

## Instructions for the CPF 800 series Single Stage Preform/Adapter

### Please Read These Instructions for Proper Use

If your model has a flat end and the adapter fits on it with no movement. You can remove the riser at the bottom of the adapter and apply the adapter directly to the model. If you are fabricating a socket with a domed end or significant offset use the following procedure for best results:

#### Riser Contouring



Fig 1 Mark contour and shape    Fig 2 Remark contours and shape    Fig 3 Remark contours and shape

1. Place the riser on the model without the PVA bag applied. (Using a large barreled sharpie or marker will give you some distance away from the model and reduce the amount of times you need to sand.)
2. Mark the contour of the part that is in contact with the riser (Fig 1 shown with our carbon preform product). Sand the riser legs to the line on the riser.
3. Replace the riser on the model and retrace the contour of the model. (Fig 2) You may need to repeat this procedure again until all of the legs on the riser are in contact with the model.
4. Mark around the riser an equal distance to remove enough material to shorten the riser as much as possible (Fig 3).
5. Sand to the line. The legs on the highest part of the model should be completely ground off. Apply the PVA bag to the model.
6. Tie the first layer of the carbon or fiberglass (which can be short) over the riser and cover it. We tie our carbon with a short amount below the adapter tie groove and a length enough to cover the entire model above the groove, which will be reflected down over the model. Tie stockinet first if you need a cosmetic layer.



Fig 4

7. Check alignment (Fig 4) and apply laminating cap and the PVA bag. Apply one layer tape around the laminating cap to secure.

8. Pour the resin and let the resin run itself for three to four minutes. This gives the resin time to saturate the groove under the adapter so that the resin flow fronts meet under the adapter.
9. Note: You may want to slow your resin gel time by reducing the amount of catalyst by 25%.
10. Remove the tape from around the cap and run the resin as you would normally. The riser is designed to stay in the laminate. You can adjust the alignment of the adapter slightly by sliding it on to the model before the resin sets.

This procedure can be used in a transfer fixture. A very small amount of putty will be needed to stick the riser legs to the PVA bag while removing it to the laminating station.

#### **Technical Tips:**

- Tuck excess carbon or fiberglass under at socket brim to increase thickness, strengthen the laminate and reduce waste.
- Use 250-400 grit sandpaper and sand under running water to finish socket edge after rough sanding on a Trautman or disk sander.
- ***Tyrco and other buffing wheels will not work on carbon.*** These wheels work by melting and abrading plastic and carbon melting temperature is 3000 degrees Fahrenheit!
- Painting with lacquer and sanding with fine sandpaper will create a great finished edge. Do the same for the grinding adjustment during fittings.
- Vacuum should be run at a maximum of 29 in hg. The strongest composites have as little resin as possible. Do not over string because you can starve the laminate by pushing too hard. Let the vacuum do the work for you. String in one direction and keep a wave of resin ahead of your string. Be sure to string in one direction only.
- Give the resin ports in the cap time to do their work. This should only take 2-3 minutes. Then run it as described above.
- The short reinforcing layers inside the layup are designed to strengthen the composite at the adapter, which is the area with the highest stress. This is also used to cover the riser with carbon to contain it in the laminate. Use what you need to cover the riser and fill the gap between the riser and the plaster model.

If you have any questions please call American Prosthetic Components, Inc. 01 (920) 406-9550 or 01 (800) 772-7508.

Thank you,

Your Team at American Prosthetic Components