

## **Installing New Shoes with Shoeplate for a Traditional Van Dusen Footboard**

1. Before you take off the old shoes, mark their position with tape or pencil, especially how low the heels are. Drill out the rivets from the backside of the footboard. Make sure you use a sharp drill bit. Pry off the shoes using a screw driver or similar tool.
2. Inspect the footboard. If it looks like Swiss cheese, fill the holes with epoxy resin before proceeding. Tape the holes shut on the underside of the footboard. Masking tape works well. Rub it on with some force so the resin can't leak through. Use two-part epoxy and mix a small amount thoroughly to put in the holes. It should be a bit goeey, not too runny. Use a thin pointy tool (e.g. tooth pick) to stuff the resin into the hole. Try to avoid leaving any air bubbles in the hole. Go around to fill all holes and come back a second time once it has settled a bit. Any bubbles should float to the top. Overfill slightly. Clean up a bit and cover with masking tape and make it smooth. This will avoid more work later on. Let the epoxy cure.
3. Remove the tape on both sides. If there are air bubbles you may need to repeat step 2. If not, use a scraper to remove excess resin, in particular on the top face of the footboard so the shoe plate can go on flat. Some wet sanding with fine grit sandpaper may be useful to smooth the area. Do the same on the bottom but only enough to take out rough spots so you don't hurt yourself when you handle the footboard. (You won't be looking at it, after all.)
4. Mount the new shoes on the shoeplate with the screws that come with the shoes. Use grease on the screws. Place the assembly on the footboard so the shoes are in a similar position as before. Mark the position of the shoeplate for reference.
5. Use the paper template to line up the holes for the shoeplate. There are 4 rows that allow for variation in the vertical position. This allows you to play with the vertical position and find out what is most comfortable. (This is the advantage of the shoeplate over riveting the shoes directly on the footboard.) Make sure everything is lined up properly before you tape it down. Check where the template holes are, relative to where you marked the shoeplate position. The holes should be drilled in the flat area of the footboard, avoiding the curved part.
6. Now you are ready to drill holes. It is essential to get the holes in the right place. You may want to use a sharp object (punch) to mark the center of the hole on the footboard so the drill can't skid. Again, use a sharp drill bit. The holes should accommodate a ¼-20 bolt so use a size E (0.25). If you have a drill press that would be ideal. Otherwise, try to make sure you drill really straight through the board.
7. Proceed with drilling all holes. Use a round file to clean up the holes. You can also use a deburring tool to clean up the edges of the holes (carbon/resin is sharp). It should be a tight fit with the bolts to avoid things shifting when pressure is applied, but you can enlarge the hole slightly if there is an alignment issue. [If you know where you want the shoes to sit, one row is sufficient of course, but 2-4 rows will give more flexibility with vertical alignment.]
8. Mount the shoeplate with shoes on the footboard with the 3 bolts provided. Grease the bolts and put the metal washer and then the black plastic washer before inserting the bolts into the board. The plastic washer provides insulation between metal and carbon to avoid corrosion. The shoeplate holes are threaded so the bolts should go in easily. Tighten them securely. Place the footboard in the boat and see if you want to make any adjustments to the vertical position of the shoes. Call 508-788-4466 if you have any questions.