

# REBUILD STORY- **MG YA**

The story starts in August 2009 when I mentioned to a friend that I fancied another project. Something old that perhaps, needing a bit of work, but that I could drive around and improve as I went along. A few days later he said "I have found just the thing for you. It looks old, its black and it does not look in bad condition - not sure what make it is but it is for sale in the village"

Naturally I had to go and look. A 1949 MG YA!

It had had five former owners, was originally registered in Cheltenham, Gloucestershire, and as far as I can tell has lived around that area all its life. It came with the original drivers hand book, some of the original tools and a record of all the servicing and repairs between 1955 and 1977 and a few spares.

Through my rose coloured glasses I noted a bit of rust in the boot floor, sills were red leaded with a couple of rust spots and the door bottoms were a bit lacy. The engine ran, the car moved, the brakes needed attention but the car was complete. The Sean, the seller, had recovered it from a barn with a number of boxes of spares. He explained he had intended to break it for spares but as it was in good condition - "only needs an MOT" - he was prepared to sell it for what he had paid. The deal was struck.

I got the car home with the intention of

servicing the car, checking the brakes and getting an MOT so I could drive the car and work on it at my leisure.

I should have known better!

On closer examination the rust spots on the sills were not spots but big holes covered with pop riveted bits of old metal and filler. In fact the sills disintegrated leaving only a one inch strip of original car underneath the door. It got worst as I investigated the boot floor. What appeared to be sound metal was pop riveted aluminium strips covered with bitumastic paint. The inner rear wheel arches were also held on by pop rivets and odd pieces of steel. The body had actually collapsed on to the chassis.

Clearly, a complete rebuild was necessary starting with the body and chassis.

First, wings, doors and other detachable panels were sent away for sandblasting to reveal the full extent of the rust. Next, with the help of a neighbour the body was braced, the doors rehung so we had a reference point, and new sills, using replacement panels from NTG, welded in to hold the front and rear of the car together. The body was then jacked up and repair pieces fabricated and welded to the rear inner wings and, floor and boot floor. The chassis was sound with only the body support brackets requiring reinforcing.

Once the body was structurally sound the doors were removed, the bottoms cut away and repair panels welded in. The wings and running boards were repaired by welding in new steel where the inner flanges had rusted away. The boot lid was also repaired with new steel where it has rusted through at its base. The "A" posts round the windscreen had to be carefully cut out to get at the rust in the inner skins which had caused the metal to swell and foul the door frames. This repair called for some very careful and intricate welding!

When written down quickly this all sounds very simple. It was not though! It took months of work carefully bracing the body, measuring, and modifying repair panels and welding them in place. We soon discovered that weld and lead body filler does not mix. MG used copious amounts of lead where they modified the front and rear of the Morris body shell to turn it into an MG!

Eventually all the welding was ground back. The new joints were lead loaded and the body primed and put to one side to await final preparation and painting. The car was stripped down to a bare body and rolling chassis and sent to a friend in the village who runs a small paint refinishing workshop. He did the final preparation and respray for me between other jobs.

In the mean time I started work on the mechanical parts. I had already noticed some damp patches under the car when I first got it home but now I looked more closely at the engine block and discovered a long crack in the water jacket. This was a bit of a blow and I was advised that it was likely that the cylinder

walls would be cracked as well and that satisfactory repairs would be difficult. However, my luck was in as I phoned round the MG workshops. One of them had a rebuilt XPAG engine for a customer who had let them down. They were willing to exchange it for my engine for a very reasonable price. Deal done - and I now had a reconditioned engine.

About this time - mid 2010 I broke my wrist which rather stopped work on the car for some months. When I was able to restart work the body and chassis were still in the paint shop so I amused myself cleaning up, repairing and repainting, all the little bits and pieces that had been removed from the car so they would be ready for reassembly. I found Bilt-Hamber's DeoxC a most effective way of cleaning up small rusty parts. This cleaning process took months, but this did not matter too much as the respray "between jobs" also took months.

The Jackall system was a challenge as it was filled with something that had turned into a sticky toffee like goo which took months of soaking before I could strip the parts for cleaning and rebuilding. The system is back on the car but I have not yet dared to try it.

Eventually the repainted rolling chassis and body were returned. It was worth waiting for and Dave had done a superb job. I decided I wanted a two tone finish - black over ivory. The doors were fitted and the car returned to Dave briefly so he could finish the ivory painting to the sides of the vehicle. The colours are original MG (as close as we could match them anyway) just not in the pattern MG originally used!

With the car back I first rebuilt the suspension, the front was good with no wear apparent so it was just cleaned repainted and re-assembled with poly bushes. The steering rack was a bit of a problem. Some slight play in one of the ball joints was rectified by re-shimming the cup. Dis-assembly of this joint can be a problem but I found that by carefully welding a nut to the end of screw that joins the ball joint to the rack and then carefully clamping the housing I was able to unscrew the assembly. When finished the weld can be carefully ground off and the nut removed leaving the thread undamaged. Oil leakage was a problem and despite replacing the felt oil seal in the steering column twice I could not stop it leaking. Eventually I was given a good tip - use semi liquid grease. Steering is now smooth with no play and no oil leaks.

The back axle required repair as oil had leaked on to the brake shoes. On stripping it down I found the near side wheel bearing was badly worn and this had resulted in the failure of the oil seals with the half shaft wearing little groves where it passes through the hub. I replaced the half shaft on the near side and wheel bearing and oil seal on both sides and so far the axle has been oil tight.

Next job was to refurbish the interior. The door cards were badly water damaged so I remade them with very thin marine ply. I was able to recover and clean the front door trim materials but I had to replace all the rear door and trim panels and material. In the past they had been re-glued but the glue had reacted with the material which caused rexine material to wrinkling up and go hard. The leather on the seats came up well but did require a good soaking in leather cleaner and

reconditioner. Unfortunately the passenger seat back had gone very brittle and cracked. I suspect the car had been parked for many years in a place where the seat caught the sun and dried out the leather. The old head lining had rotted but I was able to use it as a pattern for cutting new material. Fitting it was fiddly but much easier than I had expected.

The dash board was in poor condition. The ply backing had delaminated and the veneer had cracked, lifted and broken away in places. However, with the car came some spare door cap woods and I was able to soak the veneer off these. The delaminated ply back was re-glued and clamped and all the old varnish was stripped using a chemical paint stripper. I did not want to remove the varnish by sanding for fear of rubbing through and further damaging the veneer. The salvaged veneer was used to repair the damaged surface. The veneered surface was covered with cling film to prevent the veneer sticking to the clamping boards. The repaired surface was carefully sanded back with fine sandpaper and re-varnished with ten coats of varnish rubbed back with wire wool between coats. The surplus veneer was used to make a supplementary dash panel for the period radio and tachometer which I wanted to fit.

With all the parts cleaned and repaired reassembly of the car went smoothly.

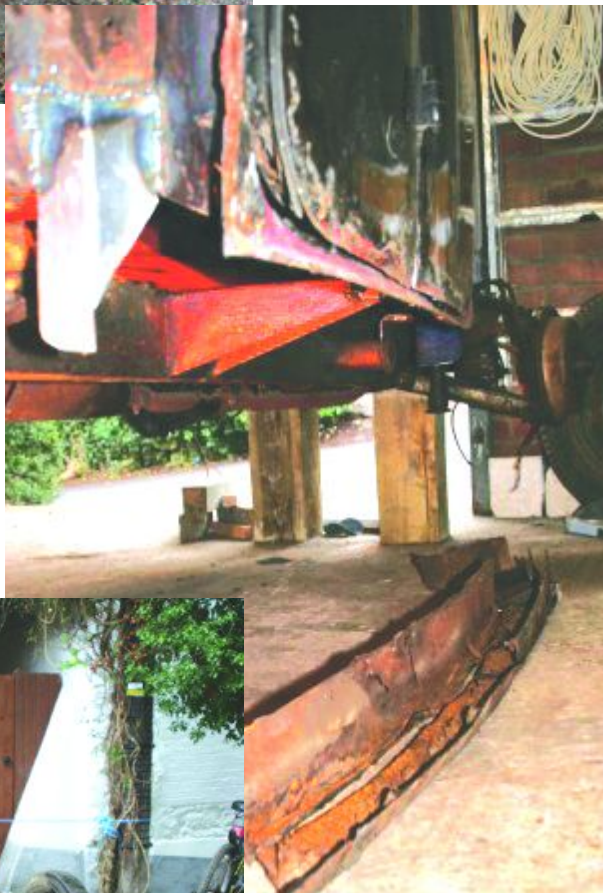
I got a Sierra five speed gear box on EBay and used a HiGear kit to fit it. I can recommend the HiGear kit for ease of fitting.

The kit includes a new transmission tunnel. I covered this in half inch felt for insulation and then made a paper pattern



*The YA as originally viewed in August*

*Not much metal was left! The old sill on the floor was only held on with pop rivets and body filler. On its way to the paint shop*



*The refurbished dashboard with the new supplementary panel for the Radio, Tachometer and flasher warning lights*



*The finished car - September 2012*



### *Vernon*

*I saw this little TD at the Haynes Motor Museum near Yeovil in Somerset. A massive car museum well worth a visit. Lots of everything- really. Entry entitles you to go back again within the year*

**Ian Ailes**



from which black carpet was cut and stitched to fit. Felt and carpet were then glued together for fitting to the new transmission tunnel.

Although I set the clutch cable according to the handbook, I was unable to get sufficient movement in the cable to release the clutch fully. A lot of fettling was required to sort this out and as I had replaced all the clutch components I never really found out exactly what caused the problem

As far as other modifications go, for reliability, I fitted electronic ignition and replaced the petrol pump with an electronic one. I re-routed the patrol line round behind the battery box and fitted a heat shield and heat insulating blocks behind the carburettor, I also wrapped the exhaust manifold with heat insulating tape to hopefully avoid petrol evaporation when it gets hot.

For safety I have fitted flashing indicators (but retained the trafficators as I like them!) I have also fitted a LED brake light in the rear screen.

## **FINISHED!**

The car passed its MOT a month before the government scrapped the test for pre 1960 cars (but I would have it tested anyway) and now I am looking forward to the summer and getting some miles under the wheels!

**Dougald Ballardie**

Originally printed in The Bulletin, September 2013. The Bulletin is the official magazine of the MG Octagon Car Club. You can join the MG Octagon Car Club at [www.mgoctagoncarclub.com](http://www.mgoctagoncarclub.com)