Corken CoroFlo Models 09 - 15 Re-shimming and Bypass Setting

Prior to working on any pump, confirm pressure has been relieved.

Re- Shimming Impeller Clearance:

- 1. Remove 8 bolts on cover, and remove cover.
- 2. Remove shims and note quantity. (Red .002" and Green .003")
- Clean flat surfaces on front of case and back of cover with file or sandpaper.
- 4. Replace shims, less one (1) of the original quantity.
- 5. Bolt cover back on with 4 bolts.
- 6. Rotate the shaft by hand and note if the pump is rubbing or locked up.
- 7. Continue to remove shims one at a time until the pump rubs or locks up.
- 8. Re-install one of the removed shims.
- 9. Replace the cover with all bolts.
- 10. Re-check to assure the pump is free turning.

Setting Bypass Valve: (CoroFlo pump only, with B166 Bypass)

- 1. Re-shim pump per above instructions.
- 2. Back off (Counter clock wise) existing spring adjustment on B166.
- Note pressure reading on discharge pressure gauge. (Should be on ¼" NPT discharge pump opening.)
- 4. Start pump with the hose-end closed. Note pressure reading.
- 5. Slowly increase pressure setting (Clock wise), watching the pressure gauge.
- 6. When the pressure stops increasing or drops back to the original pressure, note the pressure and turn off the pump.
- 7. Back off on the spring pressure again (Counter clock wise) a few turns.
- 8. Re-start the pump and increase the bypass setting back up to about 5 10 PSI under where it had previously stopped increasing or dropped off. The bypass pressure should not be set more then 100 125 PSI higher than the beginning reading.
- 9. Note that this may be at higher than **full load amperage** (FLA) or **service factor amperage** (SFA) on the motor. If a pump is going to operate continuous duty the bypass should be set just below the FLA or SFA.
- 10. The adjusting stem should be locked in this position using the lock nut.

(Example: Beginning pressure is 125 PSI. After starting the pump it increases to 150 PSI and adjusts to 235 PSI before dropping back to 125 PSI. The bypass should be set at about 225 – 230 PSI and locked in position.)

The above are guidelines; each company may have policies that should be followed at all times.