

# Ball Valve Linkage Kit Installation Instructions

# **Application**

The AV-610 ball valve linkage kit enables replacement of linkage components on VB-2x13-500-9-xx valve bodies.

# **Applicable Literature**

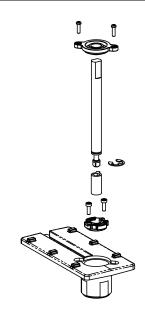
- MA4x-704x, MA4x-707x, MA4x-715x Schneider Electric DuraDrive Series Spring Return Twoposition actuators, General Instructions, F-26642.
- MF4x-704x, MF4x-707x, MF4x-715x Schneider Electric DuraDrive Series Spring Return Floating actuators, General Instructions, F-26644.
- MS4x-704x, MS-707x, MS-715x Schneider Electric DuraDrive Series Spring Return Proportional actuators, General Instructions, F-26645.
- MF41-6043, MF41-6083 Schneider Electric DuraDrive Series Non-spring Return Floating Actuator General Instructions, F-27213.
- MS1-6043, MS41-6083 Schneider Electric DuraDrive Series Non-spring Return Proportional Actuator General Instructions, F-27214.
- MA4D-xxxx, MF4D-xxxx, MS4D-xxxx Schneider Electric DuraDrive<sup>™</sup> Series Actuator General Instructions, F-27170.
- MF4E-60430-100, MF4E-60830-100 Schneider Electric DuraDrive Series Floating Actuator General Instructions. F-27173.
- Vx-2xx3-xxx-9-xx Series Ball Valve Selection Guide, F-27086.
- Vx-2xx3-xxx-9-xx Series Ball Valve Installation Instructions, F-27087.

### Instructions

- 1. Remove power from the actuator. For Mx40-704x actuators note which side ("L" or "R") is facing out.
- 2. Remove the actuator from the existing valve linkage.
- 3. Disassemble the existing valve linkage (refer to Figure-1). Note that the Linkage Base, Valve Body Mounting Insert and (2) Valve body Mounting screws need not be replaced unless damaged. If the Linkage Base is replaced, note the orientation of the long end with respect to the valve and install the new Linkage Base with the same orientation.

#### NOTE

The Stop Dog, Plastic Connector, and Shaft from the existing linkage *must* be discarded.



4. Install the new linkage components as shown in Figure-2. Be sure the Stop Dog ear and Shaft flats are oriented as shown and that the stop dog ear points to the long end of the base. If the Linkage Base is being replaced, make sure its long end is pointing in the same direction with respect to the valve. Check operation by rotating shaft. Once the new linkage is installed, make sure the shaft is turned to its full clockwise (CW) position.

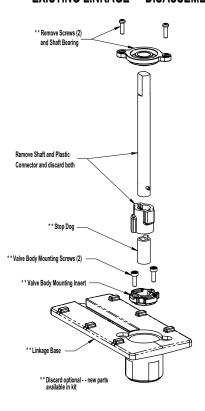
### **▼**CAUTION -

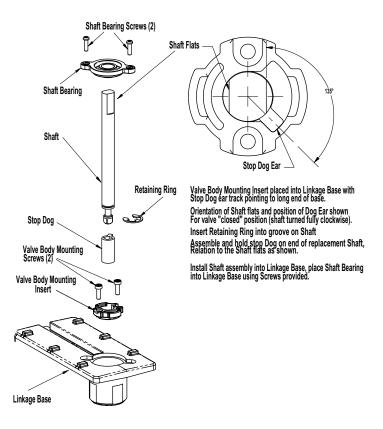
**Both** the actuator and the valve shaft must be in the fully clockwise (CW) position (2-way valve closed, 3-way valve port A closed) when the actuator is reinstalled. Failure to do so will cause improper valve operation and possible component damage.

- Make sure the actuator is positioned at its full clockwise (CW) end of rotation (Mx40-704x may have to be powered to do this). Reinstall the actuator using the proper anti-rotation clip (refer to Figure-2).
- 6. Reapply power to the actuator.
- 7. Check operation by varying the control input signal to the actuator and observing valve operation.

## **EXISTING LINKAGE -- DISASSEMBLED**

## **AV-610 REPLACEMENT LINKAGE**





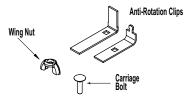


Figure-1 Existing Linkage

Figure-2 AV-610 Replacement Linkage

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