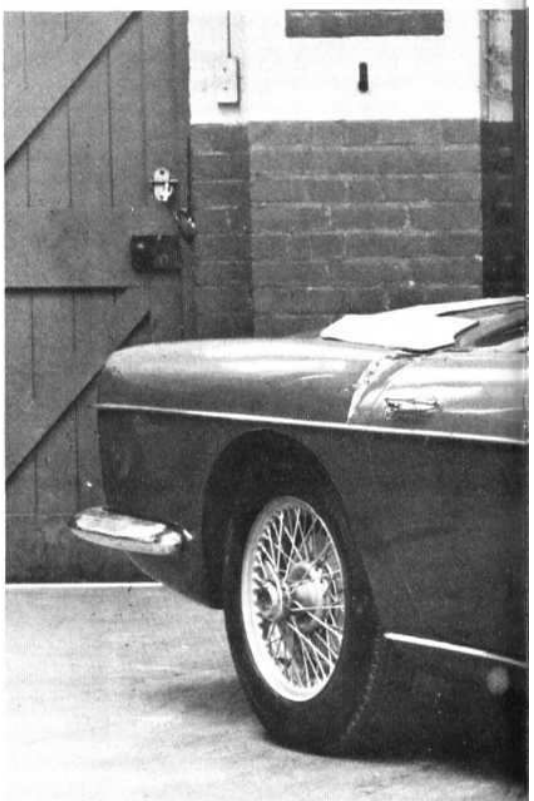
MGs you never saw



Before this, nobody has ever been allowed to look behind the scenes at Abingdon. Nobody knew what secret projects had been started, then suspended. A few weeks ago we were given a privileged glance at some of MG's most mysterious prototypes. Truly, these were the MGs that "Got Away".

By : Graham Robson

WOULD you have bought these recently-designed MG sports cars? A monocoque 2+2 car, intended to replace both the Midget *and* the MGB, with alternative engines, all-independent suspension and Hydrolastic units? A chunkily attractive little two-seater, open or in fastback form, based very closely on Mini-Cooper S engineering? Even a mid-engined two-seater wrapped around a tuned Maxi 1750cc power pack, with De Dion rear suspension?

Of course you would. After all, they were not fantasies. These were all designed in the 1960s, all run, all partly developed. They were all meant to be sold in large numbers from the Abingdon factory. Prototypes of the first two cars *still* exist somewhere in the group.

The production lines of MG at Abingdon are as busy as ever. They have been churning out Midgets since 1961, and MGBs since 1962. But that does not mean there have never been any new ideas in the background. MG have never gone in for rapid change – after all, there have been only five basically different MG sports cars since 1945. Surely there must have been a lot going on behind the scenes all the time?

Right. There has. Normally we never get to know about the cancelled projects, and for some strange reason a car maker is rarely proud of them. Some of us heard lots of rumours over the years, and wished we could look behind the security curtain. It took time, and a lot of nagging. I have now been shown all MG's post-war designs – and some of the sideline prototypes would make any enthusiast's mouth water.

On the surface, of course, the pace of life at Abingdon has looked very gentle since the 1950s. MGA and MGB sales now span 20 years, and there have been Sprites and Midgets buzzing around in one guise or another since 1958. But that's only a superficial impression. Hidden away, behind closed doors, Abingdon's noted engineers have usually been beavering away with advanced prototypes and new ideas.

Why have none of them actually been produced? Put it down mainly to one pleasant problem – that you, the public, have kept on buying the existing models in huge numbers, and still show no sign of losing interest in them. The other factors concern mergers, capital spending, and priorities. Triumph have already revealed their hand for the rest of the 1970s – the TR7 – and I don't think even they thought that the MGB needed replacing before the TR6. Nowadays there's more involved in getting approval for a project than ensuring that the design is right!

Before beginning to describe these exciting cars, I have to apologise for using a lot of hieroglyphics. Other firms might give new cars code names, but here at Abingdon they have always had numbers. Either a car has an EX . . . number, or (later) an Austin-Morris ADO . . . number. It's confusing at times – even the engineers themselves slip up occasionally – but it's also the only way to tie down the projects accurately.

Just to look back at scale models, drawings and project registers would have been hopeless, so I am especially grateful to Don Hayter for his guidance. Don came to MG in 1956 as a production body designer, additionally to look after special competition projects. One of his first jobs was in connection with lightweight MGAs, then record cars, and then the fast-back style of Ted Lund's Le Mans MGA. Before this he had worked at Aston Martin on (among other things) the DB3 and DB3S, and the first of the DB4 prototypes.

Don recalled that in 1956 the MGA had just moved fairly smoothly into production, but that work on the tiny Healey-inspired Sprite had not yet started. He remembers also that works MGAs had been sent to the TT at Dundrod the previous year equipped with two different designs of twin-cam engine. One, further developed, was finally used in the MGA Twin-Cam, while the other – an all-Austin unit, and entirely special – was subsequently abandoned, and never appeared in public again.

There were two different twin-cams, quite simply because BMC were indulging in a straightforward "design competition". According to Don Hayter, the Austin unit was completely special, and might eventually have been intended for other BMC models. That which went into production for the MGA Twin-Cam was a fairly straightforward conversion (like the Lotus-Ford, for instance). It was basically an Austin-designed B-Series engine, with twin-cam modifications by the Morris Engines Branch at Coventry! All quite typical of BMC thinking in the un-rationalised 1950s.

It is also worth remembering that the MGA body style had its origins in a special

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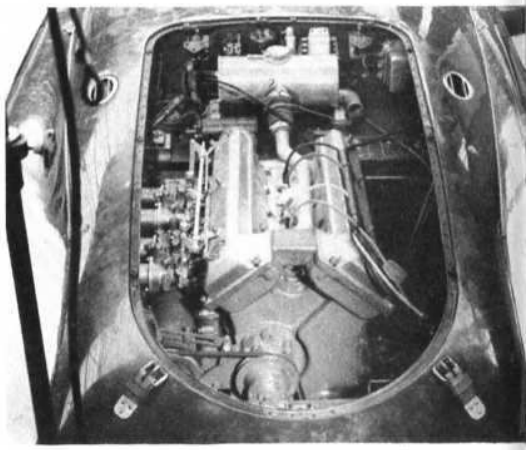

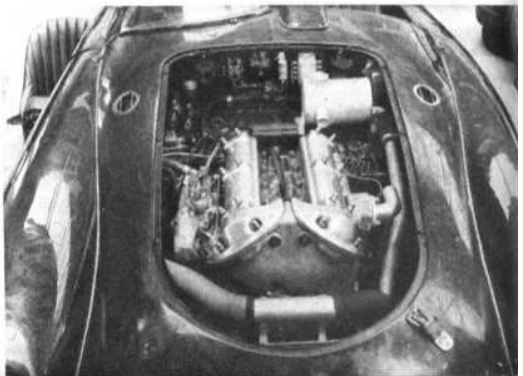

Above, the MGA Twin-Cam unit was first seen at the 1955 TT and the Austin version, below, was also there, but not seen again.

Above and below, the restyled MGA was designed by Abingdon and built by Frua, EX214; some Maserati is evident in grille and boot shape.

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body supplied by Syd Enever to George Phillips in 1951, to clothe an MG TD chassis entered for Le Mans.

We must also note that the MG Midget evolved from the Austin-Healey Sprite, and that the Sprite was conceived in Warwick. Donald Healey and his son Geoff laid out the bare bones of a small sports car using Austin A35 mechanical components, built prototypes and sold the idea to Sir Leonard Lord at Longbridge. Lord then turned the partially-developed and tooled project over to MG at Abingdon, and the car went into production at Abingdon in 1958.

Once Sprites were being delivered, and were obviously a success, BMC managers soon warmed to the idea of making an MG out of it. At that time there was no stigma attached to "badge-engineering", which Sir Leonard and George Harriman frankly encouraged. They were cold-bloodedly ready to authorise mechanically identical Sprites and Midgets, different only in trim and badging. Indeed, the last Sprite was built in 1971, ten years after the shot-gun marriage was arranged.

The first Midget of 1961, with body styling reworked from the "frog-eye" Sprite, evolved in a very curious way. MG's Syd Enever was told to redesign the tail of the car, behind its cockpit, and to include a boot lid, while Donald Healey in Warwick was given the job of restyling the car's nose. The two men were given very strict instructions by BMC management that they were *not* to compare notes!

In spite of this incredible state of affairs, the result was remarkably pleasing. Only the flattened rear wheelarch cutout (since rectified but later re-introduced) seemed to be at odds with the complete concept.

Even though the MGA was all new in the mid-1950s, Enever's designers were encouraged to try anything new. They had not long been granted independence of Cowley and Longbridge, and were beginning to enjoy it. The Le Mans EX182 prototypes were thought good enough only for their first year, and with the 1956 race in mind two other versions were proposed. EX183 looked just like any other MGA (but wasn't), while EX186 was very different indeed.

EX183 had an MGA-shaped shell, built entirely from light alloys, but had a much lighter tubular chassis (not a space frame). EX186, on the other hand, took a different approach. The standard pressed-steel production chassis was altered only to accommodate a De Dion type of rear suspension, and to support a longer body. The body itself was entirely special. Like other special wind-cheaters designed at Abingdon, it was wind-tunnel tested by Armstrong Whitworth at Baginton, near Coventry. This one, nominally a two-seater, was intended purely for sports car racing, looking sleeker and slippier than any previous MG. The driver sat out in the open, protected by a wrap-around screen, with a head-rest behind him, but with a metal cover over the "passenger" space. There was no seat under that cover, but one could have been added if the rules required it.

Both cars used Twin-Cam engines, and both were built with Le Mans endurance events in mind. Neither raced, purely because BMC had called a halt to their racing programme after the 1955 season, with its horrifying accidents at Le Mans and Dundrod. EX183 was subsequently dismantled, while EX186 was sold off to an MG fanatic in North America. Where is it now?

Once the splendid little mid-engined EX181 record car had been tested in 1957, and proved its efficiency, MG designers began thinking about similarly derived shapes for their next generation of road cars. As far as the MGA was concerned, little attempt was made to do any major reshaping of the car during its production run, though at one time the MGB-type of forward-leaning nose was tried on a development car.

There was one serious attempt to rebody the car completely, while retaining the existing MGA chassis. Christened EX214, this started life as a series of body lines which were then supplied to Frua in Italy. Frua were then requested to build up one prototype to that style, and to design a suitable interior for that car. In those days at the end of the 1950s, BMC top management at Longbridge were convinced that Italian coachbuilding was best. They were often prepared to spend money to have a scheme built up, rather than study small-scale models or stylised sketches.

Although another Italian styling house, Pininfarina, had had a contract with BMC since the mid-1950s (first fruit of which was the Austin A40 in 1958), they were not asked to tackle this job. Only the one Frua prototype was built, passed around for approval by management, turned down, and shortly cut up. The only other major attempt at restyling the MGA was Hayter's own work on the Le Mans car owned by Ted Lund. This machine (see *T&CC* January 1975) was very definitely an Abingdon project, even if BMC's current racing ban caused it to happen in an under-the-counter way! The screen and doors were pure MGA hardtop, but the swept tail and recessed racing filler were Hayter's own.

Mechanically, the MGA had an easy time over the years. The Morris Engines Twin-Cam "conversion" was used after 1958, and from time to time the push-rod ohv engine was enlarged. Occasional thoughts of converting the rear suspension to coil springs with radius arm location (while retaining the same beam axle), or even to independent rear, were squashed, but towards the end of the MGA's run there were intriguing possibilities of yet another new BMC engine.

Alec Issigonis was pursuing a future policy of designing very compact new saloon car designs, and vee-formation engines loomed large in this philosophy. Longbridge engineers spent many months designing a family of engines – not one of which saw the light of day. Later, of course, Ford took up this theme, but it was quite definitely BMC in Britain who first embraced the thought of a vee-4 and vee-6 family of engines using standardised tooling. The angle between banks was 60 degrees, and although there was a single camshaft nestling in the centre of the vee, valve operation was by the very complex BMW/Bristol type, which included cross pushrods.

For the MGA, and subsequently for prototype MGBs, a 2-litre vee-4 unit was proposed. In the MGA, naturally, this dropped in fairly easily, apart from a surprisingly wide profile; the bonnet opening on these cars, though long, was really

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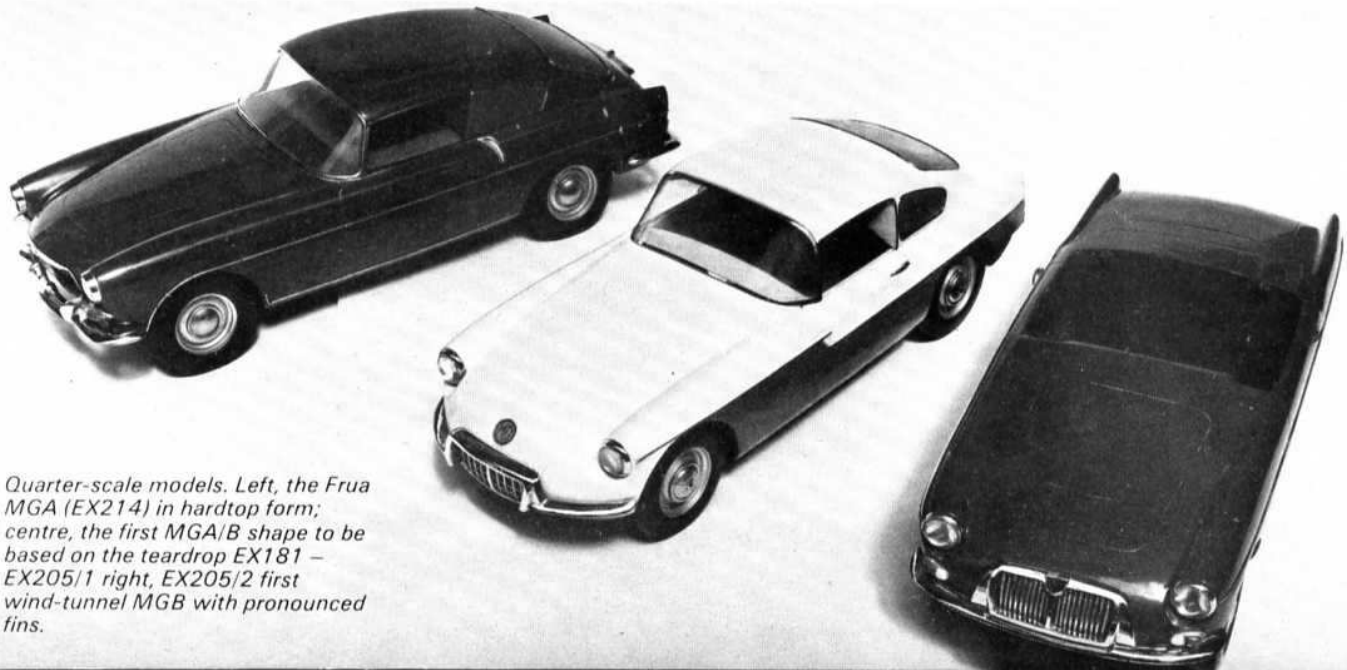

Quarter-scale models. Left, the Frua MGA (EX214) in hardtop form; centre, the first MGA/B shape to be based on the teardrop EX181 – EX205/1 right, EX205/2 first wind-tunnel MGB with pronounced fins.

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rather narrow. Even a Twin-Cam was quite a bonnetful!

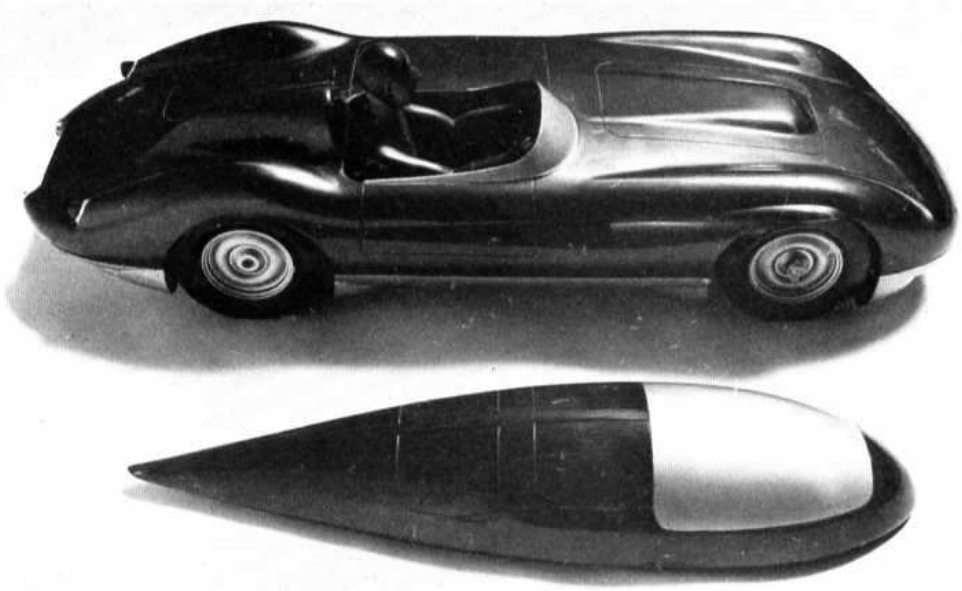
Developing the MGB (EX205 in the project register), starting from the basis of the tear-drop shape of the EX181 record car, was a lengthy business. The first styling scale models had fastback tops, were too long, too wide, too heavy, and had an excessively long wheelbase. Don Hayter recalls that his first major non-competition job at MG was to start paring away at this original idea – a gradual and well-thought-out process – until the existing shape had evolved.

Hayter insists that there was no trace of styling influence of Pininfarina in the open MGB ("Not even the slightest touches – it was all Syd Enever, Jim O'Neill, Roy Brocklehurst, myself, a few other designers, and a lot of hard work. Farina didn't even look seriously at the MGB until 1964!") – which makes the ageless grace of the MGB all the more of a credit to Abingdon.

When it came to the design of the MGB GT (EX227 in Abingdon terms), Farina was commissioned to style the coupé top. The result was well liked, and was turned into production tooling in double-quick time.

Because the MGB was a unit-construction structure, and because the basic style was so nicely balanced, there was never any intention to reshape it or to re-engineer it in a major manner, though of course the MGC and the MGB V8 came along later as "top of the line" models. Before the MGC, of course, MG designers had tried several other engines. The MGC, or AD052 as BMC preferred to call it, was meant to replace the Austin-Healey 3000, which eventually ran out at the end of 1967. At first the big Healey's C-Series engine was to be shoehorned in to the MGB structure, but it was big, bulky, and heavy. It was not satisfactory, and even at that stage it was necessary to redesign the front suspension because of a lack of space at each side and (more important) under the engine. Next along was the Longbridge vee-6, in 3-litre form, still complete with cross pushrods, but when this very expensive capital project was cancelled the final alternative was the redesigned C-Series engine, which turned out to be shorter, but no less high and very little less heavy than before!

In the meantime, and this would be in 1966 and 1967, thoughts were turning to a replacement for the MGB. The first prototype MGB had had coil spring rear suspension, and now thoughts turned to a conversion to irs. A subframe would have been needed, and the carve-up would have been serious – so serious, in fact, that a new car was then considered.



Two wind-tunnel $\frac{1}{4}$-scale models, above: top, EX186, a streamlined MGA for 1956 with twin-cam and de Dion was built, but not raced; lower, teardrop alternative with supine driver in front behind a large screen. Left, first development of the Frua shape for the MGB – looks almost right apart from twinned headlights