UNIPUNCH

UniPunch Products, Inc. 715/263-3900 | Fax 715/263-3897 311 5th Street NW | Clear Lake, WI 54005 www.unipunch.com

HOLES IN PARTS. FAST.

OA-6 Unit (For Round Holes)

Assembly and Punch and Die Replacement

Lower Arm Assembly

<u>Pilot Pin Removal</u>: 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.



1001 Pilot Pin

<u>Die Removal for the 2820 Die:</u> To remove the die, loosen the die set screw (P/N 91350 5/16-18 x 3/8) in the front of the holder and, if necessary, push the die up out of the holder from the slug chute.

<u>Die Installation for the 2820 Die:</u> First make sure the die and die seat are free of debris. Then insert the round die (P/N 2820) with the cutting edge on the top, being sure the die is fully seated in the lower arm of the holder and tighten the S.S.S. (P/N 91350).

Die and Die Adapter Removal for the 3820 Die: To remove the round die (P/N 3820) from the die

adapter, loosen the die set screw (P/N 91330 $\frac{1}{4}$ 20 x 1/4) from the right side of the die adapter and lift the die up and out of the adapter.

To remove the die adapter (P/N 2829), loosen the die set screw (P/N 91350 5/16-18 x 3/8) in the front of the holder and, if necessary, push the adapter up out of the holder from the slug chute.





<u>Die and Die Adapter Installation for the 3820 Die:</u> First make sure the bottom die seat and the die adapter are free of debris. Insert the die adapter (P/N 2829) into the adapter bore on the lower arm of the unit and tighten the S.S.S. (P/N 91350) in the front of the holder. Then make sure the bottom die and die seat of the die adapter are free of debris and insert the round die (P/N 3820) with the cutting edge on the top, and tighten the S.S.S. (P/N 91330) on the right side of the die adapter to secure the die in place.

Upper Arm Assembly

First check punch and die alignment. Externally lubricate punch body (P/N 2818) with a thin even coat of lubricant (e.g. P/N 8007 Molykote® type G-N metal assembly paste). Assemble the punch body up thru the bottom of the punch driver (P/N 2879) and loosely thread the punch bolt (P/N 91072) only a few threads, by hand, into the punch. Drop the punch 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.

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 2870) on the underside of the upper arm by inserting the two stripper bolts (P/N 2685) down thru the center of the lifter springs and tighten into the stripper plate.

Assemble the (4) stripping springs (P/N 2540) into the four larger pockets on the top of the upper arm. Then put the punch plate (P/N 2871) on top of the springs and drop the (4) spring retainers (P/N 2681) down thru the center of the holes on the punch plate and down thru the center of the stripping springs. Then insert the (4) stripper bolts (P/N 2684) down thru the spring retainers and tighten into the stripper plate.

Securely tighten the punch bolt (P/N 91072) into the round punch and driver and drop the assembly down thru the center hole of the punch plate and the guide bushing. Then assemble the two punch retainers 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 91202) and lock washer (P/N 91604) into the punch retainer from the top of the punch plate. Please note that the punch retainers must engage in the groove ring on the top of the punch driver.

Converting a Round Unit to a Shaped Unit

Purchase a key kit (P/N 9314) and the appropriate shaped punch and die.

