900QMD BACKLASH REMOVAL INSTRUCTIONS - BOTH AXES

- **Do Not touch** the painted screws as they are not part of the adjustment process.
- **Do Not loosen** the pivot screw shown in the photo below.
- First you'll need to loosen the right locking screw shown in the photo at the right. It is on the knob side.
- Next loosen the stainless steel screw shown in the photo below right.
- Using a block of wood and a hammer, **lightly** tap the worm gear housing near the knob - Not the Motor Bracket - inward toward the axis housing. Tap the housing as far from the pivot screw as possible, but Do Not tap the drive test knob itself.
- Re-tighten the screw and test for backlash. **Do Not turn the drive test knob** without loosening the right collar screw shown in the photo at the bottom of the page. **Doing so will damage or destroy the stepper motor!**
- Test through an entire worm cycle every 60 degrees of rotation or so. You want a gear mesh that minimizes backlash while allowing the worm to turn through any minute high spot that the worm wheel might have.
- Multiple tries might be needed to tweak it just right.
- Do Not over-tighten the gear mesh or the motor will not be able to turn the worm.
- If you need to loosen the gear mesh, lightly tap the gear housing in the opposite way as before.

- Hammer not withstanding - this is precision work. The difference between too tight and too loose (having backlash) is a matter of one or two thousandths on an inch!

**First:** Loosen this screw to check worm / worm wheel tightness

**Second:** Turn this knob to check worm / worm wheel tightness

This screw should remain tight

Loosen this locking screw first (near knob)