

# Potentiometer Add-On Kit

## AC1340

Actuator Chassis

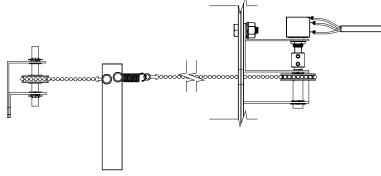
#### Each AC1340 Kit includes:

Potentiometer with cable
Potentiometer Support Bracket
Idler Pulley Bracket Assembly
Drive Sprocket Bracket Assembly
Bead Chain Assembly
Idler Pulley
Drive Pulley
Wiring Label
Traveling Bracket

### **Tools Needed:**

5/16" Nut Driver
7/16" Socket Wrench

7/<sub>16</sub>" End Wrench Small Phillips Screwdriver Needle Nose Pliers
1/16" Allen Wrench



## **INSTALLATION INSTRUCTIONS**

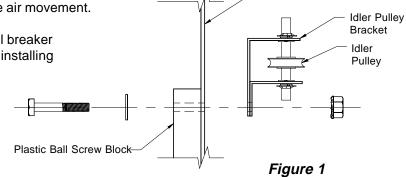


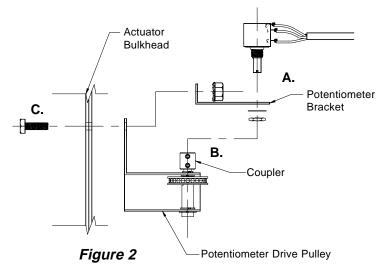
The kit is easily installed using existing and provided hardware in pre-existing holes in the actuator chassis. The addition of a AC1340, Potentiometer Add-On Kit, upgrades the BA1701 so that baffle or inlet position feedback used by the air inlet controller.

sure that ventilation remains ON to assure adequate air movement.

1) Close the baffle completely. Be

- Turn off main panel breaker for actuator before installing Add-On Kit.
- Install idler pulley bracket assembly using the pair of mounting bolts passing through plastic ball screw block. See Figure 1.
- 4) A) Install the potentiometer on the potentiometer bracket, being careful to position alignment pin, and tighten mounting nut. Insert potentiometer shaft into stainless steel coupler of the potentiometer drive pulley assembly.
  - B) Align the mounting holes in the potentiometer bracket with the mounting holes in the potentiometer drive pulley bracket. Tighten the set screw in coupler onto potentiometer shaft. Rotate drive sprocket to ensure that the potentiometer shaft turns freely.
  - C) Attach this complete assembly to the actuator using the pair of mounting bolts and nuts passing through actuator bulkhead. See Figure 2.





- 5) Rotate potentiometer drive sprocket (clockwise looking at end of the shaft) until the internal stop is reached. Rotate the sprocket in the reverse (counter clockwise) direction ¼ turn (90°) away from the stop. **See Figure 3.**
- 6) Install bead chain in the following order starting on the end with the coupling ring without the spring attached:
  - A) Attach coupling ring with Tek screw to the hole in the traveling bracket closest to the idler bracket assembly.
  - B) Pass the spring end of the bead chain over and behind the idler pulley.
  - C)Pass the spring end of the bead chain under the traveling bracket, and through the oblong hole in the bulkhead.
  - D)Pass the spring end of the bead chain through the potentiometer drive sprocket assembly, around the sprocket from bottom to top.
  - E) Hold the potentiometer sprocket to prevent rotation and pass the spring end of the bead chain over the sprocket and back through the oblong hole in the bulkhead.
  - F) Attach the spring with a Tek screw to the available hole in the traveling bracket. See Figure 4.

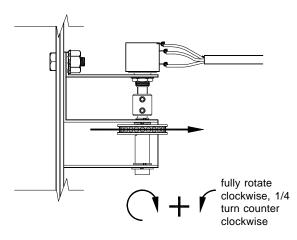
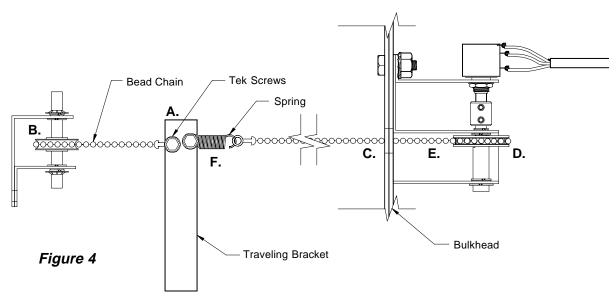


Figure 3



- 7) Proper tension in the chain extends the spring approximately ½. 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 5.* 
  - 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.
- 8) Connect potentiometer leads to terminal block according to: POS (+): Black; NEG (-): Red; Sweeper: White.
- Turn on main panel breaker for actuator.
   Proceed with calibration of actuator using instructions from the air inlet controller.

