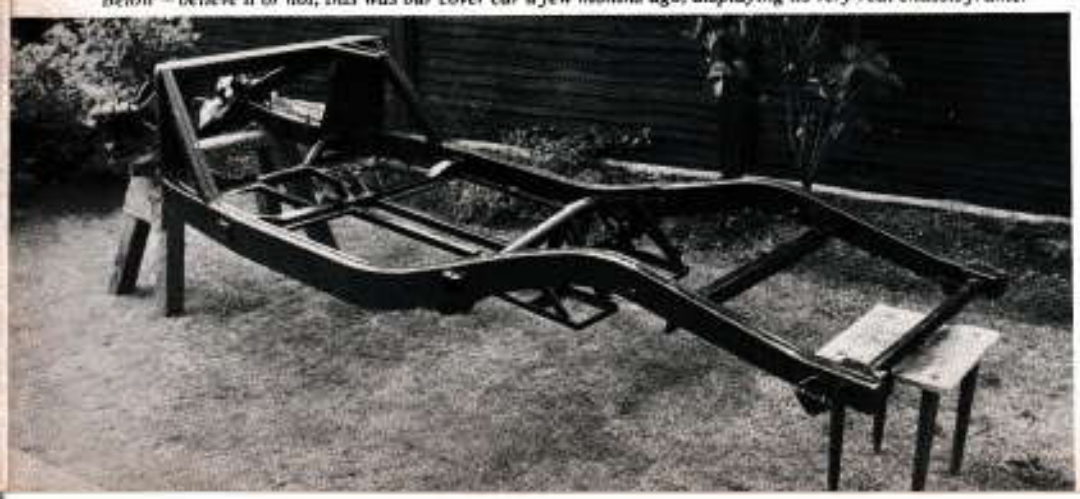


From the top, 1500 roadster, 1600 coupé, Twin Cam roadster.

Above and right, upturned rear bodyshell showing rust in boot floor areas; left, front wing removed to show door hinge pillar – rust sets in at bottom of inner wing too.

Below, check for suspension wear by wobbling jacked-up wheel.

Below – believe it or not, this was our cover car a few months ago, displaying its very real chassis frame.



MGA

Remember, if you have occasion to drain the cooling system to re-fill with anti-freeze, it's not sufficient to simply drain the radiator, the block will have to be emptied separately. Also unlike the pushrod car, the twin cam is fitted with a separate radiator header tank.

Steering, suspension and brakes

The most obvious external difference between the twin cam and its pushrod brother is that the former car is fitted with rather handsome Dunlop wheels, though they have four locating pegs instead of splines, as might be expected. Dunlop disc brakes are fitted all round. The rear discs rust badly and up until now replacements were unobtainable, so this situation is shortly to be resolved by Peter Wood (see "Spares" heading). Although these brakes provide excellent retardation, don't expect great things from the handbrake, this will require careful adjustment to get it working tolerably. You'll also be in trouble with the Dunlop brake master cylinder. Replacement rubbers simply aren't around, nor will those fitted to the later Girling product (though still marked "Dunlop"). Here the only answer is to fit a non standard part, if you find the rubber and/or cylinders are worn badly.

The steering rack is mounted farther forward in the twin cam, due to the longer engine, so the same check points apply to this as the pushrod model.

It should also be noted that at chassis 2371, the number of splines on the differential and half shafts were increased and if you need a replacement you're in trouble because these components were not used on any other MG, or for that matter BMC car.

As far as the front suspension is concerned again the same shortcoming apply, but Ralph Canby, competitions secretary of the Twin Cam section of the MG Car Club's MGA Register, advises against the use of the current replacement brass parts on the model, which is, after all, over two hundredweight heavier than the pushrod version.

The MGA Twin Cam, showing the distinctive cam covers of its power unit.

Spares

MGA owners are fortunate in that body and mechanical spares (the latter for the pushrod, at least) are in plentiful supply. Some chassis and engine parts are still available through Leyland Cars stockist, but if you're really looking for a comprehensive service, then the specialists' in the model should be your first port of call. Vic Ells Sportscar Repairs of 234 Trussley Road, Hammersmith, London W6 (01-741 2731) specialise in the MGA (and B) and can handle a host of mechanical work and also operate an exchange shock absorber and radiator service. Vic will modify cylinder heads for competition work and will also repair temperature gauges, providing they are provided complete. I gratefully acknowledge Vic's help in the preparation of the "pushrod" section of this article. Motobuild Ltd, of 128 High Street, Hounslow, Middlesex (01-570 5342) also operate a comprehensive list of facilities for A owners (and also T types) and supply a variety of metal body parts, an offside front wing of their manufacture is at present gracing the writer's MGA and a very good job it is too. My thanks to Motobuild for providing suitably rusted A's to be photographed for this article from their "Black Museum". In addition NTG Services of 25 St Peters Street, Ipswich IP1 1XF (Ipswich 211240) can supply mechanical spares which include all suspension parts and also a range of rubber mouldings. The rubber gear lever gaiter will soon be available and an exchange instrument service is also operated. It almost goes without saying that Toulmin Motors (1962) Ltd, of 103–105 Windmill Road, Brentford, Middlesex (01-560 1722/2228) offer a wide variety of parts, and in many cases they have initiated the manufacture of "new" spares that would have otherwise have become obsolete. MGA front and rear wings are also available from Marsh Developments of 2 Walnut Tree Close, Guildford, Surrey (Guildford 37775) (see *Thoroughbred and Classic Cars*, August 1975) though this is just one of many makes embraced by the company. On the body scene, Roy McCarthy's Custom Style Autos of 1a Windermere Avenue, London SW10 (01-540 7028) specialises in A's, though engine re-builds are also undertaken. An excellent secondhand parts service is also to be had by S. H. Richardson and Sons Ltd, at Moor Lane, Staines, Middlesex (Staines 55388). But if you decide to join the ranks of MGA owners, then membership of the MG Car Club is a "must". General secretary is Gordon Cobban of 273 Green Lane, Ilford, Essex IG3 9TJ. This means that you can join the club's MGA Register, and my thanks to Harry Pearce, their historian, for providing the comprehensive B series engine "Case History" provided here. The Register's magazine, *MGActivities* costs £1·25 per annum and can be obtained (post free) from the Snowball Press, 14 Cross Street, Reading, Berkshire.

Many of the body and mechanical parts of the twin cam model are, as we've seen, common to both cars, but the main source of parts for the twin cam is Peter Wood of Westwood, Church Street, Twyford, Buckingham, (029673-310). He can also supply "pushrod" spares as well. In addition, Ralph Canby of 5 Churchill Close, Hartley Wintney, Hampshire, who kindly gave up a morning to talk to me about twin cams and provided the information for the "Case History" section for that model, is also a source of some spares and advice.

If you're toying with the idea of A ownership then you'll see that spare parts are the least of your problems. There's no shortage of secondhand examples on the market, but I'd be inclined to steer clear of the lower end of the range which starts at around £150. But for a good looking classic with a racing pedigree, reliability (once sorted) and above all fuel economy, you can do no better than buy an MGA. I should know, I've got one! **J.W.**

CASE HISTORY

Pushrod engined cars

SEPTEMBER 1955 – MGA ROADSTER. 1489cc BMC "B" series engine, ohv + push rods. Price £595 + pt £249 = £844. First chassis number 10101. BMC "B-type" gearbox with extended casing to accept splined end of prop-shaft. 1¾in SU carburettors. Lockheed hydraulic drum brakes, front-two leading shoes, rear-one leading, one trailing. Disc wheels with ventilation holes and 4-stud attachment; wire-spoked, centre-lock wheels as optional extra. Flush fitting radiator grille follows line of car nose. Dual filament combined front/flasher + tail/flasher lights. Car discontinued May 1959.

SEPTEMBER 1956 – MGA COUPÉ. 1489cc engine. Price £699 + pt £351 = £1050. First chassis number 20670. Larger wrap-round windscreen, wind-up windows + wrap-round rear window. 15GD power unit introduced from chassis No 61504 (early 1959). Prop shaft modified with universal joint at both ends and splined sliding joint in prop shaft itself. At 101·2mph "max", car is 3·5mph faster than roadster. Returns 1mpg better fuel consumption (31·5mpg). Outside door handles + door locks. Car discontinued May 1959.

JULY 1958 – MGA TWIN CAM (Roadster or Coupé). 1588cc engine, twin overhead cam. Price £843 + pt £423 = £1266 (Roadster) 1¾in. carburettors. Dunlop disc brakes all round. Centre lock disc wheels. Separate radiator header tank bolted to exhaust manifold. Leather covered facia board. Rev-counter reads up to 7500 rpm 115mph (max). 27·6mpg. Car discontinued March 1961.

MAY 1959 – MGA 1600 (Roadster or Coupé). 1588cc ohv + pushrod engine. Price £663 + pt £277 = £940. First chassis number 68851. Lockheed disc brakes at front only, drums at rear. New tail-light housing with separate flasher cover. New front parking/flasher lights. Sliding plexi-glass side screens on roadster. New coil mounting. 96·1mph "max", 29·7mpg. Car discontinued March 1961.

LATE 1959 – MGA 1600 DE LUXE – little known hybrid model of twin cam specification but with 1588cc pushrod engine. Few only made. Discontinued early 1960.

JUNE 1961 Mk II (Roadster or Coupé). 1622cc ohv engine. Price £663 + pt £277 = £940. Engine has new block, pistons, con-rods, crankshaft and flywheel, new head, larger valves and new ribbed-casing to gear-box. Final drive gearing raised from 4·3 to 4·1 to 1. Re-designed inset radiator grille. 101·4mph "max". 35mpg. Coupé discontinued June 1962, Roadster discontinued September 1962.

Twin cam engined cars

Chassis numbers are prefixed YD1 501 (Roadster) and YmI 501 (Coupé)

Chassis 592 Wheel arch fitted with detachable panels.

Chassis 713 Water temperature gauge changed from Fahrenheit to Centigrade.

Chassis 2192 Flasher changed from white to yellow at front and separate unit introduced at rear. Minor trim changes in Coupé.

Chassis 2275 Anti roll bar fitted.

Chassis 2371 Half shaft and differential fitted with finer splines. Also applies to De Luxe model.

Engine numbers are prefixed 16GBUH (High compression) or 16GBUL (Low compression) numbers start at engine 101.

Engine 272 Dynamo pulley changed to smaller size; 1·2:1. Shorter fan belt.

Engine 313 Gearing on oil pump changed from nine to 10 teeth on the half speed shaft and 10 to 11 on the oil pump drive.

Engine 446 Piston rings changed from chrome plate to iron.

Engine 528 Packing plate fitted between engine mounting and chassis.

Engine 1087 Tappet bucket increased in length from 1·25in to 1·5in.

Engine 1343 Heavier conrods fitted.

Engine 1587 Tappets sleeved into cylinder head.

Engine 2223 Distributor change to non-vacuum advance type.

Engine 2251 Valve springs changed.