

1967 Kombi Restoration : Part 2

Metal Work

There are many jobs that are downright scary the first time you tackle them: the first tipping my kombi on its side, the second, giving it a nose job. But I managed to get through both without serious incident.



In June 2001, my attention turned to the kombi's nose. With plenty of trepidation I unpicked all the welds around the side and bottom. Then I simply cut across the bottom of the windscreen: because the lower sections had to be replaced I had plenty of room to move and this left me with clean metal at the top of the nose to graft to. Likewise with the valence, as it was being replaced it could simply be cut away. The only area which caused me any concern was where some previous expert had brazed a couple of joints on the door pillars: brazing is quick and easy but is a terrible fix - you can't weld on top of it & the bronze reduces the strength of the surrounding metal to its own level. I had to cut away the bronzed sections and patch them later.



After plenty of persistence, I really felt like a surgeon when I picked the last welds away & lay the nose on the ground. This proved a great bonus: not only could I de-rust and seal the inner sides of the nose and body, I could fill all the pinholes in the nose and remove all the small dents which had accumulated over the years. That V-profile of the splittie nose has to be one of the prettiest shapes to ever be pressed into sheet

metal. Took me a lot to resist the temptation to hang it inside on the wall to admire!

With the nose smoothed, the valence replaced and everything looking clean, in Nov 2001 I tacked the nose back in to position. After months of having the front end open, it was a real joy to see it looking "normal" again. Then out came the grinder and Dremel so I could cut out all the rusty metal from under the van. The grinder is great for big cuts and the Dremel (or a die-grinder) allows you to get in to those tight corners and also to make a much thinner cut. The first real section I tackled was the driver and passenger floor. I had to cut away an area about 30cm long and 20cm wide on each. I used the old sections as templates and cut replacements out of flat sheet. I made up a die out of a block of steel that had about the same profile as the corrugations in the floor and then hand beat the sheets til they had the same pattern in them as the original. Time consuming & laborious. Now that these panels are relatively cheap it hardly seems worth the effort, but at the time it was the best solution for me. Fortunately my dog-legs were pretty sound and all I had to do was cut out a couple of small sections and graft in clean metal.



To lighten the van, I supported it on axle stands, removed the engine then unbolted the front end and transaxle. These were all put aside to be tackled as time became available. I then built a platform next to the van, out of crates covered in foam rubber. With lots of trepidation I then jacked up one side til it was just short of tipping over. From there all it took was a gentle pull to lay it over on the base - I did this all singlehanded - it's certainly a lot less scary with a couple of helpers.

Then it was over to the cross members and outriggers underneath the van. Over time dirt and dust fills the partially closed sections. This then gets wet when it rains and acts as a real rust trap. It is rare to find a van with all the box-sections intact. I marked the positions of the various heater pipes, gearshift coupling tube etc and opened out holes for them. Removing the old sections was a pain: tight corners and not much space to move. I also ended up having to replace the heater tube, as under its insulated cover it had all but disappeared.

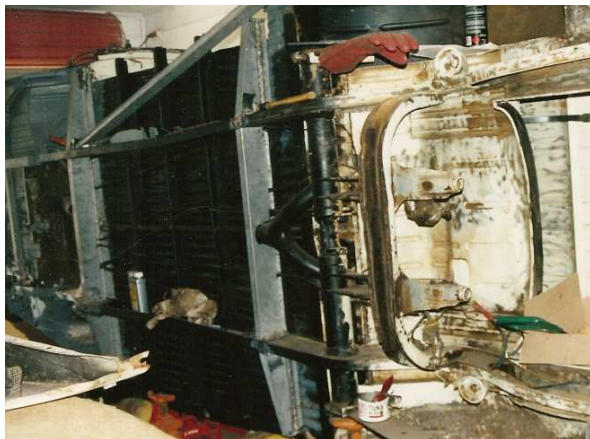
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I spent a few hours measuring up the sections I needed and took my drawings to Steven's Sheet Metal who went to work on sheets of zincalume: 11 hours of labour later and, in early 2002, I had a new set of doglegs, cross-members, front valence, side panel, inner and out sills, repair section for the windscreen and cargo doors and a few more odds and sods include a complete 600mm high repair section for the driver's side. Today I would have simply bought all new panels but at the time choice was far more limited and prices quite a bit higher. As I laid out all the new parts on the floor, I started to worry about whether I would be able to get them all on. Was I going to be up to the task?



Through all this I tried to keep myself to working in one area of the car, so I could see myself making progress in one spot before tacking the next. With the box-sections replaced I tackled the passenger side inner and outer sills and the jacking points. I was very happy with how these worked out: they were the most complex piece to measure and bend. Probably 4 hours of the labour was involved in just the jacking points. This was complicated by the fact that they were also cut from 1.2mm sheet!

On my list of new panels was a pair of replacement sections for under the windscreen. Before fitting, I carefully cut them to the required length and opened up the holes for the windscreen wipers. The guys at Steven's had done a great job of getting the profile exactly the same as the original section, meaning that as I



tacked them in place, I could see everything was going to line up really well. The nose had taught one important lesson: you can never have enough G-clamps and vice grips.

The cargo door area comes in for a real beating; foot traffic carries in extra water on top of the panels and trapped dirt rusts it from beneath. There wasn't much left along the first couple of cm of my door opening. So I cut out the whole section from just behind the cab divided to just behind the doors. I had Steven's Sheet Metal fabricate a section of floor 15cm wide to graft in, along with the stiffener ribs for below the floor. I had to cut off the brackets for the mounting for the centre seat so I could fit the new section and then weld it back down when the job was completed. All of this work took place in two sections: firstly with the car on one side and then later with it rolled over to the other (once again a job completed very gingerly on my own. Getting a complete repair section for the driver's side certainly saved a lot of time. My only mistake here was to not think of lining up the join with one of the small ribs which run along the length of the panel. I ended up with a join a couple of cm away, whereas it would have been better if the join was concealed.

Over this period I also fitted repair sections to the two cargo doors. This had to wait until the van was upright again. That way I could cut away the bottom few cm of the old metal, tack in the new and get everything line up properly. I was lucky enough to have the original doors, so everything could be lined up pretty well. The best tip here is to do some work, then go and have a break before you weld things in permanently. When you come back you certainly are better at picking whether or not things are lined up properly. Alternatively find yourself an anally retentive friend!

It's been long enough now to admit to learning another lesson: always keep a fire extinguisher handy. I had made the mistake of keeping one of my seats nearby the Kombi while welding. Of course the obvious happened: a stray spark ignited the horse hair padding – that stuff is incredibly flammable. I looked out from under my welding mask to see orange flames from behind the car! Imagine my panic as I squirted the flames while hoping I wasn't going to quickly undo all my good repair work. Luck was with me and the damage was limited to a gaping hole in my passenger seat.

Before I knew it another year had passed and Christmas 2002 was on us.

.....To Be Continued in the Next Edition.