UNIBODY ELECTRIC VALVE ACTUATORS E1F & E2F
POSITION SENSOR REPLACEMENT INSTRUCTIONS

(Please refer to Fig. 1 and 2 of this document)

1. Disconnect harness from position sensor (Item #1).

2. Remove the four cap screws and washers that retain the gearcase cover (Item #’s 2 & 3).

3. Remove the gearcase cover (Item #4). The sensor actuator shaft (Item #5) should come off with the cover, if not remove it also.

4. If the sensor actuator shaft (Item #5) stayed attached to the gearcase cover, (Item #4), when it was removed remove it now by pulling it straight out.

5. Remove the sensor retaining screw and sensor (Item #1).

6. Install the new sensor and replace the sensor retaining screw. The new sensor should be turned clockwise as far as the adjustment slot allows before tightening the sensor retaining screw. Do not overtighten the retaining screw or the threads may strip out in the cover. The screw should be tightened just enough to keep the sensor from turning in the cover.

7. Reinstall the sensor actuator shaft (Item #5) to the gearcase cover (Item #4) by positioning the two parts relative to each other as shown in Fig. 2. With the sensor actuator shaft pin at the 3 o’clock position and the worm gear pocket of the gearcase cover at the 12 o’clock position press them together. The parts may stay together, if not, hold them together and go on to step 14.

8. Place the gearcase cover and sensor actuator shaft assembly down onto the gearcase so the pin on the sensor actuator shaft (Item #5) fits into the hole on the toothed end of the gear segment (Item #8). Carefully rotate the gear case cover assembly until the mounting screw holes in the cover line up with the tapped holes in the gearcase.

9. Reinstall the four cap screws and washers that secure the gear case cover (Item #’s 2 & 3). Apply #242 Loctite to the threads and tighten to 16 in/lbs.

10. Recalibrate the valve positions. See Valve Position Calibration on page 4 of the Quick Start Guide on our website;

(Parts are shown with valve in the OPEN position except for the EB_J or EB_S valves which would be closed.)