

Installation, Operation, Maintenance Disassembly and Assembly Instructions for Globe Valve Models A330P and A331P

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Form FVC 464 - Rev. B

KEEP THIS DOCUMENT WITH THE PRODUCT UNTIL IT REACHES THE END

WARNING

Before installation or removal of any globe or angle valves, the system must be purged completely of all product. Use proper safety equipment at all times. An <u>abundant supply</u> of clean water must be readily available and easily accessible as a means of providing IMMEDIATE First Aid treatment of exposure to ammonia. To insure long term safe operation, the manufacturer recommends that under normal service conditions this product should be inspected at least once every five (5) years and be repaired or replaced as required. To prevent the accidental opening of any valve, never carry or grasp a valve by its handwheel or handle.

CAUTION: Contact with or inhalation of Liquid Anhydrous Ammonia or LP-Gas or their vapors can cause serious injury or death. Dispersement must be in accordance with local regulations. For the proper handling and storage of Anhydrous Ammonia refer to ANSI Standard K61.1

For the proper handling and storage of Liquified Petroleum Gas refer to NFPA Code 58.

TOOLS REQUIRED: Safety Equipment (i.e. gloves, goggles, and clothing), 12" Adjustable Wrench and 18" Pipe Wrench

Removal of any Globe or Angle Valve for Repair or Replacement

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

Step 1: Safety equipment (i.e. gloves, goggles and clothing) must be worn before continuing with the next step.

Step 2: Before removing valve from tank or hose, place in FULL OPEN POSITION to insure all pressure is bled from system. Note: An 18" Pipe Wrench will be required. See Warning at top of page.

Disassembly Procedure for Repair

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

- Step 1: With valve secured in a bench vise, remove Bonnet (9) from the Body (24), which will expose the complete Bonnet and Stem Assembly.
 - Note: It is important to inspect the Seal Disc Holder (14) rotation. If it does not rotate freely, do not use valve. Consult your local dealer for instructions. Remove old Gasket (16).
- Step 2: Secure Bonnet (9) in a bench vise and remove Handwheel Nut (18), Lock Washer (19), Information Plate (20) and Handwheel (21).
- Step 3: Remove Seal Disc Screw (17), Seal Disc Retainer (16), and Seal Disc (15).
- Step 4: Remove Packing Nut (2), Chevron Packings (4, 5), Spring Guides (6, 8), and Packing Spring (7) over end of Stem (10).
- Step 5: Rotate Stem (10) clockwise (CW) using Handwheel (21) if necessary, until stem is disengaged from Bonnet (9). Remove old Gasket (3).
- Step 6: Before reassembly, clean and inspect the valve seat. Clean all metal components with solvent and wipe or blow dry with air.

Assembly Procedure

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

- Step 1: Install Seal Disc (15), against the Seal Disc Holder (14), Seal Disc Washer (16), and Seal Disc Screw (17) to Seal Disc Holder (14). Secure Seal Disc Screw (17) to threads in Seal Disc Holder (14) with thread lock compound (Loctite #271).
- Step 2: Lubricate threads of stem (10) with a good quality grease and install Stem (10) into Bonnet (9) until Seal Disc Holder (14) rests against bottom of bonnet (9).
- Step 3: With the bonnet and stem assembly secured in a bench vise install Gasket (3), Spring Guides (6, 8) and Packing Spring (7).
- Step 4: Replace O-ring Seal (1) in groove of Packing Nut (2).
- Step 5: Install Chevron Packings (4, 5) into Packing Nut (2).
- Step 6: Lubricate exposed surface of Stem (10) with John Crane Style 279A Packing Lubricant or equavilant.
- Step 7: Place Packing Nut (2) with packing in place over Stem (10) and engage bonnet threads in Bonnet (9). Rotate Packing Nut (2) while making contact with bonnet threads. Tighten packing nut (2) clock-wise (CW) with torque wrench to 55 ft-lbs.
- Step 8: Secure Body (24) in vise. Place Body Gasket (23) over bonnet threads and lubricate threads with a good quality grease.
- Step 9: Install bonnet assembly (22) into body (24) and tighten clock-wise (CW) with torque wrench to 95 ft-lbs.
- Step 10: Install Handwheel (21), Information Plate (20) Lock Washer (19) and tighten Handwheel Nut (18) onto Stem (10).
- Step 11: Check stem packing and valve seat for leaks. Operate handwheel (21) full open to full closed to ensure smooth operation.

Installation of New or Repaired Globe or Angle Valves

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

Step 1: Apply Teflon tape or sealant on the male pipe threads of mating part, and place handwheel (21) in full open position. Step 2: Install valve and tighten to desired position, taking caution to not overtighten.

Safety Tips for Shut-down and Storage

SAFETY TIPS FOR SHUT-DOWN AND STORAGE WHEN TANKS ARE NOT IN USE:

- Step 1: Make sure all valves are closed with any exposed outlets / inlets capped to keep out debris and moisture, which will help to prevent condensation or corrosion of internal parts.
- Step 2: Store tanks in accordance with federal, state, and local codes and manufacturer's instructions. Check periodically for leakage or excessive pressure build-up. Make corrections or repairs as necessary.



WARNING: These products contain a chemical known to the state of California to cause cancer and birth defects or reproductive harm

Figure 1

