

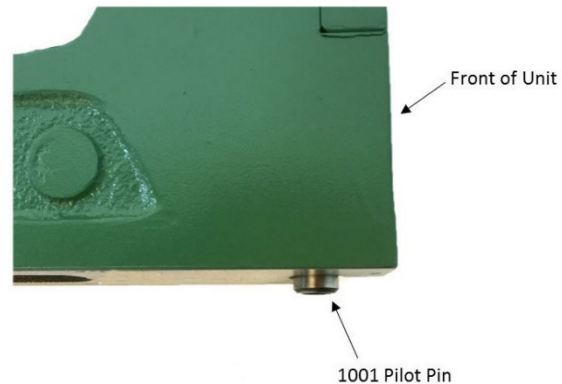
## A-1 Unit (For Round Holes)

### Assembly and Punch and Die Replacement

#### Lower Arm Assembly

**Pilot Pin Removal:** To remove the pilot pin, thread the ¼-20 x ½ set screw into the holder to back the pilot pin out of its hole.

**Pilot Pin Installation:** Use a brass or aluminum hammer to install the pilot pin assembly (P/N 1001) into the hole on the bottom of the holder under the die. Ensure the pilot pin is perpendicular to the bottom and extends 3/32" from the bottom surface. Thread the 1/4-20 x 1/2 set screw (P/N 91332, supplied with pilot pin), until it touches the bottom of the hole, being careful not to push the pilot pin back out.



**Die Removal:** To remove the die, use a hex key wrench to loosen the guide retainer (P/N 1018) in the upper arm and lift the guide to allow clearance for die removal. Then loosen the die set screw (P/N 91310 10-32 X 3/16) in the front corner of the holder and, if necessary, push the die up out of the holder from the slug chute.

**Die Installation:** First make sure the bottom die seat and the die are free of debris. Then insert the die button (P/N 2120) with the cutting edge on the top, and tighten the die set screw to secure the die in place.

#### Upper Arm Assembly

**Guide Installation:** Guide installation is a two-step process. First apply a thin coat of lubricant (*e.g.* P/N 8007 Molykote® type G-N metal assembly paste) to the outside of the guide body (P/N 2030). Slide the conical lifter spring (P/N 2070) on to the guide with the narrow end of spring against the collar, and insert the guide into the holder guide bore.

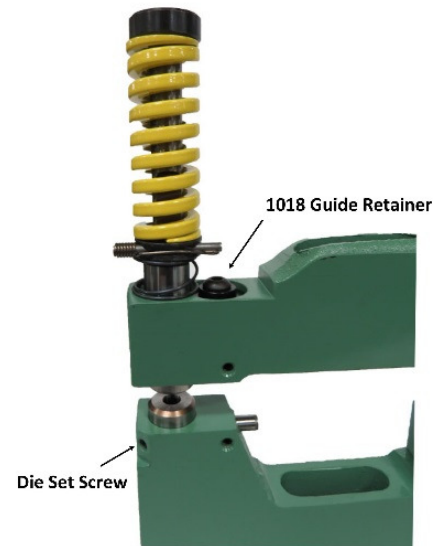
While pushing down on the guide, align the flat on the guide retainer (P/N 1018) with the flat on the guide. Insert the guide retainer in the guide retainer bore in the upper arm with the small diameter

up and use the button head screw (P/N 91130) to secure the guide retainer under the lifter spring. (For additional feed clearance, assemble the guide retainer with the small diameter down.)

**Punch Installation:** First assemble a punch head (P/N 2075) onto a punch (P/N 2111) being sure the counter bore in the flange of the punch head faces the retaining ring, creating a punch and head assembly (P/N 2011). When assembled correctly, the top of the punch head is flush with the top of the punch.

Then be sure the punch and head assembly will fit in the die by dropping it through the guide (without the stripping spring) and into the die. Visually look to see that the die clearance is even all the way around. If the die clearance is uneven, contact UniPunch.

Extract the punch and apply a thin coat of lubricant (*e.g.* P/N 8007 Molykote® type G-N metal assembly paste) to the punch body. Put the punch and head assembly through a stripping spring (P/N 2045) and into the guide. Rotate the punch so the flat on the punch is parallel to the hole in the collar of the guide and push the retainer pin (P/N 2180) through the hole until it clips on to the guide collar.



### **To Convert a Round Unit to a Shaped Unit**

To convert a round unit to a shaped unit, purchase the (P/N 7111) shaped hole conversion kit and follow the shaped unit instructions.