
MAINTENANCE INSTRUCTIONS FOR AIR OPERATED VALVE**CAT# 150V5**-ATC5****1.0 REFERENCE**

- 1.1 Butech valve assembly drawing C-1519, revision #3.

2.0 DISASSEMBLY INSTRUCTIONS

- 2.1 Remove valve from system.

CAUTION: Before valve is removed from system, vent all pressure.

- 2.2 Place the valve body (item #2) of the assembly in a vice equipped with “soft jaws”, and tighten vice.

- 2.3 Remove the two hex-socket cap screws (item #11) which fasten the bottom mounting plate (item#12) to the top of the valve body.

- 2.4 After removing the assembly from the vise, hold the complete actuator assembly from turning and rotate the valve assembly counter-clockwise to disengage the valve stem (item #8) from the coupling (item #9).

NOTE: Loosen Hex Jam Nut (item #10) prior to performing step #2.4

- 2.5 Place the valve body (item #2) portion of the assembly back in the vise and tighten.

- 2.6 Remove the Hex Jam Nut (item #10) from the stem (item #8) by rotating counter-clockwise.

- 2.7 Remove the packing gland (item #3) by turning counter-clockwise until disengaged from the valve body, and then lift it up and over the top of the stem (item #8).

- 2.8 Remove the stem (item #8) from the body by grasping the top portion of the stem and pulling straight up.

- 2.9 Using a packing extractor tool of sort you may now remove the packing arrangement (items 4,5,6, &7) by pulling them up and out of the valve body (item #2).

- 2.10 Inspect all components for extrusion, galling, or defect symptoms and replace all defective components.

NOTE: When disassembling the replaceable seat angle valves, remove the seat retainer from the bottom of the valve body by turning it counter-clockwise. The replaceable seat will fall out the bottom after removing the seat retainer.

3.0 ASSEMBLY INSTRUCTIONS

NOTE: On replaceable seat angle valves ONLY, you must first assemble the seat and retainer into valve body. Lubricate outside threads on retainer, place seat into valve body and screw retainer clockwise into the bottom connection. Torque into valve approximately 70 ft-lbs.

- 3.1 Gather all components, including all new ones required to reassemble valve as per parts list and check quantity and condition of items for shortage or defects.
- 3.2 Place the bottom washer, packing, and the top packing washer (items 4, 5, 6 & 7) into valve body as shown.
- 3.3 Insert the stem (item #8) through the packing arrangement and into the valve body (item #2)
- 3.4 Lubricate the external threads on the packing gland (item #3) with MOLY-LIT paste or an equivalent high quality lubricant.
- 3.5 Place packing gland (item # 3) over the stem (item #8) and thread into top of valve body (item 2). Pull stem up into packing gland and maintain this position to avoid damage to the valve seat or stem. Torque down the packing gland to approximately 75 ft-lbs.
- 3.6 Thread the coupling (item #9) onto actuator output shaft completely to the shoulder.
- 3.7 Thread the Hex Jam Nut (item #10) onto the stem (item #8).
- 3.8 With the actuator assembly safely supported take the valve assembly and insert the top of the stem (item #8) up through the bottom of the mounting plate (item #12). Thread the stem into the coupling approximately 4-6 turns by rotating the valve assembly clockwise.
- 3.9 If a small gap between the top of the valve body (item #2) and the bottom of the mounting plate (item #12) exists simply push upward on the valve body until it fits flush against the mounting plate.
- 3.10 Align the holes in the mounting plate (item #12) with the holes in the valve body (item #2). Insert the two hex socket cap screws (item #11) through the mounting plate and into the valve body. Fasten securely, leaving no gap between the mounting plate and the valve body.
- 3.11 Tighten the Hex Jam Nut (item #10) against the coupling (item #9).
- 3.12 Install the complete assembly into your system and pressurize to test for leakage or adjustment.