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DATABASE:

MG MGA (1955-1962)

Despite a false start, the MGA ushered in a new era for MG during the '50s. We bring you facts and figures on Abingdon's exotic masterpiece. Words: Paul Wager

Today we're used to major manufacturers releasing 'teasers' of new prototypes in the guise of racers or support cars at major events

but back in the early '50s the science of brand marketing had yet to be developed to such a fine art and when MG fielded a new Le Mans entry in 1951, nobody knew it was to form the basis of what would become the MGA.

Driven by George Phillips, who had previously enjoyed success with his own rebodied TC, the car was known internally as EX172 and essentially consisted of a sleek new body shape penned by MG's Syd Enever, sitting on the chassis of the old TD 'Midget'. Replacing the TD's upright prewar styling with this streamlined new shape gave it the ability to reach 120 mph.

It was a promising start, although the TD chassis meant the driver's seating position was higher than ideal for the lower body



shape. Accordingly an evolution of the concept was developed under code name EX175, using a wider chassis frame to allow the seats to drop between the side members and transmission tunnel. A similar body shape was drawn up, using alloy panelling.

The promising project was presented to BMC management in 1952 as a successor to the TD range, but unfortunately for MG, Donald Healey had got to boss Leonard Lord first with his Austin-Healey 100. The decision was taken to produce the Healey as the corporation's sports car and the MG project was forced on to the back burner.

This was pretty bad news for the men at Abingdon. The TD was given updated styling to become the TF but it was uncomfortably obvious just how old fashioned the T-Series cars were looking. By the time the Healey debuted in Austin-Healey production form in 1953, MG sales were falling and even Leonard Lord had come to admit that MG desperately needed that new model and so work on the project was picked up again.

Luckily, in the meantime development of the design had been ticking over on the quiet, with the design being used as the basis for the 'EX179' speed record car campaigned at Utah in 1954. Three aluminium-bodied prototypes were then constructed for the 1955 Le Mans under code name EX182, running aluminium and steel bodywork which was recognisably the MGA.

The production version of the MGA went on sale in September 1955, essentially using the chassis and body style of the prototype cars, with the delay imposed by Leonard Lord turning into a blessing in disguise since it allowed the MGA to take advantage of the newly developed B-Series engine instead of the old 1930s XP-type engines. It was the first all-new MG sports car since the '30s and its elegant shape was a hit, giving the MG badge a dose of exotic glamour at a selling price of under £1000.

MGA Evolution

As launched at the 1955 Frankfurt motor show, the MGA used the 1489cc B-Series engine rated at 68 bhp with twin SU HF4 carburettors, which was sufficient to give it a top speed of 98 mph and 0-60 mph in 15.5 seconds, quick by mid '50s standards. Suspension was by coil spring and wishbones at the front, with the lever arm damper forming the upper link, while the leaf-sprung rear axle was shared with the ZA Magnette and steering was by rack and pinion. Like the prototype cars, the box-section chassis was derived from that of the TD with more widely spaced chassis rails allowing the seat to sit lower.

In late 1956 power was increased to 72 bhp but the big news came in 1959 when the engine was taken out to 1588cc, producing 80 bhp and a 100 mph top speed. Unusually for BMC, the 1600

version of the B-Series would remain unique to the MGA, not being used in any of the corporation's other products. The 1600 model also received uprated rear brakes, standard front disc brakes and stiffened suspension using revised coils and uprated lever arm dampers. Sliding plastic side windows were also added, while the bodywork gained '1600' badging and revised rear light units.

Also new for 1956 was the coupe version of the MGA, which thanks to its improved aerodynamics was able to comfortably exceed 100 mph. Positioned as a more luxurious car than the roadster, the coupe boasted a wider wraparound screen than the roadster's optional hardtop, plus luxuries like carpeted bulkhead, map pocket, door locks and wind-up windows.

The MGA became the 'Mk2' in 1961, when the 1600 was bored out to 1622cc. The capacity increase, together with enlarged inlet valves and changes to the manifold and combustion chambers, with compression increased to 8.9:1, took power up to 93 bhp and the 1622-engined cars – recognisable by their recessed grilled slats and horizontal tail lights – were good for 102 mph, thanks to a final drive ratio increased from 3.1:1 to 4.1:1.

Faster still was the short-lived Twin Cam project (see our separate section) but in 1962 the MGA was replaced by the MGB.

"Its elegant shape was a hit, giving the MG badge a dose of exotic glamour"

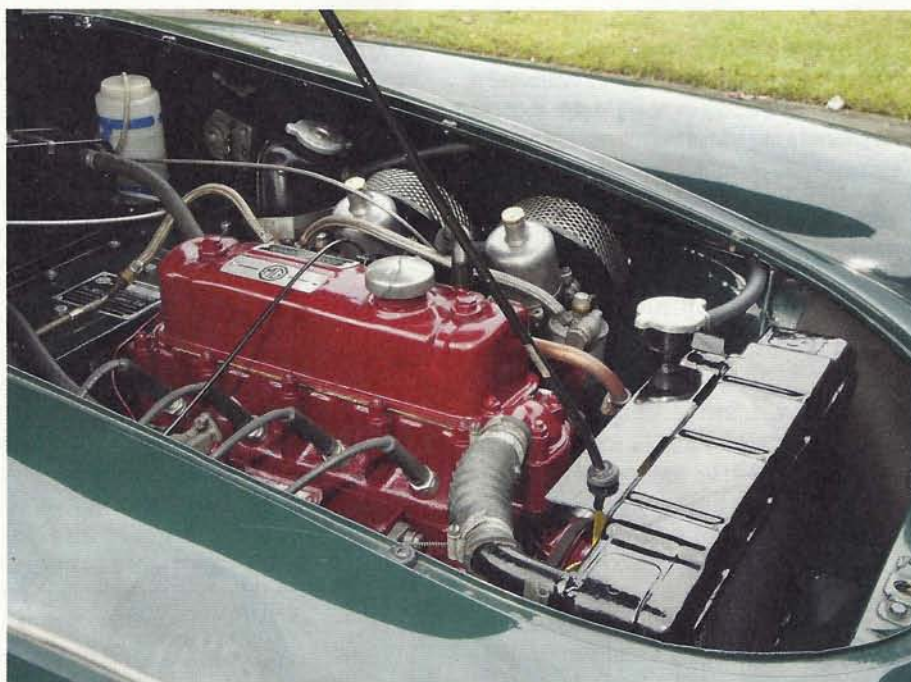


Whitewall tyres in this publicity shot show just how important the US market was to the car's success.



The 100 mph coupe was positioned as a more civilised, better trimmed car than the roadster.





The delay imposed by Leonard Lord eventually worked to the MGA's advantage as it allowed the production car to employ the new B-Series powerplant instead of the ageing prewar XP engines.

An all-new monocoque design, the MGB was thoroughly modern in many ways yet still relied on elements of the MGA, notably the front suspension which was itself derived from the TF.

The Twin Cam

The EX series of record breakers had been continued after the production car's launch and the EX181 of 1957 had been powered by a twin overhead camshaft development of the B-Series engine. Fitted with a massive Shorrock's supercharger and running on a methanol fuel mix, it was good for 290 bhp... and 254 mph.

Proposed by Gerald Palmer, designer of the

Magnette ZA/ZB cars who was keen to add a higher-performance model to the Magnette line-up, this was initially to retain as many standard B-Series components as possible but in practice the block casting was significantly different. The crankshaft ran in narrower main bearings with a lengthened nose to allow the fitment of camshaft drive gear.

Stronger connecting rods were used with heavily domed pistons giving a high compression ratio of 9.9:1.

The new cylinder head was a crossflow aluminium design, featuring hemispherical combustion chambers with the valves inclined at 80 degrees and operated by inverted bucket



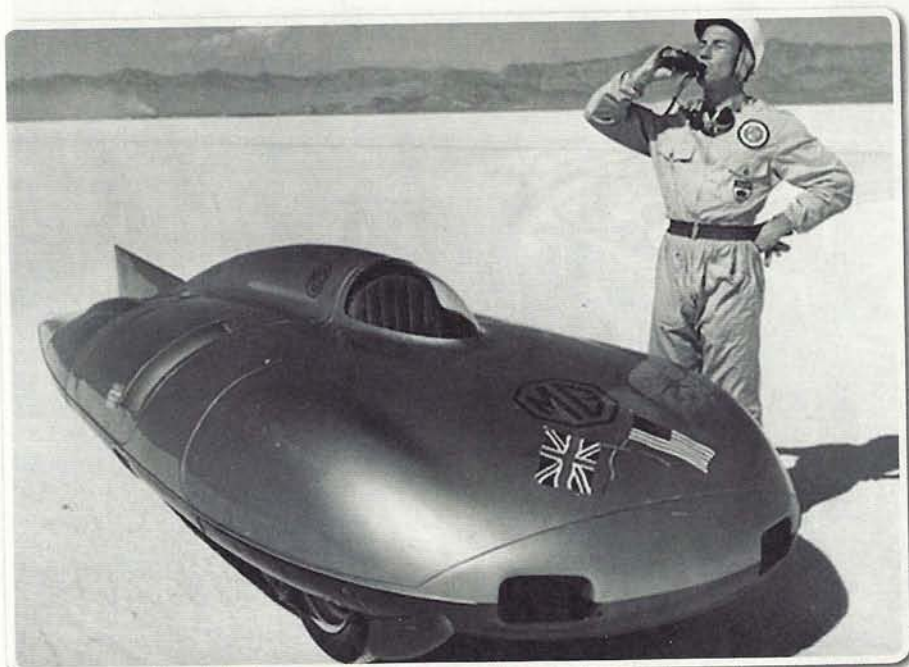
Tail lights became horizontal units when the Mk2 version was introduced in 1961.

tappets. The camshafts were operated by duplex chain and the head was finished by very modern looking smooth cam covers.

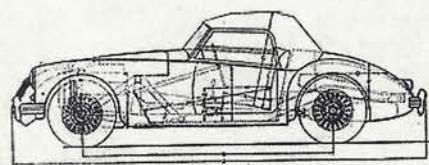
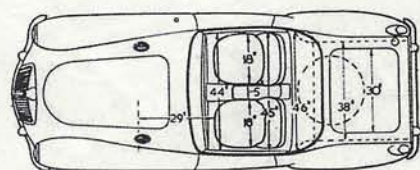
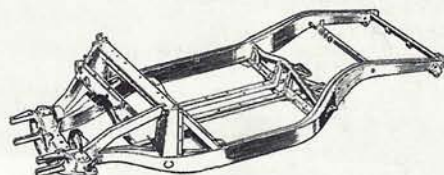
The end result produced 108 bhp and 104 lbf. ft, turning the MGA into a seriously quick car, sold complete with Dunlop disc brakes all round, the same firm's centre-lock steel disc wheels and a rev counter redlined at 7500 rpm.

Testing the Twin Cam in 1958, *Autocar* found it to wake up from 4000 rpm and judged it "happy at 100 mph for long stretches on Continental roads."

Reliability problems hit the engine's reputation though, with that 9.9:1 compression meaning five-star fuel and correct ignition timing were



EX181 record-breaker was powered by a modified MGA twin-cam engine featuring a massive supercharger which pushed it well beyond 200 mph.



The MGA was the last of the separate-chassis MGs, with elements of the design dating back to the T-Series cars.



critical to avoid detonation and subsequent piston damage. High oil consumption and valve failures when over-revved gave the engine a reputation for fragility, with its free-revving nature taking many by surprise. Oddly, a rev limiter was never fitted to the engine. Indeed, those *Autocar* testers found that the car tended to "run on" after switch-off on regular 89-octane fuel, while they had to add five pints of oil after 800 miles of hard driving.

Although a reduction to 8.3:1 compression ratio was later made – bringing power down to 100 bhp – and modified piston rings were fitted to cure the oil consumption issue, the damage was done and the car was discontinued in July 1960.

Upgrading the regular pushrod B-Series to 1622 achieved much of the power without the cost or complexity.

Just 2111 examples of the Twin Cam were built, leaving MG with a surplus of chassis and bodyshells which were later fitted with the regular B-Series engines and sold as the 1600 Deluxe, complete with the disc brakes and centre-mount disc wheels. Priced at £1265 in 1958, the Twin Cam was an expensive proposition against the £940 of the basic 1600 roadster when Triumph's TR4 was £1095 at launch in 1961.

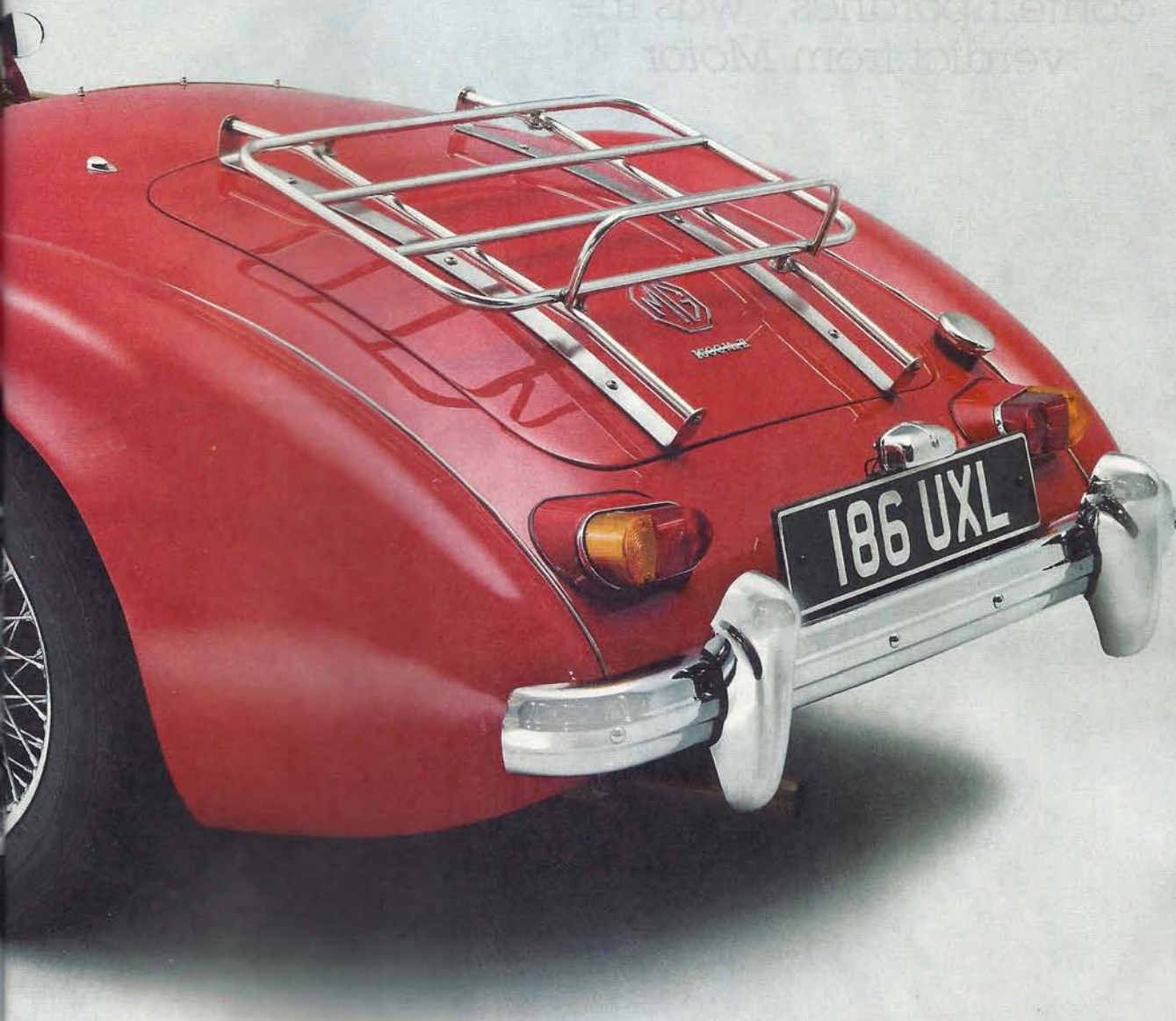
The market

Until the MGB bowed out in 1981, the MGA was the best-selling MG model to date, shifting 98,970 units over its lifetime. Launched late in 1955 at £844 on the road, the MGA sold only 1003 that year but made up for it by selling

13,410 units in 1956, its first full production year and following that up with an impressive 20,571 in 1957. The following year saw sales dip to 16,663 but the best-ever sales performance came in 1959 when 23,319 cars found homes.

As the design started to show its age, sales dropped off noticeably after this point, despite the Mk2 changes: 16,981 were sold in 1960 but in 1961, by which time the price had risen to £940, the figure had dropped to 6085, with just 3049 sold in 1962 as potential customers no doubt waited for the new MGB.

Most popular single model was the 1500 which sold 20,571 in 1957 and clocked up over half of total MGA production at 58,750 units, closely followed by the Mk1 1600 with 31,501 sales.



➔ DID YOU KNOW..?

- Despite adding wind-up windows and a roof, the coupe weighed in at only 32 lb heavier than the roadster.
- In the '50s a Judson supercharger conversion was offered in the USA. The road test car came with a 'continental' bumper-mounted spare wheel which *Road & Track* found negated the advantages of the blower at high speed...
- Ironically considering it was the Austin-Healey 100 which had nearly scuppered the MGA's chances, the Abingdon plant was used to produce the six-cylinder Healeys.
- Both the Austin and Morris divisions of BMC produced competing twin-cam engine designs. The Austin attempt was a clean-sheet design while Palmer's Morris version was based on the B-Series. Unsurprisingly, the Morris engine was chosen.
- Early designs for an MGA replacement still used a separate chassis until it was decided that weight considerations required a monocoque body..
- Don Hayter recounts in his book *MGB Story* how a 60-degree V4 engine was investigated for the MGA as late as 1958.
- Hayter also recalls an aluminium-bodied MGA produced by Frua as a flashier model for the US market. Its weight destined it not to reach production and in order to avoid a hefty import tax bill from Customs it was cut up with a torch in front of Customs and Excise staff.
- The metal bars across the rear window of the factory MGA hardtop were designed to stop the glass being sucked out at speed.
- Until 1960 the aluminium hardtops were made by BMC subsidiary Vanden Plas. From 1959 a fibreglass hardtop was offered.

"Built with a more thorough care than most of its contemporaries," was the verdict from *Motor*







Road testers back in the '50s loved the MGA and commented favourably on its high quality of construction. The MGA was never offered with the overdrive option but the example shown here has been fitted with a modern conversion to a five-speed Ford gearbox which makes the car happier on the motorway.



The Press

Road testers loved the MGA when it first appeared, with many of the tweed-jacketed heroes maxing the new car out at an indicated 100 mph. Testing one of the first prototypes in *Autosport* in 1955, John Bolster reckoned that the car was quite happy cruising at 80 mph and praised the car's ride and roadholding. "This is really quite a big, roomy car," he commented, "And nobody would guess that it only had a 1.5-litre engine."

Comparing the production version of the MGA to the competition car EX182 prototype, Bolster commented "little has been lost and a great deal gained in grooming the machine for production."

Meanwhile, testing the coupe in 1957, *Motor* commented that its ability to hold triple-digit speeds was unquestioned, while they were impressed with its rigidity: "Road surfaces abroad are notoriously poorer than they are in England," they noted (well this was 60 years ago) "and for this reason we were particularly impressed by the robustness of the car." Ironically, considering the early prototype chassis had specifically been designed to allow a lower seating position, *Motor's* testers commented that they would prefer a driving position an inch or so higher.

Driving the 1600 roadster in 1959, *Motor* praised the standard-fit front discs, which they

reckoned gave the car "an immense reserve of stopping power."

Curiously, given the reputation of later BMC and BL-era cars for quality issues, those '50s and '60s testers all agreed that the MGA was well-made and beautifully finished: "built with a more thorough care than most of its contemporaries," was the verdict from *Motor*.

Perhaps more illuminating are the road tests towards the end of its life, where both *Motor* and *Autocar* were still praising the car's performance and handling right up until 1961, when the MGA was due to be replaced by the MGB. **CCM**

SPECIFICATIONS

Model	MGA 1500	MGA 1600	MGA Mk2	MGA Twin Cam
Engine	1489cc	1588cc	1622cc	1588cc
Max power (bhp)	68/5500	80/5600	93/5500	108/6700
Max torque (lbf.ft)	77/3500	87/3800	97/4000	105/4500
Transmission	4sp manual	4sp manual	4sp manual	4sp manual
Suspension	Front wishbones, coil springs, lever arm dampers. Rear, live axle, leaf springs, lever arm dampers			
Brakes	Drums front and rear	Discs front, drums rear	Discs front, drums rear	Discs front and rear
Length (cm)	397			
Width (cm)	147			
Height (cm)	127			
Kerb weight (kg)	860	860	914	977
Max speed (mph)	98	100	102	115
0-62 mph (secs)	15.5	15.0	15.5	9.0