## **ROD END BOOT INSTALLATION TIPS**

These tips have been provided by the boot supplier. This is provided as a guide to assist in installation.

## **Initial Preparation:**

The natural elasticity of the boots allows stretching during assembly. Lubrication of the boots is required to perform this operation. There are rubber "lubricants" available, but WD40 or dishwashing liquid are also acceptable.

Moderation of the lubricant is critical. Too much creates a mess and makes the parts hard to handle. Start with a small amount. Once the boot is installed, be sure to wipe or blow the lubricant off the boot to avoid eventual breakdown of the rubber compound.

## Now, for assembly procedures:

When looking at a boot, there are three holes: two for the bolt to pass through, and one that the threaded "shank" of the rod end will protrude through after installation.

The rod end should be inserted "shank" first through one of the bolt cross-holes, and then the shank should be fed through the bottom hole, so the rod end is in a "diagonal" orientation through the two side holes.

Then, the rest of the "head" of the rod end can be inserted and pulled into the boot. A small, blunt, round dowel can help this process if used like a tire iron to lever the boot over the body gradually.

The reason for inserting the rod end through the side hole is because the neck of the rod end boot is less expandable than the side holes.

If a customer owns a set of "retaining ring pliers" installation can also be greatly assisted. These pliers can be configured so that they contract or expand.

Configured in the expanding mode, and with a set of 90 degree external snap ring tips installed (modified by grinding off the sharp "tips" that normally go in the snap ring) the customer can insert these in the side hole of the boot and expand the hole (and with lubrication, of course) be able to more easily slip the rod end into the boot in the manner described.

The external type snap ring pliers are available at most auto parts stores (a common brand is "KD Tools"), or as a reference, the current McMaster Carr lists a suitable set with 90 degree tips for (part number 5449A87).

The cautionary note here is that this is not an exact science, and some dexterity and determination is a prerequisite. The upside to the exercise is that once the boots are installed, the benefits are obvious.