

MG TA Tickford Rebuild Project

Martin Curren describes the rebuild of his TA Tickford which he has owned since 1968

**MG TA chassis number 3184, engine number 3442,
Tickford body number 4674**

**MG build date 13th March 1939, Salmons &
Son build date 15th to 21st April 1939**

I bought this car in 1968 in Plymouth. It was my first car and I subsequently ran it until 1976 as my daily car including regular trips from Plymouth to Leeds where I got my degree. It was a runner when I bought it but it had no hood and only cycle wings on the front. I fitted full front wings and running boards and got a local trimmer to make up a rudimentary hood.

The car was laid up in 1976, not being suitable for our growing family, but I was always able keep it stored in the dry and hoped one day I would be able to restore it to its former glory. That chance came in 2010 when it became my first retirement project.



This is the car before it was dismantled in 2010

Between March and October 2010 I completely stripped the car down to bare chassis level. The chassis itself was sound apart from needing some repairs to the rear body mounts, repairs to the battery carriers and a new front pin for the rear spring hanger on the offside. I repaired these bits myself and then had it shot blasted, primed and painted in satin black. I got a local engineering shop to make me up a new pedal shaft drilled and tapped for a grease nipple so that I can lubricate the pedals.

The rolling chassis was built up in the usual way for any T Type with the possible exception of the road springs which I took to Jones Springs in Darlaston and asked for them to be reprofiled with an extra one inch lift to cope with the extra weight of the Tickford body. The springs seem to be standard TA ones but I thought it sensible to allow for the extra weight. The Tickford body adds at least another two hundredweight to the car compared to the standard body.



The Tickford has an additional metal sub frame mounted on the chassis and bolted to the front, and rear outriggers plus additional mounts bolted each side adjacent to the front hand brake cable mount. These brackets are handed with the nearside one allowing for the two petrol pipes to run through it.



The subframe on my car was badly corroded and needed quite a bit of new metal welded in to certain parts. I made up a wooden jig to keep the shape correct while I made the repairs. This frame provides the essential shape for the rear wheel inner arches and acts as a mount for the wood frame uprights for the bulkhead, the door posts and the wood over the rear arches.

The repaired subframe was then mounted on the chassis and the scuttle toe board and heel board fitted to ensure everything lined up. The scuttle is unique to the Tickford having an extra metal strip added around the outer edge making it slightly wider than the standard car. The scuttle on my car was in good condition and just needed cleaning and painting. Similarly the toe board was fine and is the same as a standard TA. The heel board is an all steel one instead of the wooden one on the standard car. On my car both outer edges had corroded badly and I made up new ends and welded them in. The battery cover over the rear axle is also unique to the Tickford all in steel with two removable covers for the batteries. I made up a new one in place of the single sheet of aluminium on my car. The complete installation, together with the original floorboards, fitted together pretty well.



An old rear body bracket



A pair of new aluminium body brackets

Progress then slowed down. The Tickford has two key brackets that form the curves at the back of the body tub bolted to the metal sub frame. These are made of aluminium and the brackets on my car had almost corroded away because when you have steel and aluminium in contact

it is the latter that suffers the most. I had to find a source for some new brackets. Eventually I located a

small company in Bridgnorth who were prepared to have a go using what was left of my old parts as a pattern. Initial attempts failed to get the right shape but eventually they got it right. However it took the best part of a year to get them made. I also got the alloy pieces that act as rear mounts for the subframe cleaned up – these also support the petrol tank.

During that time I also found a brass foundry in Telford that could make me some 'pram irons' for the hood because these had always been missing on my car. They did a good job and stamped the body number on the inside of the pieces as per the originals. By now it was 2012 and I started on the body frame to create a new tub. As with the standard TA, all the body timbers are made of ash and there are 14 that make up the rear of the tub, and another 14 that make up the scuttle and under door framework. Each door has another 8 pieces of wood. My car only had two pieces of the scuttle that were salvageable and two pieces of each door that could be used again. Fortunately I had enough to create patterns for each piece.

I managed to find a large amount of seasoned ash and bought myself some woodworking kit including a band saw, a planer, a belt sander and a router. Armed with this lot I spent the next year making and fitting each individual piece until I had a complete frame and two doors that fitted. I assembled the windscreen to ensure the fit of the scuttle was right and would allow the opening screen to fit and seal properly. Quite a long time was then spent installing the winding window mechanisms into the doors to make sure they worked and would line up with the hood bows and door apertures.

The next job was to refurbish the hood bows of which there are three with an additional front stick that mounts on the windscreen. The metal parts cleaned up fine but I decided the wood had to be replaced in every case and I also made new cant rails that swing over the tops of the doors. Once this was all done I fitted the radiator and headlight brackets so that I could check the alignment of the bonnet and front wings. Finally I made up new inner wheel arches at the rear from new steel since the old ones had almost rusted away. I made each out of two pieces spot welded together.



The body frame nearly finished, just the third hood bow to make

In 2014 I felt the body was ready to be skinned and I looked for a specialist who could undertake the work, preferably not too far away so that I could keep an eye on it and sort out queries if they arose. I

was fortunate to find David Cale who runs Cales Specialists just outside Worcester. David learnt his trade at the Morgan factory and has set up his own workshop specialising in bespoke bodywork. He had not worked on an MG Tickford before but was confident he could do the job based on the frame I had built and a variety of patterns and pictures that I have. I had to wait nine months for him to be able to fit it in but I'm glad I waited because he did a great job re-skinning the complete tub and



doors in aluminium. We discussed whether to do it in steel or aluminium and I opted for the latter to

save weight, particularly for the doors, and also to limit future corrosion. He managed to get the swage line down each side lined up well with the bonnet tops. The bonnet tops are also unique to the Tickford, slightly wider at the scuttle and with a swage line down each side.

This was all finished by November 2014 and the car trailered back home.



In the meantime I had stripped the engine down and thoroughly cleaned and inspected everything. The car has the original TA engine as first fitted to the car MPJG 3442. It had been bored out to +80 and one bore was badly scored from the little end where the little end bolt had come slightly loose and allowed the pin to slide though the piston slightly. The most critical thing was the fact that the water jacket on the offside of the engine (manifold side) was badly cracked. Not that unusual for a TA but the cracks were extensive and I had previously tried to reduce water leaks with copious amounts of Araldite. Despite all this I was keen to stick with the original engine if possible. I decided to use Coventry Boring and Metalling after visiting them to look at their workshop and facilities and see what they could do. I was very pleased with their work and service.

I first asked them to repair the block and crack test the crankshaft. The crank was sound and I next asked them to pressure test the block and head – fortunately both turned out to be ok. So the decision was made to sleeve the block back to standard, fit new pistons, re-metal all main and big end bearings, lightly skim the cylinder head and fit valve guides and seats suitable for modern fuel. I also persuaded them to lighten the flywheel by taking about 5 lbs off. I don't think they had done this for a TA before but I felt that the standard TA flywheel was so heavy it would benefit from this – it is still very heavy! I looked into the option of a counterbalanced crank but I decided to stick with the standard one and have the whole bottom end, including clutch assembly, fully balanced. This leaves the rotating mass a lot lighter than having a counterbalanced crank and, at the end of the day, you rarely rev these engines beyond 4,000 rpm.

I asked Newman cams to check the camshaft and see if it could be re profiled. They advised that there was too much wear and strongly advised that I have a new one. This was before the Octagon Car Club were able to supply them and it was expensive but I felt it was an important step in getting the engine running well. I also fitted new timing gears and timing chain from the MGOCC. I asked Coventry Boring to ensure that the new camshaft would fit the old bearings properly.

This was all done by February 2015 and I collected all the parts and started assembling the engine at home. I had already fitted the original back axle which just needed new bearings and some shimming and

I had completely stripped and rebuilt the gearbox which was simply very dirty inside. The only thing I did was fit a new front seal for the input shaft. The engine and gearbox assembly was installed and running by the end of 2015.

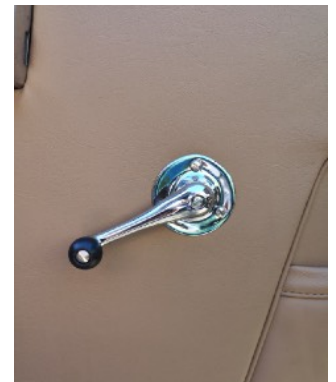
During this time I had also sorted out most of the parts that might need new chrome work. As well as the usual headlights, radiator surround and so on, the Tickford has a wide array of various hood parts that need chroming as well as a comprehensive windscreen frame and brackets and catches that allow it to open from the top – all of



Some of the chrome parts associated with the windscreen and hood

which are chromed. In total there are 28 individual chrome parts associated with the hood in addition to the external beading and the rear window.

All these parts were cleaned up and checked for fit and about 80% needed to be re chromed. I had the radiator surround repaired and re chromed by S&T in Bristol but I opted to have all the other smaller parts done by Castle Chrome in Dudley. Both did a good job. At this stage I also needed to get all the rubber parts most of which came from the MGOCC but some, being peculiar to the Tickford, I sourced elsewhere. This included the seal at the top of the windscreen and the seal that goes around the windscreen frame itself. Woollies and Phoenix Trim both have extensive ranges of rubber seals and other bits of trim I also used them for the window channel felt used in the door windows. I also needed the special grommets that fit in the bulkhead to seal the wiper spindles. I thought Y type ones might work but Pete at the Club dug some out and they were the wrong size. He very helpfully pointed me in the direction of Paul Beck and they had what I wanted. They were also able to supply window winder handles very similar to the originals. I also needed the correct door handles (my original ones were not right) and I sourced these from Peter Radcliffe in Hull who was still running the SVW business at the time.



The drivers door has a lock and the passenger door has an MG logo

By this time we were into 2016 and I did a trial fit of all the body panels prior to painting. Most of this is the same as for the standard TA with the exception of the petrol tank which has special alloy mounts with studs fitted into the rear bodywork for the top of the tank straps and the tank sits on the special cast aluminium brackets previously noted. The other main difference is that the running boards have a different fitting arrangement underneath the doors. I think the original running boards must have been made specially for the Tickfords but I only had a pair of standard ones and adapted them to fit.

The car was originally a single tone green (Apple Green I think) but I decided to go for Duo Green which I thought would suit the car even better. Tom Wilson in the States was able to tell me that the two colours are Westminster Green (dark) and Almond Green (light). I got these mixed up in cellulose and opted to have a go at this myself. The results are not bad for an amateur and I certainly learnt a lot as I went along. I left the panels for a couple of months before fitting them so that the cellulose would have extra time to harden.



The car with painted tub and panels

During that time I stripped the instrument panel down and took all the interior wood trim back to bare wood before applying a new stain and several coats of varnish. I managed to clean and refurbish all the instruments myself and got everything working even the clock. I also stripped the seats down to see what could be salvaged. I

made new wooden bases but the seat backs and hinges are steel and they were fine after a coat of paint. The spring backs were also good to use again. The base and front of the seat back are trimmed in leather but the rear of the seat back is trimmed in carpet. The trim is attached to wood strips attached to the outer edge of the seat back and I had to make new wood strips for both seats. I had the seats and door cards professionally trimmed in leather. The carpet is Wilton produced in small quantities by David Tankard to the original patterns and colours available in the 1930's. In my case it is green with a black fleck. David has been an avid collector of Tickfords and Tickford parts and it is sad to know that he is now not well enough to realise his dream of driving a finished car on the road.

The seats are special to the Tickford and have a useful hinged back. Originally the bases were filled with an inflatable bladder and I can still remember using these when I first had the car and on a long trip they would always leak and deflate. Although new bladders are available I opted to go for solid foam filled bases as a more practical arrangement. Dean Russell in Rubery did this trim work for me.

There were three main jobs to do next to get the car finally on the road. Wiring, interior trim and the hood. I felt I could tackle the wiring and the interior trim myself but I would need a professional for the hood.

In terms of the electrics I had been thinking about the main elements for a while. In the main I have tried to keep the car as original as possible except where it was either safer or more practical to change things. I tried to adopt the same approach with the electrics. So I have kept the original third brush dynamo and CJR3 control box, the original distributor, coil and fuel pump and kept it all positive earth. The original wiring loom was only good as a pattern as was the dash loom. So I bought a new loom for a positive earth TA from Autosparks with built in flashing indicators and this included a new dash loom.



The under-bonnet wiper motor next to the control box

brush dynamo I decided to fit LED bulbs wherever possible. After much research I managed to find suitable bulbs for the panel lights, the interior light, front and rear sidelights and brake lights and the headlights. They reduce the load considerably and are brighter at the same time than the originals. I managed to wire up the indicators in such a way that the trafficators work in unison with the front and rear orange flashing indicators. The arm comes up and the bulb flashes in line with the others, a bit



Newly trimmed seats and door cards

The Tickford has the same electrical set up as the standard car with the addition of semaphore style trafficators fitted just in front of each door, an under-bonnet wiper motor driving individual wipers via a series of cranked arms under the dash and an interior light fitted on the hood bow just above the rear window. So I installed the new looms – both the dash and main loom – and first of all wired up the dash and fitted all the instrument panel lights. I then added extra wires for the trafficators, the wipers and the interior light. To reduce the load on the old third



The trafficator acting as a side repeater



A photo showing the rear light set up including the high level brake light

like a side repeater. I also decided, in the interests of safety, to fit an extra high level brake light and chose a simple LED one mounted above the petrol tank. It is bolted to a stepped aluminium bracket that is clamped under the fuel tank straps. In this way no extra holes had to be drilled anywhere. The original indicator switch was similar to those found on Morris Minors and positioned to the right of the Speedometer. My car had always had a stalk indicator switch fastened to the steering column and I opted to keep that as more practical and use the hole for the indicator switch for a water temperature gauge.

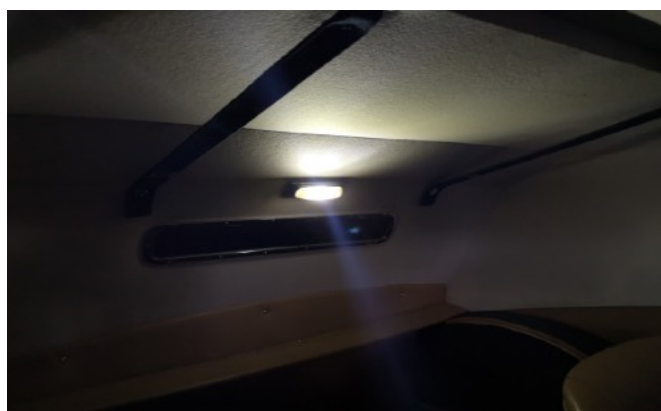
Once all this was complete I could drive the car on the road and, subject to dry weather since there was still no hood, I started to cover some miles and start running the engine in. I had also made a decision on my favoured professional to do the hood. I knew of three possibilities, Peter Radcliffe at SVW in Hull, Suffolk & Turley in Nuneaton, and a self employed specialist living

near me in Worcestershire called Bernie Lewis.

Peter had lots of experience of Tickford hoods, Suffolk & Turley had done at least one for Derek Hopper, and the local person had not done a Tickford hood but was well recommended locally although he had a long waiting list. I preferred to try the local option on the basis that it would save on

transport distance and time and would mean that I could keep an eye on progress and resolve queries on the spot with the professional.

So I called Bernie Lewis and agreed to drive the car to him so that he could see what was required. This



The interior light attached to the rear hood bow and a close up of the same. My car was missing the interior light and the late Derek Hopper had a spare one which I bought from him. When he had finished building a couple of Tickfords himself Derek was very helpful with various patterns and measurements as well as odd bits like this light.

was Easter 2017 and he had work lined up for the rest of the year. However I felt confident that he would be able to do a good job and it was also obvious that he liked the look of the car and saw it as a good challenge. So we agreed to aim for early 2018 and he would have the car for about 6 weeks. With his advice I bought the material needed for the hood, lining and external beading from Marstons in Digbeth, Birmingham, and in the meantime I started work on the interior trim.

Apart from the seats and door cards my car was missing all the interior trim. There are trim panels around the rear of the car and there are carpets covering the rear wheel



Interior trim behind the seats

arches, the battery cover, the heel board, the transmission tunnel, the floorboards, the gearbox cover and the front side foot wells. There was also a gaiter for the handbrake. David Cale who skinned the body tub for me mentioned that he had done some work for someone with a TB Tickford and I was able to get in touch with the owner Clive Brook. By good fortune he had stripped the trim out of the car and I was able to take photographs and cut out paper templates of all his trim pieces. In all there were 17 different trim pieces and this gave me a good guide as to what goes where.



Front interior trim

Taking these patterns as my starting point I cut out the trim panels to fit the rear of my car and covered them in PVC to match the leather used for the doors and seats. I also cut out all the carpet pieces for the rest of the trim and sourced an MG heel mat from NTG. I eventually got these to fit well and took all the carpet pieces to Dean Russell for him to bind the edges, stitch in the heel mat, insert lift a dot fasteners for the floor carpets and make up a handbrake gaiter. The original foot well arrangement was a single piece of carpet each side stuck to the well and with a large pocket on the passenger side. I decided to alter this arrangement and carpet just the front part of each well held in place by a vinyl covered trim piece at the rear of each well with a pocket in each.

Finally I made up an additional vinyl covered box cum armrest that sits between the seats on the transmission tunnel. As well as general storage this houses two modern usb charging points directly wired to the battery with negative earth. This enables me to charge modern equipment such as phones or a satnav if necessary.

This was all finished by the end of the summer of 2017 and I completed 600 miles by the end of the year and did an initial oil and filter change. The car then went into the garage to await the hood work scheduled for January 2018. I took a call from Bernie Lewis towards the end of November to say he had a gap in his workshop and could take the car in straight away. I jumped at the chance and said I would be there on the next dry day. I got the car into his workshop the following week together with the material that I had bought earlier in the year. I took with me as many pictures as I could find showing Tickford hoods including some from Bill Hentzen in the States showing the hood on his car in various stages of completion. We talked through the various options in terms of fixings and fastenings and I left Bernie to decide how he was going to do it.



Setting up the hood bows and tension wires for the hood prior to cutting out the fabric.

The following week he asked me to call in and talk through various aspects of the work, in particular the tensioning arrangement for the front part of the hood. We worked out the best way of getting the tensioning wire fitted, the correct positioning of the hood bows and the desired line of the hood over the top of the door windows.

I then left Bernie to it for a couple of weeks and the next time I called in it was shaping up nicely.

We talked through the best line for the front of the hood and how to seal it on the windscreen and also how the straps would work to hold the furled front section of the hood in place when in the coupe de ville position.



Bernie continued work through to the first week of January and I picked the car up on the 8th of January 2018 and drove it proudly home.

It had proved to be a good decision to use Bernie Lewis.

He had done a good job and the car now looked like a Tickford should. There is no doubt that the hood is a key component of the Tickford cars.



The fully-lined interior



Since then the car has been in regular use, usually at least once a week. The first major outing was to the NAC at Stoneleigh in February where I joined several other T Types on the MGOCC stand.

The car has now done 2500 miles including a weekend trip to Plymouth to meet up with my brother and sisters in March, a trip to Abingdon to meet up with friends in April and a trip to Goodwood for the Classic Revival meeting in September where it attracted much attention as well. There

have been the usual teething problems along the way but most of them minor. Two mechanical problems stopped me for a while, the first a failed condenser which cut low voltage supply to the distributor (fortunately I had a spare condenser) and secondly a broken pushrod which snapped clean in half. I was able to extricate the broken parts from the tappet chest and fitted a replacement with no serious damage done.

Compared to another ordinary TA I have fitted with an XPAG engine the performance is stately but I am actually surprised how well it goes given the extra weight. There is less acceleration but once wound up it cruises along on A and B roads quite happily. It is snug inside and certainly not ideal for the taller person. It is ok for me at 5' 10" but anyone much taller would struggle for headroom and legroom. The seats will not go as far back as the standard car because of the rear wheel arches. That said it is a very comfortable ride and with the hood up very warm even in winter with no draughts – quite an unusual experience compared to the standard car where I usually need extra clothing. There is a little more body roll but the handling remains good and feels safe. I think in many ways the TA MPJG engine suits the character of the car very well.

It has been a long road to getting her back on the road, at times definitely a labour of love, but overall it has been well worthwhile and I have enjoyed the challenges and the new skills I have had to learn along the way. If anyone is interested in even more details about the Tickfords I would be very happy to share more information with them. Finally my thanks in particular to Bill Hentzen and Brian Rainbow for their help and encouragement during the rebuild project.

