



FRONT DOOR FRAMES

PLEASE READ BEFORE FITTING

ABOUT OUR DOOR FRAMES.

We have spent over 2 years developing these frames. We have tested them in three separate solid accident free buses and NOS doors. We have compared them to several sets of original frames, including two perfect German originals which we used as our masters for forming our jigs. Talking of jigs, we have CNC laser cut and CNC folded steel jigs for test fitting each component into its position after bending and forming but before it goes to be welded. Only one man with over 20 years as an aircraft parts machinist does this job. When he is happy that every part fits correctly, the parts are transferred to a second identical laser cut welding jig. Every set is welded by the same welder. He has many years of experience Tig welding aluminium racing motor cycle frames. Our frames that require polishing are sent to a company that metal polish for the UK's largest Super Yacht manufacturer. After returning from polishing, the frames are fitted to a "soft" wooden jig for final checking prior to sale. As you can see we have done everything possible to produce the highest quality part available.

After all this effort we have to point out that like all vehicles from this period, doors, frames and car bodies all varied slightly. In the 50s and 60s there was no CNC production, no robots and a casual regard to perfect fitting panels when new, mean that no two doors or bodies are ever exactly the same. Therefore our frames, just like original VW parts need to be "fitted" to your bus.

Whilst we are talking about correct fitment, we would like to point out possible problems with quarter lite frames. Our door tops will accept original VW quarter lite frames provided they have not been distorted when being "re glazed" by somebody with heavy hands. You can easily bend the frames when pushing the glass and rubber into the frame. If this has happened they will not fit our frames correctly. Our own quarter lites fit perfectly and will be pre installed into the door frame if you have ordered them. We can supply a non original extruded rubber seal which fits better than any original flat style seal that everybody else sells. Throw it away its useless. Because ours fits you wont damage your quarter lite frame beating the regular flat strip seal into it. Finally the other repro quarter lite frames in polished stainless. As far as we are aware the bulk have been produced in China but some apparently are being made in the UK and neither fit. (at the point of writing.) The Chinese ones have the hinge stud 4mm out of the correct position and although they look great are totally useless. I know we bought some ! Please do not blame our door frame if your quarter lite does not fit or came from us. We make are own and they are an exact fit.

PLEASE TAKE A MOMENT TO FOLLOW OUR RECOMMENDATIONS BEFORE YOU START INSTALLING YOUR FRAMES.

The frames will become ridged and strong when secured but until they are secured treat them with great care. When fitted do not swing or pull the door by them. If you have purchased polished frames be aware that whilst they are loose and being fitted, they will scratch easily. It's a good idea to protect them with insulation or masking tape until they are fitted. Only put them down on soft surfaces. Do not be in a hurry to complete the installation of these windows.

As a guide and depending on your experience and skill level, it could take between 2- 4 hours to assemble each complete frame. Possibly a bit quicker, easily a lot longer ! Accept that time scale and take your time. Your patience will be tested when you fit the quarter lite (vent wing) main seal. Its never easy on original or our frames. Its about the worst job on a Split bus restoration ! Fitting this seal alone should take 15-30 minutes. Do not allow yourself to become angry with frustration. It will only take more time.

LETS GET STARTED WITH A TRIAL FIT BEFORE YOU GLAZE THE WINDOWS.

This allows you to check the frame fits before the glass goes in. It is important to understand that our frame, just like an original frame, will flex and twist a small amount before glass is installed. This will not happen when the glass is eventually installed and the frame fully secured with all 8 bolts. **The order in which you tighten these bolts will alter the overall fit of the frame.** If you do not pay attention to what's happening whilst you are fitting our frames, you may not achieve the best fit. Follow our instructions.

- 1) To do the trial fit remove the 2 x M8 countersunk bolts on the rear leg, the 2 x M6 hex bolts and washers from the middle leg and the 2 x hex bolts and washers from the front leg and the 2 washers and nyloc from the cross channel.
We supply the cross channel screwed to the frame. Normally we leave the 4 screws loose enough to allow up and down movement of the cross channel. This will aid the trial fit of the frame. You can leave the outer rubber body seal in place as this will help protect the frame from scratching whilst test fitting.
- 2) With the front door open, and WITHOUT fitting the rubber seal between the door and frame, drop the frame into the sockets on the door. **IT HAS TO BE INSERTED PARALLEL SO AS NOT TO DAMAGE THE FRAME.** Insert the front and middle legs 10mm into the door and then gently insert the rear leg 10mm. Slight flexing of the legs is normal. Then lower it carefully keeping it PARALLEL. Look out for the threaded studs as they approach the 2 holes in your door. Guide them gently into the holes. We tried many doors during development and found some needed these 2 holes filing 1mm or so as doors vary slightly. The frame should now sit all the way down onto your door. **DO NOT BOLT THE LEGS IN PLACE.** Carefully close the door and check for fit. The frame should look like its going to fit even before its bolted in place. You should be able to see the fixing holes aligning with the holes in the door. The front and rear legs have a captive nut plate that can be moved to achieve the correct fit.

ALL ADJUSTMENT TO OBTAIN THE BEST FIT MUST BE DONE WITH ALL SIX BOLTS LOOSENEED NEVER TRY AND TWIST THE FRAME WITH ALL THE BOLTS TIGHTENED OR YOU ARE COULD FRACTURE THE WELDS.

- 3) When you have tested the frame for a loose fit, and still before fitting any glass, its worth just nipping the bolts up for a final fitment test. The adjustment on the 3 legs allows vertical alignment of each leg which will either remove or create minor twist in the frame. **Always start with the front leg first.** With the bolts loose align the foremost part of the frame with body aperture. When the two are aligned hold in place, open the door and gently tighten the 2 front bolts up.
- 4) Now secure the second leg with the 2 M6 screws and washers. Be gentle and "nip" the screws up enough to secure the position. Do not over tighten.
- 5) The last leg, the rear one, offers the most alignment because the frame is most flexible at the rear. Adjust it so it follows the body's B post. Nip up the countersunk M8 screws to secure. When your happy that the frame fits you can remove it for glazing as you now know it fits without glass, it should fit with the glass !

GLAZING.

- 6) When installing the felt channel ready to accept the glass, be sure that the small notches have been removed from one side of the rubber felt channel where the sliding lock fits into the lock channel. If they have not been removed, trim with a Stanley Knife. If you forget you will have to remove everything to do it later. The sliding windows are fitted by unfastening the channel at the quarter lite end, inserting the glass and then refitting the channel. Care must be taken the refit the cross channel correctly. You should bolt the cross channel as high as possible in the frame. The glass should be just loose enough to slide. Be aware that it is possible when tightening up the cross member to clamp a small twist in the frame. We find it useful not to fully tighten the 4 cross member screws. The cross member will ultimately be secured by the M6 studs on its underside.
- 7) The Quarter lite seal is a pain ! There is no easy way. Use Silicone Spray (available at Halfords) or WD40 to lubricate. Start at the bottom and slip the seal over the Catch Clip. Work forward to the bend. Try and push one side into the channel by hand and then push the second side into the channel with a worn flat screw driver. When it clips into place correctly you can feel and almost hear it pop into position. The rubber clips into the two "tabs" on the inside of the frame. Watch out for Utube video coming soon.

CLEANING POLISHED FRAMES.

- 8) We recommend cleaning Polished frames with Autosol metal polish (in the black and gold box/tube.) Failure to clean will see them oxidise and go dull in the same way as alloy wheels do if they are not looked after. We do not anodise the frames as it dulls the shine. Painted frames require no maintenance.

PAINTING OUR FRAMES.

- 9) If you ordered primed frames they have already been acid etched and primed using a 2 pack paint. We recommend another coat of 2pk primer followed by the top coat.