HANDLE ASSEMBLY INSTRUCTIONS
Style 7840 4” Swing-Out™ Valve

The Akron Style 7840 4” Swing-Out Valve is designed to provide efficient, trouble-free operation for many years. The following assembly instructions are provided to assist in obtaining the most trouble-free assembly.

LOCAL ACTUATOR
Assembly Instructions:
Thread spinner (Item 1) onto the handwheel (Item 2) and tighten using a 11/16” open-ended wrench. **NOTE:** Apply Loctite No. 222 or equivalent to the internal threads on the handwheel to secure the spinner properly. Line up the hole in the handwheel shaft (Item 3) closest to the valve housing (Figure 1) with the hole in the handwheel (Item 2) and insert the roll pin (Item 4). Clean the surface of the handwheel hub, then attach “OPEN” directional decal to the hub of the handwheel as shown.

REMOTE ACTUATOR
Assembly Instructions:
1. Thread spinner (Item 1, Fig. 2) onto the handwheel (Item 2) and tighten using an 11/16” open-ended wrench. **NOTE:** Apply Loctite No. 222 or equivalent to the internal threads on the handwheel to secure the spinner properly.
2. Attach the handwheel (Item 2) to the handwheel shaft (Item 10) with the 1-1/2” roll pin (Item 4). Clean the surface of the handwheel hub, then attach “OPEN” directional decal to the hub of the handwheel as shown.
3. Line up the hole in the handwheel shaft (Item 3) with the hole in the universal joint (Item 6) and insert the 1” long roll pin (Item 5). **CAUTION:** Hold a block of wood or steel against the opposite side of the universal joint as a “back-up” when driving in the roll pin to avoid damage to the shaft.
4. Select the position for the handwheel bracket (Item 9) on the pump control panel and drill a 1-1/4” diameter hole for the handwheel bracket. **CAUTION:** Before drilling the 1-1/4” diameter hole, ensure that the angle of the universal joint does not exceed 30 degrees.
5. Insert the handwheel bracket into the 1-1/4" diameter hole, align the handwheel bracket with the screw holes in the desired orientation and mark their positions. Remove the handwheel bracket and drill 9/32" diameter screw holes.

6. Re-insert the handwheel bracket in the 1-1/4" diameter hole and slide the back plate (Item 7) on the back of the handwheel bracket behind the control panel. Using a screwdriver, snug-up the handwheel bracket and back plate together using the four screws (Item 8) supplied.

7. Place one spacer (Item 11) over the handwheel shaft (Item 10) and insert the shaft through the handwheel bracket (Item 9). Place the second spacer (Item 11) over the handwheel shaft on the universal joint side of the back plate. Slide the universal joint over the shaft and attach the universal joint to the handwheel shaft (Item 10) with the roll pin (Item 5). **CAUTION:** Hold a block of wood or steel against the opposite side of the universal joint as a “back-up” when driving in the roll pin.

8. Measure the distance between the universal joint attached to the gear drive shaft and the universal joint attached to the handwheel shaft. The connecting rod should be inserted 3/16" into each universal joint. Cut the user supplied 3/16" diameter connecting rod to length. **CAUTION:** The angle for each universal joint should not exceed 30 degrees.

9. Match drill a 9/32" diameter hole through one end of the connecting rod, on center, as shown. **CAUTION:** The hole must be drilled on center and straight through the rod. If the hole is not drilled properly, difficulties will be encountered when installing the roll pin that secures the rod and universal joint together.

10. Loosen the screws (Item 8) from the handwheel bracket and pull out the handwheel as required to install the connecting rod. Insert a 9/32" diameter screw through the universal joint and connecting rod at the “drilled end” of the connecting rod.

11. Snug-up the screws to pull the assembly back together.

12. Mark through the 3/16" diameter hole in the universal joint on the opposite end to locate where the second 3/16" diameter hole should be drilled in the connecting rod.

13. Remove the 3/16" temporary screw holding the universal joint and connecting rod together. Loosen the screws (Item 8) and slide the handwheel assembly back so that the connecting rod can be removed.

14. Drill the second hole in the connecting rod where it is marked. **CAUTION:** The hole must be drilled on center and straight through the rod. If the hole is not drilled properly, difficulties will be encountered when installing the roll pin that secures the rod and universal joint together.

15. Reinstall the connecting rod.

16. Install roll pins (Item 5) through both ends of the connecting rod to secure the connecting rod to the universal joints. **CAUTION:** Hold a block of wood or steel against the opposite side of the universal joint as a “back-up” when driving in the roll pins.

17. Remove and discard both spacers (Item 11) and tighten up the screws (Item 8). **NOTE:** After tightening the screws, ensure that there is a gap between the handwheel face and the face of the handwheel bracket. Also ensure that there is a gap between the face at the back of the handwheel bracket and the face of the universal joint. This will ensure that there is no binding in the connecting rod.