

Four long years

Ian Evans describes the restoration of his 1959 MGA Twin-Cam

Jacquired 33 AFD, an MGA Twin-Cam Coupé, on the death of my father on March 19, 1978 (oddly enough the car was completed in the factory at Abingdon 19 years previously to the day. Being a motor engineer and garage proprietor he had admired my 1956 MGA 1500 roadster back in 1965 but hated the thought of leaks and draughts and hankered after something a little more interesting from the mechanical angle — hence Twin-Cam YMI 1629. He then ran the car as everyday transport until November 1971 when an unfortunate skid on some ice wrote off the front end. The car was then taken off the road with the intention of repairing the damage sustained and attending to several minor jobs at the same time. Needless to say, the MG all but disappeared beneath a pile of odds and ends as it stood forlornly in a corner of the garage. Still, the radiator had been repaired (more of that later) various bits were obtained and I still possess the scraps of paper which, in my father's copperplate handwriting, say: "Front bumper £12, sill £3.10s."

Seized wreck

After my father's death the car remained in Bolton until 1979 when the problem of transporting the MG down to Christchurch, Dorset, where I was living, became fairly acute. A friend and his trailer were 'borrowed' and in one weekend we managed it although I will remember how our towing speed throughout the 280-mile journey had to be kept below 39mph — any faster and 'the tail wagged the dog'.

After all that time, what I had in fact inherited was little better than a seized wreck. This gloomy realisation, while doing nothing at all for my confidence, at least made me think about what I wanted to achieve in the end.

I have always owned sports cars and have been involved in running the TR Register for many years. One development which I have observed with increasing dismay is that the better the car, the less it is driven, the outcome being that 'concours' vehicles hardly ever move under their own power! To me this is ridiculous. An MGA T/C was constructed in the expectation that it would be driven, probably hard and certainly with enjoyment.

With the decision made to aim for a good roadworthy car which, with luck, I would enjoy driving for many thousands of miles, I was then faced with the problem of whether or not to go for exact originality or to modify the car for practical use. In opting for the latter I knew that I might offend some purists, but as consolation I would at least be able to offer them a drive!

In any rebuild I now know there are two initial hurdles to overcome: the first is to actually spend some money (money which could almost certainly be useful elsewhere) and the second is to begin to dismantle what still vaguely resembles a car. In my case the first purchase was a new genuine BMC exhaust system which I obtained for £10 at the Beaulieu autojumble. Determined to hang on to my good fortune I then spent the rest of the day cursing it — as did quite a few others — as I laboriously lugged my awkward burden around the stalls!

Thus committed, I then resolved to begin the dismembering of the car and set to on September 9, 1979, although it was to be a somewhat fitful start as other matters took precedent for several months.

With the New Year and a new baby daughter, resolution was renewed and I began to strip down the car in earnest. The interior was first, then all wings, doors and what was left of the outer sills were removed. The front valance was easy — there wasn't one! After several months' work I was beginning to realise that the project would take longer than I had expected. Having reduced the body to a bare shell, I now had to decide whether to remove it from the chassis. As I had visions of body distortion, storage problems, extra work and complications, I'm afraid I took the coward's way out! Besides, I had seen too many rebuilds enthusiastically begun and not carried through, and far too many of those rebuilds had then ended up in 'for sale' columns under abandoned rebuild, etc. So discretion won and I have not yet regretted it.

Once the wooden floorboards had been removed — I lost count after the 70th securing set screw — I was at last ready to turn my attention to the removal of the engine. At this point my worst fears were realised for everything in the engine bay was inaccessible — little wonder that the body was lowered on to a rolling chassis when first assembled! Having successfully removed everything within reach, the day came to remove the engine and gearbox. As this combination weighed over 600lb I was anticipating the manoeuvre with some trepidation, but with a borrowed hoist, the help of a friend — augmented when necessary by my wife operating the crane itself — we managed the whole operation in just over an hour, and the result was duly entered in my 'log' for the November 8, 1980.

Perhaps I should mention at this point that I had decided to keep a record both in words and pictures — more for my own satisfaction than anything else and with the car now taking on the appearance of a heap of 'autojumble' I was glad, too, that I had labelled everything which had been removed, with a note of location and fitting. All this was, of course, time consuming but rebuilds always seem to take longer than anticipated and what was obvious when first removed may not be so obvious three years later, especially when discovered at the bottom of a pile of other bits!

I soon decided that a couple of hours of uphill struggle deserved a couple of minutes cataloguing the offending item and it certainly helped to ease my wrist and back-ache!

During the removal of the outer panels from the car, I had become increasingly intrigued as to its history before my father purchased it with about 50,000 miles on the clock. The nearside front wing had obviously been replaced in that time and that side of the chassis had a deep gouge nearly two feet long. The offside door was also non-original and both offside wings had evidence of extensive battering over the length of the car while adjustable shock absorbers had been fitted at the rear, all of which indicated something of an active life.

With the engine out and ready to be tackled, I did wonder whether I would find further evidence of a hectic early life. I approached an old friend of mine whose help I thought would be useful. I had probably read too many articles on the doom-laden mysteries of the MG Twin-Cam engine for my own good and in my estimation the fact that Julian had once worked on a Maserati twin-cam unit made him a positive expert! So what did the engine reveal? The crank was in excellent

condition — the pistons were still of the original 9.9:1cr type — but there was evidence of considerable wear throughout the unit in spite of its relatively low mileage. The big surprise was the "plus 20" stamped on the piston crowns, for to my knowledge the engine had never been rebored. Thanks to the help of Peter Wood, the Twin-Cam specialist, and other members of the T-C register, obtaining the many new parts needed did not prove as difficult as I had anticipated, even though throughout its productive life the engine received a constant series of modifications — how the dealers must have loved them — and the engine rebuild therefore incorporated most of these.

The most important improvements were the fitting of 8.3:1cr pistons, phosphor-bronze valve guides and a modified distributor. New big end shells, timing chains and starter ring were fitted also, while as the exhaust cam needed cleaning up and an MG Twin-Cam profile was not available a Lotus one was used instead as it was almost identical. Throughout the work on the engine, a local firm, Taurus Engineering of Bournemouth, was very helpful, balancing the crank, clutch assembly and pistons. The dreaded job was the timing of the engine. So much had been written on this subject that it would fill a book all by itself, but in the end teeth were gritted, common sense was used and all the dire warnings were put aside. The task actually took 4½ hours — four hours for the first cam and half an hour for the second — and apart from needing a great deal of patience, it was fairly straightforward.

At last the engine, freshly painted and complete with its auxiliaries was tied down and prepared for its first run in ten years. Exactly one year to the day after being removed from the car it was started up. My notes record the fact but I remember best the feeling of elation, for not only did the engine run sweetly — so much so that our previous rope-work proved somewhat superfluous and with it still running we were even able to manoeuvre the engine on its trolley — but there were no leaks of any vital fluids either. The only real problem during the first 1½ hours of running was having to hold up and continuously refill the plastic funnel which acted as the fuel tank!

As the rebuild on the engine was progressing, so work on the rest of the car slowly began to show more positive results. With the engine and gearbox out I indulged in the luxury of having the car steam-cleaned, and having seen the result wished I'd had it done sooner. The severe crash damage to the front was the major area attended to first and once again I was fortunate in being able to rely on the help of another good friend, TR enthusiast Brian Toalster. His skill with a welding torch is legendary and once the front end began to resume its proper shape and another chassis extension had been fitted it seemed that real progress was taking place at last. The massive and complicated chassis was de-rusted, given one coat of 'Trustan' and two of 'Bonda-Primer' followed by two coats of gloss enamel. (Against all advice I chose bright red and was to so much regret the final dazzling result that a year or so later I painted the whole chassis yet again — this time in black). As I also treated all the new panels and repair sections with coats of 'Trustan' and 'Bonda-Primer', by the end of the re-build I felt I should have bought shares in those firms!

In common with most rusty MGAs both body



Above left, two shots of the car before work began showing the rust damage and the crash-damaged front end. Above, after restoration. Above right, the completed engine prior to testing. Far left, nsf wheelarch showing the removable access panel. Left, work on the car in progress. Note the fully repaired front which used standard MGA parts. Right, complete! The start of the first family outing. Ian Evans muses that neither daughter was born at the start of the rebuild!



sides were particularly bad around the 'B' post area so all this was cut out, leaving a frighteningly large hole. Then the doors were hung on what remained of the 'A' posts and these were then used to locate all the new panels, when, much to my relief, everything finally fitted.

The coupé roof appeared fixed to the rest of the car more by gravity than anything else and many hours were spent cutting and shaping little pieces of sheet steel at all four corners. Given the choice I now know I would re-build a roadster rather than a coupé for a roadster is much easier to work on.

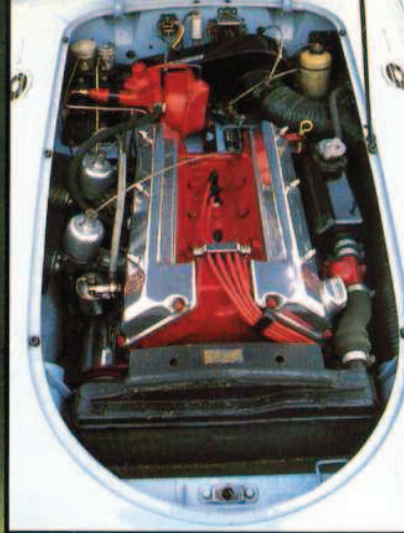
The braking system employed by MG for the Twin-Cam, of four-wheel Dunlop discs, was unique at the time and, in the case of my car, totally useless as everything had seized solid, the discs themselves also being badly rusted. The master cylinder was replaced with a comparative, though non-original, one. The pipes were all replaced with Handy copper ones and, in the course of removing the front discs for skimming,

more evidence of the car's early life was revealed. On removal, the offside spring fell into three pieces and the swivel pin was also bent, while the nearside lower trunnion was shaved flat with both lower wishbone arms being bent back half an inch! Nevertheless, after some two years' work, the car was showing undeniable signs of progress; the engine was ready, the chassis and central body structure was rebuilt and the braking system was working well again.

While tackling the various jobs now required to make the car mobile I carried out several modifications which I hoped would make it a more practical vehicle to run. I decided to utilise one 12V battery instead of the usual pair of 6V ones, and many a storeman's eyebrows were raised as I rejected battery after battery on its size and shape alone, finally discovering that the one for a 2.0-litre Cortina was ideal once I had sawn off the lugs. This went in the nearside carrier, the other being occupied by the fuel pumps for the advantages of better protection and easy access.

It was at this stage too that I suffered what could have been a major setback. Soon after the car was crashed in 1971, Marston Radiators of Manchester repaired the radiator, which I was very pleased about as Twin-Cam radiators are almost unobtainable. When offered up for the first time, however, there was no way that it would fit. Scouring the parts book, I found that it had been re-assembled not only upside down but back to front as well. When the men at the local Marston branch heard this, they not only did the job again correctly in 24 hours but would only accept a fiver 'for a drink for the lads,' and a promise that I would show them the completed car when it was eventually on the road. This attitude I found typical — and very pleasing — of many trade concerns I dealt with.

My troubles still weren't over though, for when I came to fit the radiator, I had to shorten the newly sprayed duct panel by two inches and the only way was by using a hammer and chisel!



Once the engine bay was prepared, that part of the car became the first to be sprayed in colour. The original specification was Mineral Blue with black trim, the car being one of only 11 coupés in that colour, but at some time this had been changed to an unknown lighter blue and the roof sprayed dark blue. I wanted to retain an MG colour and fancied a pale blue known as Iris Blue — it looked attractive in the tin, so I was very pleased and relieved when I could admire the gleaming engine bay resplendent in the car's final colour.

As soon as I could gather together the necessary hoist and straps the engine was lifted into the now-completed bay. We made six attempts before the power unit — progressively shorn of its jutting out bits — was eventually dropped into place and the gearbox then mated to it. Again with a view to practical road use I had taken a leaf out of the racing mechanics' book and greatly enlarged the access panels in the inner wing arches with the result that now it is often easier to gain access to the engine from the side rather than through the bonnet aperture itself.

With the engine installed, a major step forward had been taken. Even so, with hundreds of items still to be fitted, and working an average of at least one hour per day, it was another three and a half months before I was able to reward myself with a drive of the car (minus wings, doors, trim, etc) on the surrounding forest tracks. That first 'drive' probably did much more good for my morale than it did for the MG but my enthusiasm received a great boost as the car could now move under its own power after 11 years.

The rebuild was at last gathering momentum and I was now ready to tackle the wings and doors. Fortunately both the boot and bonnet lids were undamaged and in good condition. Not so the doors, however, for both frames were loose, the bottoms rotted out and the aluminium skins badly dented. These were duly repaired and Brian, the welder, really came into his own where the wings were concerned. As I was unable to afford new ones, he repaired them all with great skill and patience. They were quite bad too, each rear wing, for instance, requiring the welding in of no fewer than ten separate pieces with each one individually shaped.

More decisions were now taken regarding the practical use of the car. The parcel shelf was cut back to allow more room for my two young daughters and the spare wheel was re-located within the boot. I also obtained second-hand sets of front and rear lights containing orange flasher lenses as the last thing I wanted was to be hit by the confused driver of another vehicle on a dark night. Both these modifications were, of course, identical to the later Twin-Cam specification. For a mere 70p I also obtained a pair of uprated 70W-50W sealed-beam headlamp units — at the Beaulieu auto-jumble — where else?

Another four months passed as the laborious



but all-important task of repairing and then fitting each of the wings and doors continued. A sense of urgency now began to creep into the work for there was a deadline to be met if the car was to be ready for Whitsun 1983 and the 25th anniversary of the start of Twin-Cam production — to be celebrated at the MGCC Silverstone weekend. Still, patience was finally rewarded as the effect of well-fitting panels was very pleasing. It is true, unfortunately, but I think that a re-build can often be spoilt at this stage in the sheer frustration of trying to get panels to fit and the natural desire to get the car completed.

The standard of paint finish on any rebuilt car depends, of course, on the preparation so as a start it was decided to go back to bare metal — at least the car was now all metal! All the previous coats of paint, requiring no fewer than three attempts with paint-stripper, were removed. The shining silver body looked quite impressive — from a distance! The ancient art of lead filling, complemented by its more modern counterpart, were then employed, all the previous work being now rewarded as only the thinnest skim was required to achieve a ripple-free surface. I treated

the metal to one coat of 'Trustan' and one of 'Bonda-Primer' before hand-painting it with a high-build primer which sanded easily and gave an excellent base for spraying. The whole of the above preparation was done in two halves, divided at the windscreen but whereas the preparation of the front of the car went well up to and including the primer surfacer stage, the entire rear section, comprising roof, doors, rear body and wings, produced a reaction problem and therefore had to be completely stripped right back to bare metal once again. It's at moments like this that the famous British stiff upper lip is needed! With just three months to go to Whitsun, the pace of the rebuild had to be stepped up again and long hours were spent attempting to achieve a final body finish reflecting all the effort and attention which had gone into the parts the eye doesn't reach!

By the middle of March, what was in many ways the most enjoyable stage was reached — fitting out. The windscreens were fitted first (by a local specialist who afterwards swore he would never do a rear window like it ever again!) and then the interior was completed and finished off with a new set of carpets and carpeting in the original grey. The fitting of the chromework was,

of course, most enjoyable, for the car really did seem to 'come alive' as the paintwork at last had some contrast when all the gaping holes were filled up. It is probably pure anticipation of the final moment which makes fitting out such an excruciatingly long process — as fast as I struck off one item from my list of 'final' jobs, another had to be added so that it never seemed to get any shorter.

At long last however, and one month inside the deadline, the necessary MoT was obtained (all the mechanics stopped work to have a look — most gratifying!) tax and insurance were arranged and once more MGA Twin-Cam no 1629, first completed March 19, 1959, re-built April 28, 1983 took to the road. The feeling of deep satisfaction which comes from actually driving on the open road a car which has been transformed is one which will strike a chord in all those who have ever done it, and it was a proud moment indeed when I parked 33 AFD with the other Twin-Cams at the premier MGCC meeting of the year. It was also particularly pleasant to meet fellow TC register enthusiasts whose advice and help I had sought over the 'phone and who at last I could meet, as well as to confound those who swore I'd never do it!

Since then I have driven nearly 5000 miles and so far nothing has leaked, fallen off or broken. The car is used almost every day and has proved totally reliable. I ran-in the engine for 2000 most frustrating miles, and spent most of the first two months 'tuning' the engine to my satisfaction. The car is good fun to drive, has turned out to be faster than I expected, yet returns 25mpg in local driving and 34mpg on a journey.

Was it all worth it? I certainly believe so and I know that, if he was still alive, my father would agree. ▲

