

AH-2 1/2 Unit (For Shaped Holes)

Assembly and Punch and Die Replacement

Lower Arm Assembly

Pilot Pin Removal: To remove the pilot pin, thread the 1/4-20 x 1/2 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 concentric with 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.

Block Die Removal: To remove the shaped block die (P/N 2626), turn the unit on its side and unscrew the two S.H.C.S (P/N 91029) from the lower arm. Then lift the block die up out of the unit.

Die and Die Holder Removal: To remove the shape die (P/N 2625) from the die holder, loosen the S.S.S. (P/N 91330) from the front of the holder and lift the shaped die up and out. To remove the shaped die holder (P/N 2675), turn the unit on its side and unscrew the two S.H.C.S (P/N 91029) from the lower arm. Then lift the shaped die holder up out of the unit.

Block Die Installation: First make sure the die and die seat are free of debris. Then insert the shaped block die (P/N 2626) with the cutting edge on the top; make sure the dowel pin on the bottom of the block die aligns with the dowel pin slot on the lower arm. Ensure the die is fully seated in the lower arm of the holder and insert the two S.H.C.S (P/N 91029) up thru the lower arm of the holder and into the bottom of the block die and tighten.

Die and Die Holder Installation: First make sure the holder and die seat are free of debris. Then insert the shaped die holder (P/N 2675); make sure the dowel pin on the bottom of the die holder aligns with the dowel pin slot on the lower arm. Ensure the die holder is fully seated in the lower arm of the holder, and insert the two S.H.C.S (P/N 91029) up thru the lower arm of the holder and into the bottom of the die holder and tighten. Insert the shaped die (P/N 2625) into the die holder with the cutting edge on the top, making sure to align the shape in the die in the intended orientation. Align the keyway in the die with the dowel key in the die holder and insert the die into the die seat, being sure the die is fully seated at the bottom of the die seat. Tighten the S.S.S. (P/N 91330) on the front of the die holder.

Upper Arm Assembly

First check punch and die alignment. Assemble the punch head (P/N 2671) and the S.H.C.S. (P/N 91025) onto the shaped punch body (P/N 2616) until tight. **Helpful hint:** the flat on the punch head typically falls between the two keyways on the punch. Externally lubricate punch body with a thin even coat of lubricant (e.g. P/N 8007 Molykote® type G-N metal assembly paste). Drop the punch through the guide bore in the same orientation as the die and insert the key (P/N 2778) with the B.H.S.C.S. (P/N 91130) on the top of the upper arm where the slot on the guide bore is located. Visually look to see that the die clearance is even all the way around. If the die clearance is uneven, contact UniPunch. Remove the punch and key from the holder.

Assemble the (2) lifter springs (P/N 2673) into the two small pockets on the upper arm of the holder. Then assemble the stripper plate (P/N 2676) on the underside of the upper arm by inserting the two stripper bolts (P/N 2683) down thru the center of the lifter springs and tighten into the stripper plate.

Assemble the (2) stripping springs (P/N 2540) into the two larger pockets on the top of the upper arm. Then put the punch plate (P/N 2677) on top of the springs and drop the (2) spring retainers (P/N 2681) down thru the center of the holes on the punch plate and down thru the center of stripping springs. Then insert the (2) stripper bolts (P/N 2682) down thru the spring retainers and tighten into the stripper plate.

Shaped Holder Assembly

To assemble the punch in the unit, drop the shaped punch and head assembly (P/N 2615) down thru the center hole of the punch plate and the guide bore in the same orientation as the die, and insert the key (P/N 2778) with the B.H.S.C.S. (P/N 91130) on the top of the upper arm where the slot on the guide bore is located. Then assemble the punch retainer on the punch plate. While holding the punch retainer (P/N 2680) on the bottom side of the punch plate in the groove, screw the F.H.S.C.S. (P/N 91201) and lock washer (P/N 91604) into the punch retainer from the top of the punch plate. Please note that the flat on the punch head must line up with the flat on the punch retainer.

