Piezo Replacement Instructions

These instructions describe the procedure for exchanging standard temperature (-4°F to 176°F/-20°C to 80°C) piezo module assemblies on the Flowserve Logix 3200IQ positioner with low temperature (-40°F to 176°F/-40°C to 80°C) assemblies. These instructions supplement the 3200IQ Installation, Operating, and Maintenance (IOM) Instructions (FCD LGAIM0058-00).

1. Remove main housing cover and driver module cover by unscrewing the covers. WARNING: To prevent ignition of hazardous atmospheres, disconnect supply circuit before opening. Keep assembly tightly closed when in operation.

2. Remove the plastic main control board (PCB) cover by removing two (2) short cover screws, and one (1) long cover screw.

3. Unplug the red and black 2-wire piezo connector.
4. Disconnect the flexible tubing from the barbed fitting on the driver module assembly by hand.

5. Pull the red and black 2-wire piezo connector through bottom of driver module housing.

6. Loosen and remove the 9/64” Allen screws A and B. **Important:** Loosen the screw opposite the wire entry last. This screw is retained by the piezo cover, and should only be removed after screws A & B are removed to avoid damaging the cover.
7. Remove the piezo assembly.

8. Verify that the O-Ring is installed in base of driver module housing (O-Ring may be stuck to the bottom of the piezo assembly that was just removed). A new O-Ring is included in the low temperature assembly kit, in the event that the original is lost or damaged during disassembly.

9. Replace the current standard temperature piezo assembly with the low temperature assembly (Kit Number 218956.999.000). The piezo assembly part is marked with a “-40” on the bottom of the plastic housing.
10. Attach the new piezo assembly to base of modulator, installing and tightening the 9/64” Allen screw opposite the wiring entry first, and then installing and tightening Allen screws A and B. All Allen screws should be installed hand tight.

11. Reconnect the flexible tubing to the barbed fitting by hand.

12. Insert the red and black piezo assembly connector back through the housing, and attach to the main PCB assembly, assuring the connection is tight.
13. Insert and attach the plastic main PCB cover by installing and tightening the two (2) short cover screws, and one (1) long cover screw. Exercise care to insure that the LED’s are properly aligned so they aren’t bent or damaged by the cover as it is being installed.

14. Perform a Quick-CAL to recalibrate the piezo assembly and the positioner. Refer to the 3200IQ IOM for detailed calibration and configuration instructions. (FCD LGAIM0058-00)

15. Replace the driver module cover and main housing cover.