Eric the Viking – a restoration in many parts – February 2024

Spend since last report: £17.55. Total hours labour since last report: 13

Whilst sorting the workbench, I came across a trapezoidal piece of steel with a lip all round, covered in 50 years of muck. It is the steering box strengthener plate that goes between the box and the chassis rail. I had been looking for it last year when I fitted the steering box back onto Eric. Annoyingly, I had put the steering box on, the drag link, greased everything and it looked great.

Drag link nut came off easily but the ball joint (top of picture) steadfastly refused to separate from the Pitman arm (arm at an angle under it). After much hammering and swearing, I explained the issue to a neighbour who offered to lend me his ball joint separator, which reminded me that I had one on the tool shelf ten feet from where I had been hitting the ball joint bolt. Oops, silly me.

Once the drag link was off, it is possible to remove the steering box of a late Bay with the Pitman arm still attached, which is a good job as the arm will not come off the box so it is staying there for now! With the steering box on the bench and the strengthener plate being stripped to bare metal for a repaint, I was unhappy with the paint on the steering box so that was stripped again. 3 coats of etch prime and 2 coats of John Deere top paint in matt black to both and they looked great once more.

Seam sealer to the join between chassis and strengthener plate (it is horrendously messy stuff) and reassembly went smoothly. At the same time, since I had the etch primer and the topcoat, I grabbed the box of tin ware for the engine and did that as well – I had stripped it last year and rust proofed already. Looks much better.

The brake pedal had been bothering me as I had a return spring that seemed to do nothing – I did my trusty saying “What would Malcolm do?” and contacted him. My spring had snapped, which was why it was doing nothing. JK to the rescue with that and a pack of other bits. The return spring works better when it is complete and after a small fight, it was on. I connected the handbrake cables to the brace bar that also turned up on the bench and then went through all of the suspension and steering nuts, ensuring that each one has the correct washer under the nut. During one enforced rest, I bought loads of washers and a box of drawers to store them. All labelled of course. That was easier than hunting through my assorted basket of bits for random washers and all nuts are now about 18% stronger with the washer added.

The clutch return spring was next, the previous one having never been there. Removing the circlip, the arm, the cup seal and the washer took 5 minutes, cleaning was straight forward but took about 15 minutes to remember where I had put the box of new circlips! Once found it was easy, then empty the whole of the garage of all boxes of parts, work bench, welder and

everything else which took ages. Eric went down onto his 2 wheels, the rollover jig came off, new wheels went on the hubs. Those wheels went down as well…fortunately I have spares.

Eric is now on 4 wheels and I can access the front. Next up, prepare the cab for the topcoat – filler, sanding, more primer on top of the current primer, then topcoat in L90D white. The only spend this time was £17.55 on a new spray gun, the old one was about a fiver and has done about 7 years good service but keeps leaking paint out of the nozzle all over the floor. The garage looks like it has measles.

The next morning, I popped into the garage to see Eric and the overnight heavy rain had come in leaving a large puddle under the workbench and the freezer. Ho hum.

Eric the Viking – a restoration in many parts – April 2024

Spend since last report: £508. Total hours labour since last report: 88.9

Yes, that is a lot of hours since the last report. Yes, progress has been made! Last report, I noted that I had purchased a new spray gun and it was time to test it out. Prior to installing the nose / front panel, I decided to spray it before installation to get down to the bottom that is hidden when installed. At the same time, there is a lot of metal to spray on the cab floor, kick panel, seat tubs and main cargo floor. I mixed up my 2-pack L90D Pastel White and donned my trusty 3M mask and did a test spray on some cardboard to check the spray pattern. Once that was about right, I set to work and used about 750ml of paint.

I'm not very good at paint and for sure others would be faster. My garage is dusty, so there's a few bits under the paint here and there but it is on and looks great. The feel of 2-pack paint is that it is really durable and smooth (dusty bits excepted!).

Then I moved on to the installation of the front panel. Welding that on is simple – loads of people do it. There was a recent article from John Undie Underwood on it with clear details, and is a regular thing to do as the front takes all of the weather when driving.

Simple huh?

I started to get it clamped into position just 2,023 days after purchasing the panel from Just Kampers in 2018 and it has been sitting in the corner of my garage ever since. Every clamp in my garage was used to get it into position along with a ratchet strap to hold things tight. No matter how I tried, it would not line up properly – I managed to get everything sitting comfortably except the bulges on each side between the windscreen and the air intake vent. Possibly the panel was a poor pressing or it got bent at some point, or I simply did not know what I was doing!

I welded it all into place except the bulges. All looked good. The outer panel matched to the inner windscreen panel to within 1mm which was brilliant given that the inner panel went in rather blind due to rot on the previous one.

The air vent tabs also lined up and the spot welds were things of beauty.

Next up is the dashboard. The dash is made of the metal front, a softer rubber style grab rail in the middle and then the metal for the dials, radio and switches. Separating the 3 components was straight forward, although the nuts would have been tricky without my trusty impact driver. Everything was stripped to bare metal before dealing with the inevitable rust on the front lip.

This was chopped out and a few sections of new steel let in. I was quietly pleased with how smoothly that all went on!

Once stripped, I then rust proofed it all, etch primed twice and top coated twice with John Deere matt black tractor paint that is my go-to paint for black parts and it goes on wonderfully well. I also emptied the box of other metal to be painted black as well – dash, front of dash, steering column, steering column surround, foot pedals, steering column support bracket and closure panel on the floor, and finally the air vents that sit on the front of the dashboard.

The sun came out for a change and it all got air dried and sun baked.

The inner windscreen repair panel did not come with the bracket to attach the dashboard. Never mind, I can cut rectangles of steel, bend them, drill a hole and weld a captive nut. I made one for each mounting hole of the dashboard, offered up the dashboard, marked the location and welded them in place. They looked great and I then painted them in L90D pastel white and adjourned for the day with a big smile on my face.

It was later that night that I realised that you don't put the dashboard in flush to the top of the inner windscreen, it goes about an inch down. The next day, I carefully removed the tabs, remaking a few that were not good enough to re-use, took the paint off the tabs and the inner screen, welded them on in the right place and then offered up the dashboard.

Yet more time spent doing it a second time because I don't know what I'm doing.

Eric the Viking – a restoration in many parts – August 2024

Spend since last report: £73. Total hours labour since last report: 16.1

The last issue was reserved for the Germany trip, so this is actually 4 months of very minor and rather eclectic updates.

I bought a diesel heater some years ago which in the short term was on the garage wall to take the edge off the winter cold. This was dismantled and built into the wasted space under the passenger seat. It took a little fiddling as the space is large enough for the heater but the entrance was too small. A section of bracing was removed and welded in a few inches away allowing the heater to pass into the hole. A hole was cut in the floor of that area for the exhaust pipe and air inlet and the 2mm thick steel plate provided with the heater was bolted into place. A 70mm hole was cut in the rear of the bulkhead to allow hot air into the cargo area as well. I have fashioned a very small fuel tank that also sits in the same area to run the heater at night. It is very discrete as well as functional.

The kitchen pod has been filled, sanded, epoxy primed and top coated on the inside and looks rather good. It cannot go in until the B post and C post are finished and top coated though, so it is sitting forlornly at the side of the garage. That left nothing needing white paint that was finished, so I sanded the dashboard, pedal and steering column sections before spraying them black and trial fitting them back in.

The wiring loom was removed some years ago and had been subjected to some “upgrades”. This included a lot of bullet connectors to join the front to the rear and plenty of extra wires serving unknown purposes. Every wire was removed from the fuse board, inspected, cleaned and the coil, ignition and main live cables from front to rear were replaced. The entire plastic shrouding from 1973 was hard, brittle and missing sections, so it was removed and discarded. The fuse board was filthy and slipped out of my hands, accidentally landing in the dishwasher whilst Lorna was out. Along with some of the plastic air vents. Once it was all clean and ready, the smaller cables like rear lights and indicators were rejoined, the whole loom rebuilt into the fuse board following the 1973 wiring diagram and the long snake hung from the fuse board.

Several rolls of fabric tape were used to give me a neat finish from the fuse board for about a metre. This was then passed through the hole in the floor in front of the passenger’s feet and onto the garage floor.

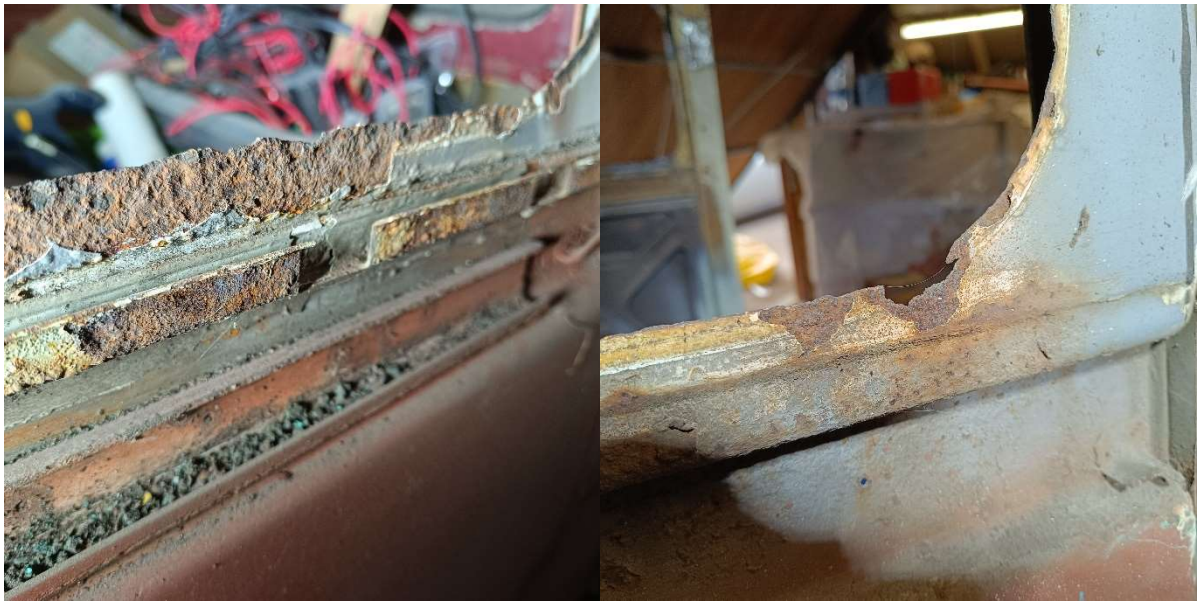
The brake lines were still not right, so to finish both brakes and wiring, Eric went onto his side again.

All brake joints were dismantled, checked and put back together or replaced. Malcolm’s advice was that making the end is all well and good but to finish it, you wind it down into the correct place.

With the van on his side, the rest of the wiring from front to rear was taped up and run as far as the engine bay. Then the reversing light switch on the gearbox received a pair of new cables in more fabric and that ran into the engine bay as well. Then finally, the brake light switch on

the new master cylinder also received a new pair of cables in fabric up to the fuse board. All told, that looked rather nice.

The rear windows had also seen better days and needed some attention – very frilly metal was removed, new sections added, and welds tidied up. The external covers on each side sit on clips nearly a metre long which had also perished and have been removed. New ones are a continuous U-shaped steel section, the old ones were more like fingers which makes them very fiddly to make. JK came to the rescue (with club discount) supplying the simple rectangle of steel folded over. There were no mounting holes either, so I drilled holes ready to weld them to the body.



Brake bleeding again. The plastic reservoir on top of the master cylinder was leaking, cylinder removed to the bench, issue traced to it not sitting correctly. Master cylinder refitted.

Brake bleeding again. The master cylinder was now leaking on the joint heading to the rear brakes. I'm not playing that game again – just that one end removed, and new flare added. Every time I remove a pipe leaking at one end, the other end leaks!

I would have done more, but since the last report, we have been to the AGM, Germany, the Cider farm, Cheddar, Herefordshire again, RAF Odiham and that is just club events. I'm going back to work for a rest!!

Eric the Viking – a restoration in many parts – October 2024

Spend since last report: £440. Total hours labour since last report: 72.2

Yes, 72 man-hours spent working on Eric in just under 2 months, averaging just over 80 minutes every day of the week. Huge progress.

Front seats. The seat backs never received the steel cable around the edges, but I still had the reel. This was welded to the zigzag serpentines and the springs making the seat back look much more like a seat back! At the same time, I was not happy with the mountings for both base and back. I welded a new piece of heavy box section to both B posts, added a captive nut inside and added a hole to the upright for an M8 knurled bolt to hold the uprights in place. A further M8 knurled bolt on each side holds the seat back to the upright. Much stronger and not much extra time to flip things over.

Underneath the rear windows you will find covers for the sliding door track and these sit into V channels. Eric's ones had long since rusted away, I bought some years ago which are somewhere in the garage and had to buy yet more. These are just a one metre long, flat piece of metal folded in half to make a channel. I drilled holes in the front and smaller ones in the back to weld the channel to the van. This was a pain, and the clamp slipped causing the first one to move by 2mm. Removing it was more of a pain. The next morning, I slapped my forehead. For the second channel, I drilled the holes into the van below the window, clamped the channel to the van and welded from inside. Sometimes the obvious solution appears just after the horse has bolted but they are on now!

The whole cargo area received a coat of L90D Pastel White topcoat using my lovely spray gun after a while covering the entire garage in plastic sheeting – spray paint gets everywhere like a mist! The end result of spraying two-pack is wonderful, it just goes so smooth, but you do need to wear a decent mask. After the paint had fully cured, I then added heat insulation (foil-based roof insulation) to the cargo and rear plus sound and heat insulation (bitumen based) to the cab area. Everything was suddenly silver and uniform.

On top of this into the cargo area went some 18mm thick ply with bolts from under the van through the factory holes into threaded inserts in the ply to hold it down. In the slide out

kitchen pod I used 5.5mm ply to keep the weight down after adding heat insulation there as well. With the slide out hinges all cleaned of dust, dirt and metal grinding dust from several years, I applied new grease and bolted them in place. A friend came over and we lifted the pod onto the runners, bolted it in place and slid the pod into the van. It stopped 6 inches short and refused to budge. The nuts protruding were thought to be the issue and were swapped for rivets which popped off during the next trial. Nearly 10 hours were spent on diagnosing this and it turned out that one of the runners was just under 3mm from where it should be stopping everything from sliding home. I could have ground off the bracket from the cargo floor, welded it, repainted around it and under the floor where the heat would have inevitably burned off the paint. Instead, I added 3 small washers to the bolt and everything slid home, albeit with the grinding noise of metal against metal – the side of the pod rubs on the C post now! Grr.

I was planning it anyway, and the fix was to add a guide wheel on each side of the pod to maintain the distance between the pod and the B-post and another guide wheel on the C-post. Now the metal of the pod stays parallel. To improve the strength of the pod that is effectively a box with the inside face missing, I added the kitchen worktop and wooden sides underneath for the cupboard. Once the front goes on and is glued and bracketed in place, it will be a lot stronger. I even managed to cut out the worktop holes for the sink and cooker unit.

With my parents coming to visit, I cleaned the dashboard, mounted the car stereo and the glove box lid, dismantled the instrument panel, washed it in the dishwasher and put it back together with clean glass and put it in. Looks fabulous and much more like a van now!

That level of procrastination meant that I could put things off no longer. I slid myself under the van, into the engine bay and removed the fuel tank and its associated pipes. It took some wrestling, but it came out eventually and I slid across the garage floor and took out a surprisingly good fuel tank. I am not chancing things and sourced a brand-new German quality tank though. The tank sender unit was removed, and I followed the club article on testing the sender – either the sender has failed or my trusty multimeter has failed. Close examination found the metal fingers that send the resistance to the gauge had rusted and snapped. The sender was confined to the bin and a new one ordered along with new filler neck pipe and new soft pipe for the joints for the emissions control system.

With everything out of the engine bay, there was some remedial welding needed in a few minor areas, some smoothing out, rustproofing, priming and top coating again in L90D. I also did the firewall and the inside of the engine lid as well.

What a transformation!

Again, I slid into the engine bay and got the new tank into place, attached the sender unit wires, pushed the new soft pipes onto the emissions pipes and connected the filler pipe from the side of the van to the tank. There was swearing. Don’t wear anything warm when doing

that, you'll sweat buckets. Don't wear a watch or other wrist adornments, you'll get stuck. Don't do this in front of impressionable children, they will learn new words! "Push both ends of the new rubber pipe on and tighten the jubilee clips" plus the little rubber joints took me 2 hours!

With the engine bay clean, I can now start putting the wiring into the right places and maybe test the circuits. I still have no idea what I am doing, but I am starting to think that I might actually do this.

Eric the Viking – a restoration in many parts – December 2024

Spend since last report: £136. Total hours labour since last report: 54.6

The last two months have been productive but mostly not in the garage. To "be nearby" as Lorna convalesces and frankly, to be warm, I have been busy wielding "Sally Sewing Machine". The front seats that were originally in Eric are now in Poppy as we decide how to upholster them now that they have got rather old and soggy plus at least one piece needs welding. In their place in Eric, I made a frame for two seats that I wrote about some time ago – they are the same size as original ones and use the same spring and serpentine arrangement but they are mounted on a 20mm box section steel frame to allow them to be inclined correctly when facing forwards or backwards. With some bent metal staples added between the serpentines for support, I brought the base frame indoors and started cutting the material for the base trim.

The first piece of material is the seat base top that you sit on, which I cut with a 10mm seam allowance and placed it on the metalwork – already it looked marvellous! Then I took the 10mm scrim foam and cut a piece to match. The new Somabond thread is high strength nylon and is 3,000 metres long – that's towards two miles on the reel which is enormous. With a practice on a scrap, I found a way to get both material and foam under the presser foot of the sewing machine (it is a domestic one from Hobbycraft, not a professional one with a walking foot so it is a bit more tricky!) and get the pleat roughly straight. Then onto the real thing – a pencil line down the middle marked the first front to back pleat and 3 on each side of the middle at 5cm apart makes 7 pleats plus about 12cm of cheeks on either side. Pencil lines along all of them to guide things and I pushed the material through. The first one had around 1mm of movement along the straight line on a couple of the pleats but that was mainly to do with the domestic machine being asked to sew more material than it can comfortably eat.

The pencil lines can then come off and we have a rectangle of material with a foam backing and 7 pleats that look rather like the real thing. Quietly pleased with myself, although it took a while.

Then I took two full width pieces of the brown door card material (I did side to side and according to the Internet, piping should be cut from a diagonal but that is hugely wasteful), sewed them together into a 3-metre-long piece of 26mm wide and changing to my piping foot on the machine, I made brown piping.

Next up, I took a long rectangle of the cream material which will form the sides of the seat, long enough to go all the way around the seat base. The piping was sewn onto this rectangle of cream.

With my top and my sides made, I then ran a pencil line around the top where I wanted the piping, put on my big boy pants and set to work, the machine now sewing through the top, the side and both pieces of material that form the piping. Once the tension was adjusted high enough, the machine coped – the corners were a bit fiddly but went well. Eventually, I had a cover and once on the metalwork looked rather nice.

Under the cover, I added some man-made horsehair and it was very lumpy, even in a sewn bag that went under my evening sofa chair for a week. Layers of lambswool produce a much flatter, albeit slightly less soft, seat.

Rinse and repeat for the other front seat and already the pleats are coming out more defined and straighter as I get my eye in. Then a middle seat / arm rest / dog seat that is mounted on board and goes from the front to just in front of the arm rest so that the seatbelt buckle can emerge and a small upholstered flat piece for a drinks table when you are facing backwards.

Both seat bases received ears of fabric to allow a drawstring to be used underneath to pull everything tight, then on to the seat back!

The seat back metalwork is more sculpted to curve around the back of the user, which presented the issue of how to get the material sewed correctly to avoid and bagging. The main piece was made as previously with the foam underneath. The rectangle for the side similarly and the piping similarly as well. The piping was sewn straight for the sides, and in a curve at the top and bottom to match the curve of the metal. Once that had been worked

out, it was then a case of repeating the attachment of the bib to the side piping and sewing up the start of the side to the end of the side.

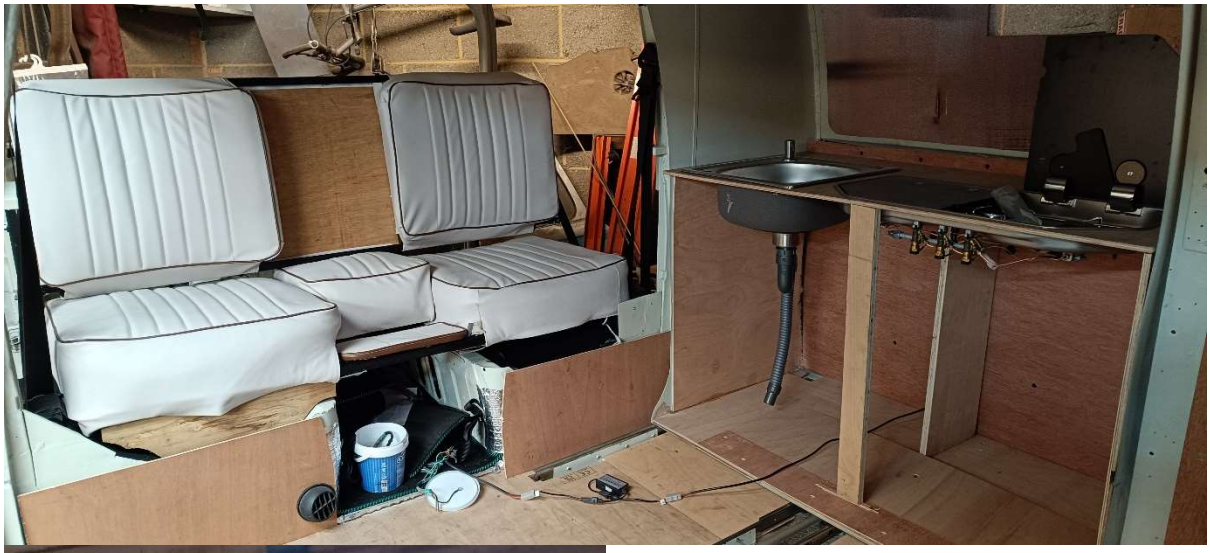
Each of the covers has to go around metal in places which needed careful cutting and seaming.

And then the padding can be smoothed out, Velcro added to the metal (self-adhesive) and to the seat cover (sewn on for strength) and get a final trim.

With the material complete, the seat back now needs the rear to be made pretty as you do not want to see the serpentines all the time. When not driving along and not sitting on the seat, I want the option to use it as a table – 3 jobs in 1! I removed the upholstery to keep it clean, cut a piece of 9mm exterior hardwood board and trimmed the edges to fit the metal of the seat back. With a suitable hole for the bottom of the steering wheel cut, I then came in and added some marble effect sticky back plastic and the back was finished.

The dining room was requisitioned for sewing, the office was heaving full of rolls of material and the back bedroom was being used to cut material on the floor. With Christmas coming, it all needed to be tidied away to allow us to have pigs in blankets, or “relatives staying in the spare room” as some call it (sorry Mum and Dad, I know that you have heard that plenty of times before, but it is quite clever). The rolls of material, foam, sewing machine and everything else were tidied away, the upholstery stores converted to bedrooms and the seats removed from the house and into Eric both to empty the house and verify it all fits.

I was rather pleased with the result. This configuration gives me seats for driving, the same seats facing backwards for camping and a table for storage / dinner prep.



I will admit that in addition to the upholstery, I made a start on the wiring as well. After a full review of the wires, I added a battery to the right place, added the wire that ought to be on the alternator to the battery as well (since there is no alternator and no engine). As I turned on the side lights, headlights, beam, hazards and windscreen wipers, each fuse showed 12 volts as the right time. I was rather heartened and finished the day in a celebratory mood. The next day, I joined the right fuse to the actual side lights, headlights, beam, and windscreen wipers. Nothing worked, not a single circuit. Which was a key reason why Sally Sewing Machine came out.

A job for another day, perhaps I can persuade Malcolm to pop down and help me get it all sorted?