**MACHINE PUTTER EPOXIED IN HOSEL REMOVAL INSTRUCTIONS**

First, you need a good strong vice mounted on a firm surface, preferably on or near the corner of a workbench, and preferably some aluminum angle pieces to put in the jaws.  Next you should protect the head with masking tape on the face and back flange.  Make sure the tape doesn’t cover the heel of the face, as you will need that to stick out about an inch from the jaws.

Next you need a longer #6/32 screw, but it doesn’t have to be a torx head.  Hex or even slot or Philips head are fine.  Preferably 1.5” long, but 1.25” or even 1.0” will work.  Longer will work too, but tend to bend the longer they are.

Next you need a hot air gun or torch (which is what I use).  Regular propane is fine, as MAP gas can get too hot if you aren’t careful.  You will also need a large metal hammer with flat face (or small hand held sledge hammer).

Use leather gloves and protective eye glasses or face shield.  Sometimes hot epoxy can spatter, and you don’t want that stuff flying on you anywhere.

Put the putter in the vise upside down, with the sole pointing up and even with the top of the vice, and the heel sticking out approximately one inch so you can see the hosel junction.  The shaft should be accessible and free to hold onto as you remove it.  Masking tape should be flush with the edge of the jaws and not exposed as it can burn and melt on the face discoloring it.

The loft on the face will help hold it in place as you tighten firmly, but don’t over tighten to dent the head or anything (the softer aluminum jaws and masking tape should also help protect the head).

Heat the sole of the putter where the connection screw is, and using a Torx wrench (#T-15 size), unscrew the connection screw.  Use enough heat and time until the screw comes out easily.  Put the screw down to cool in a safe place (another piece of aluminum plate or angle piece, or ashtray, etc.

Heat the junction of the head and hosel moving your heat source evenly around all sides, including the face, sole, and back, and pointing down the now empty hosel connection screw port.  Working quickly now, heat the tip end of the longer screw until hot (orange hot at the hottest, but not red or white hot).  Insert the tip into the port and screw in approx. .250” (with whatever tool works with that screw).

Continue to heat the juncture of the hosel and head, until you see slight smoke rising from the area.  Keep moving the heat so as not to burn the head or cause discoloration.  When you see the smoke, and / or smell it, start tapping the end of the longer screw in a straight downward motion.  Smaller, more frequent hits should start the hosel moving down without too much force.  When it starts to move, put down the heat source and hold the shaft while you continue to tap the longer screw until it is completely free from

the head.

Put down the hammer and use the longer screw tool to unscrew the longer screw, take it out with your glove and rest in safe cooling spot.

You can use a stiff brush, Scotchbrite or sandpaper to remove the old epoxy from the hosel tip, taking care to not scratch above the square mortise joint.  Use a pick and then Dremel tool to remove any old epoxy down in the hosel port.   Also remove any epoxy from the connection screw using Scotchbrite.

You are then ready to experiment with the new pre-loaded hosel shaft grip combos.  When experimenting, be sure to use a locking washer on the connection screw, and use the low strength Loctite on the tip of the screw.  Tighten, but do not over tighten as you can break the screw if you really torque in it.  You can disassemble the Loctite and locking washer connection with just the Torx wrench, no need for the vice and all the heating, etc.

 If you arrive at a combination that you want to stay with, we recommend epoxying for a semi=permanent bond, and to avoid any rattling, buzz or slight movement that can occur without the epoxy bond.  Let me know if you need any pointers on that!

Please let me know if this helps. Please call or email if you need any assistance.