## HOW TO BUILD GOLF CLUBS



### INSTRUCTION SERIES

Follow the recommended shaft trimming intructions. If purchased as a kit, the shaft has been tip trimmed and prepped already.

**STEP 1a. Steel Shaft tip trimming**: Use a Golf Shaft Cutter (STC) to cut the shaft per the recommended tip trimming instructions.



**STEP 3b. Graphite Shafts**: Lightly sand shaft from tape to tip with 150 grit or finer sand paper to remove the polyurethane finish and all the paint. This operation is "prepping" the shaft and can be done by The GolfWorks (PREP).



**STEP 1b. Graphite Shaft tip trimming**: Using the Grit Edge Blade (GREB) mounted in a hacksaw frame, cut the shaft per the recommended tip trimming intructions. Apply a piece of masking tape to the shaft at the cutting point to prevent splintering the fibers of the graphite shaft.



**Step 4.** The steel shaft tip should have a uniform satin or brushed appearance. The graphite shaft tip should have a uniform grayish graphite appearance. Prepping ensures better adhesion of the epoxy to the shaft.



#### STEP 2. All Shafts:

Measure the hosel depth of the clubhead to be assembled by inserting the shaft tip into the clubhead and placing a mark on the shaft next to the hosel. With graphite shafts, use a pice of masking tape to mark the depth. It is very important that the shaft penetrates completely to the bottom of the hosel.



**STEP 5.** If using a ferrule, slide it over the shaft tip. Note: A small amount of epoxy can be applied to the shaft tip prior to installing the ferrule. This helps the ferrule slide into place easier and keeps the ferrule secure.



#### STEP 3a. Steel Shafts:

Sand the tip of the shaft with 100 grit sand paper to remove the shiny finish. This operation is "prepping" the shaft and can be done by The GolfWorks (PREP).



**Step 6.** If you encounter difficulty, use a Ferrule Installation Tool (GW1004) and hammer to start the ferrule onto the shaft.



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**STEP 7.** Place the hosel over the ferrule, grasp the clubhead with your right hand and the shaft with your left hand, as shown. Tap the shaft butt firmly against a hard surface to drive the ferrule into place.



**STEP 11.** Remove the shaft from the hosel. Check to make sure the shaft is evenly and adequately covered. If not, apply more epoxy.



**STEP 8.** Mix the epoxy according to the directions on the packet.



**STEP 12.** Reinstall the shaft into the hosel. Grasp the clubhead in one hand, the shaft in the other, and tap the shaft butt down on a hard surface. Be sure the tip of the shaft seats to the bottom of the hosel bore. If the shaft does not penetrate to the bottom of the hosel bore, breakage will very likey occur. This action will also ensure that the ferrule is in the correct position on the shaft.



**STEP 9.** Dip the tip of the abraded steel or graphite shaft into the epoxy. Roll the shaft to ensure that the epoxy coats the circumference of the shaft. Take care not to get epoxy on the ferrule.



**STEP 13.** Remove excess epoxy from the top of the hosel with a paper towel. Allow the epoxy to cure before proceeding to the next step. Any graphics on the shaft should be aligned in proper position at this time. Place the club in a secure place, with the club head down. Check the epoxy instructions for set time and a cure time.



**STEP 10.** Insert the tip of the shaft to the bottom of the hosel, simultaneously rotating the shaft. This will completely coat both the hosel bore and the shaft tip with epoxy.



**STEP 14.** After the epoxy has cured, position the club in normal playing position. Slide a 48" Ruler (RUL48) behind the club as shown. Using a felt tip pen, mark the shaft 1/8" below the desired playing length. The grip cap will extend the club's length by 1/8". For steel shafts, use the Golf Shaft Cutter (STC) to cut the shaft at this mark. For graphite shafts, use the Grit Edge Blade (GREB)to cut at this mark.

