Injection Clamp Cylinder R&R  
For Uniloy IBS Models 75 and 88-3

Allen Wrenches Needed:

* 7/8" To remove the 1-1/4" shcs from the cylinder to the table.
* 1/2" To remove the 5/8" shcs that secures the block that attaches the cylinder rod to the lower cross arm.
* 3/8" To remove the 1/2" shcs on the two hydraulic flange adaptors.
* 3/16" To remove the 3/8"-16 set screw that secures the adaptor block to the cylinder rod.

The Procedure

1.) Remove all of the core rods.
2.) Remove the parison mold.
3.) Close the clamp.
4.) **Shut down the machine and lock out / tag out.**
5.) Disconnect the two hydraulic flanges to the cylinder using a 3/8" Allen wrench (place a pail to catch any oil).
6.) Place a bottle jack under the clamp where the parison mold sits.
7.) Remove the four 3/4"-10 bolts securing the rod block to the lower cross arm using a 5/8" Allen wrench.
8.) Using the bottle jack, lift the clamp all the way up.
9.) Remove the four 1-1/4"-7 bolts that secure the cylinder to the table using a 7/8" Allen wrench.
10.) Typically cylinders are slid out using a fork truck. The two forks are pushed together (if not then remove one fork completely). Position the fork so it is as close and parallel to the lower cross arm as possible. If a fork truck is not available, then a platform needs to be built that extends from the cylinder out towards the operator side of the machine. The height of it needs to be about 2" lower than the full up position of the lower cross arm.
11.) Using the bottle jack, lower the clamp so that the top of the lower cross arm is even to the forks or platform.
12.) Using muscle, slide the cylinder onto the forks, then slide out of the machine.
13.) Loosen the 3/8" set screw using a 3/16" Allen wrench and unscrew the adaptor block. When installing the block onto the new cylinder be sure to first "spot" the hole by burying the point of a 5/16" drill bit into the hole. This will clean out the threads. Otherwise, the next time the block needs to be removed it may pick up a burr and lock up.
14.) To re-install, reverse this procedure.
15.) For initial start up, be careful as there is no oil in the cylinder. "Jog" the clamp up and down to purge the air.
16.) Dry cycle the machine to make sure the balance of the two clamps has not been affected.
17.) The cylinder cushions may have to be backed out, as it is often the case that there is too much cushion which slows the open/close time.
18.) Done!