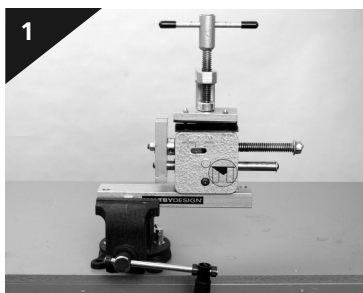
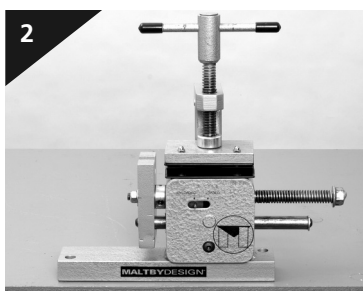


The Enhanced Graphite Shaft Extractor is designed with an internal load sensing spring and indicator. To use, place the club into the device and tighten as you would any screw-type extractor. Tighten until the indicator shows the spring is loaded. Then apply heat. The pressure exerted by the spring is enough to cause the head to slide off once the epoxy breaks down from the heat, but not so much spring

pressure that the head shoots off! Your hands remain free, as you don't have to feed pressure while the head starts to move. Improve efficiency and reduce the damage to shafts and heads. The Enhanced Extractor can be used for 460 cc heads and larger. On the largest of heads, it may be necessary to position the head with the toe up.



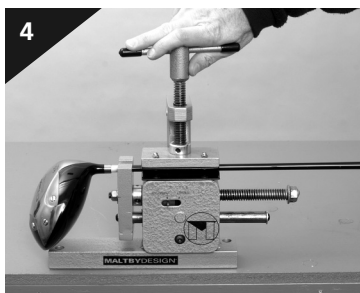
1 The Enhanced Graphite Shaft Extractor is designed to be used either in a vice (see photo 1). . .



2 or bolted directly to the bench (see photo 2).



3 Before placing the club into the Extractor, remove the ferrule from the club. Tip: Applying a few seconds of heat to the ferrule softens the ferrule material and makes it easier to remove.



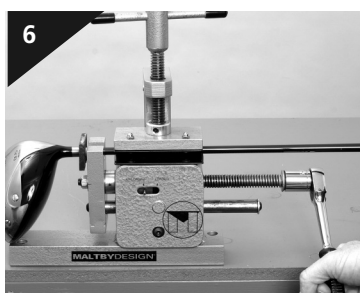
4 the U shaped cradle on the extractor. Be sure the shaft is sitting properly in the extractor clamp and tighten firmly.

Place a piece of 3/4" masking tape over the area of the shaft where the ferrule was. This will help protect the shaft. Place the club into the Extractor as shown in Photo 4. The cradle for the shaft should be positioned as close to the main body of the extractor as possible (within 1/2" of all the way) and there should be approximately 1/2" of space between the top of the hosel and

CAUTION: Do not over tighten. Over tightening the clamp could cause shaft damage. The shaft should be secure enough to prevent the shaft from slipping when the extractor pressure is applied. The clamp is coated with a non-slip coating and should prevent slippage with the proper clamping pressure applied.

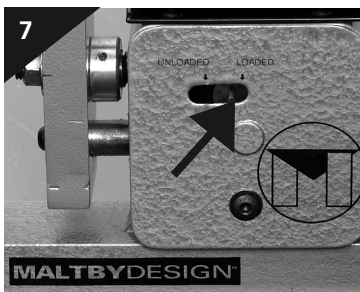


5 Insert the V shaped steel collar over the shaft, between the top of the hosel and the extractor U cradle. The V shaped steel collar is provided with the extractor. Using the ratchet wrench provided, tighten the large hex bolt. Tighten until snug. The indicator on the front of the Extractor will indicate "Unloaded" as you

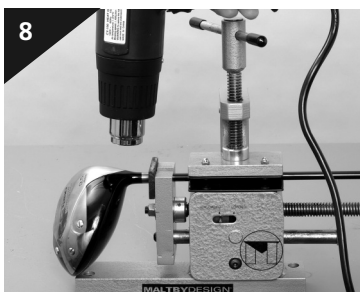


begin to tighten. Continue to tighten and observe the indicator. It will begin to move to the right toward the "Loaded" label. Continue to tighten until the indicator is close to the "Loaded" indicator. Once the indicator is favoring the "Loaded" side of the indicator, there is enough pressure being exerted on the club head to cause it to move as soon as the epoxy bond is broken during the heating process. Tip: Be sure to watch for shaft slippage during the tightening process. If you notice the shaft sliding through the clamp, stop and tighten the T bolt more securely down on the shaft. CAUTION: Do not over tighten the hex bolt when applying loaded pressure. The unit is designed to allow for tightening until the indicator needle is all the way to the "Loaded" position. However, it is not necessary to load to the maximum amount on most shaft removals.

continued on reverse. . .



The arrow in Photo 7 shows the position of the indicator needle has moved right toward the "Loaded" position. In this position, the force supplied to the head should be sufficient to move the head once the epoxy bond is broken, during the heating process.



Heat the hosel area using a heat gun. It is a Heat gun be used when removing graphite shafts and/or on heads that have painted finishes. A torch is acceptable to use when removing iron heads from steel shafts.

Move the heat gun back and forth as well as around the entire hosel. Keep the gun moving to prevent too much of a concentration of heat in one area. Too much heat applied to one area can cause damage to the club head finish and the graphite shaft. 3 to 5 minutes of heat are required using a heat gun (High setting) for most metal woods and irons.

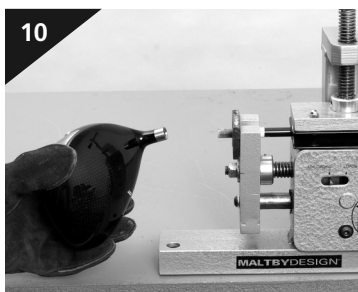


CAUTION: Never twist the head when removing it from a graphite shaft. The head should be pulled, or pushed, off the shaft straight, with no twisting.

Once the epoxy bond is broken, the head will move due to the pressure applied by the extractor. Wearing a leather heatproof glove, hold the head as shown in Photo 9. If the head is not pushed all the way off the shaft from the extractor pressure, crank the large hex bolt a few turns to push the head the remainder of the way off the shaft. Work quickly. Too much

heat exposure to the graphite shaft can cause a weakening of the fibers. Tip: Keep a bowl of water on the bench next to your removal operation. Once the head is removed, you can quench the

hosel area in the water to accelerate the cooling of the hosel.



Once the head is removed and cooled, it is necessary to properly clean the hosel before installing a new shaft.

A good tool for this is the Golfworks Wire Hosel Cleaning Bit (GW1015). These bits work on any type of hand drill and make cleaning the hosel easy. Once the bits rough out the hosel, swab out the

hosel using a cotton tip applicator or clean rag or towel dampened with acetone or an equivalent cleaning solvent. Be sure to let the hosel completely dry before installing a new shaft.

Additional Information:

Minimum maintenance is required on The Golfworks Enhanced Graphite Shaft Extractor. It is recommended that the large hex bolt threads and the stabilizing bar (located below the large hex bolt) be lubricated from time to time. A standard all purpose grease can be used.

It is also recommended that the clamp and the U shaped shaft cradle, along with the V shaped steel collar be wiped clean after every use.