Gracoil Installation

Note: Professional installation is recommended. Use protective cylinder cap during sanding and buffing.

1. The Gracoil® adds 1” to length of a gun stock when it is installed, so it is necessary to know the shooter's length of pull. In most cases, the stock must be cut off to allow for added length of pull. Once the length of pull is determined, measure, mark, and cut off the stock accordingly.

2. The stock is now ready for drilling the holes, and the fast, easy way is using a Gracoil® Drill Kit, which allows you to drill across other holes or “cutouts” maintaining the correct position and hole sizes. If you do not use a drill jig, the first hole to put in needs to be 1 1/16” diameter, and at least 2 1/4” deep in the center of the stock. Next, insert the stock plate cylinder into the wood screws, using the stock plate for a drill guide, then attach the plate with the wood screws provided.

3. Using a 5/16” diameter drill bit, drill the two holes 1/4” deep for the guide pin placement again using the stock plate for a drill guide. Next remove the stock plate. Using a 3/8” diameter drill bit, enlarge the guide pin holes by drilling them 1/2” deep. Now put the Gracoil® back on, and secure it with the two wood screws.

4. After the Gracoil® is mounted to the stock and wood screws are in place, scribe a line on the bottom of the stock plate to completely outline the stock. Now remove the Gracoil®, then using a band saw with a metal cutting blade, saw off the excess material just outside the scribed line. We recommend a B-square type pad fitting jig for the saw operation, so the cut will have the same “toe angle” as the stock.

5. Using the same jig, begin sanding the toe and sides back to the scribed line, on a belt sander. Start with a coarse 36 grit sanding belt, going up in steps with 80 grit, 120 grit, to 180 grit. The heel of the plates can be sanded by laying the unit flat on the sander table. It is important to use the protective cap on the stock plate cylinder to protect the unit from sawing and sanding dust. After finishing the Gracoil® to size, the protective cap can be discarded.

6. After the sanding operation the next step is fitting the recoil pad and finish the aluminum sides of the Gracoil®. First fit the recoil pad to the 1/8” thick pad plate using the same procedure on the belt sander. Hand polish the Gracoil® plate edges with emery paper, starting with a 180 grit to remove all sander lines, and go up to 240 grit, then 320 grit, then 600 grit. If a high luster is desired, buff with a polishing compound.

7. Replace the Gracoil® unit on the stock, and adjust the pad settings according to the enclosed instructions.