Installation of Minibits with spring sleeve retainers.

To insure the minibits are correctly inserted or removed, please follow the instructions below. If you are experiencing problems with either installation or removal, please refer to the second page for tips on both.

Installation:

- 1. After all the original bits are removed from the drum, inspect all holes for rust or buildup of dust and particles from previous grinding. If holes are rusty, spray with a rust inhibitor/penetrating oil and then insert a round wire brush and clean all the holes. Any buildup of rust of scale will prevent the cutters from rotating during operation and wear them unevenly.
- 2. Tools required would be a large set of pliers, soft hammer and new minibits.
- 3. With the pliers around the spring collar and the split in the collar pointing towards the opening in the plier jaws, squeeze the spring collar to compress it.
- 4. Hold the pliers/collar directly over the hole they are to be inserted into and tap on the minibit head with the soft hammer to start the bit into the hole. As you tap, the pliers will contact the mounting block and slide up and hit the underside of the bit head. At that time release the pliers and continue to tap the bit until seated on the top of the block.
- 5. As an alternative you may be able to place a deep socket over the head, which will prevent contact with the tip while hitting the end of the socket with a regular hammer. This will allow use of any type hammer without damaging the tip.
- 6. After installation insure the bits can be rotated by hand. As stated earlier, failure to allow rotation causes premature wear.

Removal:

- 1. To remove the bits, spray all the bodies with WD40 or any other penetration oil to help loosen any rust on the outside of the sleeves. This will aid in removal.
- 2. Grab the head of the bit with a pair of vise grips and clamp on securely.
- 3. Using a soft punch, place it under the end of the bit to be removed and hit the punch with a hammer. The bit will begin to move up in the bore. After tapping it up some, you may use a small pry bar to pry up on the vise grips to totally remove the bit.

Problems:

- 1. If you are experiencing any problems installing the bits, insure the sleeve can be compressed sufficiently to install them with out the ends of the sleeves touching. If the ends touch DO NOT attempt to drive the sleeves in. They will not install correctly.
- 2. If the sleeves are cracking during installation, you may be inserting them incorrectly. Refer to the installation instructions above. If you do not compress the sleeves during installation, the sleeve may slide up, hit the taper on the bit and start to expand n the top while they are being compressed by the tapered hole at the bottom.
- 3. If the bits are difficult to remove due to rust, insure the mounting blocks are sprayed well with penetrating oil and the tips rotate when gripped with vise grips.