

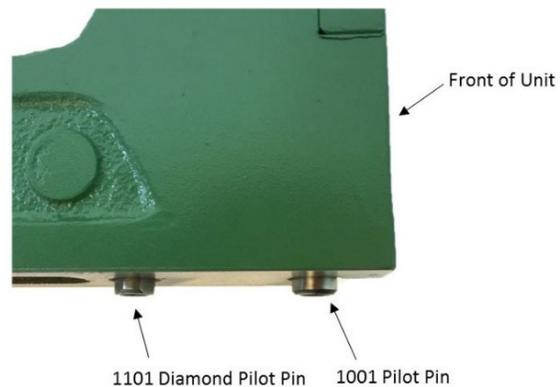
A-8 Unit (For Shaped Holes)

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.



Using the same process as above, install the diamond pilot pin (P/N 1101) into the second hole making sure a point of the diamond shape faces the front of the unit.

Die Removal: To remove the die, loosen the two button head screw (P/N 91130) and the guide retainer (P/N 1018) from the upper arm of the unit. Lift the top punch and guide assembly out of the unit to allow clearance for the die. Then loosen the die set screw (P/N 91350 5/16-18 x 3/8) 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, to install the dowel pin (P/N 1088-2) in the front of the die seat, back out the ¼-20 x 3/8 set screw (P/N 91332) located on the bottom side of the lower arm in the slug chute area. Then insert the dowel pin into the hole in the front of the die seat being sure it extends into the die seat at least 0.050" and no more than 0.075"; finally retighten the set screw.

Then, being sure the die seat is free of debris, insert the shaped die (P/N 1425) with the cutting edge on the top. Align the keyway in the die with the dowel pin and insert the die into the die seat making sure to align the shape in the die in the intended orientation, and the die is fully seated at the bottom of the die seat. Tighten the die set screw at the front corner of the unit (P/N 91350) to secure

the die in place. **Useful tip:** reinsert the guide assembly and push down on the guide to help tap the die down into the die seat to make sure it is fully seated.

Upper Arm Assembly

Punch, Guide and Spring Assembly: First check punch and die alignment. Externally lubricate punch body (P/N 1415) with a thin even coat of lubricant (e.g. P/N 8007 Molykote® type G-N metal assembly paste). Insert punch (threads facing up) into the punch driver (P/N 1474) making sure the dowel key on the punch is inserted into the correct keyway on the punch driver so the punch is in the intended orientation. Externally lubricate the punch driver and insert the punch driver into the shaped guide (P/N 1485), making sure the keyway on the punch driver aligns with the guide key (P/N 2878) on the top of the guide. Externally lubricate outside diameter of guide body. Molykote® type GN metal assembly paste or die grease is recommended. Loosely thread the S.H.C.S. (P/N 91072) only a few threads, by hand, into the punch. Now using the punch screw as a handle, drop this punch and guide assembly through the guide bore of the holder, gradually lowering the punch 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.

Pull this assembly back out once die clearance is visually verified and remove the punch screw leaving the punch and punch driver in the guide.



Assemble the (4) lifter springs (P/N 1470) into the four pockets on the upper arm of the holder. Then assemble the (4) spring cages (P/N 6043) on top of the lifter springs as shown in the picture on the left. Insert the (2) guide retainers (P/N 1018) into the two corner pockets of the upper arm of the holder, making sure the flat on the guide retainer is facing the center of the guide bore of the holder.

Insert the (9) stripping springs (P/N 2240) into the pockets on the top of the guide. Then assemble the punch plate (P/N 1473) to the punch driver using (4) S.H.C.S. (P/N 91047). Assemble the S.H.C.S. (P/N 91072) thru the punch plate into the punch and tighten.

Assemble the punch and guide assembly into the holder. Insert the (2) B.H.C.S. (P/N 91130) into the guide retainers by inserting the screws down thru the hole openings in the punch plate as shown in the picture on the right, making sure the flats on the guide retainer are aligned with the flats on the guide.

