

INSTALLATION INSTRUCTIONS

⚠ WARNING



**Moving parts,
disconnect power
before servicing.**

- 1) Close the baffle completely.
- 2) Turn off main panel breaker for actuator before performing upgrade.
- 3) Remove the drive cable and tension spring from the traveling bracket and discard. Also remove and discard the idler pulley bracket with pulley. Save the mounting bolts and Tek screws. **See Figure 1.**

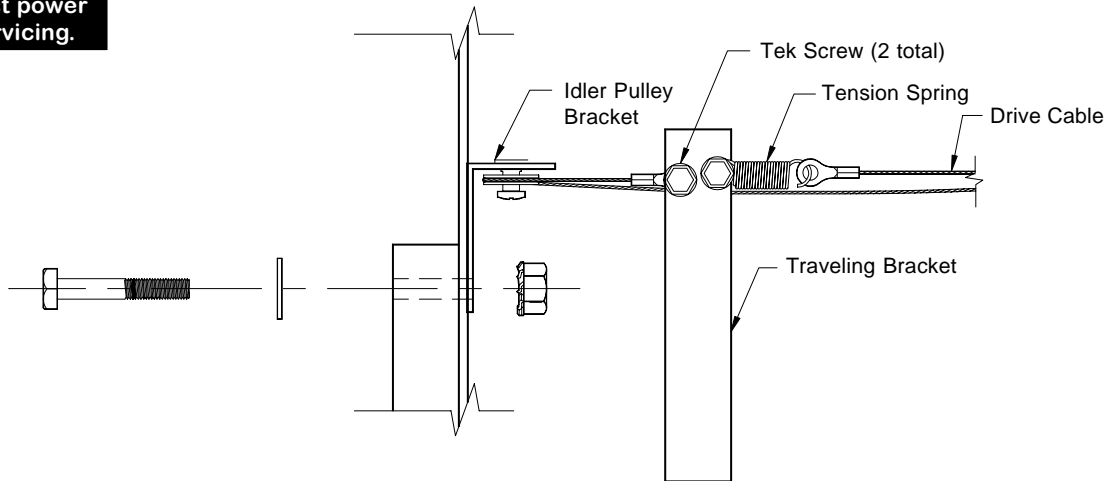


Figure 1

- 4) Remove potentiometer bracket from the actuator and save the mounting bolts and Tek screws. It is **not** necessary to disconnect the terminal end of the potentiometer cable. Remove the potentiometer drive pulley from potentiometer shaft by loosening the set screw. Remove the potentiometer from bracket and save the potentiometer, washer and mounting nut. Discard the potentiometer bracket and potentiometer drive pulley. **See Figure 2.**

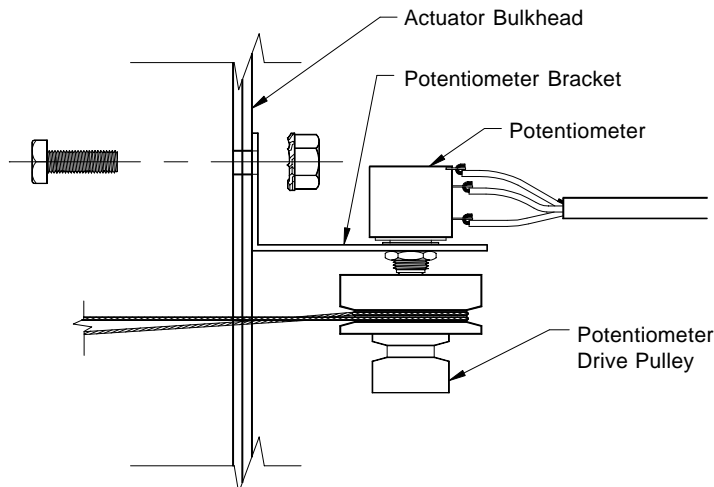


Figure 2

- 5) A) Install the potentiometer on the new potentiometer bracket and tighten mounting nut. Insert potentiometer shaft into stainless steel coupler available on the potentiometer drive pulley assembly.
- B) Align the mounting hole in the potentiometer bracket with the mounting hole in the potentiometer drive pulley bracket. Tighten the set screw in coupler onto potentiometer shaft. Rotate drive pulley to ensure that the potentiometer shaft turns freely.
- C) Attach this complete assembly to the actuator using the pair of mounting bolts and nuts removed in Step 4, from the previous potentiometer bracket. **See Figure 3.**

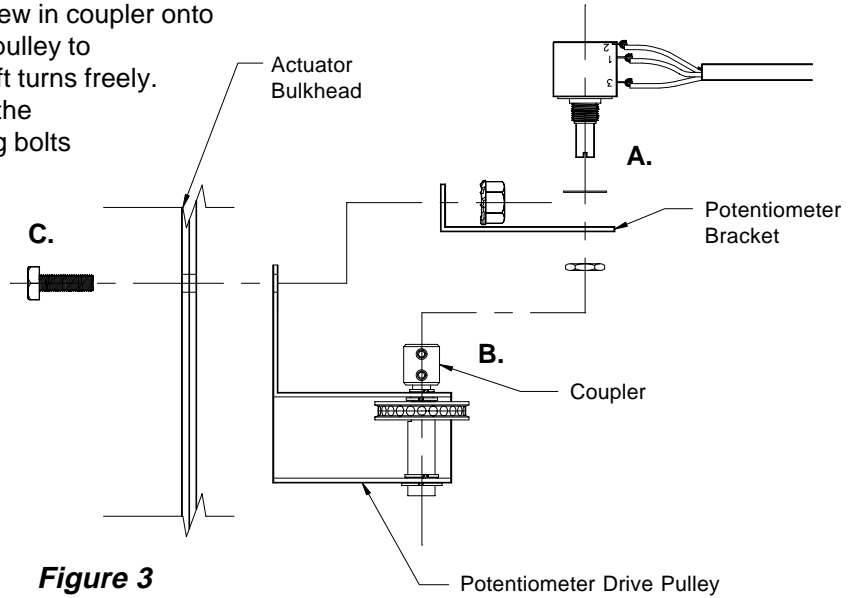


Figure 3

- 6) Rotate potentiometer drive pulley (clockwise looking at end of the shaft) until the internal stop is reached. Rotate the pulley in the reverse (counter clockwise) direction $\frac{1}{4}$ turn away from the stop. **See Figure 4.**
- 7) Install new idler pulley bracket assembly using the pair of mounting bolts and nuts removed in Step 3, from the previous idler pulley bracket. **See Figure 5.**

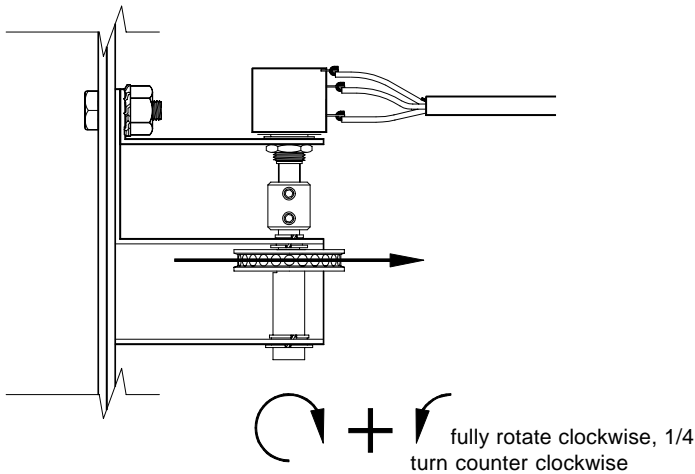


Figure 4

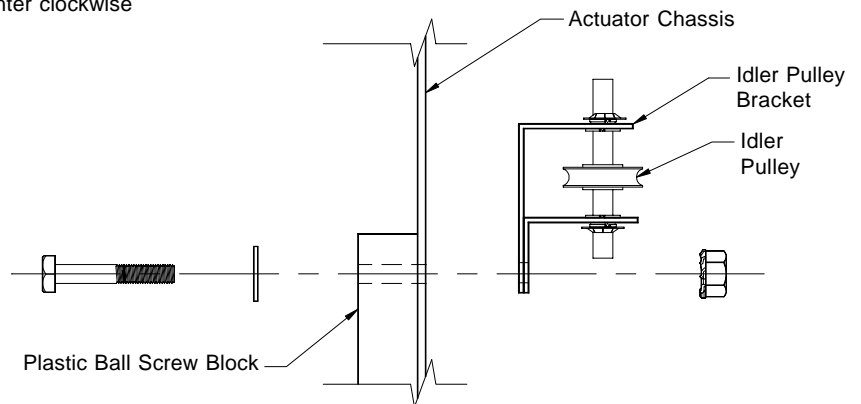


Figure 5

- 8) Install bead chain in the following order starting on the end with the coupling ring without the spring attached:
- Attach coupling ring with Tek screw to the hole in the traveling bracket closest to the idler bracket assembly.
 - Pass the spring end of the bead chain over and behind the idler pulley.
 - Pass the spring end of the bead chain under the traveling bracket, and through the oblong hole in the bulkhead.
 - Pass the spring end of the bead chain through the potentiometer drive pulley assembly, around the pulley from bottom to top.
 - Hold the potentiometer pulley to prevent rotation and pass the spring end of the bead chain back through the oblong hole in the bulkhead.
 - Attach the spring with a Tek screw to the available hole in the travelling bracket. **See Figure 6.**

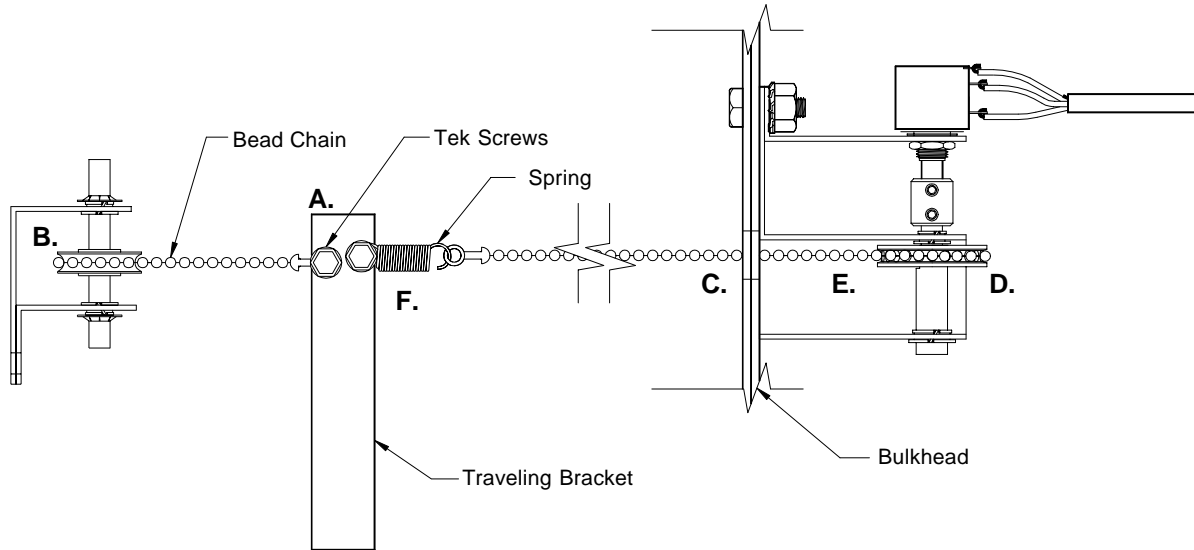


Figure 6

- 9) Proper tension in the chain extends the spring approximately $\frac{1}{8}$ ". If tension in bead chain is not sufficient, remove Tek screw securing the spring to the traveling bracket and remove the coupling ring from the chain with needle-nose pliers, **See Figure 7.** Then remove the appropriate number of beads from the chain and re-attach the chain to the coupling ring and spring. Re-attach the spring with Tek screw to the traveling bracket and repeat this step if necessary.
- 10) Turn on main panel breaker for actuator. Proceed with calibration of actuator using instructions from the air inlet controller.

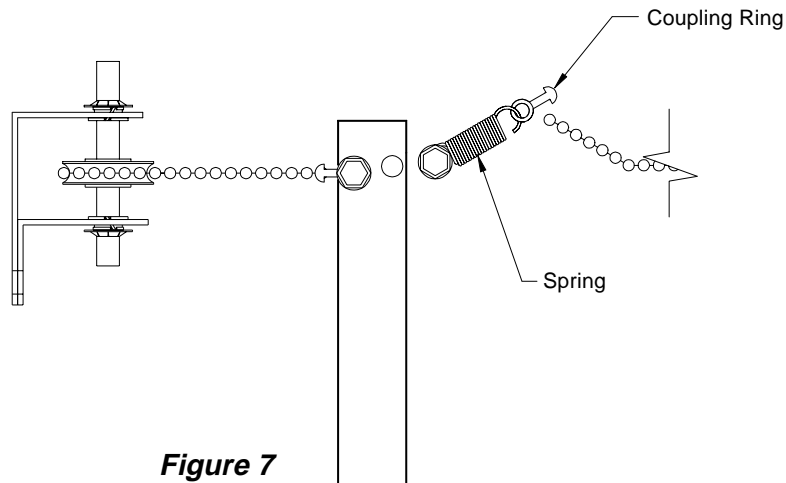


Figure 7