

ADJUSTING AIR COUNTERBALANCES

COUNTERBALANCE AIR PRESSURE MUST BE ADJUSTED AFTER A DIE CHANGE

THIS IS A BRIEF EXPLANATION OF HOW TO SET THE AIR PRESSURE TO ALLOW THE COUNTERBALANCES TO OFFSET THE WEIGHT OF THE SLIDE AND UPPER DIE. This adjustment can prevent premature wear of the bearings and associated components, reduce the load applied to the brake, reduce drive train gear wear and save energy by minimizing overall motor load as well as the slide adjust motor and components. Use the method that works best for you.

USING AN AMP PROBE TO MONITOR THE CURRENT FLOW TO THE MOTOR

1. Clamp the amp probe to one of the main motor leads.
2. Turn off the counterbalance regulator and drain all air from the system.
3. Start the press and run it in continuous mode.
4. Monitor the amp probe as you adjust the air regulator to the counterbalances.
5. When you have achieved the balance point the needle or digital readout display should stabilize and barely move.
6. The slide or slide with upper die attached is now in balance and the press is functioning with minimal resistance.
7. At this time we recommend adding 3-5 lbs. of air pressure to the regulator. This will allow the counterbalances to pull all the weight up against the main bearings and connection bearings, preventing premature wear.

USING A DIAL INDICATOR

1. Make sure the press is at the top of the stroke, the slide will be in the up position.
2. Turn off the counterbalance regulator and drain all air from the system.
3. Place a dial indicator to one of the side frames or bolster area. The indicator base will be attached to the side or bolster and the dial indicator itself will be in contact with the face or bottom surface of the slide.
4. A 1" travel dial indicator is best for this application.
5. Set the dial indicator to 0.000.
6. Open the air regulator. Slowly you will start to see movement in the dial indicator showing that the slide is rising.
7. Once the dial indicator stops, this indicates that the counterbalances have pulled the weight of the slide and die attached all the way up, and that the connections and main bearings are now tight and the press is ready to operate.
8. Record the pressure and place it on a tag affixed to the die for future reference.