

Daily Blogg Part 11 started 1st May 2020 - [Click here to the Blogg Part 10](#)

Tuesday 22nd December 2020

Not really much to record on the bike front, most of my time is spent on the battery loco project which leaves no space in the workshop for bikes. I have continued to monitor the Himalayan battery and even after 2.5 weeks it never dropped below 12.84v. I reconnected the battery on 17th as I wanted to use the bike and left it connected when I got home. Within 2 days it had dropped to 12.52v. So I disconnected it again and since that time it has risen slightly to 12.6v. I also noticed when I reconnected it on the 17th that there was a small spark when I touched the -ve terminal with the earth lead – so clearly something is live. I doubt it will do much good but I have recorded my findings and reported them to the dealer I bought the bike from. I really think it's something Royal Enfield should fix but I suspect they will just say batteries are not covered by warranty and I should keep it on trickle charge. In reality it would not be so much of an issue if the bike was being used regularly but Covid-19 has meant little or no riding throughout the summer and now the weather is crap.

When the workshop is clear I do plan to give the Francis-Barnet another checkover to try converting it to -ve earth and fit the side-stand I bought a while back.

Saturday 12th December 2020

The Honda is now off the bike lift and I had it running for a few minutes on the drive just to make sure everything was ok. Not sure it looks a whole lot different as a result of its makeover but I feel it was well worth doing and gives me confidence to ride it in the future. Took the picture below before putting under blankets in one of the sheds.



The Himalayan battery is still pretty much fully charged, down to 12.84v today so hardly dropped at all in the last 4-5 days. I have written up the results of my investigations and sent them to Rob P-N and Rick Carter as they both have Himalayans. I plan to send a copy to Hayball's in Salisbury as I think this battery leakage is something Royal Enfield should be dealing with. They will probably just tell me to buy a trickle charger but that of course is just dealing with the symptoms not the cause.

Roger Bibbings dropped in today. I have been helping him with a Powerdynamo problem on his ETZ trail bike. He has lost confidence with it (déjà vu – look back on this blogg over my Supa5 Vape coil problems) and is converting his back to 6v dynamo. I was able to give him most of the bits he needed and he has left the Powerdynamo bits with me. The plan is to liaise with Ollie Harris and see if we can figure why it has failed and possibly fix it. Will be useful information for the future if we succeed.

Friday 11th December 2020

TPCS rang to say the Honda s/arm was ready so I popped over and collected it this morning. First job was to fabricate a patch to cover the hole. I made this from brass and used stainless steel screws to hold it in place. First job however was to fill the inside with as much waxoil as I could get in then shake it around to spread it as much as possible. Not overly worried as any serious rust or corrosion will take place at the bottom which is where the waxoil will

settle anyway. In the summer when the whole bike gets hot it will soften and spread itself afresh. The plate has been sealed with JB Weld and painted. As it's underneath I doubt anyone will ever notice it, well not in my lifetime anyway.



The s/arm went back in quite easily. The wheel was a bit fiddly but also went back ok once I figured out the sequence. The new chain fitted perfectly, the old one must have been very worn as I had to move the wheel a long way forward. So apart from a final checkover tomorrow morning I think the Honda makeover is done. Doubt it will look much different to other people but well worth doing. Might even give it an oil change.



Wednesday 9th December 2020

I have been checking the Himalayan battery daily since it was fully charged on 30th November then left disconnected from the bike. After 10 days it has only dropped to 12.85v which is negligible. Previously it would have needed recharging after this period so I think it's pretty certain that there was a current drain when the battery is in circuit even with the ignition off. It is not my accessories as I have been disconnecting them as soon as it is parked up. No easy way to put a master switch in circuit as it would need to be the heavy duty type to handle the starter motor current. Removing a fuse is an option but there are several so establishing which one could be difficult. It seems like the solution for now is to always disconnect the battery if the bike is not to be used frequently. With the current Covid-19 restrictions and poor weather I doubt it will get used much if at all until the Spring. At least I saved the cost of a new battery as it would not have solved the problem. I may still need one eventually as the old one may have been damaged by this constant current drain. One tedious thing about disconnecting the battery is resetting the clock which I never remember until part way into the journey. I have fitted a separate clock just in case.

The new rear chain for the Honda arrived yesterday from Busters. Excellent service since I only ordered it on Sunday. Not such good news from TPCS though. Steve sent me this



picture of a rust hole he found in the s/arm when he was blasting it. I brought it home and checked it over and ponder what to do. In the end I found that the metal around the actual hole was still quite thick and sound so I eventually I decided to clean up the hole to firm metal and let Steve powder coat it anyway. When I get it back I will soak the inside with waxoil to inhibit further corrosion and seal the hole to stop any further

water ingress. In an ideal world I would have waxoiled and sealed before powder coating but the oven temperatures used for cooking the powder coating precluded this.

Saturday 5th December 2020

Stripping the back end of the Honda was fairly straightforward though it does have an odd arrangement for locating the chain tensioners. Curiously the design does not include a qd rear wheel so the whole thing has to be removed as a single item and it was reluctant to come out initially due to a bit of rust. Removing the swinging arm was quite straight forward fortunately but it does involved removing the plates that support rider & pillion footrest, the rear brake assembly and the gear change pivot.

Next task was getting the centre stand off the bike and to do that I had to rig up the contraption shown below to support the back end of the bike.



This was where it all went a bit pear shaped. Firstly I could not get the stand spring unhooked. My usual trick with washers simply did not work. However, it was of no consequence as there was no way the centre stand itself was coming off the bike. This is a problem I have come across before with other Japanese bikes, not just Honda. The Centre stand pivots on a tube which is supported by two lugs on the frame. One side of the tube has a flange so it can only be removed one way and the other side a circlip (or in this case a split pin) to hold it in place. I got the split pin out eventually but the pivot tube was totally seized in the stand and would not drive out. Rather than risk damaging anything, I gave up and just cleaned and painted it in situ. The net result was that only the swinging arm and the rear brake lever went to TPCS for powder coating.

All the other bits were easy enough to clean up and paint with Hammerite. The chain was clearly quite worn so I have ordered a new one from Busters. The sprockets looked fine and frankly the bike is not going to do a huge mileage in my hands so were not replaced. Job now on hold until I get the bits back from TPCS.

Couple of other developments this week, I now have a tidy 18" wheel for the ETZ project bike which came in exchange for a rear carrier. I need to find a tyre and tube for it but there should be something suitable in the shed. Then I can swap it for the 16" wheel currently in the bike. Secondly, we found a buyer for Mike Davis's Ducati Forza today. Nice chap and seems to be very pleased with it. Sadly we were not able to get anywhere near the £3500 Mike paid for the bike 3 years ago but he bought from the heart rather than the head and

we think he paid too much. Quite apart from the difficult market conditions at present. However, Carol was very happy to see it gone and is not concerned as we made very good money on the other bikes sold so overall she is well in profit. All we need now is a buyer for the Triumph TR6.

Tuesday 1st December 2020

So far so good, despite the very cold weather, the paint has dried hard enough for me to reinstate the front end of the bike and replace the side stand. Other domestic chores meant it was not sensible to start stripping the back end.

I checked the Himalayan battery at noon and it has dropped to 12.95v. Not a cause for concern as yet, they normally drop back a bit when charging stops. It's how much it loses over the coming week or so that matters.

Monday 30th November 2020

Yes it's near a month since I last wrote up this blogg. However, we have been in a full lockdown for the pandemic and only essential journeys are allowed. I have been out a couple of times on the Himalayan for shopping trips but frankly the weather has been so atrocious most of the time there is absolutely no pleasure in kitting up to ride a bike. Even the car has only been out a few times to do the shopping, not one single pleasure trip. If you look at the garden railway blogg you will see what has been keeping me busy until the last day or so but time to get back to bikes for a few days anyway.

First up was the Himalayan which for most of its time with me has been uncertain in the battery department. Initially it was fine, perhaps because I used it regularly. Then if unused for say 3 weeks it would struggle to turn the engine over. Once running it would be fine for the rest of the day. I did complain to Hayballs about this when it went in for a service but they assure me the battery was fine and blamed the accessories I have wired in. They are not to blame as I disconnect them when the bike is laid up and yet the period over which the battery goes flat has now dropped to under a week. I was going to replace the battery and did an internet search to identify a replacement at a good price.

What I found was lots of complaints about battery problems on this model and the consensus was that just replacing the battery rarely produced a permanent fix. New ones, of good quality or even lithium batteries would eventually fail in the same way. The theory is that something remains live in the electrics even with the ignition turned off which gradually runs it down though it's unclear what. So I put the battery on charge and overnight it came up fully charged at 13.1 volts. I disconnected the earth wire and did some simple test with the multimeter set in DC amperage mode. No evidence of any leakage at all from my accessories until they are turned on. However, the bike electrics did show a very small leakage initially which faded to nothing as I watched. Not sure what this means, but I have left the battery disconnected and I am going to monitor its voltage daily over the next week

or so to see what happens. If it drops whilst disconnected then I know it needs replacing. If it doesn't then the problem lies within the bikes electrics. Doubt I will ever identify the cause but I can deal with the symptoms by disconnecting it when its unlikely to be needed within a couple of days. I did watch some videos on how to change the battery – bit fiddly.

Next into the workshop was the CB250RS for a bit of a makeover. Nothing drastic but some of the black paintwork is wearing thin and showing corrosion. Not that Honda made much of a job of painting frames and suchlike anyway so not really surprising after 40years. I made a start at the front end with the fork legs and the mudguard stay. These have been painted with Hammerite smooth applied by hand followed by a light spray to take out the brush marks. I don't want to strip the complete fork legs for powder coating. The mudguard stay and the sidestand have received the same treatment. That's as far as I can go for now. The front end has to dry and be reassembled before I can tackle the back end where the s/arm is the item in most serious need. I will probably have that powder coated. Would like to do the centre stand as well but getting that off could be tricky.



Wednesday 4th November 2020

Well the weather did finally improve and we did the New Forest Run today in glorious sunshine though it was a bit frosty to start with. AS it turned out it will be the last run for at least a month and probably a lot longer. The government imposed a new total lockdown for England starting tomorrow with only essential travel allowed and only two people allowed to meet. So it was a win win and to add a little spice Terry and I rode the Imber perimeter track from Gore Cross to Bratton on the way home. I need to review the bikes and decide which one(s) need attention to stop me getting bored during the lockdown. Probably the Honda and possibly some electrical work on the F-B. Speaking of the latter, Mick has done a nice job on the Falcon side panel and managed to remove the worst of the dents – all without damaging the paint or the transfer.

The picture shows the riders as we were about to depart The Fighting Cocks after lunch. Note the cloudless blue sky.



Wednesday 28th October 2020

The CB250RS had its final Mot on Monday and passed with without any problems, not even a weeping fork seal. It's still taxed until end November at which point I shall put it on SOrn and give it a bit of a makeover.

Tomorrow I was supposed to be leading a VMCC run to the New Forest but the forecast is awful so we are going to reschedule for next week if we can find a suitable day.

Friday 23rd October 2020

Had the Falcon 74 on the bike lift for a couple of days to check it over. Simon the previous owner had thrown a lot of money at the bike, rather more than was perhaps prudent and certainly more than I paid for it. The engine and gearbox were overhauled by Villiers Services in 2012 and it has only done 380 miles since. The frame and all the cycle parts have been powder coated, not quite a match for Arden Green and not an ideal finish for things like the petrol tank but it is very durable. Just about everything else has been overhauled, or replaced. The wheels have chrome spokes but the rims have been powder coated; Simon swears that's how it left the factory but I am not sure. Again its durable if no quite as shiny as I would like and they are unlikely to rust which chrome rims certainly would eventually. I briefly started it and it sounded fine. I also took it for a short ride to check it out. No real issues though I will need to adjust the gear lever and brake lever to suit my riding position.

The brakes work better than I expected but there is a knock from the front back plate. Like many British bikes of that era (including my Velos) the plate is located in lug on the fork leg and can move slightly – hence the knock. More an annoyance than a serious fault and it should be possible to shim out the slack.

The electrics are standard Villiers with a flywheel magneto providing the sparks. Re-magnetising the flywheel and new ignition coil were part of the overhaul so I don't anticipate any problems here. In fact the bigger issue is fitting a LT cutout to stop the engine. The rest of the electrics are 6v +ve earth and with the battery charged everything works fine. The Villiers lighting coils are barely adequate to balance the full headlamp load (only a 25w bulb) and the switch includes a 4th position which provides AC current to the headlamp bulb. The rest of the electrics continue to run off the battery. Odd arrangement but it seems to work at the expense of dim lights when the engine revs are low. Ideal for daytime running though and with a flywheel magneto, the ignition is not dependant on the battery.

I am contemplating swapping the electrics to –ve earth and swapping the headlamp bulb for an led type. You can get 6v +ve earth Leds but they tend to be expensive and I have plenty of the –ve earth type. I could also fit the 6-12v inverter board as we have done with the MZs in the past to allow a 12v led to be used. Not essential as I doubt the bike will ever get used seriously at night but fun trying.

Overall very happy with my new bike bought mainly as long term prospect when a lightweight is all I can manage.

Monday 19th October 2020

I rode the Honda CR250RS on Sunday for a VMCC run under the Rule of 6 constraints to give it one more airing before the tax MoT runs out. When I got to the meeting place we had 8 participants so Terry D and I had a gentle bumble round on our own and finished up at Merkins Farm Shop café for a hot chocolate. Bike went well and I have booked it in for an MoT just to make sure there are no issues before undertaking some improvements over the winter. It will be classed Historic in April 2021 and unlikely it will get an MoT thereafter so best to give it one more.

I have also acquired another new addition to the stable, a 1956 Francis Barnett Falcon 74. I have known about it for years and been trying of late to sell it for my friend Simon who lives in Frome. After 6 months we had no interest whatsoever, so I made him an offer which he has accepted. More details about the bike later but here is a picture.



Thursday 8th October 2020

The RT125 passed its MoT last Thursday with an advisory over a weep on the LH front fork leg as I expected. I rode it the 5 miles each way, and it went well. They are rather nice bikes to ride and I enjoyed the trip. Just to be safe I kept the speed below 50mph though it felt happy to go above this. Only slight hiccup was an operator error. The tank was empty when I picked up the bike and I put in a gallon for the trip which was all I had in the garage. About 2 miles down the road the bike ground to a halt. Switching to reserve got it running again and no further problems. Clearly the RT125 has a 4.5l reserve. The new owner is collecting the bike on Saturday, coming from North Lincs so quite a journey.

No other bike activity, we had a major power surge followed by a ten hour power outage last Friday. We had exploding plugs though no fires fortunately but it trashed an awful lot of our electrical equipment. Some stuff has been fixed but not the essentials like a fridge and washing machine. Dealing with this has occupied most of my time as you might expect.

Thursday 24th September 2020

The RT125 is now ready for an MoT but the earliest date I could get was Thursday 1st October so its back in the shed for now. The small jobs took longer than I expected as is usually the case with John's bikes and three things needed or will need attention. The non-functioning rear brake light turned out to be the brake light switch itself which is a hydraulic item and part of the rear braking system. Not the sort of thing I have spares for and knowing



Grahams, it would likely be pretty expensive. I grafted on a normal mechanical switch and it now works fine at nil cost. Whilst checking the wiring diagram I noticed that there is an oil pressure switch in the system. With such a device I would expect the oil warning light to illuminate when the ignition was switched on and go out once working pressure was reached. The light was not illuminating at all so I spent a tedious hour or so checking things before concluding that the indicator light itself was faulty. AS you can see from the picture this is a special item that once again was not in my spares stock and would have to be ordered from Grahams. With nothing to lose I dismantled the unit and found it was a broken wire internally rather than a duff bulb so eventually I was able to make a repair and put it all back together. I was mightily relieved when it lit up and even more relieved when it went out once the engine was running. The third thing I noticed was an oil film on the nearside fork slider and a small patch of oil underneath. I noticed there was a replacement seal in the toolkit so John must have already spotted this but I chickened out at trying to replace it. The bike has no centre stand and s*ds law says I will break something else in trying to fix it. With luck the tester will not notice or just make it an advisory. If it fails because of this John will still be with me and can help fix it. It is his bike after all.

Actually I may already have a new owner lined up from an advert I placed in CarAndClassic. I have exchanged a couple of emails with the chap and explained the issues with the bike and he still seems keen. We just need to get it tested and complete a successful ride to/from the MoT centre.

Sunday 20th September 2020

We had a cracking week in Dorset cloudless blue skies and a breeze to keep the temperature reasonable. I did take the TS125 Sport out for a brief ride on the Sunday. It was brief because it ran like a pig and at one stage I thought I would have to push it home. Pretty sure it's carburetion as sometimes it would bog down and other times it would pick up and run fine but even when it slowed right down it never actually stopped. Behaved in some ways like it was a blocked silencer but as this is brand new that seems unlikely. Anyway I put it back in the van and took it down to Exeter on the Tuesday. Hopefully Andrew L will sort it out. I spent a nice day with John Hill and came back with the RT125.

On Saturday Ollie came over with the replacement cdi plus a neat harness he had made up and with some trepidation we fitted it. Great relief when it sparked and grins of satisfaction when the bike fired up immediately. We checked the timing with the strobe and it was spot on at tickover but possibly a little over advanced at peak revs even when adjusted to the minimum advance. Today I took it for a brief test ride (its not MoT'd or taxed so care needed) and it ran fine with no sign of pinking even when given a handful of throttle at low speed in a high gear. So it seems like a successful modification which cost a total of £15 compared to £165 for the genuine cdi if you could even get one. I need to do few small jobs to get it through an MoT which will then allow a better test ride. The object of the exercise is to make the bike saleable as John wishes to get rid of it. Bit tempted to buy it, but don't

really have room or need for it right now. On the other hand how often do nice ones come up and it would be an ideal electric start lightweight for the future.

Tomorrow will be a busy day, the courier is collecting the ES250/2 and I am going to Neston to pick up the BMW – one in, one out.

Tuesday 8th September 2020

Not had time to write anything for a few days in part because a number of things were up in the air but are now resolved. The major consideration has been one of my periodic reviews of the bikes which have slowly crept up to 9. This was compounded by the fact that Mike Davis's lovely BMW R75/6 has suddenly become available. His son Simon was going to retain the bike but last week advised he had changed his mind and asked Terry & I to arrange its sale. Put me on the spot for several reasons, firstly do I want it (head says no, heart says yes) and how to reach a fair valuation since I was now an interested party. Eventually the issues were resolved to mutual satisfaction and the bike is now mine. However, it will remain in Neston for a couple more weeks while I make room for it and because we are on holiday shortly.



Anyway, the review concluded that two bikes could go. The ES250/2 Trophy was duly advertised and sold within a couple of days. It is going to Eire as soon as a courier can be arranged. I gave it a checkover today and took it for a short ride. Wish I hadn't in some ways as it went very nicely and I wondered if I had made the right decision. However, previous to that it had not been ridden for 9 months so it was hardly at the top of my 'must ride' list.

The other departure is the TS125 Sport which also has not been ridden for near a year. It was bought and restored as a long term project for the hopefully distant day when I can only manage a lightweight bike. I didn't want to sell it but neither did I want it gathering dust in the shed for the time being. The compromise is its going back to Andrew Long in Exeter who will give it a home and some exercise but remain in my name. Bike now in the van and will be dropped off next week whilst we are caravanning in Dorset.

Ollie H has completed the testing of the RT125 electrics and confirmed the cdi unit is dead. He is doing some testing on a substitute a replacement Chinese cdi and if this works on the bench it will be tried on the bike. So while I am in Exeter with the van, I will pick up the RT125 and bring it home. John wants to sell the bike which I will do for him once we have it running. Worst case is we will need to buy a new cdi which Grahams in Taunton currently have in stock & £165. Lot of money but without that it only has scrap value.

I have today sent the reed valve barrel, piston and head from the Red Beast to Andy Henworth in Cumbria for him to try out on his MZ Racer. Its wasted in my garage so may as well go to someone who might be able to use it. Talking to my eldest son Richard last night, he expressed an interest in having a bike project so I may well bequeath him the Red Beast to work on. Still sorting out the ramifications of that as there are some bits I would need to keep like the Honda front wheel and my hybrid top end. It is tempting though as that would get remove another bike from the stable and give more room to work on the railway projects over the winter.

Wednesday 2nd September 2020

A rework of the exhaust pipe and the RB now looks like this. Also note that the front indicators have been re-sited and a panel inserted to keep the muck of the battery tray and rear of the frame. This is just a template for an aluminium cover which can be shaped properly. Still agonising on how to disguise the extension rods on the shocks. Think I could shorten the exhaust pipe a little more, or use a standard TS250 pipe but cut & twisted. Bike back in the shed for now while I get on with other tasks and ponder the photos.

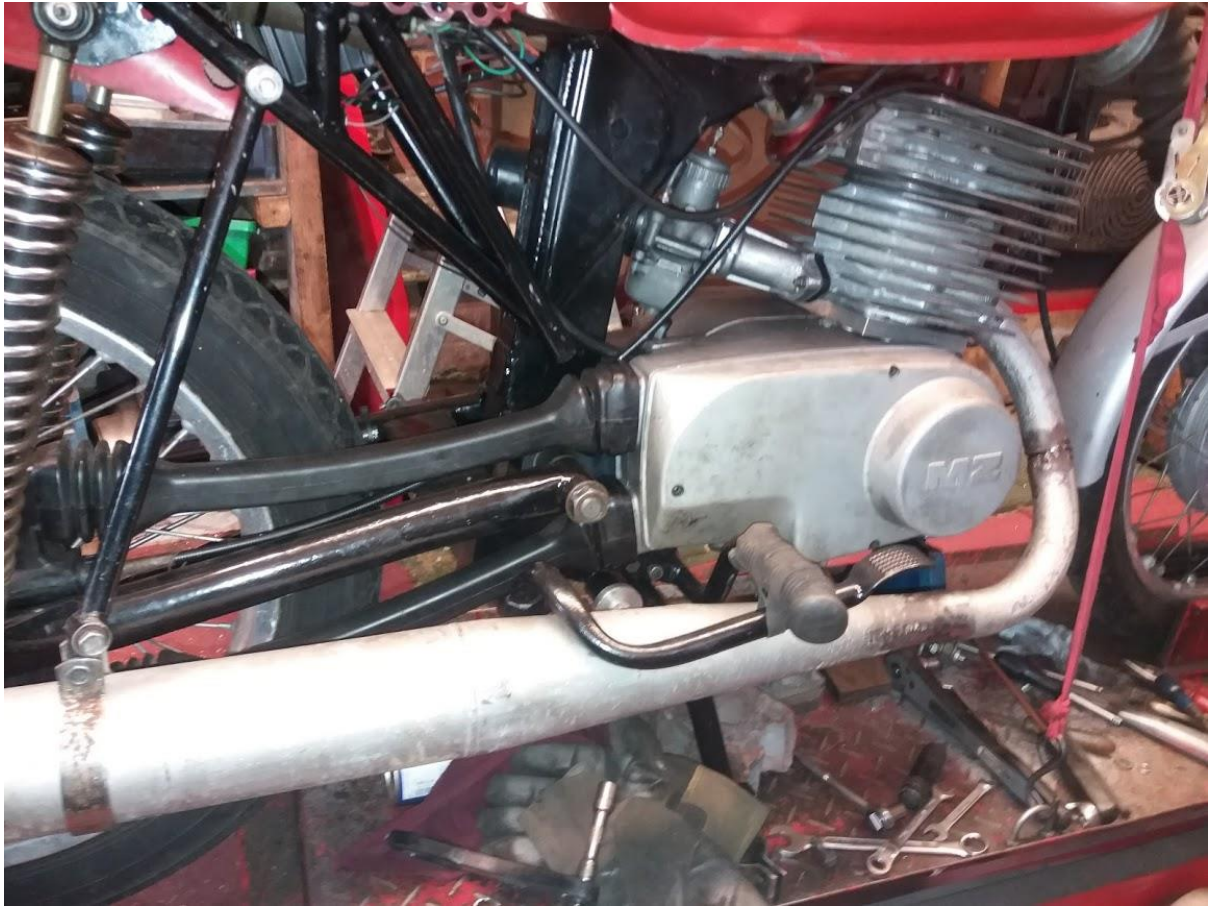


Monday 31st August 2020

Made the decision to revert the Red Beast to a hybrid motor and today I removed the trick top end and replaced it with a Supa5 barrel, piston and cylinder head. They may even be the bits I removed when I stripped it a while ago. I managed to find the special bits which are basically a 15mm thick adapter plate which lifts the barrel so the piston is at the correct height (and adjusts the spacing of the cylinder studs) plus a couple of steel strips acting as spacers to connect the head to the doughnut.

The tricky part is getting the exhaust to line up. Last time I used a TS250 exhaust pipe and an ETZ251 silencer and managed to just about get them aligned. This time I used the TS250 ex pipe again but with a TS250 silencer and they simply will not line up. Out of interest I fitted the special ex pipe I made up for the Trick ETZ based top end. This was better but I really

need to cut through the welds and twist it a few degrees to tuck the silencer in better. At the moment it is fouling the brake lever which stops it lifting enough.



Sunday 30th August 2020

I made up the spacers to lengthen the Reb Beast rear shocks toady. Nothing complicated, just a piece of 16mm steel bar with a 10mm thread tapped right through. The pictures show the result.



They do the job in terms of lifting the bike to give greater clearance but they do look a bit odd and I need to think of a way to cover the extension rod; inspiration lacking at present. It has also made the exhaust look a bit more low slung. However, If I do fit the Supa5 top end that should sort the matter nicely.

John Hill has managed to remove all the electronic ignition components from his RT125 and will be posting them to Ollie after the weekend. John is also now booked for a visit on 24th September and will most likely bring the RT125 with him. With luck we will get it going this time so that he can sell it at a reasonable price.

Saturday 29th August 2020

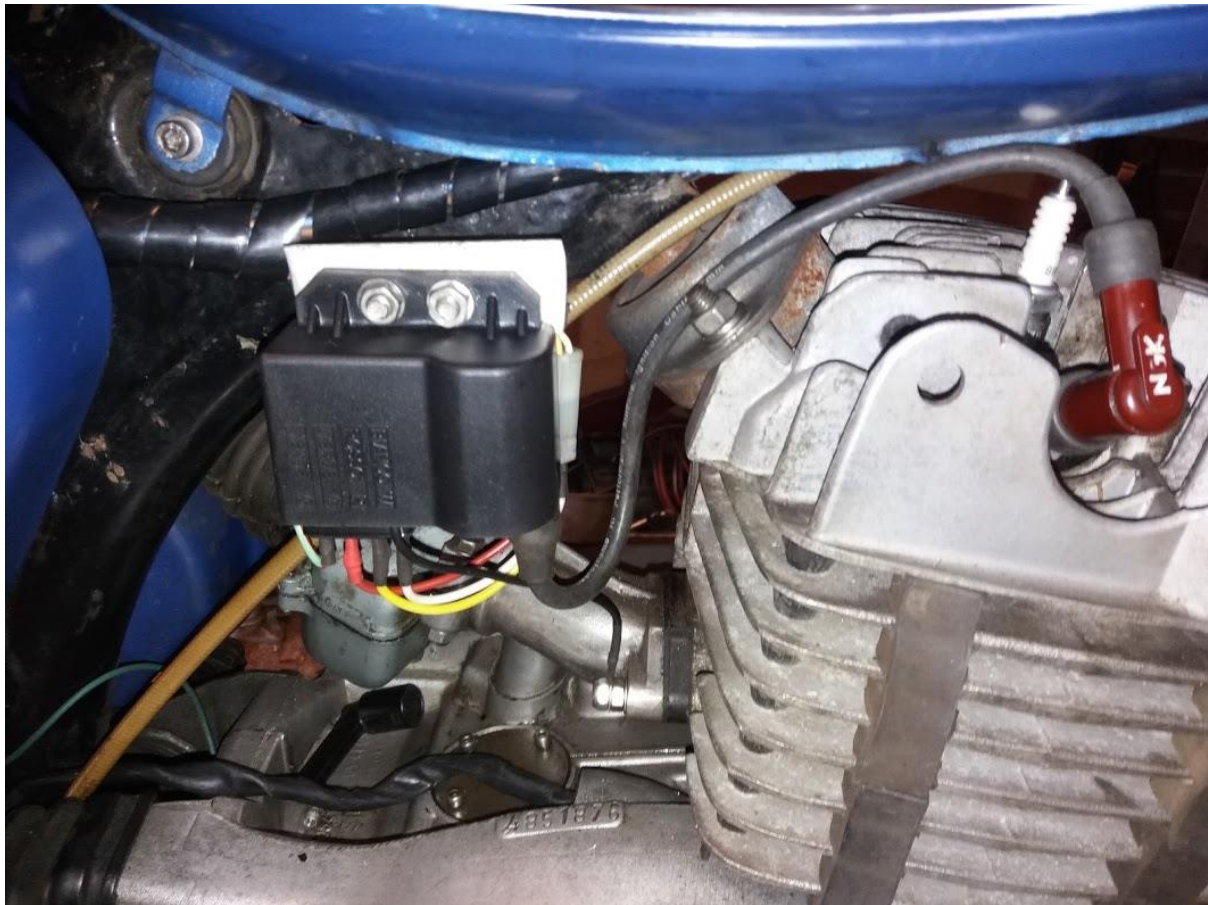
Yesterday I fitted the primary chain tensioner I fabricated a while back to the TS125 Sport to see if it would reduce the rattle from the engine. Not a difficult job but I had to extend the adjuster slots a little to get a correct tension on the chain. Clearly the chain on the spare engine I tested it on was a lot more worn than the TS125 chain. Good in some ways but may negate the test of course. My initial reaction was that it had little effect but the bike was running on the bike lift and in the garage which seems to amplify engine noises. Outside and on the road I think it is quieter but still noisier than I would like and it seemed a bit harsher than I remembered. However it did a couple of laps of my test route with no problem apart from the speedo which just flickered. Very odd as I am sure it was working fine last time I rode the bike. The cable run seemed a bit tight so I disconnected and re-routed it and it now works fine again. Overall however, I did not really take to the bike and I am considering selling it to make way for another bike I have my eye on.

Today I gathered together bits to build an ETZ250 engine. Some parts came from the deal I did with Andy Henworth, mainly the special racing crank and gearbox internals, other bits in a swap with Peter Wickes (crankcases), the rest from the shed. With a bit of ingenuity, I was able to build a serviceable bottom end. Don't have any particular use for it but its better to have it in one piece than scattered like confetti in the shed. One possibility is to transfer the trick top end from the Red Beast motor so that all the special bits are in one engine. It may be of interest to someone. I don't have a complete standard ET250 top end at present but I do have a barrel in need of a rebore and a 75mm Mahl piston so one option is to have it overbored to make a 300. The other option is to recreate the hybrid motor I originally built about 10 years ago with ETZ bottom end and Supa5 top end. I do have all the necessary bits to do that.

This afternoon I started work extending the rear shocks to lift the back end of the Red Beast.

Wednesday 26th August 2020

The strobe test on the AM6 coil was successful. I chalked a timing mark on the rotor with the piston set at 2.5mm btdc which equates to 22°. Running the engine, the actual timing was spot on this mark so job done. The parts arrived this morning so I now have my own AM6 coil nicely wired into the bike with a standard Vape Female connector to make future connection/removal easy. The bike ran straight away and sounds fine. Bike now put away.



I also made up a spare set of connector wires for the other AM6 coil which can now be taken in the top box or tank bag of whichever MZ I am riding. With luck it will never be needed but at £14 its cheap insurance.

I finally got to ride the Honda yesterday, only for a trip to Melksham to pick up some bits from Toolstation and on to Terry's for tea and a chat. Pleased with the way it went very happy with it. In an ideal world I would like to raise and pull the handlebars back a bit. I did try fitting some risers I found on the shelf, but I could not get enough slack in the cables to make it all work. I think they could be re-routed to gain sufficient slack but that will have to wait until if/when I decide to do some more serious cosmetic work on the bike during the winter. The tatty spokes continued to annoy me so I rubbed them down and painted them silver today. Tedious job but they do look better and a lot cheaper than rebuilding with new spokes.

Less success on other fronts, I have picked up the challenge of getting John Hill's RT125 running again. There was a lot about this in the blogg around June/July last year when I was thinking about buying it. In the end I am afraid I lost patience with it and it went back to Exeter where it remains still without any sparks. My work with cdis for the Vape systems made me wonder if we could replace som of the suspect electronics on the RT125 with cheap after-market parts at least to establish which component(s) had failed. To start with I tested Red Beast electrics again as this is a DC cdi system same as the RT125. Could not get

any life out of it at all so it has gone back to the shed though the actual coil is probably suitable if it works. I have spent some time researching various DC cdi offerings on eBay and they are surprisingly cheap but I am wrestling with two problems; provision of auto-advance and connecting the RT125 pickup/trigger. Most of the cdi's advertised don't mention auto-advance and are possibly intended for 2-strokes which are normally happy with fixed ign timing. The cdi's also provide just a single wire input for the trigger whereas the RT125 pickup has two wires. Investigations continue but if they are too succeed, I will either have to go down to Exeter or better still, get the RT into my garage.

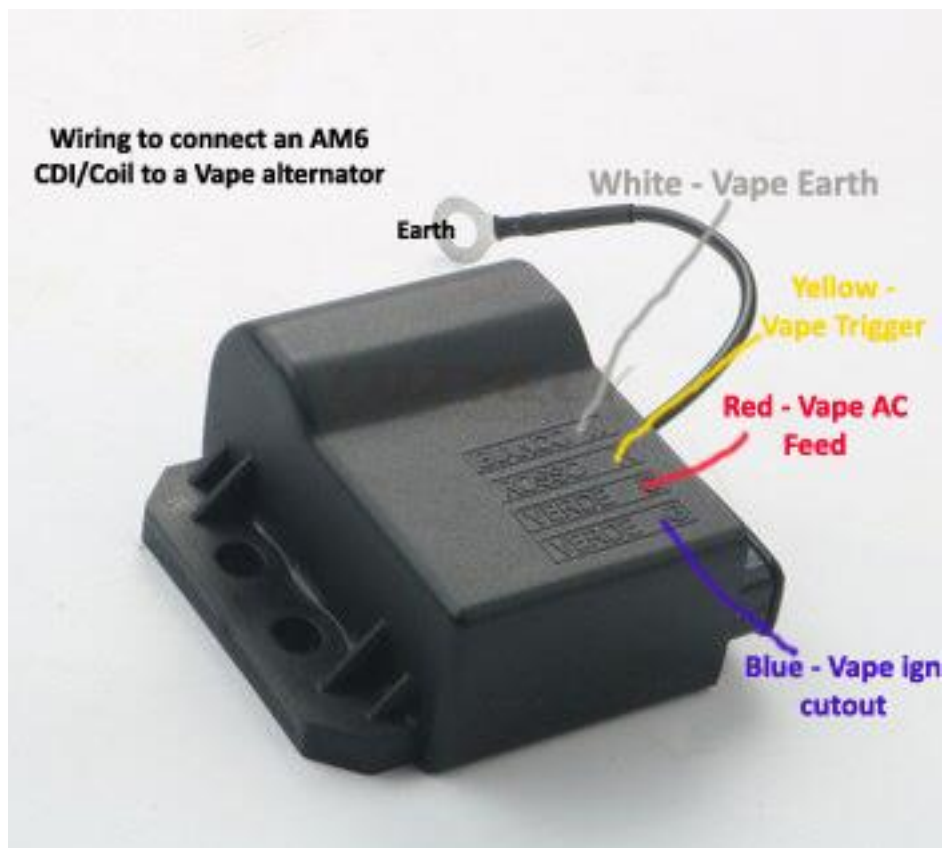
As a bit of light relief, I spent part of yesterday rubbing down and painting the Honda spokes silver as they were beginning to annoy me.

We also have some progress with the disposal of Mike Davis's bikes. A chap from the North East has paid a deposit on the Scott and is coming down next Thursday to collect it. That leaves the TR6, which has someone interested and possibly coming to view early September, and the Ducati which has attracted no interest so far.

Saturday 22nd August 2020

Long story short, finally had my tooth removed today so hopefully things will begin to improve but it's been a pretty rotten few days with little enthusiasm to do anything. I did finally find the RED Beast CDI equipment but in practise it was not a lot of use for testing the Vape coil failure. Turns out there are two types of cdi unit, AC powered and DC powered. Vape use AC powered coils, and the Red Beast equipment is DC powered. So it's gone back into the shed.

However, the irrepressible Ollie came to the rescue by lending me an AM6 type coil which he had previously tried out with some success on his TS125 fitted with Vape alternator. I picked it up this morning (before the dental appointment in the confident belief that I would not feel like doing it afterwards). Whilst the Novocaine was still working, I managed to wire in the AM6 coil and 'ye verily' there was light or rather lots of sparks. Some must be in at least approximately the right place as the engine runs and even the kill switch works. Now I need to put the timing marks on the flywheel and strobe it to see if it's firing anywhere near 22° BTDC. That will have to wait until my jaw stops aching though.



I am sufficiently convinced of the success of this trial to order a couple of the AM6 coils for the vast sum of £28 the pair. I have also ordered some 2.8mm connectors so that I can make up a harness that allows the AM6 coil to be quickly swapped for a Vape coil. As well as getting the 4spd TS250 running again, I want to have a spare in the top box as my confidence in Vape is somewhat shaken. One interesting fact, Vape specify different coils for the internal and external sensor type alternators. Mine is the external type and Ollie tested it on an internal sensor type so it seems to work with either. As I have two MZs with external sensors and two with internal sensors, my one spare AM6 should be usable on both in emergency.

The tooth problem also meant that I did not take the Honda on its first planned VMCC outing on Thursday. Not sure yet when I will feel up to riding again. What a wimp.

Tuesday 18th August 2020

Not a terribly successful day. I wanted to experiment connecting a Powerdynamo alternator to the electronic ignition components that came with the Red Beast. Searched hi and lo and not a sign of them. Decided to stop looking and get on with something else in the confident expectation that I would then fall over the bits. Well the first part worked and I have now swapped the fork legs and fitted the Honda front wheel to the Red Beast, the second part has yet to come true. So I knocked a couple of things off the todo list (the other was a bit more TLC on the CB250RS), However, I found that the Red Beast Petrol Tank is leaking again. Not much choice other than to prep and paint the silver tank that came with it; two steps

forward, one back. I did manage to get a dental appointment for tomorrow so with luck my tooth will get sorted and I will be able to concentrate on things and remember where I put the cdi bits!

Monday 17th August 2020

Well that didn't take long. I posted an ad for the ETZ250 on Saturday night and had 3 enquiries my Sunday midday. By Sunday evening the deal was agreed, the money transferred and I delivered it to Reading this morning. Not the pleasantest of journeys, the tooth I had filled last week started aching badly and I had to blag some paracetamol when I arrived. Arrangements are in hand to remove the ETZ from my insurance and add the Honda and the John May Red Beast ETZ so I hope to be able to ride the Honda on a VMCC run on Thursday.

Apart from that I have done damn all today, toothache just seems to drag you down. I need to organise my biking tasks and get stuck into something to take my mind of it. There are plenty of things to do including:

Replacing the Vape coil on the 4spd TS250. Options are to convert to 6v or find a cheaper alternative to the genuine article which is an eyewatering £80+. Ollie Harris has some ideas on this. I have written to Vape twice about the coil failure and yet to receive even an acknowledgement let alone an answer. Damned if I will spend any more money on their products if they treat customers this way and I shall warn others off as well.

Fit the Honda front wheel I have in the shed to the Red Beast. This means swapping the fork legs over.

Rebuilding the bottom half of the ETZ engine that came as a p/ex from Andy Henworth. I believe I now have all the necessary parts other than the clutch which is still with Andy.

More tlc on the Honda to get rid of some bits of rust. Actually for a 40yr old Japanese bike its pretty good. The spokes are sound but beginning to discolour and they will be a lot more difficult to rebuild than MZ wheels.

Plus lots of things to do on the railway front – see the Garden railway Blogg.

Saturday 15th August 2020

I carried out various tests on the ETZ250 trying to track down the cause of the air bubbles without success so I finally removed the pump altogether, capped off the pipes and the control cable and fitted a blanking plate over the hole into the primary drive. The tank is now filled with a 50:1 petrol mixture. Testing the pump off the bike has established that the air is coming from within the pump itself. I don't have a spare pump of the right type so

It is likely to remain on petrol for the foreseeable future. Annoying but not a real problem as it is going to be sold soon anyway see below.

No real progress on selling Mike's bikes. All three (TR6, Scott and Ducati) are now on CarAndCallasic and the Scott is on the Scott Owners Club Website. Had a couple of enquiries about the Scott but no offers. A couple of offers on the TR6, one derisory and one not far short of our target range. We may revisit that offer if nothing better occurs by early next week.

Thursday I looked at Honda CB250RS being sold by Reg Cox (the guy who bought Mike's CD200) it's a 1980 k/start only model and a bit scruffy but seems quite sound and it was very cheap. Went well on a test ride so I bought it and now plan to sell the ETZ250. Though the ETZ is a good bike somehow it has never gelled with me, I much prefer the Trophy and the Supa5. The Honda is a bit smaller and lighter than the ETZ and I fancied having a smaller VMCC eligible 4-stroke; plus it will be historic next April. Currently it's in the workshop for servicing and some tlc.



Monday 10th August 2020

Difficult to decide where to begin as it been a busy 10 days. No nearer s solution about the VAPE cdi coil. I emailed them explaining the problem and asking for advice on why it could

have failed when not in use. No reply so far – not impressed. I am tending more towards converting the 4psd TS250 back to 6v electrics.

On Tuesday Terry D and I did a survey of Mike Davis's bikes, 6 of which we have been asked to sell. We got 5 of them running and cleaned up enough to take photos. The MZ was left for another day. I sent out a list to the local VMCC section and that got offers for two of the bikes, a Honda CD200 and the Venom very quickly. A couple of people expressed interest in the Triumph TR6 Trophy but no offers as yet so we will probably advertise it publicly by next weekend. The Scott Squirrel and the Ducat 350 Forsa are advertised publicly, one request for more info about the latter, no interest so far on the former but it is early days. The MZ I collected on Friday as it needed a couple of small jobs doing. These sorted it was advertised on CarAndClassic on Sunday and sold on Monday afternoon for slightly above what we expected. Dealing with this has taken up quite a lot of the week.

On Thursday I rode up to Cricklade for a VMCC Coffee morning at Bill Little's place to try and get the section running again. Encouragingly about 16 turned up and we had a good socially distanced chat. Nice ride up and back on the Himalayan.

On Sunday Terry D and I did the Hereford VMCC sections' Compass Ride, this is a trimmed down version of their HOTE run so not so many controls and less miles. Even so we had to do 18 controls which needed 148 miles to achieve a Gold Award standard. Plus of course 160 miles in the van to get to the start/finish at Ross on Wye. Long time since I have done a 14 hour day and I was pretty tired by the end but we had a good time. Terry rode his Supa5, I rode the ETZ250. Part way round I noticed that there were air bubbles in the oil feed pipe to the engine. While the bike was running oil could be seen pumping through and the bubbles gradually went away. However, very quickly after the engine stopped the bubbles reappeared. The engine was not giving any signs of distress through lack of oil but to be on the safe side I put some oil in with the petrol and rode the last 50 miles very gently.

When I unloaded the bike from the van today there was a patch of oil under the engine though it smelt to me more like gear than 2-stroke oil. I checked the gearbox oil level and it was fine and the bike has been standing all day on the lift with no signs of a leak from the engine itself. I am hoping the air bubble problem is an own goal. I investigated a rattle from the engine earlier in the week during which I removed the primary drive cover which of course disturbed the oil pump and the feed hoses. When I put it back together I just pushed the output hose onto its spigots without clamping them. The hose is not an original MZ item, it's the same size but a soft silicone rubber. It was all I could at the time and as far as I know has worked fine until now. I have now clamped both ends with small cable ties and run the engine to get oil back in the pipe. Tomorrow I will check to see if the bubbles have reappeared. If they have it may indicate the air leak is within the pump itself. That will mean reverting to petroil at least for a while. Annoying but not a major issue.



Picture taken at Shobdon Airfield during the Compass Ride

Saturday 1st August 2020

We had family staying for the last week and one afternoon we got out some of the bikes to give the elder grandkids some riding practise round the garden. It was not a success sadly. We started with the TS125 Sport but they could not master the clutch/throttle balance needed to pull away. In part this down to the bike; the carb has no tickover setting and the clutch drags when the oil is cold. So we switched to the 4spd TS250 which was a little better until its clutch started dragging as well. So we switched again to the Supa5 which normally is ultra smooth and reliable. Except that it just would not start even with a brand new plug. So we gave up the riding lessons for now.

Today I brought the Supa5 up to the workshop to investigate the problem. This was quickly established as a lack of sparks; very unusual for a Powerdynamo system. I removed the coil and tried it on the 4spd TS250 which has the same type of Powerdynamo system. No sparks again so a dodgy coil. The 4spd coil worked fine on the Supa5 so at least that is now running. The issue is why its original coil packed up. It was working fine when I last used it (though I cannot in truth remember exactly how long ago that was. Quite why it should die when not in use is a mystery. The alternator and electronic ign part of the system is about 15yrs old but the coil was replaced more recently (4-5 years ago probably). Not because it had failed

but because I gave it to John Matthews to keep his bike running and bought a new one for the Supa5.

Not sure what to do now as a genuine VAPE coil is about £90 and I really feel that such an expensive item should last more than 4-5 years.

Wednesday 29th July 2020

It was Mike Davis's funeral today so about 20 of us met up at Corsham and followed the cortege to the crematorium at Semington. Bit chaotic at times but we got everyone there on time. At Semington we preceded the hearse through the Porte Cochere at the funeral directors suggestion. Someone was videoing it so hopefully I will be able to include some pictures in due course. Quite a lot of the others went direct so we had a very good presence. Due to the pandemic, only 30 people are allowed to attend the service so we gave priority to the family and all stayed outside watching by webcast (except that the sound did not work for some reason). After talking to Carol and the 3 children, we rode over to the Lysley Arms at Pewsham to hold a wake and talk about the club. We are going to restart meetings in August. Starting with a coffee morning in Cricklade on 6th August and evening meetings on 2nd & 4th Thursdays. These will be at the Lysley Arms (our old meeting venue) until such time as the Rugby Club is able to accommodate us again.

I rode the Viper and it went well, starting easily and coping ok with the stop start traffic following the hearse. It still has a dragging clutch which manifests itself in two inter-connected ways. When you pull in the clutch to change gear, the revs remain hi for a period which is irritating but helps with downward changes making them very smooth. But upward changes are crunchy as the input gears are spinning too fast for the output shaft. If you have the luxury of a slow lazy gearchange, or you can find a false neutral, you can overcome it. However, the Viper is a revvy engine and if you dally too long it drops off the power curve and won't pull the higher gear comfortably. For the moment I plan to leave it as is in the hope that things will bed down. The bike was much admired anyway.

Monday 27th July 2020

I rode the Viper to Melksham on Wednesday afternoon – its first outing in nearly a year and probably only the 3rd time I have ridden it. Lovely bike to ride but you have to let it rev, it won't pull top gear below 40mph unlike the Venom which is happy with top gear from 30mph upwards even lower sometimes. The clutch is a dragging a little making the gearchange a bit crunchy. I think it just needs to bed in as most of the clutch components are new and in other respects it works fine and is very light. I would like to ride it on Wednesday as part of Mike Davis's funeral cortege but bit concerned about the dragging clutch for such an event. We shall see.

On Thursday I rode the Himalayan to HAYballs in Salisbury for its annual service. Done while I waited and I was back home by 1:30pm. They even cleaned the bike and it lloks just as

good as new – why can't I ever get it that clean. The bike was subject to a recall over corroded brakes. Mine were fine as I thought they would be but apparently They are going to be replaced under warranty anyway. Very happy with the service I got from Hayballs and still love the bike. The technician reckoned it was amongst the nicest he had ridden – bet he says that to all the owners.

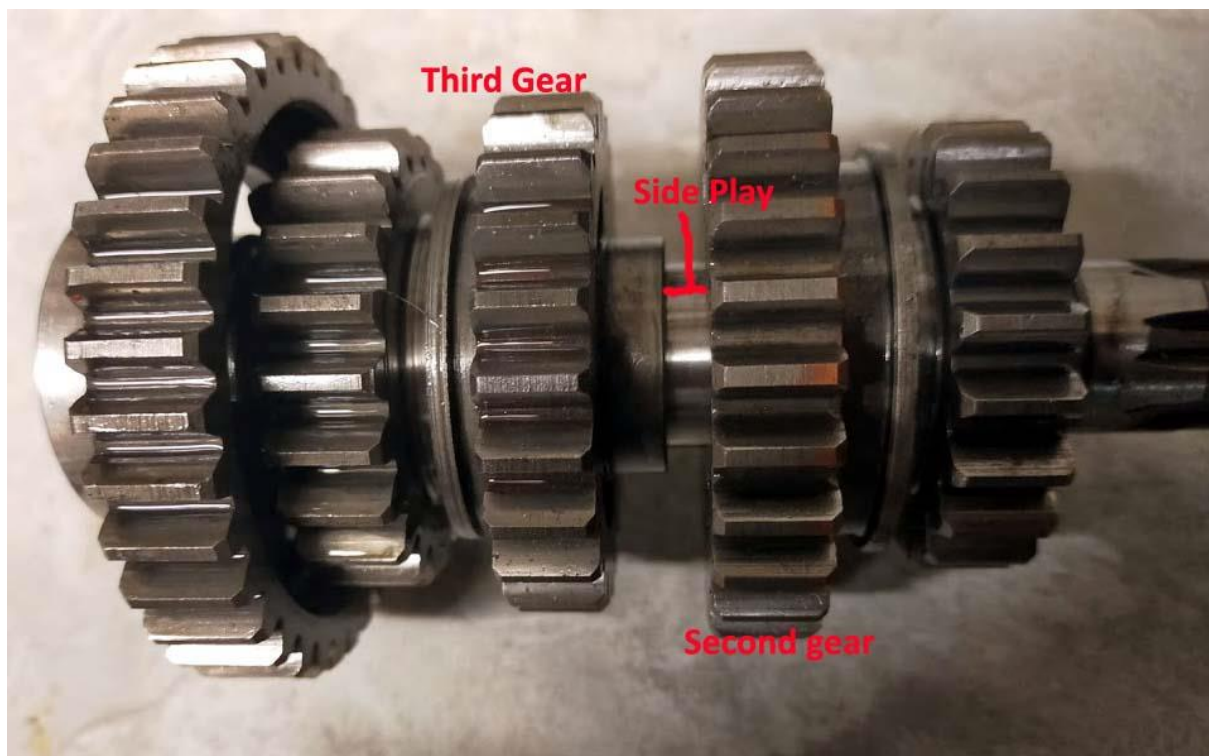
On Saturday my son Richard came to stay for a few days and brought with him the exchange ETZ250 engine from Andy Henworth. Today it has rained all day so I stripped the engine to assess its condition. It has been extensively modified for racing, the offside crankcase has the chain cover guides cut away so the gearbox sprocket is exposed, holes drilled at the front for cooling and threaded holes to take Pazon ign. Instead of the 72mm diameter oil seals, there are aluminium plates with an O ring on the circumference and supporting a small oil seal for the crank. I guess this is to reduce the chance of blowing an oil seal under racing conditions. The normal thin plates that sit between bearing and seal were replaced by some much more substantial items. I intend to return all these items to Andy as I have no use for them and they might just be useful to him.

The crankshaft has a Maico conrod and bigend and the flywheels are sleeved to take the smaller crankpin. The big end and the small end are both narrower than the ETZ rods so there is quite a lot of sideplay. I can understand the smaller crankpin would be beneficial at the consistent high revs when racing. Not so sure about any benefits from the extra side play. Standard 6306 main bearing are used and they, like the crank appear to be in good condition; though I am not sure yet whether I will use them or buy new parts.

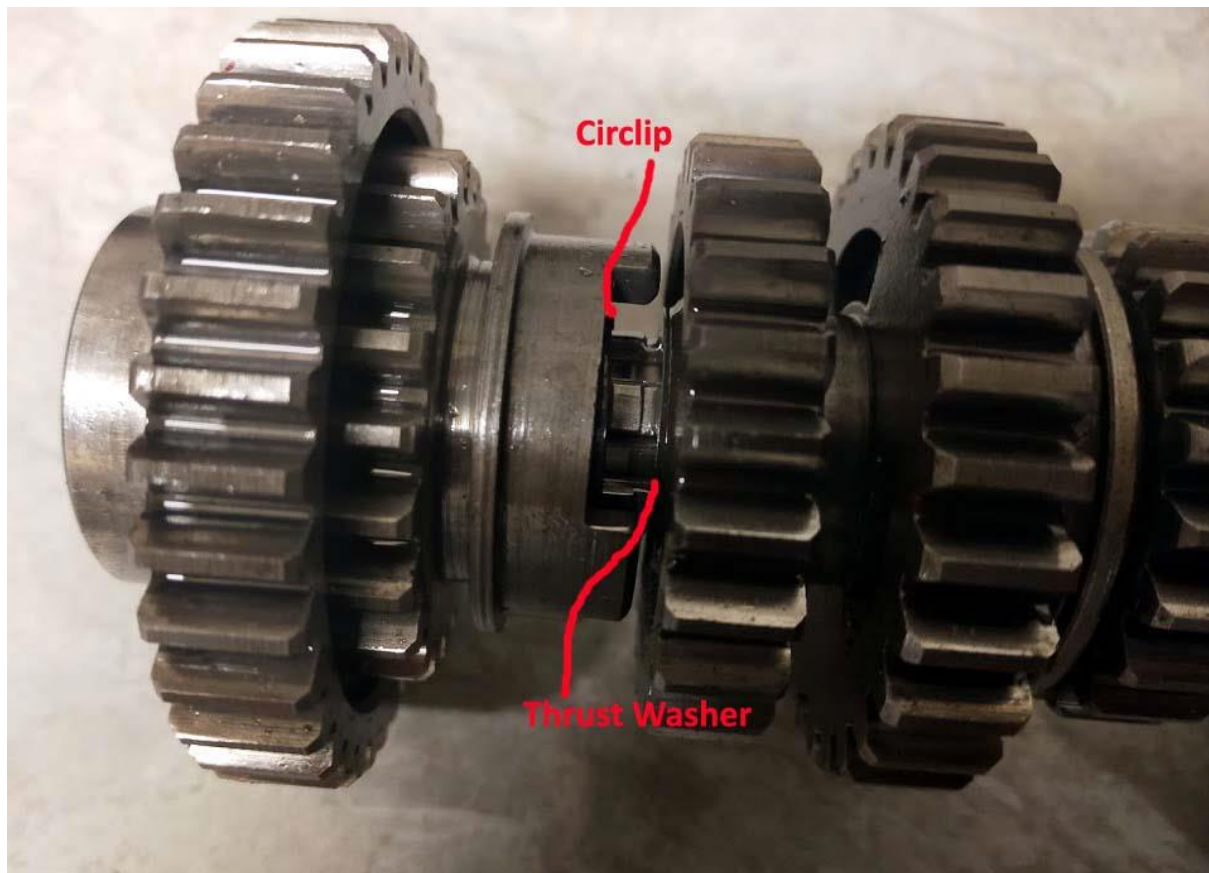


The groove in the rear of the crankcases had been completely filled as had the drain holes at each end which fed oil down to the main bearings. New holes for the same purpose had been drilled in the transfer ports but were now sealed up. The transfer ports themselves looked to be enlarged a little. There was no clutch as this was a specially lightened item that had been retained by the PO. However, the large primary drive gear was present but appears to be made of steel rather than cast iron.

Finally I was able to split the cases and examine the gearbox and the anomalies continued. Given the diagnosis of jumping 3rd gear, I expected to find a badly worn 010 selector showing evidence of overheating, and badly rounded dogs on the 3rd gear slider. There would likely be wear on the dogs of 3rd gear as well but it's always difficult to determine this until the cluster is stripped. There was wear present but nothing like as bad I would expect. What I did find was a huge amount of side play between 2nd and 3rd gear and the 1st/3rd gear slider dogs barely able to engage the 3rd gear dogs. With a that amount of play it is a wonder that 2nd gear was not jumping as well though there was no sign of wear on its selector or dogs.



Subsequent investigation established that the cause of this excessive side play was the ciclip that holds 3rd gear in place coming out of its groove. This was also stopping 3rd gear from selecting properly.



I was able to force the circlip back into its groove, it now seems quite firm and the gear cluster works as it should. What caused the circlip to move is a mystery which I am consulting about before deciding what if any bits I should replace. I still need to strip the cluster to examine 3rd gear but my initial reaction is that all I need is a new circlip as a precaution. Previous bad experience with after-market MZ gears makes me wary about buying them unless there is no other choice. You can see there is virtually no indication of rounding of the dogs on the 1st/3rd gear slider above. The amount of wear on the 010 selector is also minor with no sign of heat damage.



Tuesday 21st July 2020

Well as is so often the case doing nothing about the kickstart problem yesterday meant it resolved itself quite easily this morning in a two-part solution. Removing the large chrome nut from the top of the k/s provided enough clearance for the s/arm. There is a circlip holding the lever in place so the nut was largely cosmetic. The spring still fouled but fortunately the hooks are offset so turning it round gave enough clearance. Total time about 15 minutes, 10 of which were figuring out how to get the spring off (2p pieces again). The tank and mudguard went on easily enough (the former still not leaking so my second repair seems to be holding up. I turned the petrol on and petrol did not come pouring out of the front edge of the float bowl though there was the odd drip later. Bike started easily enough but kept revving hard as though there was an air leak but eventually settled down. The exhaust is running very clear so I don't think fuel is leaking down the manifold. The welding on the exhaust pipe, though not pretty is leak free but it is blowing from the exhaust port area making it a little rorty but tolerable. I rode it for a few laps around the garden and it seems ok – a road test will have to wait as I have spent far too much time on this bike and need to get on with other things (or so I am told by SWMBO). Bike now in the shed and workshop being tidied ready for our visitors.



The picture is now my screen saver so I can study it and decide what else needs/ought to be done. Some obvious things: The exhaust pipe bend is wrong and it's too far forward – starting with a correct ETZ the should sort that. The carb is at too steep an angle so the

manifold needs more thought. New front indicator brackets – they angle upwards at present. The back end needs to be lifted a little, either lengthen the shocks or extend the brackets. The rear mudguard needs to be extended to protect the s/am and lower part of the frame. It would be sensible to combine this with building in a toolbox where the monoshock used to sit. Overall though it's not too bad.

Monday 20th July 2020

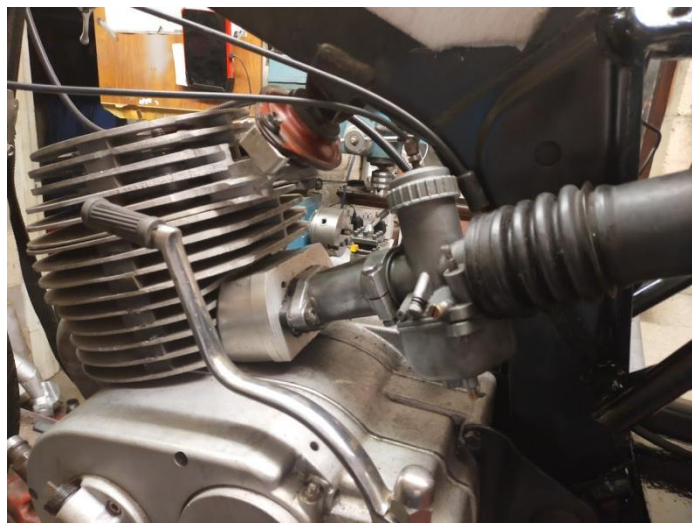
The conclusion of my deliberations was to stick with the ETZ engine and modify the Trophy exhaust pipe to mate up with a TS250 silencer. As always, it took far longer than I anticipated and is pretty ugly but it is now done. It's certainly not a long term solution but it should enable me to ride the bike and get a better feel of the potential of the engine. If it's promising, I will buy an ETZ exhaust pipe and have another go. Even the correct pipe for the bike is unlikely to fit properly but it might be easier to modify.

With the exhaust sorted (for now) I was able to fit the electricals and the cables. My home made loom went straight back in place and I found a better way to fit the rear indicators, they look much neater now. I still have to fit the tank and the front mudguard but these are both standard items and straightforward.

I did hit one snag when kicking the bike over to check there was a spark. The kickstarter fouls the swinging arm spindle. The latter is now the right way round to provide a lip for the stand spring. However, former is a modified item and the lower part has much less offset than the MZ k/s. Even if I shortened the spindle, the k/s would still foul the spring! I really don't understand why the guy felt it necessary to make this mod and the only solution I can see is to fit a standard k/s lever. Pretty sure I don't have any loose spares nowadays, but I can borrow one from the spare ETZ engine for now. In fact it is probably easier to just swap the complete primary drive cover. The RP strikes again.

Sunday 19th July 2020

Not a terribly satisfying day. I expected to get quite a lot of the RP rebuild done but in the end progress stalled and I am having doubts about the project. First problem was getting the engine back in the frame. The first part of this – getting the rear engine mountings connected was pretty straightforward. Because of the mods to the head and barrel, the cylinder head mountings are miles out of line with the doughnut and extension pieces have been made to fill the gap, very neat looking but a b*****r to get lined up and it took a lot of fiddling and the best



part of an hour. Not a job I want to do frequently.

When done I was able to check my new carb manifold layout and this is a bit of a concern. The good news was that it cleared the frame and there is room for the rubber hose to connect to an air cleaner. However, as you can see from the photo, the carb has quite a steep downdraft and it's possible the float bowl will leak at the forward edge – not yet tested but a potential concern. I guess I can try lowering the float height if it does leak as the level at the jets will still be plenty high enough.

Continuing the tale of woe, the hi-level exhaust does foul the LH rear shock and it will not be easy to adjust it. In any event I am not overly impressed with its design or construction. So I tried offering up a standard MZ exhaust system. Connecting the silencer should not be a problem, the connection point under the engine is still present and it only requires the drilling of an 8mm hole in my new shock mounting to provide a rear attachment point. The issue is going to be the exhaust pipe, I only have spares from a TS250 and an ES250 but even if I had an ETZ250 type it is unlikely to fit due to the changes made to the head & barrel. The best bet seems to be the ES250 type but it will need cutting and welding to get things lined up. Time to step back and think it through.

One thought going through my mind is junking the ETZ engine and fitting a rebuilt Supa5 motor I have under the bench. This would solve most of the problems I encountered today and give me a bike I have often thought about building - an early ETZ frame with Supa5 motor. There are two downsides though. Firstly, the original object of the project was to see how the modified ETZ engine performed. Secondly the bike is currently configured for 12v electrics and the Supa5 engine uses a 6v dynamo

Saturday 18th July 2020

Reassembly has started and the bike is now a rolling chassis again. I was anxious to get it to that stage to see how it looked. Not too bad in my view. I might experiment by lengthening the rear suspension units a little just to see if that improves things but that will be easy enough to do later.



Next stage is to get the engine in the frame as this remains the only special feature of the bike, I have removed most of its other unique features as you can see from the inset. However, all of the 'special' bits removed still exist and none of my mods prevent them being refitted, apart from the reversed brake/gear lever gizmos which John had already removed.



I have modified the reed valve assembly to take a standard ETZ250 intake manifold. This provides a more positive mounting for the carb and angles it slightly so that it clears the frame and will allow an air cleaner to be fitted. Easier to do this job before fitting it to the frame which I hope to do on Sunday. The next potential hurdle is the exhaust system which will likely need 'adjustment' to clear the suspension leg.

Friday 17th July 2020

Busy day today as I spent the morning at the model engineering club playing with my new 16mm locomotive. This afternoon I moved the major parts of the Red Peril to the workshop and started the rebuild. The s/arm is installed along with the rear mudguard, the centre stand, the rear brake and the footrests. For now I have used the 16" rear wheel, the 18" wheel destined for this bike is temporarily on my other ETZ250. Now its original wheel has a

new tyre, I can swap them back again. Next logical step is to get the front forks and wheel installed so that I have a rloong chassis. The drawback is that the fork legs need stripping and either polishing or repainting and it would be easier to do this now rather than strip the front end later to do the job. Extending that logic, I really ought to prep and paint the headlamp shell before I install the wiring as it will be a pain to get it out later. So I guess I have just talked myself into another day or cosmetics. I would much rather be spannering.

Actually that is one of the good things about keeping this blogg, it makes me back off and think about the job.

As a little light relief this evening, I made a start on cleaning up the newly acquired ETZ250 crankcases. The worst of the crud was scraped off then I left one of the cases soaking in my washer for a couple of hours. With some energetic scrubbing it looked pretty good so I soaked in hot fresh washer to wash of the detergent and left it dry. For donkeys years I used paraffin and old petrol in my parts washer but not only is it expensive and a fire risk but it's also carcinogenic so I now used a water soluble alkaline cleaner. You still have to wear gloves though as it does nasty things to your skin. You also have to be careful how long you leave aluminium parts in the solution as it can attack them but probably only after days of soaking – overnight has not caused a problem so far.

Thursday 16th July 2020

Mucky day today, I took the frame and s/arm together with the angle grinder and the power drill to the end of the garden and spent the morning derusting both items, grinding off the surplus lugs and generally tidying them up. Not a brilliant job but a darn sight better than they were. These bits plus the centre stand and the rear brake lever have now all been painted with Hammerite Smooth and left to harden off for a couple of days. The greenhouse used to be the preferred location but it was dismantled a while back as it was about to fall down. As the weather is fine and dry I'll just leave them outside for now.

Peter Wickes popped over this evening to bring me a pair of ETZ250 crankcases in exchange for a 6v dynamo setup he needs to a Supa5 rebuild. The cases are for the engine that is coming from Andy Henworth which I took in part exchange for a rebuilt motor. A long complicated story which I will write up later. However, by one of those curious twists of fate the new cases are of a very early pattern with the oil feed through the case rather than by external pipe. These are ideal as they match the other bits I already have for the rebuild.

Tuesday 14th July 2020

What a difference a day makes as in the words of the popular song. I was surprised to find it was actually written in 1934 though still being re-recorded when I was a youngster – Dinah Washington as I recall and there were others. Anyway having slept on the problem I decided to investigate putting the bike back to twin shock. I have a good pair of MZ rear shocks in the spares box and a tatty but sound standard swinging arm. In fact as the first

picture shows it looks promising – yes the tops are only secured with cable ties while I offered up an 18" rear wheel. There is enough clearance to the tyre, not as much as with the monoshock but the MZ shocks only have a limited movement.



It looked good enough to me to justify spending the rest of the day fabricating and welding in place the top mounts. The next picture shows the end result. Still a lot of work to do but one benefit of getting rid of the monoshock is the extra space under the seat which in part will let me build in a tool box. I also need to extend the mudguard to keep the road muck out. Rather hoping that the end result will be a better bike.



Monday 13th July 2020

Today started of very well. I picked up the stand kindly donated Andrew Rae at the Nunney Catch garage yesterday whilst doing a few of the controls in the White Horse Challenge. A cunning plan that worked out well Baldock.

I had to make an adapter to compensate for the part of the stand tube that had been cut away but this was soon done. However, fitting the stand spring presented a challenge. One end hooks onto an extension of the swinging arm spindle but on the RP the spindle has been fitted the wrong way round. No problem I thought, I will remove the nuts from both sides, tap the spindle out and reverse it. A job I have done lots of times to grease the spindle and stop it seizing. To be sure it stayed lined up, I even used a spare spindle as the tap. To cut a long story short getting the spindle out was easy, getting it back in was impossible, the s/arm simply would not line up with the frame lugs. Initially I thought this was because of the pressure exerted by the monoshock. I started to strip it out but eventually concluded the only way to do this successfully was to dismantle the bike to a bare frame. I was going to do this anyway at some time to paint it. So the bike is now in a million pieces, all neatly packaged up to make reassembly quick and easy – ho-ho-ho.

The end result is that the problem is caused by distortion of the swinging arm as a result of the modifications made to incorporate the lower part of the monoshock assembly.

Moreover, the linkage for the dog bones to the frame is very flimsy and will need improving. Not a good situation and right now no obvious solution. Reverting to twin shock is complicated by the fact that the original rear sub-frame has been cut off so a new top mounting would need to be fabricated. Quite a lot of work whichever option I went for. Time to sleep on the problem.

Saturday 11th July 2020

The tank remained leak free so I refitted it to the bike this morning and took it for a short test ride up and down the road initially and then a little way along the bypass. The brakes were a bit problematic but after adjusting them and working them hard to bed them in they became just about adequate. The front forks could do with a service, I just fitted them without even checking if they had any oil. The monoshock rear suspension feels a tad hard but worked well enough. Handling was ok and doubtless would improve with some better tyres. A Pneumant at the front and an Avon SM at the rear is not the best. The engine seems to be more flexible than a standard ETZ but this could be in part because it's running a 16t gearbox sprocket and a 16" rear wheel.

I did not try very hard but I get the feeling that the exhaust is strangling it. Overall everything worked and nothing fell off or made worrying noises – though the intake drone would mask a lot anyway. Not sure what I was expecting, it certainly was not the fire breathing monster I half expected but that may be because I did not rev it much beyond 4000rpm. For the moment I have put it back in the shed as I need to spend time on other things. The following is a list of the things that I feel ought to be done if I am to keep it – not in any particular order of priority:

- Better front brake – ideally get an ETZ disk front end

- In the interim clean up the front wheel and fit new brake linings. Possibly fit the external brake lever Terry D made.

- Better seat and try to lower it a bit – could need major surgery

- Fit a centre stand – may be collecting one tomorrow

- Make better brackets for the rear indicators.

- Ditto for front indicators – the ones fitted touch the tank on full lock.

- Strip and paint the frame

- Paint headlamp – to match tank?

- Paint front mudguard – or experiment with hi-level guard I have in the loft.

- Make a box or bag for tools, oil and spares to fit behind the seat.

Make a cover to hide wires under switch (or find the proper MZ rubber cover)

Make sure tank now sound if not paint the spare.

Fit standard ETZ inlet manifold to angle carb and fit a decent air cleaner or even an air box if possible.

Not a huge list but enough to make me wonder – we'll see how things develop.

Thursday 9th July 2020

It has taken a bit longer than expected but the wiring on the RP is now complete. I had to rethink the stop light wiring and reverted to the built in rear hub stop light switch. However, this works as an earthing switch so my original cabling had to be revised. A front brake lever switch is also now incorporated as I managed to find all the necessary bits. Indicators at the front were fairly easy, I was able to adapt a couple of brackets that originally came with the RP. They are stainless steel and little flimsy but fine for now. If I keep the bike and give it a makeover, I will make some new brackets. At the rear I was able to adapt a couple of brackets already on the frame. Again they are not ideal. If I strip the bike for a repaint, I will weld on better brackets. I found the original side panels in the box of bits and these have been fitted to fill the gap and hide the electrics. Not sure if they are an improvement or not. At some time I propose to make a new seat with deeper valances which should look neater.

Attention has now turned to the petrol tank. On Tuesday I drained out the bulk of the fuel and left it on clean newspaper to see if I could identify where it was coming from. In the interim I turned my attention to the tank that came with the bike. When I drained it of dead fuel the amount of rust and muck that came out was amazing. Though it had showed no signs of leaking, I was sure it must be perilously close to perforation. However, nothing ventured, nothing gained, I filled it with a spirits of salts solution and left it to pickle for a couple of days. When drained, the tank looked pretty clean inside though some more loose rust and muck also came out. I filtered the pickling solution and gave it another day with still no signs of leakage, even the tap now worked where previously it had been blocked solid. The tank was drained once more, washed out with fresh water and is now filled with an alkaline based cleaning fluid solution used in my parts washer. This will neutralise any remaining acid and should limit further rusting until I can figure out how to line the inside of the tank. So far it is still leak free so may be an option to use but it needs a lot of TLC externally.

Reverting to the 'leaky' tank, I could now see where it was coming from and it may well be down to bad work on my part. When I sealed it with JB Weld I did not remove all of the araldite previously used as it seemed fine. I smoothed it down and ground away any obviously loose bits then applied a new coating. Examining it now I can see that fuel, in very minute quantities, is leaking inside the original repair. I have cut this back and reapplied JB weld such that it seals the bad area and forms a lip on both sides of the seam. Tomorrow

when it is dry I will put some fuel back in and let it fester for a couple of days. If it works, fine, if not I'll prep and paint the other tank.



Tuesday 7th July 2020

Well the ETZ250 now has an MoT and is taxed. However, it nearly never happened as the engine stalled as I was leaving home. Then I realised it had not stalled but was totally dead. Fuses were the obvious culprit and sure enough one had blown so I changed it and the idiot lights came back on again. Immediate problem solved but not why it had blown. I put the battery cover back on and the electrics were dead again, same fuse blown. For once I thought back to what I had done recently in connection with electrics, oh yes I put the battery back in and clamped it down. On ETZs the clamp is the tool kit holder and it's held down by a couple of spokes which hook into the base. Closer inspection showed that one of these spokes was very close to the battery +ve terminal and putting the cover back on was enough to push it into contact – pop goes the fuse. I padded it out with a piece of rubber as a temporary fix and got to the MoT station with a minute to spare.

Stuart the tester pointed out that there was oil mist on the offside fork leg but only made it an advisory so I came away with a ticket and another job to do on the bike. I enjoyed the ride and had forgotten what a nice bike it is even though you have to row it along on the gear lever as the ETZ engine is so peaky. The spoke that cause the fuse problem is now

covered with shrink wrap and the top clamp cover is repositioned a little. Hopefully this incident will not recur. Fixing the leaking oil seal is a longer term matter. The forks on this bike were rebuilt with brand new stanchions and new oil seals less than 1000 miles ago so it should not be leaking. I need to research a better quality oil seal before stripping it down. In the interim I have wrapped a piece of felt around the fork leg above the calliper to soak up any further oil that may leak. I also washed the disk and the pads in petrol in case there was any contamination.

After lunch I made a start on wiring the RP. It went quite well and I made good progress. The ignition and charging system are now wired through the MZ switch on the instrument console and we have lights and a horn. Tomorrow is the turn of the stop light switch and the indicators. These will take a while as they need brackets to be manufactured. Easy enough at the front but as yet I have no clear idea how and where to mount the indicator brackets at the back.

Monday 6th July 2020

First task today was to dig out the petrol tank that came with the RP. I had discounted this because it had a lot of external surface rust combined with a couple of dings, curiously in almost the same place as the red tank. Of more concern was the huge amount of rust that came out when I emptied the stale petrol. On the other hand there was no evidence that it was actually perforated as it was totally dry outside. So I gave it another good shake to loosen a little more of the rust, then filled it with a spirits of Salts solution and left it to soak for 24 hours. So it will be interesting to see if it's still watertight tomorrow.

The ETZ250 is now in the workshop and has been given a service and checkover. The front brake felt a bit wooden and there were traces of brake fluid underneath the caliper. I had in stock a complete brake assembly which I serviced some while ago. This has now been fitted and the brake is much improved. I then got sidetracked so the original wheel with its new tyre did not get fitted. However, the spare that is in place is nearly as good so no problem.

In the post today I received the combined dip, horn and indicator switch I ordered for the RP. Impressive service given it has come from China and was only ordered a week ago. So no excuses about doing the RP's wiring. This afternoon I sorted out the other bits I will need to complete the wiring. This evening I have sketched out the wiring diagram to be used. Not sure yet when I will start the job but it will likely take 2 days, it's always a slow and for some unaccountable reason a messy business.

Sunday 5th July 2020

Progress on several fronts today. Andy Pratt arrived spot on 9am and collected his bits so my bike slush fund is somewhat healthier. We had a long chat before he departed for

Reading – no doubt to collect some other bits. He left me an ETZ250 rear hub as promised. This is now built into a 16" rim using the s/s spokes from AKF, a tyre is fitted and the wheel is on the bike – job done. If the bike is a long term keeper I will have to fit a better tyre (it's a 3.25 Avon SM) but it's perfectly adequate for now. I thought the bike was pretty well done mechanically, but I noticed a smell of petrol this morning, the seam on the tank is weeping again so my JB Weld repair has not worked. Back to the drawing board.



The ETZ250 has been booked in for an MoT next Tuesday so tomorrow it will be given a check-over. It was working perfectly when put on SORN last September but you can be sure that something will have stopped working. The battery was still ok but I have put it on charge to be sure. One thing that I know has to be done is to replace the rear tyre. Though it looks fine with plenty of tread, when you examine it closely (as MoT examiners are wont to do), there are splits in the sidewalls. I fitted a spare back wheel a while back but though it has a good tyre it's a bit scruffy so today I fitted a new tyre to the bikes proper rear wheel this will get swpped over as part of the service tomorrow.

Saturday 4th July 2020

I rode the Himalayan over to Camely yesterday to collect the bits ordered from AKF and the other items he had found for me. He is an amazing young man full of ideas and the skills to put make them work. He has built his own alternator system for a TS125 using readily

available bits from the internet plus some machining. Net cost less than half that of a Powerdynamo setup.

Back home the RP Now has a functioning rear brake. Not quite straightforward as I found that a previous owner had chopped off about 40mm of the tube in which the brake runs. I have made up a temporary spacer but ideally this needs to be welded in place and a spigot added for the return spring. Realistically this can only be done if/when I totally strip the bike to paint the frame. The brake works well enough without it so no urgency.

Thursday 2nd July 2020

The RP got a test ride round the orchard yesterday and all seems to be well. It's now starting quite easily and hardly smoking at all. I still have not tried tuning the carb to get a reliable tickover but I think it will be possible. The exhaust is also quite subdued. Ollie Harris has come up trumps on two fronts. Firstly he has found a rear brake lever and rear tank mounting rubber and secondly he placed an order with AKF on Monday which included a couple of bits for me. Apparently the AKF bits arrived today so I plan to ride over to Camely tomorrow to pick it all up. Another piece of good news, Andy Pratt who is coming down on Sunday to pick up some Trophy parts has found an ETZ250 rear hub. With the 16" rim I already have in stock and the spokes I ordered from AKF, we should soon have a proper rear wheel without the need to dismantle one of my existing 18" wheels.

Tuesday 30th June 2020

Half way through the year today and half of that has been a sort of non-event due to the Covid-19 pandemic and its consequences. I guess we should be grateful to still be here and so far unaffected from a health point of view. We are slowly beginning to emerge, today I issued the regulations for an event Keith Johnston and I have conjured up to replace the White Horse Trial. We even have a committee meeting on Thursday to try and restart other section activities and to discuss the happenings at Allen House. Anyway enough of that, back to bikes though not a lot to report. The good news is that the Venom is now fully road legal, a UK sourced flasher unit arrived on Monday and the indicators are finally working. Now to get some test miles on the bike so that I have sufficient confidence to take it to Spain. That was the second recent piece of good news, Brittany Ferries are restarting passenger sailing from 15th July. Not all of their ships will be in service, I guess some cannot be made safe enough, but the sailing we are booked on is still in their calendar. Of course we don't yet know if Colombres will happen nor whether we will feel safe enough to go. However, one out of three is a good start. On Monday afternoon, I drove up to Slad to pick up an ETZ250



engine for Andy Pratt who is coming down on Sunday to pick up some other MZ bits.

I played around with the seat on the Red Peril today as can be seen in the picture below. Still looks a little high but at least I have closed the huge gap between seat and tank. Without major surgery there is not much more I can do about this. Refitting the mesh side panels to hide the electrics might well improve matters. I have also fitted a front mudguard, a headlight lens and a gear lever – small but important steps and my ankles are glad the footrest rubbers are now in place. A proper bracket now secures the back section of the rear mudguard; this replaces a couple of cable ties and is not only stronger but looks much better. Time for a test ride round the orchard.



Sunday 28th June 2020

Bit more progress, I now have a functioning charging system on the RP using the Lucas 3-phase rectifier and the solid state regulator that came with the bike. AS delivered these were fitted inside the crankcase alongside the alternator. Quite a neat idea, but I was concerned that they would overheat in that environment, so I have mounted them under the saddle. Took a while to figure out the wiring but I got there in the end. Other than a charge indicator bulb in the tacho, there are no other electrics fitted yet and the ignition is controlled by a simple key operated car type switch mounted under the seat. I have on order a combination switch giving dip, horn and indicators (as fitted to the Venom). I will

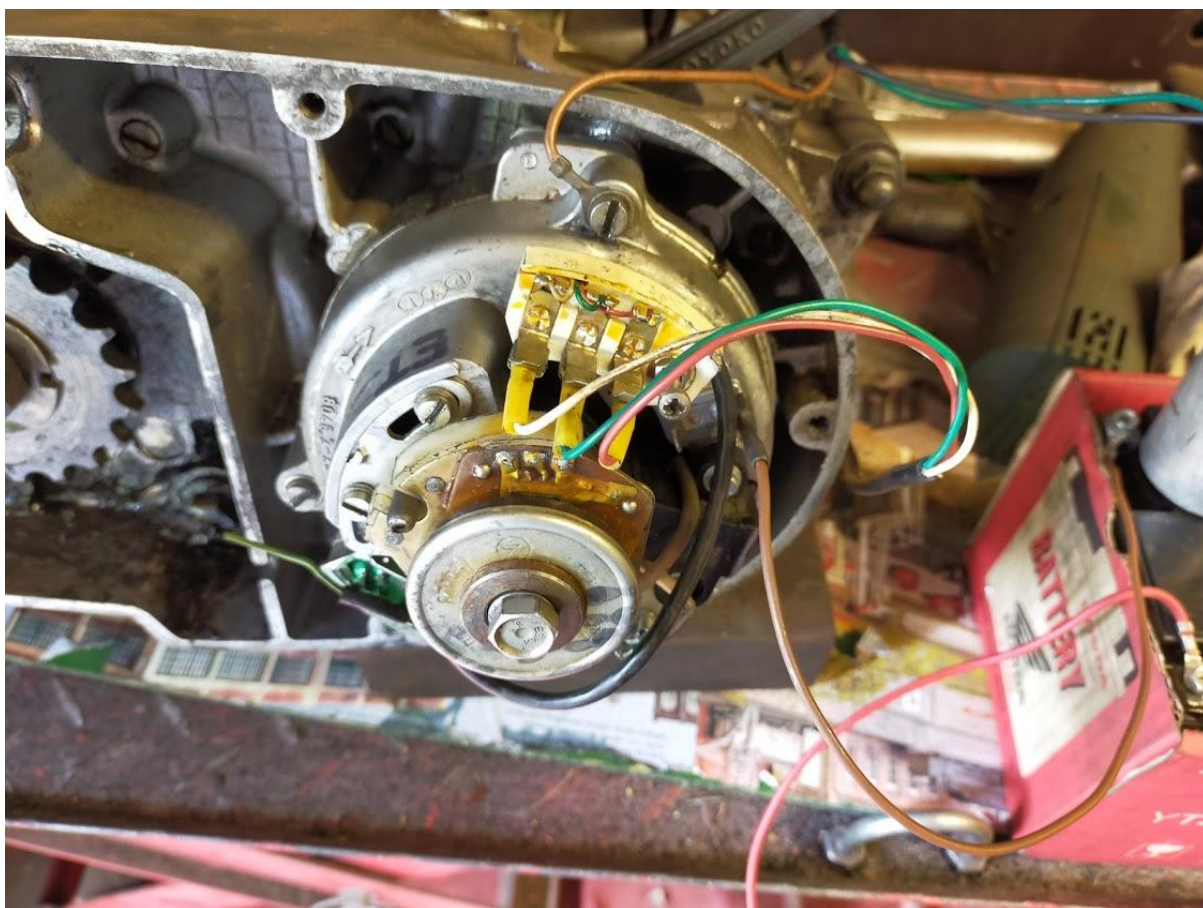
tackle the rest of the wiring when it arrives and probably revert to the standard MZ ign switch in the console.

The petrol tank is still free from leaks, so I drained out the old fuel used for testing and re-filled with 5l of fresh petrol with 40:1 oil mix; there is no pump on this engine. I then wheeled the bike to the end of the garden where it backs onto fields and ran the engine for about 10 minutes. It smoked very heavily initially due to all the oil used in cleaning and rebuilding. Eventually it cleared enough for me to be able to run it in the workshop. I have yet to tune the carb and it seems reluctant to tickover at less than 2k revs. Mechanically it is reasonably quiet but there is a lot of induction roar from the carb and I am not confident that the way it is fitted is very secure – something to look at in time.

There was no chain with the bike when it arrived and I could not find one long enough in my spares stash so I had to extend one with a few spare links. Not ideal and I will have to buy a new chain if I keep the bike. Fitting it was the usual messy business so I packed up for the day once that was done. In theory the bike can now be ridden; we shall see. Time also to review what else needs to be done.

Saturday 27th June 2020

I have been seeking advice on the mzrides.io forum about an electronic ignition system I have been hoarding for some considerable time, If it works, it would provide a solution to the lack of a points cam. Anyway thanks to the forum I have some documentation for the system which appears to be an early MZ product. Turns out it was incomplete but I was able to modify an old points backplate to overcome this problem. Today I wired it up and to my surprise it works with a very healthy spark (uses a standard DDR 12v coil). The only slight issue is that the documentation gives no clue on setting the timing. Assuming I could get it to run the timing could be finalised with a strobe. But there are already so many non-standard features on the RP engine that I wanted something more predictable for initial testing. I had used my spare ETZ250 engine to test the electronic ignition and had forgotten that it has a standard points ignition setup. So I plan to 'borrow' this when I get to the point where I am ready to run the RP engine. Overall a useful exercise.



Later, I brought the RP up to the workshop and fitted the piston, barrel and head. This was slightly complicated because the bottom end is in the frame and there is not enough room to fit the barrel with the studs in place. I removed them all then fitted them to the barrel, held in place by an elastic band. The piston was fitted to the con-rod, the barrel dropped onto the piston (with a bit of jiggling) and the studs were then screwed back in place. Not sure it's an approved technique but it worked. With the head screwed down I was able to test the squish gap which is .85mm. According to the documentation which John May dropped off yesterday, the minimum for a race prep engine (which is what this basically is) should be .80mm and ideally closer to 1.00mm. Unfortunately, on this engine you cannot set the squish gap with head shims in the normal MZ fashion as the head is deeply spigoted into the barrel (see earlier pics). You have to increase or decrease the thickness of the cylinder base gasket which is tedious and of course can affect the port timing. As it's just within limits I have opted to leave it at .85mm for now. I reckon that's something top side of 11:1 cr. The picture below shows the piston at tdc and it's a good 3-4mm below the top of the barrel. Clearly, the head fits down inside.



Since this engine is quite a lot shorter than a standard ETZ250, the head mounts need adjuster blocks and it took a while to get the engine jacked up into the top but eventually I got them located. Fitting the hi-level exhaust system was also fiddly to get it lined up well enough for the exhaust pipe nut to engage. Next step was to fit the carb but I failed on this. The 36mm carb would not fit into the rubber connector – or rather it would but then sort of squeegeed out again when you tightened up the jubilee clip. I gave up in the end and fitted a BVF 30N2-5 carb – perfectly adequate for testing. Last stage was to install a basic wiring system sufficient to provide ignition. As mentioned above, I opted for a simple points system for now using the parts from the spare engine.

Finally we had enough bits in place to theoretically run an engine but would it go? The answer is yes, with a bit of fuel down the plug hole to provide encouragement it started after a couple of kicks and sounded healthy enough. As expected, it smoked heavily no doubt due to the residue of oil in the crankcase so I stopped it almost immediately and will run it in the orchard tomorrow to let it clear without smoking out the neighbours. I then need to extend the electrical system to provide charging.

Thursday 25th June 2020

Only a couple of small jobs on the Red Peril today. The first was to clean up the area of the petrol tank which had been leaking ready to apply the JB Weld which turned up today. I

don't remember doing it, but it looks very much like I had started doing the same job a while back. However, it was a bit raggedy so I smoothed it all down and applied another layer to make a neater job. Tomorrow I will put a small amount of fuel in the tank to see if it is now sealed. The other job was to clean up the hi-level exhaust system that came with the bike. This is a bit crude but very solidly made and despite being left outside for several years only had a small amount of surface rust. It's now been painted with some silver hi temp exhaust paint.

Nearly two months ago I ordered a couple of led flasher relays from China and they finally arrived yesterday. I naively thought it would be a 2 minute job to fit them to the Venom and the Viper so both would be fully road legal. Fitted one to the Venom and it did not work. So I fitted what I thought was the same one to the Viper and it worked perfectly. So I fitted the other to the Venom and it still did not work! Eventually I managed to prove conclusively that one of the relays was duff so a snotty email has been sent to the supplier. I doubt they will ever respond and even if they offer a replacement I could die of old age before it arrives. So I did what I should have done and ordered one from a UK source which should be here in a few days. With all this fine weather I really want to get the Venom on the road. Especially as today I had an email saying the Brittany Ferries is restarting passenger carrying from the beginning of July so maybe our Colombres trip is going to happen.

Wednesday 24th June 2020

Harder work than I expected but I achieved both objectives. The bike now has a 16" rear wheel fitted. Albeit from a TS250 so it does not quite fit properly but it does let me see how it looks. Personally I think it's an improvement. Now I need to add a 16" ETZ rear wheel to the project shopping list. Alternatively, I have a 16" rear rim so I could just buy a set of spokes and rebuild the hub into this. Arguably the best solution as I would probably respoke a new wheel anyway. The engine (or rather the bottom end) went back into the frame easily enough and while I was on a roll, I fitted a tank which originally came from my ETZ250. Managed to find the correct nose rubber and the two lower frame side rubbers but not the back fitting. However, it will be easy enough to fabricate something if I don't locate one.

Final task for today was to check out the electronic ignition. It all went back together as it arrived (thanks to the photos I took) but I could not get it to spark. So I have removed all the electrics and will wire it from scratch with points ignition. That's where I hit my final snag of the day. I have about 10 points cams but not one of them will fit the ETZ rotor; they are all too large a diameter and I guess they must belong to dynamo equipped bikes. This would seem logical given the number I have converted to Powerdynamo systems over the years. So an ETZ points cam is also on the shopping list.



The seat is still way too high and with the tank now fitted in its correct position, also needs to be moved forward. I had a quick look and I don't think this will be a major problem but it's not a priority task.



Tuesday 23rd June 2020

Today was spent dismantling the front end of the Red Peril and replacing it with a standard MZ front end with an 18" drum brake front wheel. The KTM forks, wheel and hydraulics are set aside for now. They will probably be sold or swapped for MZ parts to further the RP project. Attention then turned to the wiring. It was a total mess being mismatched bits of an original MZ loom (very little) combined with wires and connectors from some other machine with colours changing part way through the loom. In the end I removed everything except the parts that were dedicated to the ignition system and the engine end of the charging system. It will be far easier to build a new loom from scratch. The wiring removed did include an LED voltmeter which works so that may get re-used.

My plan tomorrow is to refit the bottom half of the engine and reconnect all the ignition wiring plus a battery to see if I can get it to spark – more out of interest than any intention to make use of it long term. Even with a smaller front wheel the seat is still far too tall and it looks unbalanced with the trail type 3.50 x 18 tyre on the rear. I have found a 16" wheel from a TS250 which I plan to try out.



Sunday 21st June 2020

A day of reflection as I looked more closely at the Red Peril pondering on what's missing and what I should do with it. The former was easier to achieve and that got me looking in the sheds to see what bits I had in stock that might be useful. This is the tally so far:

Front fork legs: Found a tatty but usable pair; however, they are for a drum brake wheel. I then found usable 18" and 16" drum brake wheels. I also have a suitable mudguard and a front brake lever. Off to a good start. Longer term I will think about a disk brake but don't have the correct fork leg at present and the KTM caliper has totally different fixing centres anyway. The odds are it's better to sell or swap the KTM stuff to fund the correct MZ parts. I do have a good MZ Master cylinder and calliper assembly which is a start.

Fork yokes: I found a set for a late ETZ and a set for a Supa5. Either will fit, depends on which type of headlight I go for. Here again I have a choice of ETZ and TS type.

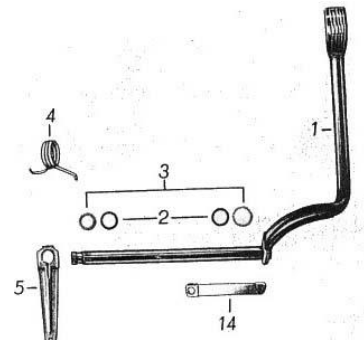
Handlebar Fittings. I found a twist grip without a crack in the alloy part (phew) and a set of ETZ brake and clutch levers. Plus a set of TS levers in case I need to use TS switches. Doing well.

Carburettor: I have managed to free up and clean up the slide of the 36mm Mikuni carb but I have in stock two good 30mm BVF carbs just in case.

Petrol Tank: The one that came with the bike is cosmetically challenged but did not appear to have any leaks. However, it was full of very stale suspiciously reddish petrol. I poured this into an old oil container for use starting bonfires and cleaning things. At the very end a huge pile of rusty particles came out. I have some spirits of salts I can use to derust the inside, but I suspect it may provoke some perforations. I do have another ETZ250 tank of the correct shape and colour but it too has perforations along the bottom seam. I only found this out after I had spent time and money refurbishing it!. I think I will try a two pronged approach; derust the RPs tank and get some JB weld to repair the other tank, It has already been cleaned and lined internally – though obviously not well enough.

Centre Stand: The shed failed on this, I have the aluminium type, probably from a TS125, but it does not fit; at least not without major surgery. Not critical but desirable.

Rear brake assembly: Almost total failure on these items. I will need the main lever (1), the splined arm which goes on the other end (5) and the lever on the cam (14). I did find a brake rod but one out of four does not compute. So overall the shed did quite well. I shall put some feelers out, as far as I know these are the same on the TS250 and ETZ 250 models.



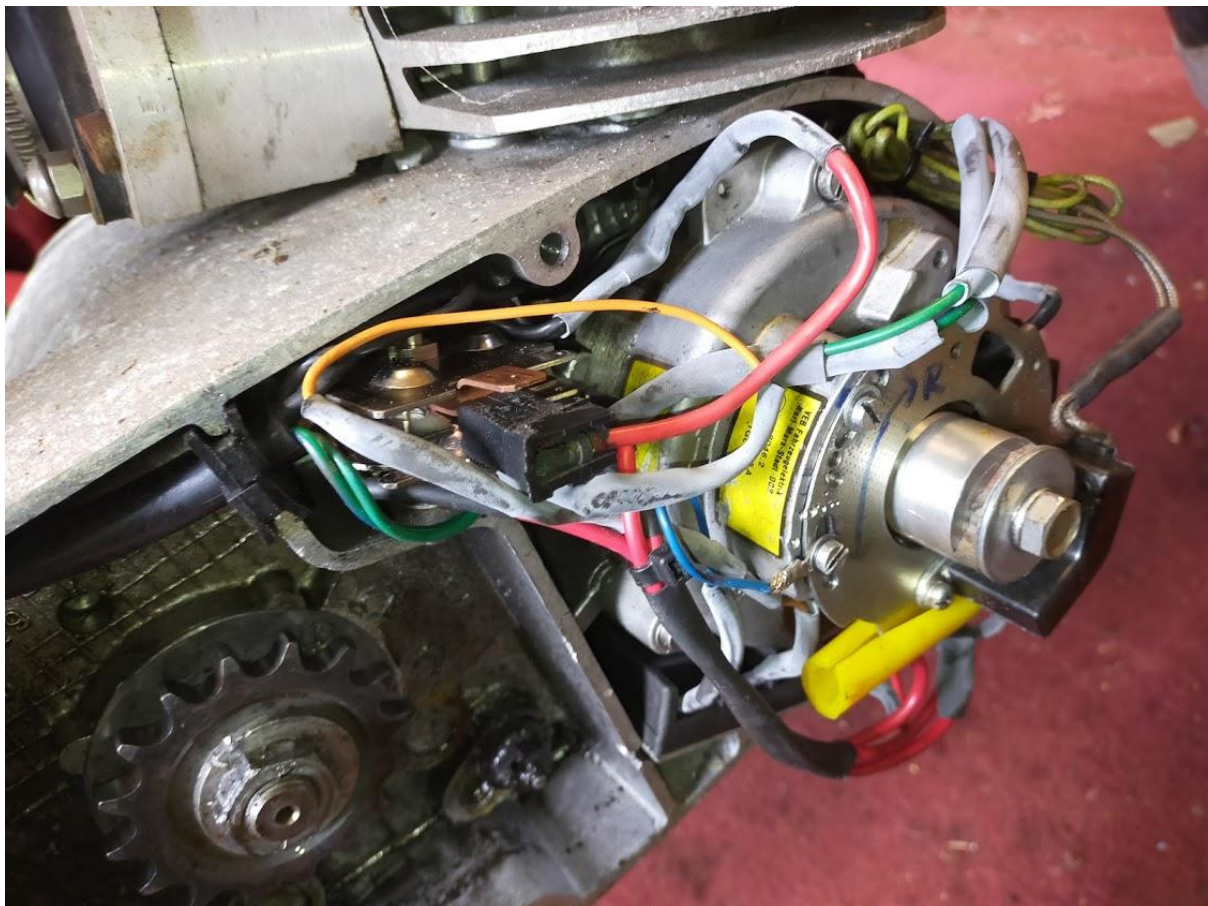
The electrics remain a mystery. On reflection, it should not be a problem to get the charging system working. There is a 3-phase rectifier (which I suspect is from a car alternator) and one of the aftermarket solid state regulators plus a complete alternator. Hopefully I have the skill to link this lot together. The electronic ignition is problematical, it will be fun trying to get it working but even if I do, I will likely revert to points and for this I have all the necessary parts. However well the electronic ignition works, if it ever broke down I would have little chance of fixing in the garage let alone at the side of the road. I have an ETZ type ignition switch which will fit in the instrument binnacle. This is obscured at present by something unknown – possibly a clock though it seems to have a lot of wires running into it. The wiring that runs from the battery area to the front end is totally non standard with much of it chopped off or no longer connected. The handlebars are bare of switches or any other electrical items. I probably have enough TS related bits to sort this but preference would be to find ETZ switch gear or more likely if the bike is a keeper, buy an aftermarket combi switch as I used on the Venom. They are small, neat and quite cheap. On the same basis, I would most likely junk 99% of the present wiring and make a new loom conforming to MZ conventions. There is a neat blade fuse box on the rear mudguard, a carrier for a battery and the indicators also look usable as does the MZ rear light unit. This may well be

the only original MZ electrical part on the bike. Horn and stoplight switch will be easy enough to sort along the way. So overall not so daunting as I first thought.

Saturday 20th June 2020

Just stopped for a lunch break. The engine is now out of the frame and sitting on the garage floor waiting for a top end strip so I can invert it to get the water out. There was clearly a lot of water inside as I emptied about a pint of rusty water from the expansion chamber when I got it off.

No particular problems over dismantling so far but the electrics are a total mystery so I have been taking loads of photos to help put to help reconnect everything should I decide to do so. I will give a fuller analysis of the electrics later but only the Stator and Rotor are MZ, everything else is Japanese but spliced into parts of the original loom. There is a solid state regulator tucked underneath the alternator and what I assume is a rectifier sitting top left. The ignition is electronic but unclear exactly how it works. The picture shows what I found:



There was no switch gear on the handlebars nor the usual MZ ignition switch on the instrument binnacle. I suspect John has used some of this on his Trail bike project but where it connected to is unclear. There is a car type ignition switch under the seat though I don't yet have the key to find out what it controls. One bonus point is the 16t gearbox sprocket you can see in the picture.

After lunch I stripped the top end of the engine, primarily for damage limitation from water in the crankcase. It had clearly been right up to the top as there was a rusty tidemark part way up the barrel. Above that where the metal was exposed to a mixture of air and water there is some surface rust but I think this will clean up ok. Having got rid of as much of the water as possible, I soaked the crank assembly in WD40 to disperse the remainder and cleaned it again. The big end looks ok and the only rust I can see is on the con rod where it was above the water level. The cases are now filled with oil to prevent any further rusting. Only oil came out of the gearbox which was encouraging



and the engine does spin over smoothly. However, it will have to be fully stripped just to be sure.



The other reason for stripping the engine was curiosity as to what if any internal changes had been made. My initial thought was that the barrel was from some other bike but I think I was wrong. It has been machined both top and bottom. The piston is not from an MZ, it is a two ring type with very



narrow rings, looks very like a Mahl with narrow gudgeon pin but I could not identify the only marking I found inside. My guess is something Japanese. There is no size marking but its 70mm and clearly from a 2-stroke as it has an arrow denoting front and ring pegs. The height above gudgeon pin is 10mm lower than a standard ETZ piston. This explains the top and bottom machining as this 10mm had to be lost; I assume a bit from both ends. The head has also been machined so that the spigot on the barrel locates inside a groove. The spigot is the

fully width of the liner rather than a narrow ring. Overall the engine is considerably shorter than standard. Not sure by how much as I don't have a standard barrel to compare with. However, there are circa 20mm spacers on the studs and the cylinder head mountings have been extended as they no longer marry up with the doughnut. The inlet and exhaust ports look close to standard as do the 4 transfer ports but there is a 5th just above the inlet port. This is just a smallish groove in the barrel and does not appear to be connected to any of the other ports. There is no slot or hole in the back of the piston either so I cannot yet figure out its purpose. I have left the reed valve assembly alone for now.

The rolling chassis is put away in one of the sheds until I decide what to do with it. The bits removed from the bike and engine are in a box also in the shed. The bottom end remains in the garage as it's difficult to move it with the crankcase filled with oil and I don't want to risk it getting damp for now. The carb turned out to be a whopping 36mm. I cannot believe it needs to be that big but perhaps that is a consequence of the reed valve. The slide is still well and truly stuck so will need attention in due course.

Friday 19th June 2020

The decision was made to have the Red Peril and it was collected today; in the nick of time it seems. I had noted that the bike was stored outside without a cover when we visited Slad on Monday and since then we have had 4" of rain. My fear was that the huge sponge aircleaner would soak up water which would get into the engine. Seen this problem many times with MZs. First clue was the carb slide which was (and still is) well and truly corroded into the body of the Mikuni carb. The



engine does kick over which was a relief (short term) but when I removed the plug and kicked it over water was ejected from the plug hole. Moreover it appeared to be rusty suggesting it has been there for a while. Not good so instead of just parking up the bike until its turn comes round, I need to remove the engine, strip the top end and turn it upside down to remove the water and assess the likely damage. This becomes the priority job for tomorrow. The rest of the bike is scruffy but not in any immediate danger as far as I can tell.

I was disappointed to find that the rear brake mechanism was entirely missing as I wanted to see how it had been done. John took it off with a view to using parts of it on his own Trail MZ project but did not use them in the end. However, at the moment he has no idea where the bits are. Not a major issue as my plan is to revert to standard footrests, gear lever and rear brake lever. I have all these bits apart from the rear brake lever but that should be easy enough to locate in due course. The other bits he removed are not of concern mostly they were not original MZ items or things I have in stock.

The KTM forks do nothing for me and fitting them caused other changes, such as moving and raising the fuel tank. I am hoping that nothing has been done to prevent standard MZ forks from being fitted. Don't want to do that just yet as its handy having the bike as a rolling chassis and don't want to strip the front end only to find I cannot complete the reversion to standard..

Monday 15th June 2020

Well the White Trail bike has gone to it's new home, Rob P-N picked it up on Saturday afternoon and took it back to Bedfordshire. He has already been out for a test ride and found a couple of easily fixed issues. Doubtless there will be others and he has identified that the exhaust system is both restrictive and noisy. Many happy hours of tinkering ahead.

Today Terry D and I had a pleasant ride to Slad north of Stroud to visit John May who has just moved there. Very impressed with his new house, lovely views down the Slad Valley (Laurie Lea, Cider with Rosie territory) and lost of potential but currently a severe shortage of bike storage. Some while ago he bought an ET250 which had been extensively modified and in the pictures looked to be the ideal basis of a Trail/Enduro bike. However, he found, as I did with the white trail bike that nothing quite stacked up to what he wanted and in the end he built his own Trail bike which is nearly finished (two broken legs slowed progress a little). He has 'borrowed some items from the Red Peril but its now sitting outside and no longer figures in his plans. It is mine if I want it so currently pondering on this. I agree with John's assessment about the overall result on this bike but it does have some interesting features which are worth investigating, a reed valve conversion with 32mm Mikuni, round barrels, KTM forks and front wheel plus a monoshock conversion at the rear. Oh and the gear change and rear brake have swapped sides! Picture below taken when John first bought the bike, It has deteriorated in the last 3 years and not all of it is still present as can be seen in the final picture but it is tempting!



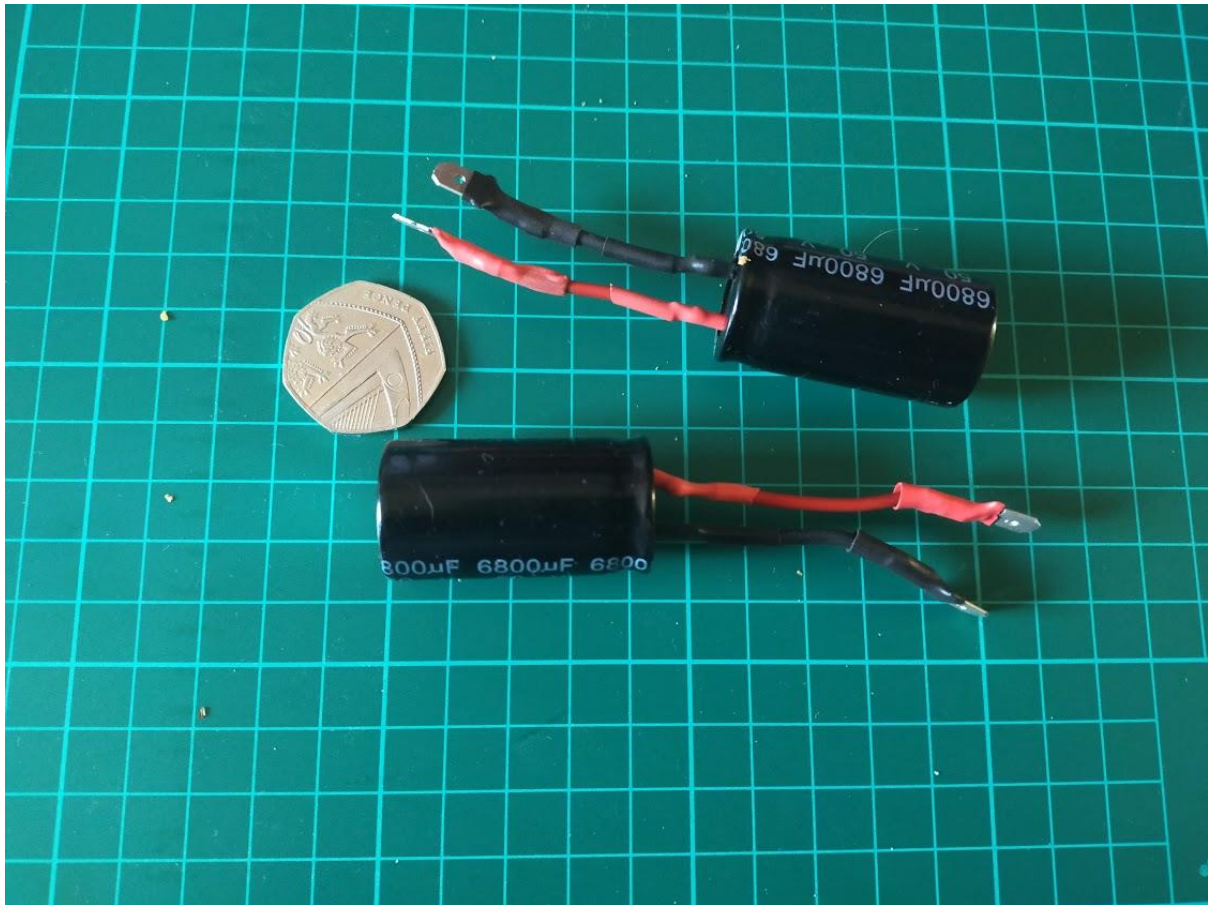


Friday 5th June 2020

The lathe has been collected and Terry D helped me move it from the car to the workshop this afternoon. Just an initial survey done so far plus a quick scrub with a wire brush to see how badly damaged very rusty chucks might be. In fact its is largely surface crusting caused by them being wrapped in rags which became damp. Three of them did respond to the chuck keys and internally don't seem too bad I am rather hoping that the 4jaw chuck can be retrieved as its self centering type. I had been told there was no motor with it we found a motor and its fixing brackets complete with the layshaft. Better still it was single phase. More in hope than expectation we plugged it in and it ran without any unpleasant noise both forward and reverse. Anyway I have decided to keep a separate diary on the lathe project see above.



When I got home the postman had delivered the capacitors I ordered back in April. I was convinced they had got lost in the post so that was a relief. These are simple electrical components so I have soldered on lucar connectors with colour coded shrinkwrap to make sure they get connected the right way round. They are to be fitted to the 4spd TS250 and the TS125 Sport both of which are running VAPE systems without battery.



Thursday 4th June 2020

My request for information regarding the 30N3-1 air adjuster screw was successful and it turns out that you can buy them new from TheMZShop. However, they are £3.95 plus postage. The same post also provided a link to a German site which also sold them but more interestingly, provided the thread size. Armed with this and a picture, I was able to make one using a piece of brass rod from my model railway spares stock. For future reference it is 8mm x 1.00mm pitch with a 5x2mm O ring. So now I have a complete spare 30N3-1 carb. I have sold three of the 30N2-4 carbs as they seemed to be popular. That still leaves me with one spare standard 30N2-4 and another which has been turned down on the inlet stub side to fit into a 28mm Trophy manifold. At some point I plan to fit this to my Trophy.



I also found a tin of old MZ petrol taps and spent a happy afternoon stripping and cleaning them. I now have three that are usable – just needing a new rubber washer and $\frac{3}{4}$ of another. I do like MZs, most things can be repaired with a little effort.

On a different tack, I have agreed to buy a lathe from a gentleman in Taunton. Its unclear exactly what model it is but it does have many features of a Myford. As you can see in the picture, it is quite cosmetically challenged having been stored in a damp shed for some time, the chucks look particularly corroded. However, I am told by John Hill that it has some very desirable features and is well worth what I have agreed to pay. Not sure what I will do with it long term but restoring lathe will be an interesting challenge. Another project blogg about to start no doubt.



Tuesday 2nd June 2020

Monday I spent converting the ETZ125 engine into a 150. I have had the necessary bits for a long time but the job has never risen to the top of the pile. However, on Sunday evening I had a phone call from a chap who a while ago had asked on the VMCC Forum for a source of an ETZ125 barrel. I offered him mine but he had already received a prior offer so I forgot all about it. Seems the other offer had fallen through so he contacted me. The 125 barrel and piston, both of which are in good order, are now on their way to Norwich and the converted engine is now back on the shelf. Strangely, on Monday I was contacted by a chap about the ETZ125 seat I put on Gumtree and in the conversation he indicated he would be interested in looking at any other ETZ stuff I had; so the engine may be on its way shortly as well.

Flushed with all this selling success, today I had a look in the sheds for other things to get rid of. I found a few things but more particularly I found two boxes of MZ carbs a few complete but mostly dismantled. I spent a very enjoyable afternoon building a complete TS150 carb and three complete TS250/1 carbs. I also assembled an almost complete ETZ 30N3-1 carb, the ones with the spring clip holding the float chamber. Its just missing one adjusting screw; unfortunately the design is totally different to the 30N2 series carbs so none of their adjusting screws (of which I have several) will fit. I have posted a query on the groups-io

forum to see if anyone has one to spare or can post a picture with dimensions so I can make one. Quite a satisfying day.

Sunday 31st May 2020

Rob P-N is having the trail bike so it is now put away until he is able to collect it. I took the Himalayan for a ride on Saturday. We went to Shaftesbury to see Andrew Rae who had kindly offered a couple of bits needed to help the rebuild of a TS125 engine I have been tinkering with for a while. Nice chap and with due regard to social distancing, we managed to look round his toys and have a good chat. Terry and I then rode back the long way via Mere and did a green lane over white sheet hill; lovely views. On Sunday I assembled the TS125 engine only to discover that it is still missing some minor parts – the clutch push rod, the gearbox sprocket nut and some gaskets. These are easy enough to obtain and won't take long to fit.

Over the years I have accumulated quite a lot of MZ parts some of which have been hanging around for a long time. I decided to have a bit of a clear out and put a few things on Gumtree to test the market. About half of the stuff has gone and there is interest in other items. Not a lot of money but it will help towards the new 16mm steam loco I am looking at. Perhaps more importantly, it creates some space to store other things.

Now that the lockdown rules have been relaxed a little, I should be able to get some riding on bikes I rebuilt recently, the TS125, the TS250 and the ES250/2.

Friday 22nd May 2020

With the Venom and the Viper back in the rear garage awaiting the flasher relays there was an opportunity to bring the Trail bike up to the workshop to tidy up some of the wiring. I have bought a load of 4 way lucar connectors and these were ideal to fit inside the frame loops for the flashers wiring. Not a long job but to quote the Repair Shop –'Happy with that'. I was also able to take the bike out for a longer test ride now the lockdown is eased somewhat. Everything worked even the back brake which has long been a point of concern. The speedos were a slight issue, the MZ one under reads but not sure by how much. Undoubtedly this is because its designed for a 16" rear wheel. One from an ETZ250 which came as standard with an 18" rear wheel would probably solve the problem. The bicycle speedo does work but is set to kms and has defeated my calibrate it; I suspect it is over reading. Sensible thing would be to rig up my phone and use its GPS to check both instruments. However, overall I was not enthralled by the bike and I have decided to sell it. First refusal goes to Rob Parker-Norman who was responsible for me acquiring the bike in the first place, otherwise I will put advertise it on the club website and MZ forums.

Wednesday 20th May 2020

Well we took advantage of the relaxed lockdown rules today and Terry D & I did about 55 miles on the bikes. First we rode to Wesbury Leigh to drop of a brake lever for John May, then up onto the Westbury Hills near the White Horse to pick up the Ranges perimeter track. We followed this, a mixture of tarmac and gravel roads with plenty of potholes all the way round to Netheravon and back via Devizes. Surprising number of people up there but not enough to cause us any concern. The weather and visibility were glorious as you can see in the photo. Now I have to clean the Himalayan. My new chain oiler worked a treat as well.



If you click on the picture you will get a short video clip of a typical section of the track. Terry is in the lead and my horn is sounding to warn him we needed to turn at that junction or risk getting arrested by heading straight into Larkhill Camp.

Tuesday 19th May 2020

The new switch for the Venom arrived today and looks to be quite good quality. There was no wiring diagram with it and 8 wires to sort out. Six of them are in a multi-way connector and two are separate. I guess this would plug straight into a modern Japanese bike but not too helpful on a Velocette. Anyway after a session with the multi-meter I figured out which wires did what and documented it for the bike's records. I had to play around with the levers on the LH side of the handlebar before arriving at a combination that allowed them all to work properly (a picture will follow). Then it was just a question of cutting of the supplied

connectors and soldering on ones that mated up with the Venoms wiring. As with all wiring jobs it took a while but once done I was pleased to find that everything worked. The only tweak needed was to reverse the wires on the headlamp to get dip & main beam the right way round. As with the Viper, I still need the led flasher relay but that apart the job is done.

Thursday 14th May 2020

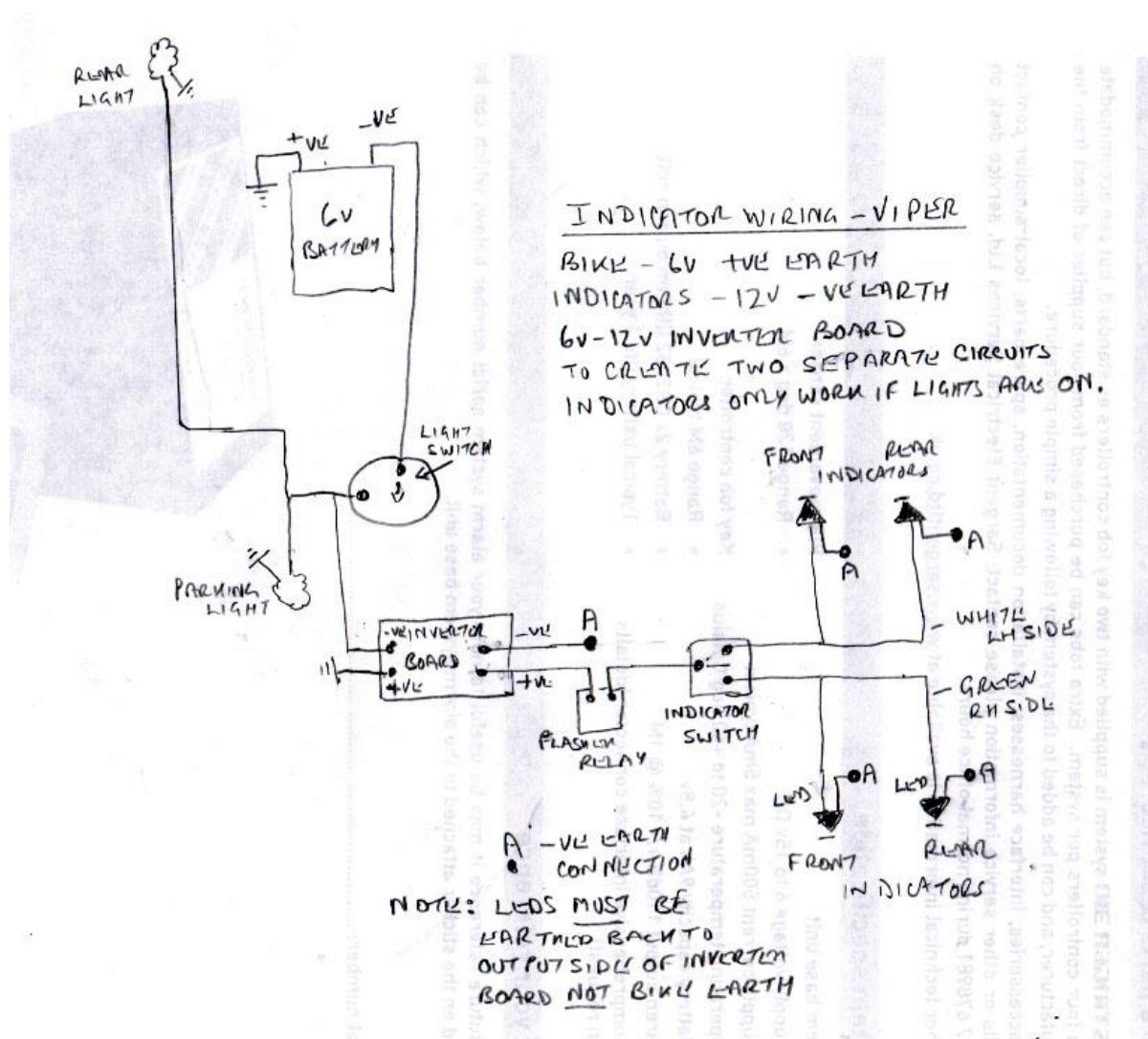
Still grieving Barney but I need to get on with things to take my mind of it. I am still waiting for the switch and led indicator relays so the Venom has been put away for now and the Viper is in the workshop to start the process of fitting its indicators. The plan was to just do the basic wiring; when I started (on Monday) I didn't have any of the critical bits like the flashers, switch or relay. No sooner had I started thinking seriously about the job than I hit what seemed to be a brick wall. All the bits I have on order are 12v leds which are polarity sensitive and -ve earth. The Viper has 6v +ve earth electrics!

I spent a morning on the internet trying to find a suitable set of 6v led flashers or a set which would take ordinary bulbs. I am sure there suitable items out there but I could not find anything remotely satisfactory. So I started thinking latterly. I do have a 6v-12v inverter board which I have used to drive a 12v led headlight on my 6v MZs. The last of these (the TS125 Sport) was recently converted to 12v using the VAPE kit so the inverter was now surplus. However, the inverter cannot just be wired into the system as it would be live all the time and quickly flatten the battery. It worked fine on the MZ because this has an ignition switch but the Viper does not need or have one. I suppose I could have fitted a separate switch but it is pretty much certain that I would either forget to turn it on or worse still, forget to turn it off. There was also the problem of the main electrics being +ve earth and the leds needing -ve earth.

In the end the latter problem was the more easily solved after I did some experimenting on the bench. The inverter has +ve and -ve 6v inputs+ ve and -ve 12v outputs but they are (or rather can be) entirely separate. It does not care that the +ve connection is actually the Vipers earth connector and the -ve the live feed. On the output side I could take I could wire the leds as -ve earth but I had to make sure that my wiring brought the earth wire back to the output side of the inverted, not through the bikes earth wiring. Sounds complicated but it's actually quite simple and more to the point it worked. A wiring diagram is below so I have a record of what I did – else in years to come I will forget and do something stupid when it stops working.

I also had a brainwave about switching the power supply to the inverter. I used the feed to the tail light. This means that the indicators only work when the lights are on (side or headlight, does not matter) but nowadays riding with lights on is pretty much de rigueur so should be a valuable safety feature. A win-win in some ways. If the indicators don't work it will remind me to turn the lights on and I am more likely to notice I have left the lights on than a separate switch for the inverter.

In fact the delay to work this lot out was advantageous as the 12v flasher set arrived this morning. So I was able to complete most of the wiring and prove that it all worked. In fact it got better as looking through my box of MZ electrical stuff I found a special indicator switch which clamps directly to the handlebars rather than to the front brake lever. I think it may be the type fitted to an ISDT bike but whatever, it is now on the Viper. Still has the irritating up&down rather than side-side operation but it works. The only thing it now needs is the 12v led flasher and the job's a good 'un.



Sunday 10th May 2020

Nothing to do with motorcycles but today is a very dark day. Apologies for burdening anyone reading this but I need to record my thoughts. As you can see elsewhere on our website, we have long bred Samoyeds. Today our beloved Barney, last of the line passed away at the age of 12 ½. For the first time in 56 years we don't have a big white dog smiling at us and the Starfield kennel name effectively died with him a double whammy. He had not been well for some time but was not suffering until Saturday when he really struggled with his evening walk. By Sunday morning he was gone leaving a huge hole in our lives. I have yet to come to terms with how much our life revolved around his needs; somehow this seems trivial now he is no longer with us. Life will go on but he was such a character (in equal parts adorable and annoying) that it will take a long time to adjust. We do have Fern our Parson Russell terrier who is very sweet but not the same. The photo was taken only a few weeks ago - RIP Barney.

Thursday 7th May 2020

I gave some thought to how to fit indicators to the Viper as it would seem a sensible improvement. The front indicators are easy enough and I have made up a pair of brackets using the pattern developed for the Venom. The rear was a bit more of a puzzle as the Viper does not have a rear carrier. There was one fitted when I bought it but I felt it was inappropriate for the bike and took it off. However, the stays that support the rear mudguard are quite substantial and I found some brackets that will clamp nicely round these. All I had to do was open the top hole to 10mm to take the indicator stalk. Beginning to wish that I had ordered two sets of the indicators and two switches.



Tuesday 5th May 2020

Workshop time has been limited by the lack of parts to complete the fitting of indicators to the Venom. I have done some of the wiring and laid it in place. This necessitated removing the seat and the tank but the latter is now back in place. One problem was providing a power supply to the flasher relay. This was solved quite neatly in the end. A while ago I fitted a new regulator/rectifier unit to the bike and wired it for -ve earth so I could run standard led bulbs. What I did not do because it looked fiddly was to switch over the ammeter connections so for the past 4 years the bike has had charge/discharge reversed. In fact getting to the ammeter was quite easy once I had dropped the headlight a little so I reversed the connections and ran an extra cable from the meter into the headlamp – job done.

I have laid the cables from the headlamp right through to the back end of the bike and added dedicated earth wires terminated on the main earth point on the frame under the saddle. In fact the frame is not used for any earth return, each electrical component (apart from the horn which I am working on) has its own dedicated earth wire in effect directly connected to the battery. I know how some of the new wires need to be terminated so these have been done, the rest will have to wait until I get the new switch and the actual indicators. I have designed it in such a way that the whole assembly can be removed easily

as a single unit with a minimum of connections. My new roll of spiral wrap came in useful – I knew it would. Now all I need is the parts to finish the job.

My new metric tap&die set has been christened. I made new 12mm x 1.25 nuts for the MZ indicators and 10mm x 1.25 nuts for a set of led indicators I had spare. I could have used them on the Venom but they are a bit scruffy and as I have to wait for the other bits anyway, I decided to treat it to some nice new ones. Won't say the set has paid for itself already but it does provide a lot more scope for future projects. I could now make a 7mm bolt for the Powerdynamo rotor on the Trail bike for example.

Sunday 3rd May 2020

Yesterday I temporarily fitted the battery to the 4spd TS250 and took it for a ride round my test loop, maybe a couple of miles. All seems well, the whining noise in the gears has gone so despite finding nothing obvious wrong with the old cluster, they must have been the culprit. Bike now mothballed until such time as I can give it a proper run.

Today I sorted through my boxes of electrical spares to try and make up a set of indicators for the Venom. Not overly keen on indicators on old bikes but they are a safety feature and in the vague hope that we are able to go to Colombres, I decided it was time to fit some. I was partially successful but the only complete set were led type and I could not find any suitable relays despite trying a box full of the things. I did discover that some of the relays could be made to work if you used a combination of led and incandescent flashers. Thought maybe I could add in a resistor to fool the relay instead but could not make that work. I also discovered that the only indicator switches I now own are the MZ type and these need MZ brake levers for the mounting. In the end I have ordered two led flasher relays, a set of 4 indicators and a combination switch giving dip, horn and indicators. No idea when they will turn up from China but no desperate hurry.

In the interim I have made the front and rear fixing brackets and they are currently drying after painting. Cannot do much more until the electrical bits arrive. What shall I do tomorrow?

1st May 2020

Part 10 was started at the beginning of May 2019 so it seems appropriate to close it after 12 months but there is a link above if you wanted to refer back to anything. As of today we are nearly 6 weeks into the lockdown imposed because of the Covid-19 virus pandemic. Though anyone reading this currently will know what that means I mention it because things are quickly forgotten and anyone reading this a few years hence will likely not understand what it means. The pandemic has virtually stopped the world economy, there is almost no international passenger travel, what planes are still flying are mainly carrying essential freight. In the UK as in many other countries only those whose jobs are essential and cannot be done from home are allowed out or to travel. The rest of us are confined to barracks

except for a once a day exercise session and for things like food shopping or medical emergencies. In the past 6 weeks the car has done a total of 22 miles to go shopping or pick up medicine. To minimise exposure to the virus, we shop every two weeks and live out of the freezer once the fresh stuff has gone. None of the bikes have turned a wheel in that time and all our holidays and activities up to the end of June have been cancelled. The likelihood is that this will extend to September/October as even when lockdown is eased it will be mainly aimed at getting people back to work. Even more likely the lockdown will be maintained for those who fall into the vulnerable group until such time as a vaccine is found and available in quantity. We are luckier than many, being retired means there is no immediate impact on our income, no pressure to go out (except to walk the dogs) and we have a big garden. We also live in the country in an area which has amongst the lowest incidence of Covid-19 in the UK and so far our children and grandchildren have been free from infection thank goodness. Like all such things the pandemic will eventually pass but it will take a long time and we may never get back to the situation we used to regard as normal.

Back to bikes and things. I decided the Trail bike justified a blogg of its own and have created one by extracting all the relevant stuff from Part 10 as at 30th April. In future only brief mention will be made about the Trail bike in this blogg . The link to the Trail Bike blogg is at the top of this blogg.

In the post today was the black spiral wrap I ordered a few days a ago. I have now stripped out the old pink (faded red) spiral wrap and replaced it with the black stuff. I was also able to incorporate the indicator wires so it all looks a lot neater. Bit sorry to see the red stuff go in some ways as it was a feature of the bike which made it easy to spot in a field of blue Supa5's. Still waiting for the capacitors I ordered last weekend but they are coming from China so could be some time. Now I have run out of bike related jobs but I am sure something will arise to fill the time.

