SQUIBB TAYLOR

MANUFACTURED BY PARKER - PGI DIVISION

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Installation, Operation, Maintenance, Disassembly, and Assembly Instructions for Model AL312P, AL313P, AL314P, AL315P Globe and Angle Valves

IMPORTANT: **KEEP THIS DOCUMENT WITH THE PRODUCT UNTIL IT REACHES THE END USER.**

WARNING!

1. Contact with or inhalation of Liquid Anhydrous Ammonia (NH_3) or of LP Gas, can cause SERIOUS INJURY OR DEATH.
2. Before installation or removal of any tank valve, the system must be purged of all product.
3. Personal Protective Equipment (PPE), safety gloves, goggles and clothing should be worn.
4. For proper handling and storage of NH_3, and Liquefied Petroleum Gas, refer to ANSI Standard K61.1. and NFPA Pamphlet 58.
5. An abundant supply of fresh water should be available to provide immediate first aid treatment for exposure to NH_3 and LP Gas.
6. To prevent the accidental opening of any valve, never grasp or carry a valve by its Hand wheel ② or handle.
7. To ensure a long term and safe operation, the manufacturer recommends that under normal service conditions this product should be inspected at least once every year and be repaired or replaced as required.

TOOLS REQUIRED

Safety Equipment (i.e. gloves, goggles, and clothing), 12" Adjustable Wrench, 9/16" Open End Wrench, 18" Pipe Wrench, & Torque Wrench.

REMOVAL OF TANK VALVE FOR REPAIR OR REPLACEMENT

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

1. Safety equipment (i.e. gloves, goggles, and clothing) must be worn before continuing with the next step.
2. Before removing the valve from the tank, place the valve in FULL OPEN POSITION to ensure all pressure is bled from the 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:

1. With the valve secured in a bench vise, remove the four Hex Bolts ⑳. Remove the complete bonnet ⑤ and stem assembly. NOTE: It is important to inspect the Disc Holder ⑧ rotation. If it does not rotate freely, do not use the valve but consult your local dealer for instructions. Remove old Gasket ⑯.
2. Secure the Bonnet ⑤ in the bench vise and remove both Handwheel Nut ①, Washer ㉑ and Handwheel ①.
3. Remove Disc Nut ⑩, Disc Washer ⑨, and Disc ⑧.
4. Remove Packing Nut ④, Chevron Packing ⑫, Male Adapter ⑬, Packing Spring ⑮ and Packing Gasket ⑭ over the end of Stem ③.
5. Rotate the Stem ③ clockwise, using the Handwheel ② if necessary, until the Stem ③, is disengaged from the Bonnet ⑤.
6. Before re-assembly, clean and inspect the Valve Seat at Ⓐ. Clean all metal components with solvent and wipe or blow dry with air.

ASSEMBLY PROCEDURE

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

1. Install the Disc ⑧, [with injection marks against the Disc Holder ⑦] Disc Washer ⑨, and Disc Nut ⑩, to Disc Holder ⑦. Secure the Disc Nut ⑩ to the threads of the Disc Holder ⑦, with the center punch mark at thread interface.
2. Lubricate threads of the Stem ③ with a good quality grease and install Stem ③ into Bonnet ⑤ until the Disc Holder ⑦ rests against the bottom of the Bonnet ⑤.
3. With the Bonnet ⑤, and Stem ③ assembly secured in a bench vise install Packing Nut Gasket ⑭, and Packing Spring ⑮.
4. Replace the O-Ring ⑪ in groove of the Packing Nut ④.
5. Install Chevron Packing ⑫ and the Male Adapter ⑬ into the Packing Nut ④.
6. Lubricate exposed surface of the Stem ③ with John Crane Style 279A packing Lubricant or equal.
7. Place block under Disc Holder ⑦ to keep stem and disc holder assembly from backing out when installing Packing Nut assembly to bonnet ⑤. Place Packing Nut ④ with packing in place over Stem ③ engage bonnet threads in Bonnet ⑤.Rotate Packing Nut ④ while making contact with bonnet threads. Tighten Packing Nut with torque wrench to 55 ft-lbs.
8. Secure Body ⑰ in a vise. Place Body Gasket ⑯ onto body.
9. Place bonnet assembly on top of Body making sure that all four bolt Holes line up, install four bolts and tighten the bolts with torque wrench to 55 ft-lbs.
10. Install Handwheel ②, Washer ㉑ and tighten Handwheel Nut ①, onto Stem ③.
11. Check Stem Packing and Valve Seat for leaks. Operate Handwheel full “OPEN” to full “CLOSED” to ensure smooth operation.

INSTALLATION OF NEW OR REPAIRED TANK VALVES

REFER TO FIGURE 1 FOR THE FOLLOWING STEPS:

1. Apply PTFE tape or sealant on male pipe threads of threads of mating part, and place handwheel in full open position.
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:

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.
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.

NO.	DESCRIPTION	QTY.
1	HANDWHEEL NUT	1
2	HANDWHEEL	1
3	STEM	1
4	PACKING NUT	1
5	BONNET	1
6	BALL	13
7	DISC HOLDER	1
8	DISC	1
9	DISC WASHER	1
10	DISC NUT	1
11	O-RING	1
12	CHEVRON PACKING	2
13	MALE ADAPTER	1
14	GASKET	1
15	PACKING SPRING	1
16	BODY GASKET	1
17	BODY	1
18	RETAINING SCREW	1
19	1/4" NPT HEX HD. PLUG	1
20	1/2-13 X 1-1/4" HEX HD. BOLT	4
21	HANDWHEEL WASHER	1
22	WARNING LABEL	1

AVAILABLE KITS

NUMBER		NAME & PARTS INCLUDED	ASSEMBLY PROCEDURE
AL312P OR AL313P	AL314P OR AL315P		
312-0022	314-0022	**SEAL KIT** ⑧ ⑪ ⑫ ⑭ ⑯	1 THRU 11
312-1300	314-1300	**STEM & DISC HOLDER ASSEMBLY** ③ ⑥ ⑦ ⑧ ⑨ ⑩ ⑯	2 THRU 11
312-1100	314-1100	**BONNET ASSEMBLY** ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑱	8 THRU 11

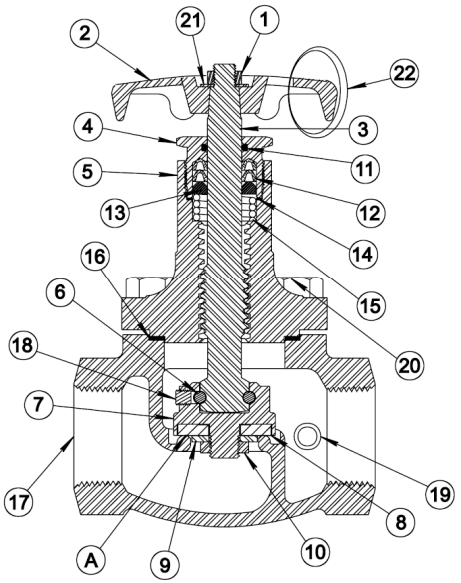
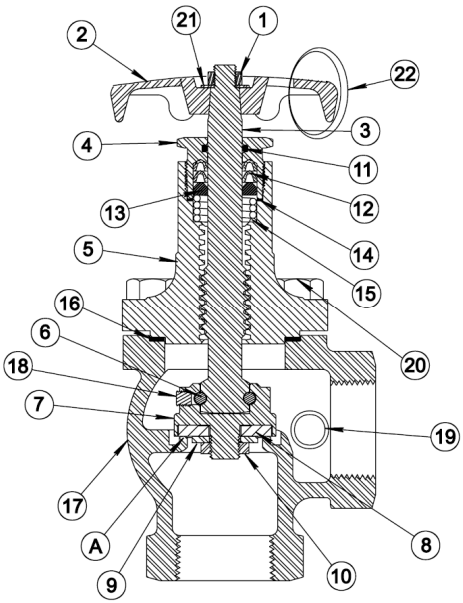


FIG. 1



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