

1975 MZ ES 150/1 rebuild



So it's Boxing Day and I'm not going to wait any longer. Most of the bits I need I have found on Ebay already and the rest can be bought new. It's time for my 1975 ES150/1 to fall into its component parts ready for a rebuild. I've got 2 or 3 months at the most before my Adler MB200 engine is due to go for a full rebuild, so there is no point in hanging about and I certainly don't want two German projects on the go at once.

I bought the bike on Ebay after a drunken "Oh that must be worth a bid" – click. One week later and I was still the only bidder, bugger! The bike ran for about 5 miles before dying with no compression and ended up being slung in the back of a work colleagues Toyota estate, then transferred to mine for the trip up north. Marvellous things company cars!

The problem turned out to be a hole the size of a halfpenny in the piston crown. I later discovered that the previous owner had put in a long reach plug. Although it didn't seem to actually hit the piston crown it may well have burnt through it instead. I put on a new piston and it seemed fine until the spark plug departed company with the rest of the engine whilst doing 60mph on the M57, along with its thread. One heli-coiled head later and on the next outing we made it successfully to Chorley and back for the Lancashire section December meeting. The rider of the Suzuki GSX1400 that we overtook on a sweeping right hander doing 60ish must have had one hell of a surprise. Still, what do you expect when you brake for even the slightest of bends? He has the acceleration on tap to make up for the lost time whereas I found that riding the 150/1 was all about keeping up your momentum through the bends. It's a lot different from my VFR750.

Friday 26th & Saturday 27th December.

The plan of attack is as follows:

1. Dismantle everything.
2. De-grease everything and shot blast anything that needs it that will fit into my cabinet.
3. Powder coat (in gloss black) all smaller items that I can fit into my oven.
4. Send the frame and front & rear swing arms away for shot blasting and powder coating in gloss black.
5. Swap my new Piston, barrel and head onto the nearly new 125cc engine that I have in the shed. Then I can strip down the original for rebuilding at my leisure.
6. Repaint all the tin ware in original colours
7. Drop the wheels off with Keith Berry so he can measure them and order the stainless spokes, whilst the rims and hubs are polished.
8. Drop off the alloy parts for polishing by Steve Smethurst. He is very reasonable and the time I take to do a poor job is better spent on a few hours overtime to pay him for a truly great job.
9. Measure every bolt and draw up a spreadsheet with descriptions for Inox Fasteners to provide me with a full set of stainless steel nuts, bolts and washers. Rusty fasteners don't belong on a rebuilt bike after all.
10. Draw up the list of new parts required and order them from MZ-B. This is the most painful part and will end up sticking a good few hundred quid on my credit card.
11. Repair the wiring loom where necessary and replace all the spade connectors with new ones, treated with No-Ox compound prior to crimping. Heat shrink everything and anything that can be heat shrunken !!!!
12. Get it back on the road ASAP. Fingers crossed I will be able to make the Classics rally at Hardraw on 17th Jan (Yeah - some hope !!!)
13. **Wonder why I have spent so much money on a bike that is still worth less than half of bugger all. I promised myself that this restoration would be done on the cheap. I must be daft!**

It took two good afternoons in the garage, to strip the bike down to almost nothing. One question that needs asking as I look at the tiny pile of bits (all neatly sealed in clearly labelled freezer bags). Where the bloody hell did my bike go, it was there yesterday?

Also I can't believe just how few nuts and bolts there are holding it all together, when compared to my 1975 Honda 500/four, probably less than a quarter.

The handlebars were a sod to separate from the headstock assembly. I really need to get a better source of heat than just a blowlamp, possibly one of those small acetylene sets from B&Q. The centre of the bars had fused itself into the middle of the fork carrier tube as if it had been welded. I wish I had bought those bars on Ebay the other week, that didn't sell for 1 Euro – Bugger! Also the top 5mm of thread on the headstock is shot. It just disintegrated as I unscrewed the locking rings, despite using copper grease. I have had to cut the top 5mm off and fingers crossed it is still long enough to do it's job (it looks OK so I'm not too worried), otherwise I will be on the lookout for a new fork carrier tube assembly.

Everything else just seemed to fall apart with ease and just a few lines in a notebook about cable routing and positioning of brackets etc. Everything else has a white plastic label tie wrap attached to it with a description of what it is. I've always found that good labelling is everything when it comes to reassembly.

I can start on the degreasing and shot blasting and repainting now. I have a mate from my flying club who is an experienced motorcycle paint finisher, he has promised to pop round and give me one day's tuition on preparation and paint spraying. The bike is currently red and silver and I have never seen another in this colour scheme, indeed I don't even know if it is the original colours

although it states red/silver on the V5. I much prefer the cream/blue livery but I've not made up my mind yet.

Monday 29th December ~ A very busy and productive day. I dropped the frame and front & rear swing arms off with Elite Powder Coating in Bootle. They are to shot blast and coat in polyester gloss black, with a turn around time of about 3 days; all for £125 cash.

I've spent most of the afternoon and early evening in my garage; shot blasting the ancillary stuff such as exhaust brackets, footrests, rear brake lever, torque arm etc. These can now be powder coated in my own oven as they are small enough to fit in. I've also been gradually separating out any alloy parts to go to Steve Smethurst in Salford for polishing.

I have a pile of parts in my degreasing bin soaking overnight, ready for cleaning off in the morning. However I can't get hold of the guy who is to do the wheel rebuilds, so I may be tempted to give a guy near Warrington a bell. He comes highly recommended by John Heckles at Elite Powder Coatings.

I'm also spending a lot of time with a Vernier calliper and a steel rule, measuring and noting down every nut, bolt and washer. I am producing an Excel spreadsheet showing the entire fastener requirement for a complete rebuild. This will enable me to replace all my fasteners with stainless steel replacements and at the same time enable [Inox Fasteners](#) to produce a kit for the ES125/150 bikes that hopefully will help other restorers. I will try to get a reasonable discount from them for all my hard work though.

Tuesday 30th December ~ I'm definitely revelling in being off work, with another 8 hours in the garage. All the parts in the degreasing bin (just a large plastic storage box with a lid that B&Q sell for a few quid) are now spotlessly clean. I have powder coated every single little piece that could be coated and now they are sitting in my garage in beautiful shiny gloss black. I bought a couple of 2nd hand Mindon powder coating machines last year for £200. I have only played with the gloss black so far, but I have a variety of different colour treatments sitting in my shed to experiment with in the future.

I've tried to get hold of two wheel rebuilders today, but neither of them are answering their phones. I really need one of them to measure my wheels before I can strip out the spokes and get the hubs and rims re-polished. The alloy rims seem fine so I don't want to replace them if I can keep the originals.

If I can only keep this momentum up, this may just turn out to be one of the fastest restorations in history, yet I must admit that I'm feeling shattered now that I'm sat on the sofa and the second half of a bottle of red wine has kicked in.

Tomorrow I will get the old engine stripped down so that the head, barrels and engine casing can go away for polishing. Then the rest of the bolts need to be measured, the plastic bits of the hand pump need wire brushing to remove scratches and then polishing up again before I even think about the wiring loom.

Wednesday 31st December ~ I dug out one of my spare engines from the shed. These all came with the bike when I bought it. They are all 125cc motors in various stated of disrepair, however the one that I'm resting all my hopes on belonged to a neighbour of the previous owner. It had only done 1400 miles before the bike was written off by a Smidsy apparently. I degreased the whole unit, then stripped down the side cases and removed the head barrel and piston.

Unfortunately the helicoil that I had fitted a few weeks ago to my 150/1 head; came out with the spark plug, so I had to return it to Lane Ends Engineering at Prescott for the coil to be re inserted.

The new 150cc piston went on the con rod OK and by the look of all the internal components, this engine might just have done 1400 miles. The oil drained clean and the magnetic sump plug didn't have a thick layer of gloopy silver metal paste stuck to it (unlike the original unit; that made some suspicious rattles from the gearbox and had a clutch that wouldn't release properly).

Thursday 1st January ~ a quiet day spent assessing what new parts I will require from either BSA-Regal or MZ-D. The list is quite comprehensive:

- footrest rubber X 2
- cable - rear brake
- cable - front handbrake
- lh grip rubber (black, open at end)
- rh grip rubber (black, open at end)
- cable - clutch
- suspension units front & rear pairs, complete
- Cush drive damping rubber
- petrol cock
- Muffler
- Muffler bracket small
- Muffler bracket, large
- Air filter element
- *mirror (left)
- *mirror (Right)
- indicator unit X 2
- tail light unit complete
- MZ- badge (set of 2)
- rubber for gear change lever
- rubber for kick start lever

The whole lot comes to approximately £320 without shipping costs, which is a lot of brass, however I don't see the point in putting back, knackered rubbers, chrome work and a leaking petrol cock (although I will look to see if I can repair mine before I order, as it may just be a perished seal). The cables may clean up well so that can be another saving, but only about £7 each.

Friday 2nd January ~

I took the wheels into Warrington this morning for the wheel rebuilder to measure the spokes, any offset and to note the lacing pattern. Then I cropped out the rest of the spokes ready for the polishing process.

All the alloy components have been dropped off with [Steve Smethurst](#) in Salford for the following:

- Head & Barrel - Barrel scrubbing to return to as new cast appearance
- Alloy side cases - vapour blasting and polishing
- Hubs - Barrel scrubbing to return to as new cast appearance
- Rims – Vapour blasting and mirror polishing
- Brake & Clutch lever – polishing to mirror finish

The polishing will take approx 3 weeks and the wheel re-builder is on holiday until mid January, so things are now coming to a bit of a halt.

I picked up the Frame and front & rear swing arms from the powder coaters. They had shot blasted them (protecting all threads and the headstock bearing cups from both blast and powder) and powder coated them in gloss black. The finish on them is perfect and for £125 I have no

complaints about the quality of work. They had to do the frame twice due to oil leaking out of the lower seam during the curing process in the oven. I must admit that I was pleased with my own efforts at powder coating, but I was delighted at their results.



Saturday 3rd January ~ I spent most of this afternoon and early evening measuring and documenting every single nut, bolt and washer on the entire bike. I have produced an Excel spreadsheet for [Inox Fasteners](#) so they can supply me with a kit of fasteners in stainless steel. Because of the way I have described the location of the fasteners, anyone should now be able to buy this kit from them for their own ES 125/150. I have e mailed a copy of the spreadsheet to Mark Dicker so he can pass it on to anyone who should find it useful, in his role as Classics Officer.

I'm back to work on Monday, so things will inevitably slow down now. But I think I can look back on the Christmas holiday period with quiet satisfaction. As you can probably guess, I'm not really concerned too much as to keeping costs to a minimum during this restoration. I just want to rebuild it to the best of my (or other more skilled peoples) ability and have a really great looking bike. The way I look at it, once the money has been spent then it's spent and I won't miss it, just get it done and ride the restored bike on the road, then move onto the next project. I will never sell my ES 150/1 so I may as well get it right first time.

Next time I write, the rebuild should have started and I may have decided what I am going to do with the tin ware. Either prepare and re-spray it myself, or let Elite Engineering do it and get it perfect.

Mmmmmmmmmmmmmmmmmmm ????????

End of part one

Part Two

Saturday 24th January ~ I have now received all the new bits from BSA-Regal. After much comparing of prices and shipping costs, the prices that Phil Albutt came up with were within a few quid of MZ-B in Germany. So I decided it was easier ordering from one person (as opposed to splitting the order on the criteria of price) who was in the same country as me. I've replaced the exhaust muffler and mounting clips, all the cables, handlebar and footrest rubbers, front and rear shocks and bushes, tail light unit, indicators, kick-start and gear change rubbers and new set of meteor badges for the headlight unit. Total cost was £450 inc shipping – OUCH !!!!! However I have managed to convince myself that some of that cost would have gone on re-chroming on any other bike.

The new stainless steel fasteners have arrived from Inox fasteners. The total cost was £55 and I really don't begrudge the cost. Certain exposed bolts that will be quite obvious have been ordered with an electro polished finish that makes the stainless steel appear like chrome. Without exception, every bolt I took off was as rusty as hell and when this bike goes back together it will get every new nut and bolt installed with a protective smear of copper grease.

Sunday 25th January ~ I've stripped the seat down today. The MZ seats are so simple, anyone can do it. I have started removing the rust from the pan (bloody thing is just too big for my shot blast cabinet) and I plan to stabilize any remaining oxide with Jenolite and then paint it in black smoothrite. I've spoken to Fred Rodgers in Winsford and he has new seat covers on their way to him shortly from Germany. So for £22 that is a very cheaply refurbished seat. One company quoted me over £90 and it wouldn't be an original MZ new old stock vinyl cover being used. The foam is fine, so I will just glue it to the repainted pan and then bend the lugs back into place to hold the new cover in place. I'm going to have to try and find a replacement seat strap though, as this one is just too stretched. I've acquired a spare seat, so that may donate the strap.

Friday 31st January ~ this morning I picked up a parcel from the post office that I wasn't expecting. It turned out to be a set of new old stock petrol tank knee rubbers and equally new rear footrests. I had bought them on Ebay earlier in the week and I hadn't even had the chance to pay for them. Either the guy in Germany is very honest (although I did buy my new exhaust elbow off him a few months ago), or he has just made a mistake. I sent the money out to him before the 12 Noon post.

This afternoon I picked up the alloy from Steve Smethurst and I must admit it cost more than I thought it would. However £290 gives me a set of rims that can be mistaken for chrome, likewise for the engine cases. The hubs look like brand new items as do the barrel and cylinder head and centre stand.



I was tempted to get the wheel face plate and break plates polished, but decided that barrel scrubbing would be more original. However the engine cases had been polished at some point in the past and the only real option was to polish them up again. Steve has made a lovely job of the shiny stuff, yet I always manage to forget something, so the choke lever is now with Steve and I will pick it up next week. He will get all my engine cases from my 1954 Adler MB200 and the many alloy components from the suspension and wheels later this summer.

The rims look excellent and I'm really pleased that I decided to keep them. They really are great quality alloy rims and I believe some polishers won't work on rims because the holes really knock hell out of the polishing mops. I might have moaned about the cost, but compared to the cost of new rims or re-chroming that most restorations will require, I think I got off quite lightly. The brake and clutch levers look fantastic, again top quality alloy components that would grace far more expensive machines.



On the way home from Salford, I dropped the hubs and rims off with Bill ??????? in Fernhead for him to re-lace the wheels with stainless spokes. The original spokes were very rusty and for the slight difference in price; stainless steel has to be the way to go. We had agreed a price of £65 per wheel all inclusive. However I didn't expect him to phone me at 11am the following morning for him to tell me they were ready. Talk about a quick turnaround!

When he phoned me I was on my way down to Cambridgeshire to pick up next years project, a UK registered from new, 1956 Adler Junior MR100 scooter. There are probably only 2 or 3 of these UK machines in existence including this one. I picked the wheels up the following day (still with the Adler in the back of the car) and Bill seemed fascinated by it. I've got him looking for 14" rims to fit it now. Bill wrapped the rims in cling film to protect the alloy rims during the lacing. I've left this on to help keep the shine as much as possible until the bike is ready for the road again.



I have started preparing the tin ware for re-spraying. The shot blaster has cleaned off the lower rear mudguard and it is now sporting a fresh coat of primer and a dusting of satin black to act as a guide coat during rubbing down. That should highlight any areas that will need filling before the top coat of silver is applied.

I have spotted a set of handlebars on Ebay, so I will buy them if I can; as I'm not happy with the strength of the centre ring on my current set. Peace of mind is worth a lot when it comes to something as critical as the steering. They look to have a better condition badge too, very important on a machine that I want to enter into the occasional concourse event.

During the dismantling process, I noticed the near side panel rear mounting bolt just wasn't screwing into anything in the rear mudguard; as the hole had long since lost it's alloy thread. Something like that would just annoy me after a while, so I've dropped it off with Lane Ends Engineering in Prescot for an M6 helicoil to be fitted. More expense !

Next week, I really need to make progress with the re-spraying of the tin ware. If I can get the front fork carrier repainted, I can start on the rebuild process. Unfortunately, as the weather has been so damp, the Honda 500/4 is in the kitchen, where I planned to build the MZ. So it looks like the ES150/1 will have to be reborn in the living room instead !
I think being single suits me !

Thursday 5th February ~ I've spent this evening sat in front of the TV with the wiring loom laid out on the floor in front of me. The loom is in surprisingly good condition for its age, the only damage I could see was chaffing along the length routed under the rear mudguard running to the rear lamp. I've replaced two lengths of damaged wire, using push together bullet connectors crimped onto the newly stripped ends.

One of the benefits of working as a telecoms engineer is access to decent crimps and a wide variety of heat shrink tubing sizes. The replaced section is now snugly covered against the elements and sealed at each end with black PVC tape.

I've also wired the new indicators with bullet connectors and replaced the black plastic after market lamp and horn switch cover with an original chrome cover that I found in Germany on Ebay. I missed last orders but at least I've got something done and I didn't fancy an evening in the garage.

Saturday 7th February ~ It looks like I've decided to repaint the tin ware myself. I've degreased and cleaned the front fork carrier and sprayed it with silver Hammerite smooth. It has given a lovely finish, looking close to (if not identical to) the original. I've also sprayed the handlebars and the steel rear mudguard with two coats of filler primer (rubbing down in between with wet P600) and then with the first top coat of "Ford Moondust Silver". Next weekend I will give this a gentle rub down with wet P1200 and put on a further two coats, topped off with a clear lacquer. I'm very pleased with the results so far, so I may as well have a go at the front mudguard. If that proves successful then I will move onto the tank, headlight and side panels.

This evening I've built up the engine. I spent an hour cleaning up the crank cases with degreaser and a wire brush. They look immaculate. Once I'd secured the barrel, head and inlet manifold in position (along with new stainless nuts, bolts and washers) and then secured the polished side cases with stainless steel M6 Allen key machine screws, the end result was fantastic. The complete engine is now sat in my kitchen (away from the damp and cold garage) next to my Honda 500/4.



One thing I don't spare on during rebuilds is the use of plenty of copper grease. It takes seconds to apply to each bolt but I'm sure it will pay dividends in the future should I have to dismantle anything, especially given the electrostatic reactions that can occur when alloy and steel are in close proximity. The Honda 500/4 rear hub was destroyed by the corrosion between the alloy hub and the steel brake seat insert. It's virtually impossible to find a good second hand one (because this form of corrosion happens to them all), so a new old stock was the only option. I've managed to buy an unused tachometer drive cable from a UK based guy on Ebay. The end price was far less than the MZ-B price and at least I don't have to try and clean up the old one. It looks distinctly shabby and I think it would look out of place on my rebuilt bike.

Monday 9th February ~ I got home from work and still being fired up by the success of the weekend, I got stuck in again. Once I had rubbed down the mudguard and handlebars again, they received a 2nd coat of Ford Moondust Silver. Also the plastic rear mudguard section was rubbed down gently with wet P600 and soap. I degreased it and gave it a coat of Halfords black vinyl paint. It looks much better than it was (slightly scratched), so another rubdown and a 2nd coat later in the week will do it no harm at all. It is hardly visible on the assembled bike when all is said and done, I'm just gilding the Lilly really. The handlebar/fork carrier lock nut has a plastic cover on my bike which I'm not 100% sure if it's original, but I suspect it is. Either way, it was cracked so I have repaired it with superglue specific to plastics. Once I am happy it's set completely, I will gently clean it up with wire wool and give it a coat of the same black vinyl paint I've used on the mudguard. Depending on the condition of the chain case, it may receive a coat of this paint itself as I am pleased with the results it gave on the Honda 500/4 chain guard.

Next up was the rubber sheet that is sandwiched between the front fork carrier and the front mudguard. It is in exceptionally good condition and cleaned up beautifully with methylated spirits and wire wool. Then a generous spray and polish off with "Back to Black" (bought for the belly pan on the VFR750) brought it up a treat.

I've dismantled the tachometer, by gently expanding and removing the bezel from the face. I've managed to remove most of the dents in the bezel (how on earth did this take such a battering, do people use the ES150/1 headlight units as bloody work benches?) and I've given it a coat of Hammerite smooth silver. I need to find some green and red plastic to replace the UV damaged lenses in the bottom corners of the tachometer face. The green one on the right is the Neutral indicator and if I remember rightly the red one on the bottom left is the charge warning light (alright I confess, for a second I'd assumed it was the oil pressure warning indicator, but only for a second, mind !. Bloody two strokes!!!!).

Realising I had half an hour to spare before meeting a mate in the alehouse, I carried on degreasing the alloy rear mudguard unit (complete with new helicoil fitted for the errant NS panel mounting). The degreaser has actually started to dissolve the silver paint on the alloy, so I decided to go the whole hog, wash it off and get the Nitromors in; to do a proper job. Once I'm happy it's all stripped and has a stable base for a coat of paint, it will get similar treatment to the front fork carrier.

Ten to ten, get cleaned up and then pub time!

So tonight's turned out to be one of those bitty nights where lots of little things get done. However it is often the small details that make the difference between being pleased with the look of the bike and that little bit of disappointment, knowing that with a bit more effort you could have done better. (Don't mention the 500/4 steering yokes, I will get them off for powder coating eventually. The satin black paint was been damaged by a since replaced; leaky master cylinder. We all live and learn don't we?).

Tuesday 10th February ~ I feel lucky to be home once again during the working week so I didn't miss the opportunity to carry on with the MZ. I've finished stripping the rear alloy mudguard and have had enough time to get 3 coats of Hammerite Silver on it. Likewise I have managed to get another two coats on the plastic mudguard and it looks just fine. I've put two coats on the aforementioned plastic lock nut cover, but I'm still not happy with it. We shall see after a few nights sleeping on it (not literally).

The front mudguard received a gentle rub down with P600 and then a generous coat of Jenolite to stabilize the small amount of rust in the seams and in awkward placed on the lower surface. It will get a coat of filler primer and then a guide coat before rubbing down and filling where necessary. But I'm getting ahead of myself.

I've re-united the front brake plate with its shoes and a new brake cable and as soon as I can de-grease both wheel bearings and re-grease them then the wheels can be re-united with their brake plate assemblies. More and more bits are making their way into the living room, ready for the re-assembly. However I am now considering putting the tank, headlight and side panels out to Elite for paint finishing. Rough alloy and mudguards are one thing, but panels are another. We shall see.

Thursday 12th February ~ the rebuild has started today as a sort of break from rubbing down and other laborious tasks. I started by fitting the front fork carrier, then the rear alloy and plastic mudguard sections. It takes time to fit everything as each time I come to another bolt, I have to stop, refer to my spreadsheet and then find the precise bolt and its washers and nut from the many bags that Inox fasteners have sent to me then I copper grease and fit it. By the time I'd finished for the evening, the front and rear swing arms and suspension are fitted, as are the front footrests, centre stand and an immaculate set of new old stock rear footrests from Germany (they came up beautifully with a liberal dousing with "back to black" but from the smell I'm guessing that "Mr Sheen" would have had a similar effect). I can't do much more with it at this stage until I get the wheels back, with new rim tapes, inner tubes and with the original tyres fitted. Then I will be able to fit the wheels, brakes and brake torque arm. Then once the bike is on the centre stand, the engine can go back into the frame. However at the moment I am trying to remember just what I did with the pin that holds the foot brake lever in position on the offside footrest tube. I remember drifting it out (Machine Mart do a drift set that is a pleasure to own and use – no more knacker screwdrivers), but I can't for the life of me remember what I've done with it. Bugger !!!!!!!



Friday 13th February ~ Yippee, I've found the pin for the brake lever. It was in the bag with the old footrest rubbers that I thought were not needed anymore, as I've bought a brand new set. I've also spent some time looking over photos of the bike pre rebuild, to try and find out where one errant bracket lives as I can't place from memory. It turns out to be the offside toolbox/side panel lower mounting bracket and it goes on the end of the rear swing arm pivot bolt – sorted. I've lacquered the rear mudguard and handlebars with two coats of Halfords clear lacquer and the result is fantastic. My paintwork has turned out as well as any professional paint shop could produce and I am delighted. I will give it a couple of weeks before I cut it and polish it and then mount the new chrome rear light unit. I've painted the lower surface of the front mudguard with silver Hammerite smooth and the upper surface with filler primer, ready for a guide dusting of matt black, before filling where necessary. I cleaned up the area under the knee rubbers on the petrol tank using T-Cut. I then spent 15 minutes in my local motor factors searching for the closest match to the original red. After roping in the staff and a few of the customers, we eventually agreed that Peugeot Cherry was the closest match so I've bought one tin and asked them to get me another half dozen tins for next weekend.

Saturday 14th February ~ I've given the compressor a right hammering this afternoon, as it tried to keep the shot blast cabinet running full time. I've cleaned and primed the headlight, toolbox lid and nearside panel and given the front mudguard a second coat of Hammerite smooth on its lower surface, dusting the top surface with matt black ready for rubbing down. I've also blasted and painted the offside side panel upper mounting bracket in Hammerite silver, as I don't like putting corroded parts back on the bike; even if they are completely hidden from view because I know they are there. It looks like tomorrow is going to be a day of rubbing down and filling in preparation for Cherry and Moondust top coats.

Sunday 15th February ~ I must be bloody psychic. I've spent this afternoon and evening rubbing down, filling and spraying filler primer. I've only got the offside toolbox/side cover still to rub down and spray. The tank is sporting a smart coat of yellow primer, the toolbox cover likewise, but with a touch of filler around the edges. The front mudguard has had a couple of smears of filler and next weekend I will give it another coat of primer, then start on the top coat. The nearside cover has taken a fair bit of filler as it had picked up a few dents over the last 29 years. Once I've rubbed it down next weekend, it may even need a little more. I feel I've made good progress this weekend and I can begin to see the end of the tunnel. I must chase up the new seat cover with Fred Rodgers in Winsford as I can see this holding the job up.

Monday 16th February ~ more filling and spraying.

Tuesday 17th February ~ as above

Wednesday 18th February ~ and yet again. The front mudguard just needs one gentle rubdown with the oldest piece of wet and dry I can find and then a couple of coats of clear lacquer to finish it off. The tank looks wonderful in cherry and tomorrow it can be rubbed down gently ready for its second coat. Fingers crossed, all the tin ware will be finished by the weekend. All I need now is for the replacement handlebars and front fork carrier to arrive from Germany, then I can spray those up to match the rest of the bike and the rebuild should be finished within a fortnight. I'm tempted to leave all the tin ware in the house for a week (near a warm radiator if possible) before I cut it and polish it up, just to make sure. I've still not managed to pick up the wheels with their tyres fitted; I just hope they have been as gentle with them as they promised and have put the tyres on by hand and not with the machine.

Thursday 19th February ~ Tank has received its final top coat and I've de-greased and rubbed down the rear wheel chain case, ready for a coating of Halfords flexible vinyl paint. More rubbing down and filling of the side panels, tool box cover and headlight. I've picked up the wheels and buffed off all the fingerprints and there are no scratches whatsoever. Phew!

Saturday 21st February ~ The headlight unit and tool box cover have received their final top coats and the front mudguard has had its second coat of lacquer and is now in the house hardening in the warm environment before cutting and polishing. I've polished up the rear mudguard, waxed it and fitted the new rear light and new number plate. However, now I've offered it up to the alloy section, I'm not happy with the colour difference between them. I think I will take off the alloy mudguard and give it a couple of coats of Ford Moondust and one of lacquer. I may as well do it now and at least I will feel happier. I know that the paint is happy to sit on top of the silver Hammerite as a base coat, as it seems fine on the lower surface of the front mudguard.

I've realised that I've forgotten to order new throttle and choke cables to replace the original ones that really do look shabby. They are a pale tan colour and show every grubby mark clearly. The rear chain case has been painted and looks fine, so tomorrow I repaint the rear alloy mudguard section as there are only five bolts holding it in place at the moment. Then I can get the rear wheel fitted and get the whole bike up on its centre stand, ready for the wiring loom to be re-fitted.

The toolbox has had its second coat of Cherry red and two more coats tomorrow morning should finish it off. The near side panel needs a little more rubbing down in the morning and a few more smears of filler before I will be happy to paint it.

Sunday 22nd February ~ the alloy rear mudguard came off in less than five minutes and after degreasing with meths it was sprayed with two coats of Moondust silver. By that evening it was hard enough to refit to the frame. Only the left side panel is left for spraying in Cherry and all the other parts are in the house hardening off, ready for flattening off and cutting and polishing. All the silver is finished and I've just had an e mail from Germany to let me know that my replacement front fork carrier complete with all cups, bearings and locking rings is on its way tomorrow. Not a bad buy for 25 Euros all inclusive. It will only take a day to re-spray it in silver and get it on the bike. I wish I could say the same for the handlebars, maybe time for an email asking where the hell they are.

I've re-fitted the rear wheel and chain and the bike is now sat on its centre stand ready for the rest of the parts to be offered up.

Monday 23rd February ~ I've refitted the wiring loom and wired up the rear light unit. The wiring just fell back into its old position and the securing tabs folded back to hold it in place under the mudguard. The engine dropped in easier with the head removed as I found it fouled on the horn with it still in place. The wiring is now back in place on the generator unit and the final drive chain, rubber gators and engine casings have been re-fitted. The new clutch cable and the rear brake cable are now in place and I've fitted the exhaust and all its mounting brackets. I've found that a spare new exhaust gasket from the Honda 500/4 fits the ES150/1 port just fine and along with all new fittings and a new locking ring it really looks great. The exhaust used to leak badly from the port and the silencer/elbow linkage so maybe a little bit better performance may be my reward, although there isn't much sign of an expansion chamber within this bazooka like pipe.

Wednesday 24th February ~ I've picked up my new Triumph Tiger 955i today, so not a lot to report other than to say "what a wonderful bike the Tiger really is". I was sorry to see the VFR go but not for long once I realised just how good the Tiger is. What fun it is to ride compared to the relative seriousness of the VFR. This is how biking should be, fun just like the MZ, the 500/4 or the Adler.

Once it was dark, I did some serious flattening off of all the red tin ware and lacquered the handlebars. I applied the last tiny bit of filler to the near side panel and it should be ready for top coat tomorrow.

Saturday 8th May ~ What happened to the last few months? Working in France for 5 weeks and a bike trip to Prague and back via Zschopau didn't help. However I have made some progress in little spurts and had a few setbacks, so here is a potted history of the last 2 months. The new

front fork carrier arrived and was re-sprayed and fitted to the bike. It looks perfect and the threads are perfect. The handlebars never arrived and just as I was about to threaten the Ebay seller with physical violence from 6 pissed off bikers as we passed through Germany on our bike holiday, my money was returned through the post with no explanation. What an Ar*ehole !!!!!

The rest of the bike has been reassembled and the engine dropped in and everything plumbed and wired up. All the lights work, including the rear brake light, which was a right bugger to get adjusted correctly.

All that appeared to be left was for me to fit newly sourced handlebars and get the engine running. However the "new" engine doesn't want to provide a spark very often and the kick start return spring ain't returning the kick start lever. In light of this I have decided to rebuild the original engine from scratch, which appears not to be the original unit after all (according to the log book engine numbers). However I have found the original crank cases in with the spare parts in my shed so I can build up the engine using those cases assuming the mating faces haven't been damaged.

The new throttle and choke cables I've ordered from Fred Rodgers arrived from Winsford along with a copy of the MZ workshop manual to help me with the engine rebuild. It can't be any worse than the Haynes manual which is primarily used to give me something to kneel on as that's all it's good for. However last Sunday I did strip the "original" engine down and that taught me a few things about the unit, more later.....

Even after almost 3 months of watching Ebay closely, there hasn't been one single set of ES150 or ES125 bars up for auction. I have e-mailed everyone and anyone I can think of to trace a set to no avail, so things are looking desperate. I'm still waiting for the new seat cover to arrive from Fred, hence the lack of progress and motivation even when I'm home from work.

Until this morning that is !!!!!!!!!!!!!!!!!!!!!

One phone call and I am now the proud owner of another (almost complete) 1975 MZ ES150/1 that has an excellent set of bars and a good seat for it's age; requiring only a glue repair to one small tear. That should patch from underneath with a piece of my old seat and some contact adhesive. The rest of the bike is going to be stripped to provide me with spare parts in my loft should I ever need them as all the tin ware is in good condition and you never know when the bike may accidentally get dropped or damaged in some way. It's probably the most expensive set of MZ handlebars ever, but for a ton, the replacement bits must be worthwhile having as a backup. As I noted at the start of this diary, once dismantled the bike disappear into a very small set of parts indeed and most of the bits can go in the loft sealed in plastic bags.

So that brings me up to date, tomorrow I can strip down the scrapper, get the bars in the shot blasting cabinet and at least get a couple of coats of primer on them. As for the engine, I am going to check the armature on the engine currently in the bike and replace it if damaged with the one from the running engine (now in bits). I will also fit the running breaker unit as a complete unit and finally re-tension the kick starter spring now I see how it works. I'm hoping that will get the engine running as the crank felt fine and the gearbox should be excellent and leave me with just the handlebars and indicators to sort out, then fit the choke and throttle cables. I still need new set of tank to headlight rubbers and have e-mailed Phil Albutt from BSA-Regal to see if he can find a set for me. Roll on tomorrow, Monday and Wednesday, as I'm off work those days.

Monday 10th May ~ the handlebars have been blasted, primed and are now hanging quietly with their final coat of Moondust silver. BSA-Regal are supplying me with final drive chain gators and a decent gasket set to seal the NS crank case cover and an indicator flasher unit. The one bought as a gasket set on Ebay is total sh*tte and doesn't even fit. BSA are also supplying me with the rubber dust cover for the throttle cable where it meets the carburettor top.

The biggest surprise of today was swapping the generator unit on the “new engine” with the one off the stripped down motor. It took 10 minutes and I was amazed when the engine fired up **first kick** on tick over with no choke !!!!!!!!!!!!!

After that I realised that the engine I had fitted was fine and the non returning kick start was due (I think ~ and this is subject to change) an incorrectly positioned oil seal. The spring is now doing its job and the engine sounds fine. I’ve been lucky that the prevailing winds have been from the north to the south, so leaving the front and back doors open gets rid of the smell of two stroke in the afternoon.

Tuesday 11th May ~ The handlebars are now lacquered and hardening in the airing cupboard ready for fitting tomorrow. I’m on to the later stages of fettling in order to check the bike over before I take it for a spin. Lots of little jobs like checking the rear wheel alignment, greasing the chain with spray grease and greasing both swing arm bolt grease nipples. I’ve refitted the headlight unit and routed the wiring and cables ready for the handlebars to be fitted. I’m amazed at just how long these apparently little jobs take.

I made a mistake when I ordered the bolts by ordering the offside lower suspension mounting bolt the same length as the others. However this bolt is an M8 x 45mm and not 35mm as it also secures the front brake plate. As I had to order a replacement I thought I may as well order dual polished bolt replacements and electro polished washers for all the suspension units so they appear to be chrome, given that the largest part of the order is postage. I’ve cleaned up the seat unit and patched the two very small tears from underneath using patches cut from the original seat cover that was held together with Duck tape. I was amazed at just how good the cover looked after scrubbing it clean and removing paint blobs with soapy water and a plastic pan scouring pad. Then a generous spray with “back to black” and it looks nearly new. Even the strap looks better after I re-tensioned it and screwed it into place.

Wednesday 12th May ~ I’ve glued the handle bar Zschopau castle badge and headlight badges into position and fitted the handlebars, clutch and brake lever. I have had to shorten the accelerator cable outer shroud to allow it to be fitted to the throttle assembly as it was 1½ “ too long and therefore held the throttle fully open.

The clutch cable fitted fine but doesn’t appear to be doing much, so I will wait until the new chain gators arrive and then fit them and look at the clutch dog in the offside crank case at the same time. I’ve rewired the connections into and out of the inline fuse to the indicator switch. However the indicator switch is badly corroded and even after stripping down and cleaning up, there is an obvious potential drop. I’ve bought two new old stock switches from Ebay hopefully one of them is an indicator switch. If not then I have two new chrome headlight switches for less than the price of one new one and I can buy the replacement flasher switch from MZ-B.

Inevitably there is some touching up to do in the paintwork department, but only on the handlebar bars (where the brake and clutch lever assemblies have scratched the bar tubes during fitting) and also just below the NS headlight comet badge where an unnoticed dribble of contact adhesive has taken the paint off down to the primer. I will have to mask everything and rub it down and re-spray it. Then hopefully some careful use of wet and soapy P1200 and T-Cut will restore the finish to its pre glue state. Bugger !!!!!

The bike hardly looks any different from Monday but the hours I’ve spent getting it to this position since Monday have been long and at times stressful. It’s so easy to make a big mistake at this late stage and set myself back with weeks of re-spraying. Fingers crossed I can sort out the clutch problem. Tomorrow the choke lever goes on and it looks bloody fiddly, however I don’t want to remove the handlebars again as I haven’t got anyone to assist me by keeping them out of harms way. It’s so easy to make one wrong move and put a bloody big scratch in the paintwork.

Thursday 13th May ~ I’ve adjusted the clutch so that it now disengages the gearbox from the engine. It helped once I had seated the clutch cable properly at the lever end, then it was simple

a case of screwing in the adjuster and locking it off with the 13mm nut. The gasket sets and new chain gators arrived today, so I have fitted them and refilled the gearbox with oil. I replaced the front offside lower suspension bolt with the old 45mm on until the new polished one arrives just to be on the safe side, as it does lock the front brake plate into position.

The throttle assembly was a bugger of a job as it had been bodge in the past. I wanted to use the original assembly as the one off the scrapper is designed for a different cable stop to my new one. I ended up buying a paint roller poll, just to cut a 4" length out of it. This tube then fitted over the bars and the throttle over that. The extra tube prevented the throttle tube from wagging about on the bars as it had effectively acted as a bush to take up the play. Then once the grip and indicator were secured it looks fine. It took me most of the afternoon modifying things to work together but I'm quite happy with my "quality" bodge until I see a permanent replacement for sale.

I still haven't fitted the choke lever, but have touched up the paintwork on the tank using a touch up brush. Once I have enough red paint on the glue wound to allow it to stand slightly proud of the rest of the surface, then I can rub it down and polish it back up again.

By 8.30pm I realised that there was no reason why the bike couldn't go out for a check ride. After all, it's still taxed, insured and MOT'd. So after a few tentative runs up and down the cul de sac I was happy enough to take it for a ride around the village. The looks from some people were extremely gratifying so I popped round to see a mate who rebuilds every step of the bike with me from the safety of the Holt public house. He was absolutely delighted at its appearance and went over it with a fine toothed comb. After that I went for another spin and bumped into another friend who is equally into his bikes. He was amazed at the finish of it as was his neighbour Glen, another drinking mate. After all the hard work, it really is pleasing to have people you know well and respect for their own practical abilities enthusing over your own work. These guys are seriously talented with their hands but they were amazed at my paintwork and of course the alloy finish. The ride home was uneventful and the MZ never got above 40mph but only because I wouldn't let it. The motor seems fine, with plenty of go and I'm now looking forward to finishing off all the last little fettling niggles so that it is truly completed and I can start on my Adler MB200.

Friday 14th May ~ Today I've fitted the choke lever and put a new dust cover on the throttle cable on the top of the carburettor. Then I gave it a polish with a cloth and filled it with petrol/oil mix, took a deep breath and rode to Southport and back via Ormskirk. The engine seemed happiest at 50mph but on the way home I even pushed it up to 60mph with no problems. The key rattles a bit but I can live with that. The amount of people that stop and stare as I ride past is most gratifying and a lot of fun. I can't wait until I take this to the Lancashire section meeting. I should ride it to the camp in the lakes that they have organised this weekend, but it's the Rugby League Challenge Cup final and I'm going to the pub tomorrow and nowhere else.

Sunday 16th May ~ I took the ES150/1 over the Cat & Fiddle today and the bike never missed a beat. It did get a lot of interest from people as I rode past as it's such an unusual looking machine.

Friday 21st May ~ The new indicator switch and original handlebar mirror arrived this afternoon and once they are fitted the restoration is just about finished, just a quick check of the ignition timing and a wait for the new flasher unit to arrive. It's entered into a classic bike show next weekend – fingers crossed X.









End