

## Quick Reference Checklist

This check list is not meant to replace the user's manual

- Manuals can be found at **Riverhawk.com**
- Also recommended, IM-220 (Stud cleaning)
- Steps with this symbol mean critical step

Stickout dimensions can be found on the GE hardware drawing in the Vendocs system.

### EQUIPMENT INSPECTION

- Check oil level in pump and minimum line air pressure of 80psi (5.5 bar)
- Check hydraulic hose for damage
- Test pump. Be sure plug in hydraulic port is clean and tight. Run pump up to pressure. Unit should build pressure and stop with no further pumping. If pump continues to run slowly (air/hydraulic) and/or pressure is not stable, there is likely an internal leak.
- Inspect tensioner for damage. A bent guard, separated cylinders, damaged/dirty threads on puller screw indicates the tensioner needs service. Puller screw should move freely within tensioner body.

### NUT AND STUD PREPARATION

- Flange must be completely closed before installation of studs. If the tensioner is used to pull the flange closed, damage **will** result!
- Inspect stud and nut for damage or dirt, especially the internal threads!!
- Measure stud length and record. To be used later for stretch measurements.
- Clean the stud and nut threads. See Riverhawk IM-220 for instructions.
- Thread nut and set stickout on tensioned side of the stud.
- Insert stud into flange and install backside nut. Hand tighten the nuts using the spanner ring and pin wrench on the tension side nut and an allen key on the backside of the stud.
- **Verify the stickout!! If not correct reset and tighten. Very Important!!**

### TENSIONING

- Apply a light coat of turbine oil or spray lubricant to the puller screw. **DO NOT use "NEVER SEIZE" on the conical threads!!!**
- Slide spanner ring over the puller screw
- Mount the tensioner on the stud in flange. Best to start on left side of flange so tensioner can be bled.
- Insert an allen wrench into back of stud.
- Tighten the puller screw.
- Back off puller screw ½ turn and retighten. *This ensures the puller screw is not cross threaded. Do NOT back off again, leave tight!!*

- Check to see if tensioner is free to rotate around puller screw. If not, recheck stickout or look for other interference problems.
- Mount spanner ring on face of nut.
- Bleed the tensioner with the ports facing up. (Start on left side of flange). **Do NOT attempt to bleed the tensioner off of a stud! This will result in an over stroke and damage the seals.**
- Tension stud to 50% pressure. Consult manual for correct pressure.
- Use pin wrench in spanner to tighten nut.
- Release pressure and move to next stud in pattern until all studs are tensioned to 50% pressure.
- Repeat above steps at 100% pressure.
- Measure final stud length and record in data sheets. Calculate stretch.
- Torque the locking set screws on the face of the nut. (Torque spec in manual)

### **Disassembly**

- Loosen set screws in face of nut. Penetrating oil may help with this.
- Apply a light coat of turbine oil or spray lubricant to the puller screw. **Do NOT use “NEVER SEIZE” on the conical threads!!!**
- Slide spanner ring over puller screw and mount tensioner on stud.
- Tighten the puller screw.
- Back off puller screw ½ turn and retighten. *This ensures the puller screw is not cross threaded. Do NOT back off, leave tight!!*
- Mount spanner ring on nut.
- Bleed the tensioner with the ports facing up. (Start on left side of flange). **Do NOT attempt to bleed the tensioner off of a stud! This will result in an over stroke and damage the seals.**
- Apply final pressure stated in manual.
- Loosen nut using pin wrench in spanner ring.
- Move to next stud in line.

### **Tensioners with adjustable hex nut on the rear of the puller screw.**

**Important!!** Stickouts must be set correctly first! Adjusting this nut will not make up for an incorrect stickout!

Typically the single stage tensioners are adjustable but the 2 stage tensioners are not, though there may be a few older style 2 stage tensioners still in the field with the adjustable nut. If the nut on the rear of the puller screw is a cylindrical nut it will be locked to the puller screw in a preset position. **DO NOT ADJUST!**

In addition to the steps above, follow the steps below if you have an adjustable tensioner.

- Back off the adjustable nut before tightening the puller screw into the stud.
- With the puller screw fully tight in the stud, turn in the adjustable nut until it stops, then back off the **NUT** 2 flats (1/6 turn).
- Repeat the adjustment for each tensioning cycle.