



WELCOME TO THE Y TYPE NEWSLETTER

Welcome to our December Newsletter. There are two items of interest which I hope you will all find useful.

Peter Sharp tells of the restoration of his YB, which he acquired in 1993 and is now finished and on the road. The tale is a very handy guide to anyone undertaking or considering attempting a total rebuild. It's not just the time involved but also the commitment and of course the cost. I often meet folk who are restoring a classic. Some are completed in a remarkably short time frame, whilst others are ongoing and are still in the same state few years on. (Which may explain why ads appear on a regular basis offering for sale a partly completed restoration...!).

Nonetheless, any restoration requires several factors to be in place. These, I would suggest, include:

- Technical and practical skills and knowledge
- Time (Family support and consideration is crucial)
- Storage and space availability
- Enthusiasm
- Financial resources

Of course, there are plenty of folk who achieve perfection without many of these factors and in that instance the completion of such a project is remarkable.

Peter's tale is well worth a good read. He and Gillie have a well-used Y that is loved by both and a regular attendee at Y events. His work on the YB has been tempered through work, bringing up a family, and a lack of storage. Despite this he has persevered. The outcome is a YB that he can be fully proud of. Well done, Peter.

Our technical contribution comes from Peter Vielvoye who describes how he has restored his pedal box through the use of 3D printing.



This technique may enable unobtainable parts to be created at a sensible price. If any of you have used this technique on parts you may have needed, then please do let us know.

Great vision, Peter, and thank you for sharing your experiences.

We have included a selection of photos below from the highly successful trip to the Isle of Man. Thanks to all the contributors and to Peter and Gillie for arranging the break.



LDA 506. AN MG YB RESTORED TO LIFE.



Being dragged out of a lock-up in 1993

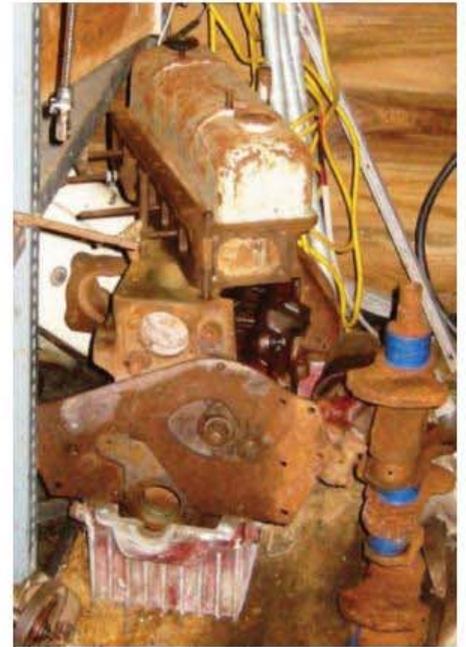
I wrote a while ago about the rebuild of LDA 506, my MG YB. The article got a bit curtailed and the tiny thumbnail pictures told no story at all. This is a bit extra with some before-and-after photographs.

When I used to read the phrase 'bare metal restoration', I innocently thought you just took the paint off and resprayed it. Now I know that the amount of time required to take a car apart is great, especially when every last screw and bolt and bit of trim needs to be labelled and stored. I wasn't prepared either for the shock of seeing how much needed repairing when everything came back from the blasters, no matter how careful he's been with the media or how gentle the air pressure was. What was a solid wing, apparently, is now a delicate piece of lacework. The wheel arch that looked like it had been expertly repaired was a hole

covered with a pop-riveted fridge door panel; the rear wing was held together with an old number plate.

After a lot of filling and fettling and try fits that showed how badly replacement parts often match the old, came the most difficult work of all. Deciding the colour. I went through every combination I could think of and looked at pictures of virtually every Y Type still on the planet. I bought a battered Lansdowne model of one, stripped it and painted it in all colours I thought might fit. The result isn't an original colour scheme but is in the contrasting body and wings style that some were finished in. The photographs make it look a lot brighter than it actually is; in real life it's a much deeper cherry red.

And then there's all the bits to put back on. One thinks of restoration as being the stripping off of paint, filling and



XPAG engine as purchased

smoothing and spraying new paint on. I forgot how many boxes of chrome bits, lights, wiring and sundries there were. It is long and tedious but it gets done. Then there's the seats and the cards and the headlining. I did start to clean and fill the seats and bought matching leather colouring. I cleaned the cards which had been in the car when everyone smoked and then stored in barns and garages for 40 years. It was harder than I'd thought and when offered up to the gleaming new car it was obvious that I was spoiling the ship for a ha'porth of tar (for our younger readers a



The YB as purchased in 2008 with the engine out



Rotten A pillar



More rot to sort out

ha'porth is short for a halfpenny-worth and, no, I wasn't putting tar on the car, it's just an old expression).

I decided to get new leather seat coverings and cards from NTG Motor Services Limited. The seats were covered for me by Dudley at Bailey Trim and Upholstery in Suffolk. I fitted the cards but I didn't trust myself to cover the wooden trim mouldings with vinyl to a high enough standard. The king of trimmers in my area of Bedfordshire was Tony Baldassare but he had retired. He came out of retirement, though, to fit my headlining and cover the mouldings. He also fitted the carpet and recut pieces to suit the replacement five-speed gearbox.

So now after being out of action since 1973, the car is complete and running, taxed and insured, and registered as an historic vehicle. It seems a shame to have to take it out and get it dirty on the road but that's what this was all about, after all.

A couple of musings to end with. Firstly, how did I end up with so much stuff left over? I think that, knowing some parts and spares will never be made again, I swooped like a magpie on any relevant bit I came across over the years. That would explain why I've got three sunroofs left over and four sets of doors, not to mention bonnets and glass, three sets of door cards and three sets of seats. This does not include the new stuff I bought at the beginning of the restoration, put away safely, forgot I'd got them and bought more; rubber sets, sidelights and lots else.

Secondly, I have been helped by a great number of very skilled, committed people who have gone out of their way to get my



The YB completed in 2019

Y Type back on the road. All of them are small traders who have developed skills over years and were quick to understand exactly what I wanted doing and even quicker to point out what I really needed. These people all have one thing in common with each other, and with me. They aren't young men anymore and neither are the workers they employ. With very few exceptions there were no young people in the workshops I visited. A few times people came out of retirement to do work for me, for which I was very grateful. What will happen in a very few years when all



XPAG now installed in the engine bay

these tradesmen and engineers give up and take well-earned rests? Are there enough younger skilled persons coming along to continue putting classic vehicles back on the road. I don't know, but I suspect not and that worries me.

Peter Sharp

THE MG Y TYPE PEDAL BOX

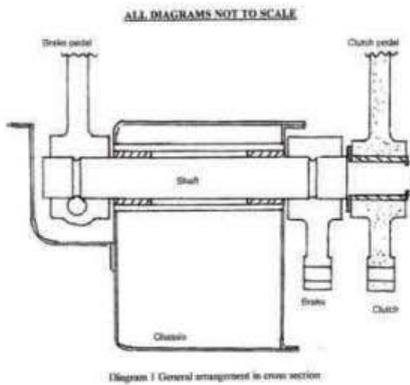
Next time you open the driver's door of your Y, stretch down and check to see how much side play there is on your clutch pedal. Mine was well over 1/2 inch at the top and was causing problems. When I put my feet down on the clutch and brake pedals together then let up only the brake foot, the brake pedal remained down. A possible MoT failure! The friendly MoT mechanic in my garage either didn't

notice it, or had overlooked it. All efforts to lubricate with the magic WD40 and liberal squirts of oil all failed to solve the problem, so I decided to remove the pedal shaft and sort the problem out.

My first stop was to check the manual, only to find that this is one of the few operations that it does not cover. The only literature I could find was Y Sheet five "Y Type Pedal Box" by Neil Cairns, a

free download on the MGCC Y Register website. This was a great help as Neil had worked on his pedal box back in the 90s and recorded the process. What I am writing is an extension of his publication. If you are about to tackle your pedal box read it first.

The pedal shaft goes through the chassis via a welded-in tube and rotates in two bushes. The brake pedal is attached to



Neil's diagram

the splined end of the shaft on the outside of the chassis with a pinch bolt and the clutch pedal rotates on a spigot at the other end using another bush. The brake master cylinder is operated by a lever clamped to a splined section in the middle of the shaft. This can be seen clearly in Neil's diagram.

On investigation, the play at the top end of the clutch pedal was caused by the wear on the spigot and the bush at the bottom end. The brake pedal was not returning because when the clutch pedal was depressed there was a sideways pressure on the shaft and it was binding in the bushes. This meant that the brake pedal could not return and was over riding the tension from the return spring. I had bought a replacement much stronger spring from NTG and it would probably have overcome the problem, but to really solve the cause of the problem the shaft needed to come out and either be replaced or repaired and then refitted with new bushes.

Removing the pedal shaft is not an easy task; it will need some resourcefulness and the maximum access you can provide for yourself. Neil's worksheet gives a guide to removal. I found I had to force open the pinch bolt gaps with a flat screwdriver blade before the pedal and lever would knock off. I was mindful that going too far with the blade wedge might crack the casting. You will need the exact type spanners for working in the box and cranked thin-nose pliers to remove the split pins from the clevis pins. A helpful tip for refitting is to scratch a line on the end



The pedal assembly



New stronger spring



Worn shaft with new bush



Repaired spigot with new bush

of the clevis pins in line with the split pin hole so that you will know where the hole is. I also had to file away a small arch from the pedal box case for the shaft to come out, as it was probably inserted during manufacture from the other side of the chassis before the body was fitted.

Once the shaft was removed the spigot could be seen to be worn unevenly. NTG supply a replacement shaft for about £120. However, I found a local engineering company that specialised in reclaiming worn parts using a metal spraying technique. They offered to build up the worn spigot and re-machine it to size for a very welcome £25. For them to get the correct spigot diameter I needed to press the new bush into the clutch pedal so that the spigot could be turned down to fit. It was surprising how much its internal diameter shrank when fitted.

I couldn't feel any wear as I rotated the pedal shaft in the chassis so I didn't replace the two chassis bushes.

The new Oilite sintered brass/bronze bush was soaked in hot oil for 24 hours before fitting. Whether this was necessary is debatable, as when Googled some say yes and others say it's a waste of time as the oil is already built in during manufacture. I also gave all three bushes a good greasing for

good measure when re-fitting the pedal shaft.

Refitting the brake operating lever requires the pinch bolt gap to be well open as it needs to be free to be positioned exactly to line up with the groove in the pedal shaft. I used a cut-off end of a flat screwdriver blade as a wedge. Again, be careful as over use could crack the casting. Next insert the pinch bolt. Mine was tight and as I didn't want to damage the start of the 5/16th BSF pinch bolt thread I turned a taper on the end of a short length of 5/16 inch rod to tap through the bolt hole. This brought the lever exactly into line and allowed the pinch bolt to fit through cleanly. The brake return spring and the clutch pedal have to be fitted at the same time. I also fitted two new brass washers, one either side of the clutch pedal. I found a pack of 10 x M16 on eBay. They allowed the circlip to fit on the end of the spigot nicely.

The bottom of the brake pedal where it is clamped to the shaft on the outside of the chassis should be covered with a metal cover to keep out the dirt. Mine was missing on the YT. This part is not available in the UK but as there was one on my YB, I borrowed it and had a duplicate 3D printed using abs plastic.

With everything re-fitted and brakes bled, the brake pedal returned with the clutch held down but was still a little sluggish and I wondered if I shouldn't have fitted new bushes in the chassis, but checking my YB the return is also sluggish.

Peter Vielvoye



New shaft from NTG



Metal end cover with 3D printed copy

Pedal box end covers are available from <https://www.mg-cars.org.uk/imgytr/stores/yzpublications.shtml>