

Restoring an Imp in Germany – Part One

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Sometimes, at the end of a project it is interesting to ponder, “How did it actually start?”

In 2018/19 I restored a Stiletto that I bought through a UK contact. The car was in pretty good condition but was right-hand-drive which I was keen to change for use here in Germany so I began searching for left-hand-drive parts to convert it. Obviously on a Stiletto the dashboard is easily converted by simply swapping the instrument panel and glovebox – the surround being equally happy with either permutation – and there are blanked-off floor panels to take the re-located steering column and pedal box. It's the steering rack that is the tricky bit as a

LHD unit is needed. Not easy to locate, even in mainland Europe, but eventually I found what I was looking for in a town 200 miles away. However, a whole car was still attached to the steering rack!

After the Stiletto was finished, COVID arrived and suddenly, with lockdown, I had a lot of free time. I looked at the little car still standing in a corner of my workshop. So why not use the time to bring the Imp back to life? Hmm, the Imp had donated its steering rack to the Stiletto. Was I back to square one with another long search for a second LHD rack, this time for the Imp? No! It turned out there were a number of boxes of old parts that came with the Stiletto that I had not fully checked. Amazingly, one of these contained a LHD rack! The irony is that without this oversight the subject of this article would never have been bought and restored!

This Imp was delivered to Austria in 1968 and was on the road until 1991. It was later sold to



Initial assessment of upper and lower body

a new German owner but in need of repair. I subsequently bought the vehicle in 2019 as an absolute wreck. Colour was white with a red roof and interior. The restoration started in October 2020.

The restoration commences

As always, restoration begins with disassembly. The shell then went for thermal paint stripping and dry ice blasting. After previous paint, body filler and underseal was removed (dry ice is very effective for the latter as it makes it hard and brittle); you could see through the body in many more places than the manufacturer intended. Rust was not removed in this process as sand-blasting at a later stage was planned.

Since I have a metalworking workshop, cutting, bending and fabricating the initial repair panels wasn't a problem. Previous accident damage in the front

area was daunting at first, but I had the Stiletto at hand so was able to take the necessary measurements for the repair from that and make some templates.

After many hours much of the hidden work was completed. NOS (new old stock) front wings, front panel and rear wheelarches were coming from the Netherlands while other parts had been ordered from Ex-pressed Steel Panels in the UK.

While waiting for the outer panels I overhauled the front and rear running gear – wishbones, training arms, crossmember, steering, brakes, etc.

In December 2020 the NOS front wings and front panel arrived, slightly surface-rusted but of good quality and fit. Unfortunately, the indicator/sidelight aperture was too low by 1.5 cm on the left wing (an early Mk 1 wing). I cut out that area and welded it in higher to line up with the front panel.



As found
All photos: Stephan Haeuser



Removal of the outer sill revealed the usual corrosion to middle and inner sills



Front panels removed to repair previous accident damage

The driver's door was problematic because a new door skin had previously been fitted; the panel had been folded over the frame incorrectly. Consequently, water was able to penetrate from above, causing rust.

The inner panel at the front of the bonnet was completely rusted through and the bonnet itself had numerous dents. In order to fit the repaired bonnet exactly, it was necessary to fit, remove, adjust (corners and weld) and repeat this operation umpteen times until everything fitted to my satisfaction.

At some point, a fellow club member gave me a tip to additionally strengthen the front end with a strut brace, the car was after all to have many competition modifications so a brace would be in keeping. Such a brace was not commercially available so I designed, fabricated and installed one.

In addition to the strut brace, a roll bar was a 'must'. For this to be fitted it was necessary to shorten the storage bins either side of the rear seat to enable the B-post bar mountings to fit.

After these steps, there was an enforced short break because there was a lack of further sheet metal parts for the wheel arches and rear lower side panels. The spare parts manager of the Sunbeam Club Deutschland had ordered the parts for me from Ex-pressed Steel Panels in the UK, but due to Brexit and COVID, a delivery time of three months was quoted.

While waiting, there was an expert project visit from Hansi Kiesmüller (clubmate and professional coachbuilder), who gave me a very valuable tip for further welding. He recommended that I use



0.8 mm CuSi3 welding wire. This is a copper-silicon alloy that has the property of not letting any sparks fly when the weld seams are subsequently smoothed out. This makes it easy to avoid removing too much sheet metal, with no risk of grinding through or excessive weakening of neighbouring sheet metal. In addition, this welding wire is ideal for welding stainless steel or galvanized materials. This wire will not rust.

When the repair panels finally arrived from the UK, work re-commenced straight away. A joggler was used to give a step between existing panel and repair panel. The Ex-pressed Steel Panels'





Bodyshell in primer



Inner shell first to receive
Limelight topcoats



Front suspension sub-assembly
is raised into position

repair panels were of exceptionally good quality and fit.

Now it was time for removing the rust from the shell in our sand-blasting unit. During this action I used 320 kg of slag with a grain size of 0.6 - 1 mm. The operation took a good three hours. As expected, new holes appeared in the shell.

An unavoidable downside of intensive sandblasting is that sand finds its way into all corners, folds, cracks and edges. No matter how often you vacuum the car, with the next turn on the body rotisserie it trickles out from somewhere again!

Eventually the welding was finished and I could start grinding down the welds. At this stage all cavities were carefully primed with a cavity spray gun (pressure tank plus long hose). I used Brantho KorruX to paint the cavities, as well as the engine compartment, boot and interior. Also, on a recommendation from the aforementioned

bodywork professional, Kiesmüller, I applied an epoxy primer to the underbody and outer skin.

Back in the workshop, the filler work started. I spent endless hours filling and sanding.

At this point, my good clubmate Markus Neuberger turned up in my workshop and assessed my filling skills. After a walk around the car, he asked with a mischievous grin on his face, "Tell me, what's this actually going to be? A corrugated iron garage?" That was a major setback for my enthusiasm, but, to be honest, he was right. The panels were far from flat.

So the filling and sanding started all over again. But this time with templates, a long sanding plane and all sorts of other helpful tools. In addition, tips and tutoring lessons from bodywork professionals from the club and friends proved invaluable.

Time for some colour

More time passed, but one day the time had actually come: I could start painting. Looking at an original Sunbeam colour card I chose Limelight: a bright lime green. I had the paint mixed by RM Coatings to the original recipe. In keeping with the trend of the period (think Mini Coopers, etc), I had a two-tone finish in mind so the roof would receive a contrasting black finish.

First, everything was masked off on the outside and the interior was painted. This gave me a feel for the painting of the exterior and confirmed I had made the right choice with the colour.

Next the interior was masked up and the outer panels were sprayed. The work went well and the fresh, vivid colour really put me in a good mood. On close inspection, however, there were some areas with orange peel but with a lot of patience, wet-and-dry paper (working gradually up to 8000 grit) and various cutting compounds and polishes the finished result was good.

Incidentally, all the bodyshell cavities were rust-proofed by spraying with Dinitrol. This is solvent-based, but has the advantage that it won't be dripping from all corners years later on a warm day.

Assembly

So now we come to the most enjoyable part of all restorations: the assembly. My usual method of preparing and getting various sub-assemblies ready on the shelf before starting reassembly has proven itself again with this project.

The most exciting sub-assembly is of course the engine. This came from long-established Imp engine builder Reg Patten. (*Older members will remember Reg from Imp Service, along with Dave Botterill. GP*). I went for something that would be fun on the road rather than only suitable for competition, namely 998 cc with approx 75 bhp at 7,000 rpm. The engine has forged pistons and crankshaft, as well as a high-lift camshaft and larger valves, fuelled by twin 40 DCOE Weber carbs. The exhaust incorporates a stainless-steel motorcycle silencer mounted transversely under the rear bumper. A friend of mine (a TÜV inspector) commented, "That's a small exhaust. Very small." I think by that he meant it was *just about* legal here in Germany. (*Germany is far less relaxed regarding modified cars than here in the UK. GP*)

The engine bay was completed with an aluminum radiator with additional fan and a high-flow water pump. In addition, an oil cooler is fitted, together with an oil temperature gauge in the dashboard. Electricity is now supplied via a modern three-phase generator plus regulator.

The stock gearbox was resealed to eliminate leaks and fitted with a new clutch and then joined to the engine on the workbench before the combination was bolted to the car. New gearbox and engine mounts and a new starter motor were attached, of course.

Rally dash a lucky find



The wishbones and trailing arms have been blasted and freshly coated with paint earlier and fitted with polybushes. Front springs are shorter to lower the car and to add a slight amount of negative camber. The rear has adjustable dampers and, again, shorter springs.

To ensure the brakes can handle the extra power of the new engine a modern disc brake system from a Fiesta is fitted at the front but drums are retained at the rear as the car is very light so drums are perfectly adequate. The shoes have of course been re-lined though.

Assembly continued with the installation of



Wood-rimmed Moto-Lita the finishing touch to the interior



13" Minilite-style alloys set the car off perfectly

the fuel tank and plumbing together with new brake lines. Lights were refitted, an easy job.

I blasted the 12" alloy wheels thoroughly with glass beads. I repainted the black parts of the wheels which required endless masking. The result is satisfying, but the journey there was tedious.

Everything was now completed on the exterior except for the badges and bumpers. Attention now turned to the interior. I started with the headlining, which unfortunately could not be saved. A trimmer I have used in the past tailored a new headlining using the old one as a template which I then installed. Luckily it's not that difficult to fit on an Imp.

The most important change to the interior was the installation of the aforementioned roll bar, which proved to far from easy. I ordered the bar from a company in the UK. Questions by e-mail about the installation and instructions remained unanswered. Likewise, there was no indication of a delivery date and inquiries about delivery were also ignored. Very poor customer service. Without further technical information, I prepared the body for installation by reducing the size of the storage compartments to the sides of the rear seat (as previously mentioned) to create space for the roll bar attachment points. When the roll bar eventually arrived, the thing absolutely could not be brought into the car unless the storage compartments were completely removed to create the necessary space for maneuvering the bar into place. I had no desire to do that. Instead, strength and intellect were applied. The long legs of the roll bar were pulled together with a strong tension belt to allow it to squeeze into the car. Then the belt was loosened and the bar bolted to the body. What a performance.

The interior continued with the fitting of insulation material and the laying of a fresh carpet set. Carpets for an Imp are actually easy to get in the UK, but I had to wait ages for that too, reinforcing my impression that many companies in the UK have had massive problems with exporting to mainland Europe due to Brexit.

A highlight of my search for parts on the internet was finding an original Rally dashboard (as optionally fitted to the Hillman Rally Imp) in nearby Austria, complete with kph speedo. The seller reported that he found it in a breaker's yard 40 years ago but never got round to using it himself. Anyway, it now graces my Imp's cockpit along with a vintage Moto-Lita steering wheel. Incidentally, I had the speedometer overhauled at Speedograph Ritchfield Ltd in Nottingham, a company I have used several times in the past with excellent results. This time, unfortunately, countless e-mails and calls were necessary. Brexit again no doubt, exacerbated by COVID perhaps.

A pair of competition seats from OMP with integrated headrests were fitted. Making them fit the original seat rails was hard work, but I got there. Much improved comfort, lateral support and increased safety are worth the effort.

Thanks to newly purchased window seals (repros from Australia!), the installation of the glass was quite easy to do, the only difficult part was fitting the windscreen chrome filler strip until I realised there was a special tool, the purchase of which made the job easy.

Doors were reassembled without any issues of note; windows and locks all worked fine.

What was missing until the very end of the restoration was the new wiring loom. You guessed it, the same slow progress with UK suppliers was repeated. It seems money is paid into the supplier's bank account and then there is silence. The delivery time for the wiring loom was more than eight months! When it at last arrived installation took just a few hours.

To be continued...