

Project Diary – 1973 MZ ES250/2 – UOY76M – Started May 2018

Concluded - Tuesday 15th January 2019

The trophy is now fitted with a Powerdynamo system which was freed up when I converted the 4spd TS250 back to 6v dynamo electrics as part of a process to make it completely standard. I am hoping that this will cure its electrical and particularly the ignition problems once and for all. It is wired up to run without a battery which means you cannot use a relay to earth the ignition when you want to stop the engine. I tried the usual alternative of wiring the cutout through the emergency start position on the ignition switch but it simply did not work (as was the case with Rob Parker- Normans Supa5). I do have the separate switch I used on the TS250 but there is just nowhere convenient on a Trophy to fit it. In the end I wired the cutout through the headlight flasher button on the dipswitch. Don't think I have ever used the HL flasher on an MZ so this loss of functionality will not be noticed and the button is very handily placed when I do want to stop the engine - result.

While the bike was on the lift I took the back wheel out and rebuilt it with the s/s spokes I bought in December. Makes all the difference to the look of the bike. The tyre – which is a new Michelin was very difficult to get off and I was worried I would pinch the tube putting it back on again but using copious quantities of tyre soap avoided a problem. The bike was taken for a test ride this morning and went well. I hope to ride it to a VMCC meeting on Thursday to give it a longer run. Longer term I will refit it original engine which has been totally rebuilt but the engine currently fitted seems to work well enough so it seems a shame to disturb it for now. I Think that just about concludes this project diary. Any further updates on the Trophy will appear in the Daily Blogg – hopefully there will not be a continuation of the electrical problems that dogged the bike initially.



Sunday 23rd December 2018

The tilt switches arrived eventually and I have wired one into the Trophy side stand. As there is no easy way to mount a warning light on the trophy without drilling a hole, I used a buzzer. This works fine except that it's inaudible once the engine is running but normally, the vibration shakes the stand closed so not a serious drawback. I need to fit this mod to the other MZs equipped with side stands but not had time due to domestic issues.

I did ride the Trophy last Sunday (16th) to attend a small a/j at Timsbury. Got as far as Brass Knocker Hill (about 8 miles) when the engine died. My immediate reaction was yet another coil failure but when I switched the plug lead from the centre plug to the side plug, the bike immediately started and ran perfectly all the way home. I lacked the courage to ride the extra 15 miles to Timsbury though I suspect it would have been fine. The bike sat unloved and unused for several days but when I did look at it the offending plug did spark though not particularly well. The central plug conversion requires a long reach plug and the one I removed was a Champion N5. It must have been the only one I had to hand when the centre conversion was done and is probably not correct for this use and is of unknown age/condition. I have now fitted a new NGK 8ES, hopefully this will prove satisfactory. I found later that there was a brand new 8ES in the toolroll as well so why I never fitted it is a mystery. I just hope this is the bikes last fling and it will start to behave in 2019.

Friday 23rd November 2018

I chickened out of riding the ES250 to ham and used the Mastiff so the Trophy has only been used for a couple of local shopping trips. The Mastiff is going on SORN shortly so the Trophy will likely get more use from December onwards. I always felt the side stand allowed the bike to lean too far when in use so I extended it by an inch or so which has improved it no end. My cheapo self return spring system is working well and I have not experienced any kangaroo hops on left hand bends since. I am still waiting for some tilt switches I ordered from China to arrive so that I can provide an audible or visual warning that the stand is down.

Thursday 8th November 2018

The bits ordered on Monday arrived at midday today – remarkable service. Fitting the new covers to the shocks was a simple job and they were all in place by mid afternoon and look really good. I also replaced some of the fasteners with s/s items. Included in the spares was a new 6v coil which is now in the Trophy top box just in case. I am agonising over whether to ride it to Ham on Sunday on a 3rd time lucky basis or take the Mastiff.

Monday 5th November 2018

Meinzwerad finally had stock of the chrome cover for the Trophy shocks so I have ordered a complete set along with a new coil and some bits for the other bikes. The parts should arrive by the weekend and it's not a big job to swap the covers over. I am hoping to be able to complete it by Sunday morning and hope for a third time lucky trip to the Salutation. I have also made up an Accumate connector for the bike so that it is possible to put the battery on charge without having to remove the side cover.

Friday 26th October 2018

I continually forget to lift the rear stand on my MZs before pulling away. Sometimes I remember before the first LH bend and then perform that artistic movement beloved of all MZ owners trying to kick the stand up with my left leg whilst still riding the bike. All too often its that pogo stick effect as

you take a LH bend that reminds me. I have had my share of heart stopping moments and decided that if I cannot devise some sort of warning device it will have to be removed though its so useful I don't really want to do that.

Today I spent an hour or so with a selection of micro switches a stop light switches trying to wire in a warning light/buzzer or even better disable the power to the coil so the bike will not start if the stand was down. However, placing such a switch defeated me the location of the stand and the overall design of the s/arm simply did not make it feasible – to me anyway.

Then I had one of those eureka moments and came up with the solution in the picture. Simply and effective if a bit ugly and should be adaptable to all my other MZs. The bungee is only strong enough to pull the stand up when the bike is pulled upright. Anyway I will trial it for a few days to mke sure there are no hidden snags.



Wednesday 24th October 2018

A few jobs done on the Trophy. The front wheel from my 4spd TS250 has now been fitted as this has a newish tyre and has been rebuilt with s/s spokes. The wheel was spare because the TS250 now has a later front end so that I could use the Honda tls wheel on the Spanish trip. The rear tyre has also been changed for a new Michelin. Tedious job made even more tedious by my not checking the rotation of the tyre properly!

I had recently noticed a slight glimmer from the charging light when the engine was running but the voltmeter showed a healthy 7.3v charge rate with the engine running at a fast tickover or above. I have a feeling that this glimmer might be connected with the 6-12v inverter used for the headlight.

However, the glimmer was apparent at all switch settings whereas the inverter is only operative when the headlight setting is selected so this seems unlikely.

One very trivial change has made a big difference. The Trophy throttle linkage is inside the handlebar and the action has always seemed very slow requiring a second handful to get full throttle. This is one of the reasons why I always felt this engine was a bit tired and gutless. Yesterday I took all the slack out of the cable and the bike feels much livelier. The throttle opens more quickly and did not seem to need the second handful to reach a good cruising speed. I had been planning to replace the original engine but the spare fitted now performs very well so I think I will defer the job until something serious goes wrong. However, it does still leak oil and I am struggling to find where it is coming from



Putting stuff away in the loft the other day I noticed a sturdy leather bag and it seemed an ideal shape and size to fit on the Trophy. I found some old tubing which has been bent into shape with legs that slide inside the rear frame tube. Quite pleased with the overall result. Neater than a top box and ideal for carrying odd items of shopping.

One thing I want to do is replace the chrome shrouds on the shocks as they are all very rusty. Typically, my preferred supplier in Germany does not have stock at present but I have asked to be advised when they might be available again.

Thursday 18th October 2018

Well the weather was awful on the Sunday so I took the car to the MZ meeting as I also needed to go via Bristol to carry out an inspection of Simson S50B for Mark Redding. So today I took the Trophy to the Red Bull at Sherston about 30 miles each way. Thankfully it went like a dream, no failed coils, no blown fuses; indeed no other problems as far as I can tell so perhaps it has turned the corner so far as breakdowns are concerned. When I got home the pair of 3.50 x 16" rear tyres I ordered from Oponeo had arrived. One is intended for the Trophy and the other as a spare for the TS250. The tyre on the latter has covered near 4000 miles and is approaching end of life as it's down to 2mm at the centre. The rear tyre on the Trophy is a very ancient Avon SM Mk2 which has plenty of tread but is absolutely square. I did try to find a suitable front tyre as well but 3.00 x 16" front tyres seem a bit scarce at present.

I have also compiled a list of jobs to do the Trophy over the winter. These are all mechanical or electrical, nothing cosmetic as yet though I am tempted to treat it to a full set of chrome covers for the shocks.

Saturday 13th October 2018

The Trophy did have another trick up it's sleeve. I rode it to B&Q a few days ago and just as I was leaving, there was a bang and the engine died. It was the now redundant side plug which had unscrewed and then popped out. I was able to recover the plug and screw it back in. I had carefully tightened the new central plug but totally overlooked the old side plug!

A couple of days ago I received two more of the LED festoon bulbs. I was intending to use these in the indicators but first I needed a replacement LED compatible flasher unit. There are plenty of these for 12v systems but I could not find a 6v one at a sensible price. I have a tin full of assorted flasher units so I made up a test rig and patiently tried them all. Eventually I found one that worked even though it was officially rated as 12v and for 2 x 15w bulbs. Today I fitted the flasher and the LEDs and they are working fine though probably only safe for night time trips as they are not wonderfully bright (then neither were the original incandescent bulbs). Everything seemed fine so I put the tank back on ran the engine which started ok the stopped dead. Total loss of electrics traced to a blown fuse. There was a dead short even with the ignition switch disconnected so I stripped it all down again but found absolutely nothing wrong but the short has gone away so I must have disturbed a wire. Bike now back together and running fine. Weird and does not fill me with confidence for a 3rd trip to Ham.

Tuesday 4th September 2018

Well the trophy has been free of electrical problems since it's 3rd replacement coil thank goodness. However, it is not giving in easily and a couple of new problems have arisen. The ride to Rob Parker-Normans house was successful; the bike performed well and did not miss a beat there and back. A few days later I rode it to Wingfield (about 4 miles each way) to visit Keith Johnston. I had just set the rear dampers to the high (pillion passenger) setting and the ride was quite hard when I started out but the handling became distinctly odd as the journey progressed. The back end seemed to have a mind of its own and I checked for a puncture but the tyre was correctly inflated. I reset the dampers to the softer setting but apart from a more comfortable ride, this did not seem to improve the handling on the trip home.

Back in the workshop I removed the rear wheel and the dampers to test for play in the swinging arm bushes. I could not detect anything of consequence but was able to tighten up the spindle nuts a little. The top mounting of the dampers were both slack but since they are mounted in rubbers bushes to give some play, I doubt this was significant. However, they were fully tightened on reassembly. The wheel bearings were new a couple of weeks ago. That only left the tyre, an old Avon SM which has a flat profile and hard walls allowing little flexibility. However, it's been on the bike ever since I put it back on the road in June so why it should suddenly cause a problem is unclear. I noticed the chain was very slack so while the bike was on the ramp I adjusted it – note that comment! Fast forward a week and I rode the bike to Bath to do an inspection of the 1971 ES250/2 shown below. It has only done 1097 miles from new and though it has suffered some corrosion is remarkably tidy and of course totally original. You can just see my bike in the background.



I rode over part of the same route via Wingfield on the way to Bath and noted a couple of points. Firstly there was still a lot of loose gravel lying around where the road had been repaired with tar and chippings. Some of this was still on the bike line on the bends. Also, the road has a lot of longitudinal ripples and I could feel the Avon SM squirming along them at times. Once clear of these 'features' the bike handled fine and we had a great ride to Combe Down. On the way home I took the Brassknocker Hill route as a change. Again it went well until I was leaving Bradford on Avon when it suddenly lost power and finally ground to a halt. Curious as the engine was still running when the clutch was pulled in but simply would not move the bike. When I got off I could not move the bike either, the back brake was locked on solid. The fix was easy, I just slackened off the adjuster and within a few minutes we were on our way.

A very curious occurrence as it seems odd that the bike should run without issue for 12 miles on the way out and only seize up when I was nearly home. My theory is that the heavier traffic and frequent roadworks on the way out created enough pauses for the brake to cool down. On the way back I had a clear run for several miles before negotiating Bradford and then a down hill section to just before the point where the brake seized. Everything seems fine now and I must remember after tightening the chain to check the brake adjustment. Funny thing is I have had exactly the same problem twice before with other ES250/2's so they are clearly very sensitive to rear brake adjustment. I wonder if the adjustment tightens under suspension movement necessitating more slack in the pedal movement?

One of the things I have been meaning to do for ages has just come to fruition. My friend Terry D has already modified the cylinder head of the TS250 for a central plug and today he kindly did the ES250 head a well. On the Trophy it's quick and easy to remove the head as unlike the TS250 and ETZ250, the engine sits in the cradle rather than suspended by the cylinder head. Terry wanted an excuse to

ride his Velocette so he dropped the head back at 4pm and by 4:15 it was on the bike and the engine was running again. Tomorrow I hope that a test ride will prove that it was a worthwhile mod. MZ clearly thought so as the ISDT bikes had this mod and many MZ experts recommend it. I was very pleased with the internal state of the engine, very little carbon build up and the plug was a perfect colour.

Monday 13th August 2018

Well my confidence concerning a fix for the Trophies unreliability was premature. I rode it to the August section meeting and it was going, we successfully negotiated the first breakdown point at the Bath M4 junction and the Wickwar traffic lights but it died at the lights crossing the M5 at J15. This time the cause was clear, no sparks and the coil had to be the culprit as the condenser and points had both been replaced. I was extremely lucky in that first Richard Warne pulled up to help, followed swiftly by Marcus Pinnock. The latter lives nearby and kindly fetched me a replacement coil and a new plug. In fact he brought two coils, one used and one new. I fitted the used coil and the bike started instantly and sounded better than it had done for some time. When we got to the Salutation, we got a round of applause from the other members.

Unfortunately, that is not the end of the story. The bike died again at the Wickwar traffic lights (the other side this time) with total lack of sparks. Clearly I should have used Marcus's new coil rather than the old one! Fortunately, that knight in shining armour, otherwise known as Richard Warne, was with me. We put the Trophy in someone's driveway for safety and rode home two up on his Supa5. We were both gobsmacked by how well it went. I took the van back to Wickwar and picked up the Trophy. Once unloaded, I switched it on and there was a good spark, and when I put it back in the bike it started instantly. I guess the coil only fails when it gets hot so perhaps I could have got home in easy stages.

Anyway, the Trophy was given a thorough checkover today. Another coil has been fitted, this one on loan from Richard who recently fitted a Powerdynamo kit. It is an aftermarket type from MZA and looks new so hopefully it may do the trick (3rd time lucky?). While the bike was in the workshop, I upgraded the headlight by fitting a 12v inverter board. This just powers the headlight and allows the use of an LED bulb. At first I thought it was out of focus but then I discovered the beam adjusters were incorrectly adjusted. With these set up properly, I have a nice dip and main beam pattern which I was able to confirm when it got dark.Flushed with enthusiasm, I have also fitted a solid-state regulator which has been on the shelf for a while. Plan is to ride the bike to visit Rob Parker Norman on Friday to see if it's all working ok. I may take a spare coil with me just in case.

Friday 31st July 2018

The bike has been quite reliable since I did the head nuts up though the farthest trip has only been to Chippenham Rugby Club. The return trip proved how poor the 6v lighting is. The sensible option is to fit a powerdynamo system but they are over £250 now and I would really prefer to keep it standard so far as the major electrics are concerned. I do have the components to fit an LED bulb with an inverter so may explore that option especially as we are now heading into Autumn.

One outstanding task has been the rear wheel which had been painted black; rim, spokes and hub. I had a chat with Steve at TPCS and he kindly agreed to dip the wheel in his stripping tank to see if that would shift the paint. Today I took the wheel, minus bearings and tyre to Sells Green. Within two hours he called me to say the wheel was done so by mid afternoon it was reassembled and back in the bike. I Had been dreading this job and yet it turned out to be quick and easy and as he would

not take any payment, cheap as well. As a bonus, the spokes were in quite reasonable condition as well.



Monday 16th July 2018

I have been using the Trophy for various journeys during the week and it never missed a beat but the poor starting has not improved. I decided it had to be fuel related so I removed the tank and gave it the full cleaning treatment as done to the TS125 sport tank. Frankly it was a bit of a waste of time as the caustic soda did not find much in the way of petrol residues and the spirits of salt found very little rust to dissolve. However, it is now pristine inside and can be eliminated from the investigation. I was also able to find a better washer for the tap so that no longer leaks. Next on the list was the carb which was totally dismantled (again) and all the parts checked against the spares book. Absolutely nothing wrong with it – even the float was perfect. Despite this the bike still would not start reliably.

Then I had what I think is the a breakthrough. I noticed when kicking it over last night that it made a sort of farting noise. Not heard it do that before but it reminded me of a blowing head gasket on the Velo. Sure enough the head nuts were way slacker than they should have been. Since then the bike has seemed much livelier and starts a lot more readily without needing the petrol off throttle wide open technique. It did however, have one more (I hesitate to say last) trick to play. It stopped dead just $\frac{1}{4}$ mile down the road when I took it for a test run this morning. The earth line fuse had blown and once diagnosed was easy to fix by bypassing it temporarily. Never quite sure why MZ saw the need to fit live and earth fuses and I may well replace the old fashioned bullet fuses with a blade fuse box. The blown fuse was an own goal as it was only 5amp rating when it should have been 15amp. Needless to say both are now new 15amp fuses.

Monday 9th July 2018

Some good and some bad news. I decided to ride the Trophy to the Bristol MZ meeting at Ham on Sunday as I was reasonably confident it would get me there and back. All went well until I got to the M4 junction on the A46 (about 20 miles) when it died and would not immediately restart. After a lot of fiddling around without finding anything obvious wrong I tried a new plug and it did finally start. I quickly through on my riding gear (removed because the temperature was near 30°C) and it restarted and sounded ok so I decided to keep heading for ham rather than turn tail for home. Two miles down the road it stopped again but this was almost certainly because I had not switched the fuel on. Eventually I got it started again and all was well until we got to the traffic lights in the middle of Wickwar (another 10 miles) when it died again and nothing I just could not get it running again. There was a spark though it looked weak but this may well have been because of the strong sunlight. In the end I had to ring for the recovery service who got me back home by 3pm. Fortunately I broke down right outside the Wickwar Social Club who kindly let me buy a drink.

I left the bike until the evening then kicked it over and it started almost immediately (grrr). There was a small fuel leak caused by a loose petrol pipe but this was easily fixed with a couple of new clamps. Still nothing obviously wrong so I took it for several laps of my test route giving it as much stick as the traffic allowed and it never missed a beat.

I didn't think it was fuel as the plug is a perfect colour, there is no evidence of the carb flooding and the choke assembly is correctly installed and adjusted. I have checked the points and the timing and made minor adjustments, none sufficient to cause the dying problem and I have replaced the condenser just in case it was getting hot and bothered. Took it for another run today and it ran perfectly albeit the route was only 5-6 miles. One thing I have discovered is that the twist grip has a very long action and you need to rotate it much more than you might expect to get the throttle fully open. Armed with this knowledge I managed to get the bike over 50mph uphill so I think my previous comment on poor performance was incorrect. I just have to learn to ride it properly.

Not having found anything obvious wrong I decided to investigate the coil as these can fail when they get hot. Normally they if they are in poor condition they get very hot yet when I checked the coil on Sunday in Wickwar it was warm but not overly hot in my judgement. I found a small selection of spare coils and tested them all with the multimeter trying to find the best of the bunch. However, when I checked the existing coil on the bike it was far closer to the correct spec than any of my spares so I have left it in place for now.

For the moment I am stumped. What I really need to do is take it for a 20+ mile run to see if it is still playing up but I want someone to come with me so that I have help at hand if I need to get back home to pick up the van. I cannot keep calling out the rescue services even if they would come.

Thursday 5th July 2018

Holidays, riding in various events and family demands have limited my time to ride the trophy but I did take it for a 12 mile trip to visit a friend in Westbury. It died just as I got there having been misfiring a bit for the last mile. However, it was just low on fuel and switching to reserve solved the problem. The bike runs well enough and is very smooth but seems reluctant to go much over 45. It also has a tendency to go beyond the selected gear when changing up so you finish up in a false neutral; just something you need to be wary of rather than a showstopping fault. Neither issue will stop me riding it and I plan to take it to Ham for the MZ club meeting on Sunday to give it a decent run.

Today I stripped the original engine to establish what spares I will need as I plan to place an order in Germany shortly. I didn't find a lot wrong as it happens. I already knew the crankshaft was shot and I found one growling gearbox bearing. I will replace all the bearings and seals anyway but none seemed badly worn. Bit of a mystery as to why it seemed so noisy when I first tried it. It cannot be the primary drive or the barrel/piston as both these items are in use on the replacement engine.

Saturday 23rd June 2018

I managed to retrieve the Trophy from the back of the garage today and decided to take it out for a spin. First job was to find the rear view mirror which had been removed to make it easier to store the bike. Eventually I remembered where it had been stored and it was easily fitted. I was tempted to put the indicators back on as well but they do stick out a lot so I decided in the end to leave that task until the bike is due to be used regularly. After all most of my other bikes don't have indicators either. Even when riding those that do, I tend to avoid using them because I regularly forget to cancel them and this could be dangerous. Anyway, the bike started up easily enough and sounds fine so we did my two mile test route in fine style. Didn't go much over 40mph but it pulled well enough and all the gear selected and stayed selected which was good. I rebuilt this engine and I am always apprehensive about the gearbox aspect as its not easy to test on the bench; unlike the 5spd unit. When I got back I checked the charging which was up to about 6.6v. Just about ok but I do have a solid state regulator on the shelf so I may fit this to see if that helps.

So the test was very satisfactory and I will schedule it for a longer ride shortly. Cosmetically I can live with most of it but the black painted rim, spokes and hub on the back wheel still irritate me. Not sure of the best way to tackle this. Ideally, I would like to find a complete spare wheel at least on a temporary basis.

Tuesday 19th June 2018

I have now removed the timing side cover and clutch on the replacement engine and checked them over. Nothing obviously wrong and I would have been surprised if there was. I seriously doubt I would have used them when I checked over and rebuilt the engine a while back. Anyway with the appropriate bits from the Trophy's original engine fitted, the bike has a good working clutch and I took it for a quick spin down the road. The bike then had to be put to one side for a while to give priority to other things. Today I added the bike to my classic insurance policy and this enabled me to tax it at the post office so its now road legal. The Post Office kept the V5c which they will send to DVLA to get it changed to the Historic taxation class. Just hope that this time it does not take 5 months and loads of emails to get the new V5 issued.

Wednesday 13th June 2018

I picked up the carb from Roger as planned and as expected it was in excellent condition. We did not get back from our caravanning trips until 9th June so I was not able to fit it until last Monday. With the engine running properly, it was obvious that all was not well mechanically so I have now swapped the engine for a spare that has been in stock for a while which has been previously stripped and checked over. This started up and ran ok, not exactly silent mechanically but nothing too ominous. However, there is something amiss with either the clutch or the clutch operating mechanism. The clutch drags and will not stay in adjustment.

As the outer cover is not in the best of condition my intention is to use the appropriate bits from the original engine as a short term solution. The head and barrel have been removed and put to one side. There is some rust inside the barrel which is on standard bore with only a very light wear ridge. I

think it can be cleaned up for re-use but probably not on this engine as the head/barrel are from a 4 spd TS250. The drive side cover cam off easily enough and the innards all look to be in good condition. Getting the clutch off was another matter. The end of the crankshaft was damaged so that I could not get the protective sleeve in place. In the end I had to angle grind the end flat and even then it was a monster effort to get the clutch off the shaft. I don't think the crankshaft will be salvageable but as the big end is badly worn it was probably going to need replacement anyway. There was also up/down play in the drive side main bearing so the engine needs a full strip anyway. I will leave this task for another time and concentrate on getting the spare engine now fitted running properly.

Friday 25th May 2018

Not a lot to report this week. The bike has been moved from the workshop to the garage as there was little else I could do on it for now. I have now arranged with Roger Badland to pick up the 28mm carb at Kingswood on Sunday whilst on my way to Llanelli for the club holiday. Roger will be at something called the Douglas Cavalcade with his T35. We won't have much time but it will be nice to have a look at the assembled Douglas's and it is hardly any deviation from our route.

On Wednesday John Rayment rode over on his 125cc 2-stroke LML (Vespa) scooter. It looks very smart and he kindly offered me a ride which I declined. Though I had a scooter for a couple of years as a teenager, when I last rode one about 10 years ago, I did not enjoy the experience at all. John brought with him the missing key to the seat lock so this now fits properly meaning the bike could be ridden once the new carb has been fitted. That will not happen for probably 2 weeks as we are away on various jaunts until 12th June.

Friday 18th May 2018

The wheel bearings arrived on Wednesday and have been fitted. While the wheel was out I cleaned up the hub as best I could and then sprayed it satin black to tidy it up. Longer term I want to revert the whole wheel back to unpainted aluminium but getting the old paint off is going to be a major job. I did strip the remaining paint from the brake back plate so overall it looks reasonably tidy. Also while the wheel was out I removed the rear mudguard and the seat and took the rolling chassis over to Mick the welders house in Bradford on Avon. He welded up the repair I made to the mudguard brackets. The picture was taken to show how much of the frame number still remains visible that to be honest it is not very clear. The bolt that was originally used as a repair went right through the middle of the number so only the first three and last couple of numbers are visible. Best I could do and the end result looks ok.



The back end of the bike is now reassembled and today I stripped the seat down preparatory to fitting the new cover. The pan was quite badly rusted but I have cleaned it up as best as possible and sprayed it with several coats of Hammerite. The new cover was a good fit and overall it looks ok. I will however keep an eye out for a better seat.

The bike came with two front headlight assemblies. The one fitted was a slightly different shade to the tank, more white than cream so I have now fitted the spare which was less rusty and a closer match to the tank. This entailed some repairs to the reflector mounting but I mix/matched the best parts from both headlights and it now looks pretty good in my view. I have also made a rear light reflector by adapting the lens from a TS250. Sadly I managed to trash my angle grinder in the process so that will have to be replaced very soon – they are such a useful piece of equipment.

I have now pretty much completed the running gear phase of the project. The engine itself is still an unknown quantity and I need to pick up the carb from Roger B before I can test it properly. Hopefully I can do that next week some time.



Monday 14th May 2018

Not a lot of garage time as it was the Bristol MZRC meeting on Sunday and I needed to go deliver the regalia for our 40th anniversary in June. It was a fruitful trip with respect to the ES250 project as Roger Badland has found a good condition 28mm BVF carb which now has my name on it. No luck so far with the rear light lens but I may have a solution using an old TS rear light unit if all else fails. The footrest bar has now been straightened and clears the exhaust pipe so that's one more item of the todo list. Today I stripped out the rear wheel again preparatory to fitting the new wheel bearings when they arrive. I have also removed completely the rear mudguard. This will allow me to clean up the inside and paint/underseal it. I thought it was going to be hideously rusty underneath but in fact its mainly surface rust with most of the original paint still intact. The other reason for removing the mudguard is to allow access to the stays that need welding up. I am hoping Mick the welder will do this for me as its beyond my arc welding skills and Mick has a tig set.

Funnily enough Mick Taylor turned up at Ham with his recently purchased ES250/2. It was an incomplete mess when he bought it (makes me realise how lucky I am with my project bike) so he has done well to get it the state it is now in. Not sure the colour scheme does anything for me but it has been well done for sure. Interestingly he chose to have the wheels blasted and powder coated, the whole lot , rim, spokes and hub. They were done in a shiny paint that looks just like chrome. Tempting, but I think I would prefer to keep my au natural as far as rim and hub are concerned and use s/s spokes. Th ex pipe and shock covers are also done in chrome powder; food for thought?



Saturday 12th May 2018

Quite a lot of progress and one backward step. The rear wheel has been checked over. The shoes were good but the pivots were seized like the front wheel. The drum had only a little surface rust and has cleaned up fine. I was not able to do much about the scabby black paint on everything so that's a job for another time. The wheel bearings were poor so I have ordered two sets which should be here next Wednesday. Subsequently I discovered that I had not replaced the brake arm correctly on the spline so that the brake rod won't reach. However, this will get sorted when I replace the wheel bearings.

I have now worked through the electrics and nearly everything worked once I had cleaned up a few contacts. There was no horn fitted but the wiring was in place and a new spare came with the bike so that is now sorted. The trickiest part was getting the charge warning light wired in. There was no bulb holder fitted and no spare wire dangling so I had to trace the wire from the regulator back to the headlamp. It was connected directly to the switch for some reasons but is now correctly wired. To my surprise, it went out as soon as the engine was running and came back on when it stopped so we may have a functional charging system; I will need to get a meter on it later to confirm just how well it's working. The paint has been stripped from the rear light cover and the chrome is worn but not rusty. However, the red lens fell apart so that's something I will have to replace.

I have now fitted the silencer and this has reduced the exhaust noise to the level where you can hear some slightly worrying mechanical noises from the engine. I will defer investigation on this for now as worst case is I will need to fit one of the spare ES250 motors I have on the shelf.

I have now stripped and checked over all four shock absorbers. I removed all the black paint while they were apart as this was annoying me. Predictably the chrome underneath was poor but I still

prefer this to chipped crackle finish paint. The grease gun was also applied to the front and rear pivots; so we are close to having a scruffy but working rolling chassis.

I had a brainwave about the carburettor and have temporarily adapted a 24mm type as fitted to the TS150. This actually worked well enough to allow me to check things like the charging system and I could make it a more permanent system without too much effort. However I hope that this won't be necessary and a suitable 28mm carb will turn up.

The backward step was the fitting of what appeared to be a considerably straighter footrest bar. It turned out to be bent as well (but differently) and fouls the silencer as well as the left footrest pointing backwards. Ho hum. I wheeled it outside for a photo session and a couple of the shots are below. Actually it doesn't look too bad and I think will look ok as an oily rag machine. Some of the obvious bits missing like the footrest rubbers and the headlamp surround are in the spares box along with a new exhaust pipe.

Two other forward steps; with the engine running I was able to put the bike into gear which established that the speedo works and I have checked out the indicator system. The flasher relay fitted was an odd small rusty can so I fitted the new one which came with the bike. This worked too well as it was a TS type designed for a 2 bulb load whereas the ES needs a single bulb loading. I managed to find a NOS correct type in the spares box and both sides work ok. However, for now I have disconnected the indicators mainly because when fitted they make the bike awkwardly wide and secondly because the actual wiring, though working is not good so I will replace that whole section of the loom.





Thursday 10th May 2018

Only managed an hour or so on the Trophy today but it was quite productive. I have replaced both rear shocks with a tidy pair of the exposed spring type I rebuilt some while ago. This keeps the bike mobile and allows me to work on the original shocks at my leisure. The adjusters are seized solid and the covers have been painted black so potentially quite a lot of work to do.

I also removed the front wheel to check the brake and drum. The brake cam and the shoes were seized but came apart without too much difficulty and cleaned up ok. The drum is very rusty so I have used a spare front wheel for now. With a new cable fitted, I now have a good front brake. The brake plate and the trim plate have both been plated black (as has the wheel rim and hub) and my initial attempts to remove this were unsuccessful as the paint is very hard. This could be a problem as the rear wheel assembly is also painted black and I don't have a spare.

Wednesday 9th May 2018

I have known about this bike for several years. It belonged to John Rayment who lives at Batheaston. He bought it in 2001 as a restoration project which was never started despite regular nagging from me. Eventually he decided he was never going to restore the bike and offered it to me. A deal was done and it is now in my garage along with some useful new parts:



The bike is pretty much complete and has a recorded mileage of 38k, the only obvious non original part is the cylinder head which is from the later TS250 4spd. Cosmetically its pretty challenged possibly not even up to oily rag condition. My intention is leave it that way only dealing with serious rust and any mechanical deficiencies.

I have given it a preliminary checkover and after fitting a battery and cleaning the points I have a spark. The engine turns over freely and compression is good with no worrying noises so I am hoping that it will need little if any attention to start with. The carb was removed and externally looked fine but inside it was corroded quite badly and I am concerned about the legs that support the float pivot. They are a weak point on the BVF carb anyway and these are well rotted. However, I managed to clean it up to the point where it ought to work and put it back on the bike. Eventually I actually got it running; rather noisily as the silencer is not yet fitted and not terribly well at low throttle openings but it actually sounded quite healthy with no clouds of blue smoke suggesting the crank seals are probably ok.

The plan was to put the bike away as next winters project and really all I intend to do for now is carry out minimal refurbishment as part of a detailed survey to assess what parts I will require. A new carb is definitely on the list but that's all so far. Wheels and brakes are next. Overall I am very happy with this bike.