

MZ TS125 Sport Diary – Started June 2018



This is one of the special edition TS125 Sport's that Wilf Green produced in the early 1980's, not sure how many were made but mine dates from October 1983. It came from my friend Andrew Long on a sort of sale or Return basis. Basically I can keep it and use it as long as I like but if I decide to part with it, Andrew has first chance. From the sparse information and pictures around it would seem they were only ever made with the red finish. This example is probably not completely original, all the others I have found and the brochure that was in the documentation pack show the headlamp and shrouds to be red – easily fixed as the tinware itself is correct. Fortunately, all the parts unique to this bike, tank, decals seat and rear mudguard are correct as they would be hen's teeth to find.

Saturday 30th June 2018

I have had the bike running briefly and it sounds ok, indeed it was refurbished, MoT'd and taxed about 2 years ago and has done little mileage since so could probably be put straight back on the road. However, my intention is to work through it as next winters project. I currently have the tank of as it is quite rusty inside and I am a bit concerned. Rob Parker Norman has an identical model and his tank was in a similar state and developed leaks once he started cleaning it. At present the tank is filled with a caustic soda solution to remove any petroil residue and is not leaking. However, the next stage is to use Spirits of Salts to remove all the internal rust and that might show up pinholes etc. I am hoping for the best but planning for the worst.

I have also started compiling a list of the things that need attention, it looks quite daunting but its mostly cosmetic. I am not planning a concours restoration, I mainly want to arrest any further corrosion and make it look tidy.

The list is in a spreadsheet which is linked to this diary at the top rather than update it in two places.

Wednesday 4th July 2018

The Spirits of Salts (Hydrochloric Acid drain cleaner) arrived today so I spent the afternoon de-rusting the inside of the petrol tank. The amount of gunge which came out after the Caustic Soda soaking was amazing and it had clearly softened the rust as well. Not a difficult job but one where you need to be careful as the chemicals are very corrosive both to operator and the external paintwork of the tank. I had the hosepipe on standby for the whole operation to wash everything down whenever there was a spillage. The rust inside the tank was quite thick and it took some while to get it to clear but we now have nice shiny metal. The rust is actually dissolved in the acid solution which came out bright orange. I have washed out the tank several times with fresh water then filled it to the brim along with some bleach to neutralise any remaining acid. This should stop the metal rusting again or at least reduce the rate until I can get it sealed. I have ordered some Petseal which will hopefully arrive in a couple of days so that I can finish the job.

The good news is that so far there is no indication of any leakage from the tank so maybe I have done the preservation work in time.

Saturday 14th July 2018

The tank cleaning process was very successful and no leaks were apparent when it was completed. I have now lined it with Petseal just to make sure. It's now back on the bike with an overhauled petrol tap and all seems well. I took it for a ride round my test route and was impressed with how well it went, quite sprightly for a 35 year old 125. Being so light has a lot to do with it I fancy.

While it was in the workshop I have tackled a few of the jobs on the todo list. Main one was to replace the front wheel with the one previously used on my Supa5. This has an excellent brake and s/s spokes so looks pretty good. Various small parts have been rubbed down and painted and the base of the seat has been de-rusted and painted as well. Truthfully it could be MoT'd and put on the road right now but I want to improve a few other things first so it's back in the shed for now. I have found that caustic soda makes a very effective paint stripper provided you are not in a hurry. The spare headlamp shrouds have already been done and the front mudguard is currently soaking. Prior to that however, I took the mudguard to Rainbow Paints in Westbury to match the red colour which they have put in a spray can for me. If I cannot locate a spare headlamp shell, I will dismantle the present black one and give it the caustic bath treatment as well.

I am also compiling a list of new parts to buy for the bike, the main ones will be a new exhaust pipe and s/s spokes for the rear wheel (no surprises there).

Monday 23rd July 2018

The repaint of the front end is now completed and some pictures are below. The shrouds, headlamp shell and the front mudguard have all been stripped to bare metal, primed and painted red. Whilst the bike was in the workshop, I also removed and straightened the right hand footrest bar and then stripped and repainted that black. Looks much better especially with a new footrest rubber. Had a bit of a problem with the wiring which refused to work at all initially. Eventually I traced the problem to a duff switch and once that was in place, all was well.

Another thing that is worrying me is the lining in the fuel tank. When I put my finger inside the tank today, the Petseal felt sticky as though it was dissolving. Trying to track down the manufacturers is proving difficult. There is no address as such on the tin or the instructions and the supplier (a

company I found on Amazon) tells me they have no address for Petseal either. There is an email address which I have written to and await a reply. There is also a post code but it only identifies an area of Leicester, not the actual address. A search on Google does not produce any information on Petseal as a manufacturer either. Not really sure what to do at present; worst case is I have to remove the Petseal though not sure yet how to do that.



Not having much success contacting Petseal. No reply to my email, not even an acknowledgement that it has been received or read. I did post a request on the Velocette Forum and someone has given me an address in Leicester and a phone number. I am going to test on a piece of Petseal that dripped onto the rubbish bin during the process. This is set hard and does not feel at all tacky even in the 30 degree temperatures we have been having recently. Addendum – the test pieces did not react to the unleaded fuel at all neither when immersed nor when exposed to the fumes so I remain puzzled

In the interim I have drained all the fuel out of the tank and purchased 5l of Esso 97 octane fuel which is supposed to be ethanol free. As a temporary measure, I will run the bike on this fuel as and when I get it on the road.

A parcel of MZ spares arrived from Germany yesterday which included a shiny new exhaust pipe for the TS125 (now fitted). I would like to do the wheels as well but currently finding s/s spokes at a reasonable price is proving difficult.

3rd November 2018

With the main riding season almost over, my winter project, the TS125 is now in the workshop. I have been slowly cleaning it – especially the back wheel which was quite dirty. I would like to replace the spokes and give it a proper clean but my preferred supplier in Germany still does not have any s/s spokes in stock. Other than cleaning there was not a lot to do. The bike started easily once I had put fuel in the tank. The good news is that the Petseal finally seems to have cured as the tackiness has not reappeared. I took it out for a ride today and it runs very well, pulls an easy 45 or so up my test hill with something in reserve. Only two issues firstly a dragging clutch when cold – something these bikes are prone to. I will look out for some thinner gear oil as that often helps. Second issue was the indicator switch which operates the opposite way to the Trophy switch. These switches are not intuitive as they work up and down rather than left and right so having them working differently would add to the confusion. As the Trophy arrangement is in my view the more logical (Down for right and up for left) I have swapped the cables over on the TS125. I noted that Andrew seems to have fitted LED bulbs in the rear indicators but retained incandescent bulbs at the front. This halves the current requirement without the need to buy an LED flasher unit which is hard to find in 6v form. Saves me a job as I was thinking of doing this anyway.

I tidied up my boxes of spares bulbs and suchlike and found I have enough parts to convert the headlight of the TS125 to 12v LED using an inverter (as on the Trophy) so this may be a future project.

Though the bike has a tool compartment (and a toolkit) it has no storage facility for oil nor does it have a measuring cap as the tank is special to this bike with a plain (British type) filler cap. I have plenty of top boxes but I don't have any spare carriers that would fit nor anything I could borrow from one of the other MZ as the 250 fittings are different. For now I am using my old tank bag with a bungee cunningly connected to retain the top flap. This holds ½ litre of oil and a measuring cap marked for 100ml – which will give 50:1 with 5l of petrol. Simple but effective. Memo to self – look at picture of TS125/150s to see how the carriers are fitted.

So all in all not much needed doing to get it ready for the road. Cosmetically the paintwork is challenged – mostly the side panels but the overall patina is good and it would be a shame to lose its originality. The swinging arm is pretty dire so I may whip that over to Steve at TPCS to be powder coated along with a couple of bits from the Trophy. Bit tempted to MoT the bike now; even though it is unlikely to be taxed until the Spring it would be nice to know its safe to use and ready to tax.

Monday 5th November 2018

I have ordered a set of s/s spokes for the TS125 along with some bits for the ES250 Trophy. They should be here by the weekend so I have a wheel rebuild to look forward to. I may well remove the swinging arm at the same time to get it powder coated.

I have also fitted a 12v LED main headlight bulb using a 6-12v inverter board (as I did on the Trophy) plus a plastic ring which adapts the P45t light unit to take an H4 (P43t) bulb. The bike was put back in the garage to make room in the workshop for another job. When it comes back I also plan to fit an Accumate charging connector. This makes it quick and easy to attached the charger; otherwise you have to remove the side panel to get at the battery connections.

Saturday 10th November 2018

I ordered the bit from Germany on Monday morning and they arrived midday on Thursday – remarkable service. Yesterday I brought the TS125 back into the workshop and removed the rear wheel. Rebuilding it proved to be more tedious as the old spokes were well corroded in and the paint that had been applied added to the problem. I had to cut them with the angle grinder and then use mole grips and a hammer to get the ends out of the hub. In the middle of this my friend John Hill rang up to enquire if I would re-spoke one of his wheels! I was a bit rude but did ring him back later to apologise and no doubt when the dust has settled, I will do his wheel. Anyway, the TS125 rear wheel is now completed and looks really good. So good in fact that it made the swinging arm look really tatty. So today it was removed from the frame and I spent a messy two hours with wire brushes and the angle grinder cleaning of the old paint and fairly thick rust in equal measure. I was tempted to take it to TPCS for a soak in their stripping bath and shot blasting but I was concerned about the effects of the solvent on the rubber bushes – that is also the reason why it cannot be powder coated. Prepped it all for painting then discovered I was out of primer so had to make a trip into town. The item is now primed, has received several coats of black Hammerite smooth and is looking pretty good. Hammerite needs several days to harden off and ideally this is best done in the greenhouse as the Ultra Violet light seems to help the hardening process. If you are doing a petrol tank it needs to be left for 4-5 weeks before it is petrol proof.

As a bit of light relief I have made up and fitted the Accumate connector and while I was at it, I fitted a slightly larger battery (7ah instead of 5ah) and even found the correct rubber strap in my rubber spares box.

Looking more closely at the frame, it too really needs a complete strip down and repaint as it is very rusty in places. More worrying is the fact that rust has obscured part of the frame number (its by the front engine mount) and the Vin plate is hidden by the special rear mudguard assembly so I may have a problem when I take it for MoT. I'll cross that bridge when I get to it.

Friday 18th January 2019

The TS125 has sat patiently in one of the bike sheds for over 2 months but finally saw the light of day a few days ago. It has coped with the damp weather very well and the battery was still holding sufficient charge to allow it to start 2nd kick. The only thing that did not work properly were the rear

indicators. The fronts were fine but flashing far too quickly. When I checked the rear bulbs, both were home-made leds. Replacing these with incandescent bulbs restored normal behaviour. My guess is that Andrew had tried retaining the standard flasher unit which requires a heavy load to operate properly. At some point I will try to find a digital flasher unit in my spares box and swap the bulbs back again. However, the immediate objective was to get the bike through the MoT which it passed on Thursday afternoon. There was one advisory concerning slight perishing of the rear tyre. Bit embarrassing as I should have spotted that when I refitted the tyre after rebuilding the wheel. Anyway to day I fitted a new tyre so all is now sorted. I checked the old tyre which was some obscure far eastern make and it was made in week 42 of 2000 so near 19 years old – definitely need changing despite the fact that the tread was perfect. I also fitted a clock while I was working on the bike – something essential in my view.

The bike itself goes really well and is a joy to ride. I took the ES250/2 over the same route earlier in the day and the smaller bike was actually quicker in most circumstances. I have now taxed it so its fully road legal. Bit tempted to use it as my Western Region Trials bike for this season.

Monday 2nd September 2019

I realised that I had not written up this diary for many months even though quite lot of work has been done on the bike. I guess I must have recorded details in the Daily Blogg but this is a brief summary to keep this diary up to date.

The bike has been used a fair amount during the summer for pottering and also on the Moonraker and Cotswold Weekend road trials. It ran really well and managed to win its class in both events. Though it generally performs well for a 125 I did however find that it ran out of steam on steep hills. When a spare 125 barrel came my way I had it rebored to take a 150cc piston. This is waiting to be fitted along with a 24mm carb I discovered in the spares box.

I also felt the bike was looking a bit tatty particularly the frame. So in August I stripped it down, had some parts powder coated and repainted the frame and swinging arm. I left the tank and sidepanels because they still have the original transfers and I have not managed to locate replacements. A new silencer was fitted along with new rear shock springs and a few s/s steel fasteners.

The result is shown in the picture below.



Tuesday 24th September 2019

The top end was stripped today and it now has the 150cc barrel and piston fitted with no particular issues. I checked the big end which seems to be in excellent condition. Not so the little end which I have replaced with a new one I had in stock. However, I am unhappy about using the 125cc cylinder head as it would raise the cr sky high and I cannot see safe way to modify it as yet. I am consulting others about this and casting the net wider to try and source a correct head. I plan to run it with the 125 (15t) gearing and the 22mm carburettor during the running in period. Top speed was never the issue with this bike it was lack of power on hills. Both decisions can be reviewed later.

Wednesday 25th September 2019

I had another look at the 125 cylinder head and took the photos below which show the sealing ring. It is 54mm internally and 63mm externally giving a surface width of 4.5mm. Does not seem much but it is clearly sufficient as I have not experienced and head joint leakage on any TS125/150 I have owned. There is no gasket, it's a metal-metal joint. However, with the barrel bored to 56mm the ring would only be 3.5mm wide. I imagine the 150 head has different dimensions – something I am hoping Andrew Long will be able to confirm. As an experiment I have made a head gasket with 56mm bore and 1mm thick. According to my calculations this will restore the correct cr using a 125 head but whether it will be strong enough is another matter. The engine does start easily and sounds fine so I may try it on my short test circuit which minimises the amount of pushing needed to get home if it does fail.



