



## Fitting Handles

### Product #

**Socket Type Tools: 01N51, 02Y51, 03F52, 03F62, 03F72, 08Y61, 11W51, 15F21**

**Tang Type Tools: 03L33, 03L44, 03L45, 03L72, 03L73, 03M30, 04M60, 05X01, 05X02, 05X03, 05X04, 06B34, 06B35, 06B40, 13W41, 13W51, 13W61, 14Q67, 14Q68, 14Q71, 14Q72, 14Q66, 14Q69**

### Fitting Handles on Socket Type Tools

It is important to properly fit a handle to a tool to achieve maximum working efficiency and safety. This is especially true with a socket-type tool where only friction holds the handle and tool together (Figure 1). To make this bond, the forward end of the wooden handle must be shaped by filing, scraping, or whittling until it exactly matches the inside taper of the tool's socket. This is done by repeatedly inserting the handle in the socket, twisting it in place, then removing it and shaping off the "high" rubbing spots until finally the whole handle surface touches the metal socket walls. It is important to leave a space of  $\frac{1}{8}$ " to  $\frac{1}{4}$ " at the bottom of the socket to allow the handle to move down as it compresses during use (X). The taper of the handle should also extend this same distance above the socket edge to allow room for this handle movement.

Every socket is different due to the many manufacturing processes involved in producing a tool, so it is rare that handles are interchangeable between tools. Whether an old or new tool is purchased, the fit of the handle in the socket should be checked and adjusted to make it ready for use.

### Fitting Handles on Tang-Type Tools

Replacing handles on chisels and gouges is an easy operation which may be accomplished following one of two procedures.

#### Method One (Figure 2)

1. Measure the widest part of the tang ("A"). This is usually found just below the bolster. If the tang is rectangular, measure the distance from corner to corner (diagonally).
2. Repeat step 1 midway down ("B") and also at the end ("C").
3. If the tang is tapered, it is often necessary to use two different drill sizes for boring the tang's pilot hole. The larger drill will go to a depth of half the length of the tang, and the smaller drill will be used for the rest of the way. This drill should measure the average of the middle and end dimensions determined in step 2.
4. In selecting the proper drills, undersize the dimensions taken in steps 1 and 3 by about  $\frac{1}{64}$ " to get the proper boring diameters.
5. The total depth of the hole should be about  $\frac{1}{8}$ " deeper than the length of the tang.
6. Upon completion of the drilling, try the tang in the hole. If the tang does not go down over  $\frac{7}{8}$  of its length into the hole, the hole is too small. In such a case, twist the handle on the tang, thus having the tang grind out some of the wood.
7. Place the blade of the chisel or gouge against a piece of scrap wood. Put the handle on and drive it in tightly.

#### Method Two (Figure 3)

1. Bore a  $\frac{1}{8}$ " hole in the end of the handle for the entire length of the tang.
2. Clamp the tool in a vise by its shank with the tang upwards and heat the tang until  $\frac{3}{4}$ " of its tip is a deep red glow. This indicates that the tang will be hot enough to burn wood without taking the temper from the tool.
3. Force the handle down onto the heated tang until it burns to within  $\frac{1}{8}$ " of the bolster.
4. Quench the tang.
5. Seat the tang in the handle as in step 7 of Method One.

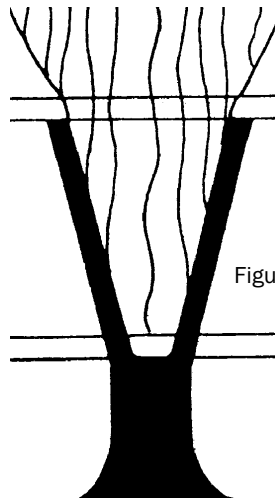


Figure 1

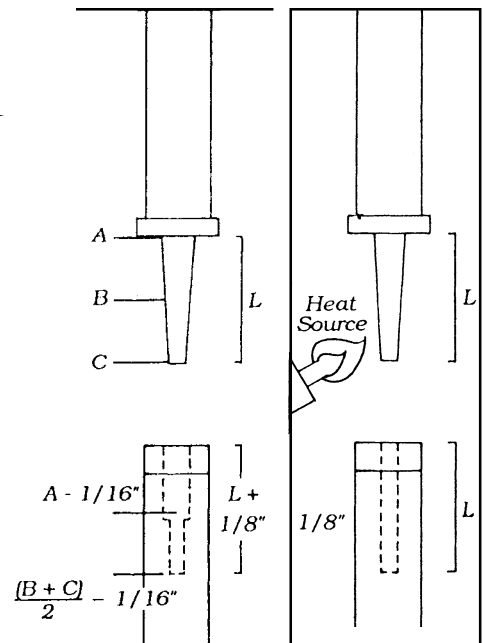


Figure 2

Figure 3