Swagelok

Mounting 83 Series Ball Valve to 130/150 Series Pneumatic Actuator

Tool list: Hex key: 9/64 in., 3/16 in., 3/32 in.

Torque wrench capable of 100 in.·lbs (11.3 N·m)

Open-end or crescent wrench: 1 1/8 in.

⚠ WARNING

Before servicing any installed valve, you must

- depressurize system
- cycle valve
- purge the valve

⚠ WARNING

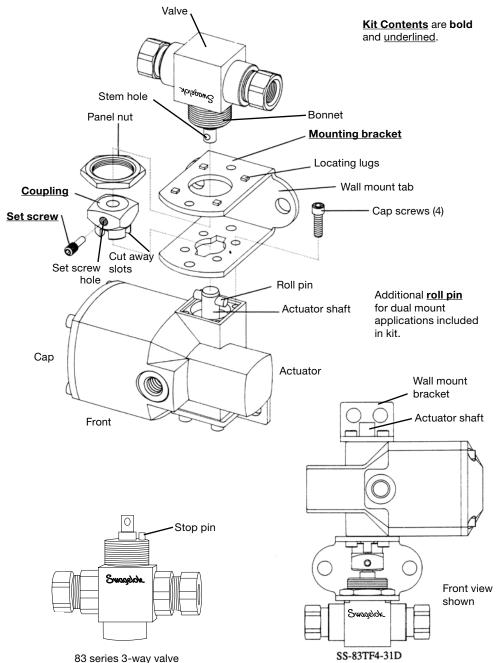
Residual material may be left in the valve and system.

⚠ CAUTION

Actuated assemblies must be properly aligned and supported. Improper alignment or inadequate support of the actuated assembly may result in leakage or premature valve failure.

Dual mounted assemblies: Remove wall mount bracket and press roll pin into the actuator shaft. Repeat the following instructions for each assembly.

- 1. Put valve in the following position:
 - 2-way, normally open and double acting assemblies: open
 - 2-way, normally closed assemblies: closed
 - 3-way: position the open orifice opposite the stop pin.
- Remove the set screw (not shown). Remove the handle (not shown) and panel nut.
- 3. Remove the four **cap screws** from the **actuator**. Place the **mounting bracket** over the **roll pin** and position the **wall mount tab** toward the **rear** of the actuator.
- 4. Attach the **mounting bracket** with the four **cap screws**. Tighten cap screws to: 131/151 series, 50 in.·lbs (5.6 N·m, 58 cm·kg); 133/153 series, 75 in.·lbs (8.4 N·m, 86 cm·kg).
- 5. Set the **coupling** on the **roll pin**.
 - Normally open: Orient coupling **set screw hole** towards the **front** of the actuator. Normally closed: Orient coupling **set screw hole** towards the actuator **cap**.
- 6. Place panel nut on the coupling.
- 7. Align the coupling set screw hole with the valve stem hole. Insert the valve through the mounting bracket, panel nut, and coupling. Center the valve bonnet between the locating lugs with the marked side of the valve facing the front of the actuator.
- 8. Thread the **panel** nut onto the valve **bonnet**. Tighten to 100 in.·lbs (11.3 N·m, 115 cm·kg).
- 9. Slide **set screw** through coupling set screw hole and tighten to 15 in.·lb (1.7 N·m, 17 cm·kg)).
- 10. Test for proper function and operation.





Mounting 83 Series Ball Valve to 140 Series Electric Actuator

Tool list: Hex key: 9/64 in., 3/32 in.

Torque wrench capable of 100 in.·lbs (11.3 N·m)

Open-end or crescent wrench: 1 1/8 in.

⚠ WARNING

Before servicing any installed valve, you must

- depressurize system
- cycle valve
- purge the valve

⚠ WARNING

Residual material may be left in the valve and system.

⚠ CAUTION

Actuated assemblies must be properly aligned and supported. Improper alignment or inadequate support of the actuated assembly may result in leakage or premature valve failure.

⚠ CAUTION

Do not use these actuators on vented ball valves. The drive shaft of these actuators rotates in one direction.

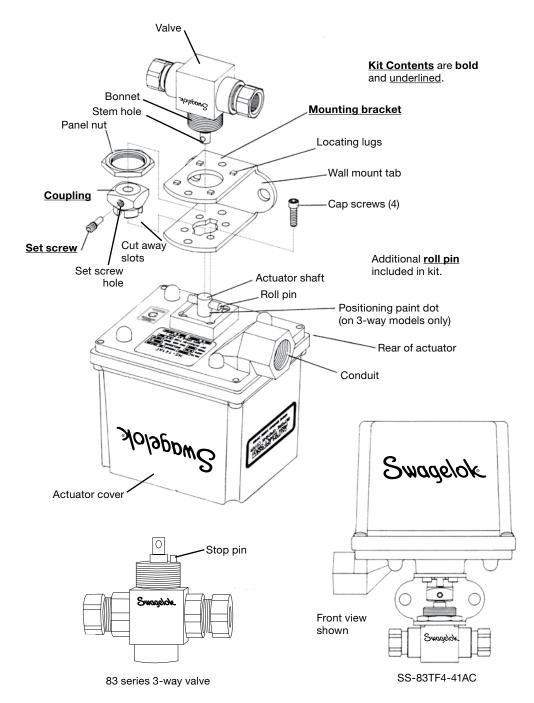
⚠ Not CE marked.

1. Put **valve** in the following position:

2-way: open

3-way: position the open orifice opposite the stop pin.

- Remove the set screw (not shown). Remove the handle (not shown) and panel nut.
- 3. 3-way valves only, the positioning paint dot on the actuator shaft should be located on the conduit side of the actuator.
- Remove the four cap screws from the actuator. Place the mounting bracket over the roll pin and position the wall mount tab toward the rear of the actuator.
- 5. Attach the **mounting bracket** with the four **cap screws**. Tighten cap screws to 50 in.·lbs (5.6 N·m, 58 cm·kg).
- Set the coupling on the roll pin with the coupling set screw hole towards the front of the actuator.
- 7. Place panel nut on the coupling.
- Align the coupling set screw hole with the valve stem hole. Insert the valve through the mounting bracket, panel nut, and coupling. Center the valve bonnet between the locating lugs with the marked side of the valve facing the front of the actuator.
- 9. Thread the **panel nut** onto the valve **bonnet**. Tighten to 100 in.·lbs (11.3 N·m, 115 cm·kg).
- 10. Slide the **set screw** through coupling **set screw hole** and tighten to 15 in.·lb (1.7 N·m, 17 cm·kg).
- 11. Test for proper function and operation.



Swagelok — TM Swagelok Company © 1998, 2007, 2011 Swagelok Company August 2011, Rev. E MS-INS-83-ACT