

Egan Thrust Bearing Alignment

For All Uniloy IBS Models With Egan Extruders

The back part of the extruder which incorporates the drive shaft is called the "Thrust Bearing Assembly".

- 1.) To check the alignment, move it forward so that there is about 3 inches between the drive shaft and the end of the Barrel.
- 2.) With a "Feeler Gauge" check the clearance between the screw and barrel to determine which way the Thrust Bearing assembly has to go (i.e. up, down, left, or right).
- 3.) For up/down alignment, remove the thrust bearing assembly and remove the two "Bottom" wear Pads. Note the shim which is already in-between the wear pads and the housing. Also, measure to confirm that the wear pads are the same thickness from front to back (originally they were .250" thick). Often, they wear more towards the front. An alternative to replacing them is to clamp them down on a milling machine and skim cut them so they are even. Remember that whatever you remove will have to be added back later with shim stock.
- 4.) Fabricate new shims using plastic shim stock.
- 5.) Inspect the extruder base to see if the flat "Ways" developed a "Belly" or low spot. If more than .005", then the entire base must be set on a milling machine to cut the ways until they are flat. Again, whatever you remove will have to be added back with more shim.
- 6.) For left / right alignment, adjust by moving shim from one side and adding to the other from the "Side" wear pads. Typically this doesn't have to be changed.
- 7.) Set the thrust bearing assembly back on the base and check to make sure that the clearance between the left and right "Side" wear pads and the extruder base are about .005".
- 8.) Check the clearance again as in step 2.
- 9.) If the clearance between the screw and barrel is between .005" - .007" for all readings, then it is fine.
- 10.) Move the thrust bearing fully back and check the readings again. If the base was machined properly, then the readings should be acceptable (although readings between .007-.013" are also ok.)
- 11.) Install the top left and right hold down bars and shim for a clearance of .003" - .005".
- 12.) Finally, make sure that you set the nuts on both hydraulic cylinder rods so that the thrust bearing assembly bottoms out (full forward) exactly together.