SQUIBB TAYLOR

MANUFACTURED BY PARKER - PGI DIVISION

Instructions for Packing Replacement, and Safety Relief Valve Inspection for Model A1416 Relief Valve Manifold

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IMPORTANT: **KEEP THIS DOCUMENT WITH 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 NH3 and LP-Gas.
6. To prevent the accidental opening of any valve, never grasp or carry a valve by its Hand wheel ⑥ or handle.
7. To ensure long term 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), 18” Pipe Wrench, 10” Adjustable Wrench, 9/16” Open End or 8” Adjustable Wrench, and Pipe Thread Sealer or TFE Tape

Replacement or Inspection of Relief Valves at Ports 1 and 2

1. To remove the Relief Valve from Port No. 1, turn Hand Wheel ⑥ clockwise, until the Disc Holder ⑧ is seated firmly against the body seat.
2. Taking precaution to be upwind, and away from any Anhydrous Ammonia discharge, open the Bleed Valve ⑬, and Bleed Port No. 1 cavity completely.
3. Remove the Relief Valve in Port No. 1 using the 18” Pipe Wrench. (CAUTION: Port No. 2 is under pressure.) NOTE: Relief Valves are required by state regulation to be replaced every 5 years. If upon visual inspection, dirt and debris or internal corrosion is found due to absence of the rain cap, early replacement should be considered. Please note the warning concerning the rain cap on the Relief Valve name plate. IF THE RAIN CAP IS NOT IN PLACE AT ALL TIMES, ICE, SNOW, OR DEBRIS WILL INHIBIT THE OPERATION OF THE RELIEF VALVE.
4. Use pipe thread sealer or TFE tape on the 1-1/4” Relief Valve threads. Install the Relief Valve, and tighten with the 18” Pipe Wrench.
5. Close the Bleed Valve ⑬.

Replacement or Inspection of Relief Valves at Ports 1 and 2 continued.

6. To remove the Relief Valve from Port No. 2, turn the Hand wheel ⑥ counterclockwise until the Disc Holder ⑧ is seated firmly against the Body Seat. Taking precaution to be upwind, and away from any Anhydrous Ammonia discharge, open the Bleed Valve ⑦ and Port No. 2 completely.
7. Remove Relief Valve in Port No 2, and install the new Relief Valve. (see # 4 above).
8. Close Bleed Valve ⑦.
9. To return the Model A1416 Relief Valve Manifold back to service, rotate the Hand wheel ⑥ clockwise 1-1-1/2 turns to place the Disc Holder ⑧ in the center position.

To Replace the Stem Packing

1. Turn the Hand wheel ⑥ counter clockwise until the Disc Holder ⑧ is seated firmly against the body seat of Port No. 2.
2. Taking precaution to be upwind and away from any Anhydrous Ammonia discharge, open the Bleed Valve ⑦, and Port No. 2 completely.
3. Remove the Hand wheel ⑥ by removing the Nut ⑫, and Washer ⑪.
4. Remove the Follower ⑤, and Stem Packing ④, and replace with new Packing ④part number 1415-7.

   NOTE: Do not substitute any other packing materials. This packing must be certified for use with Anhydrous Ammonia.
5. Replace the Follower ⑤ and tighten snugly against the packing ④.

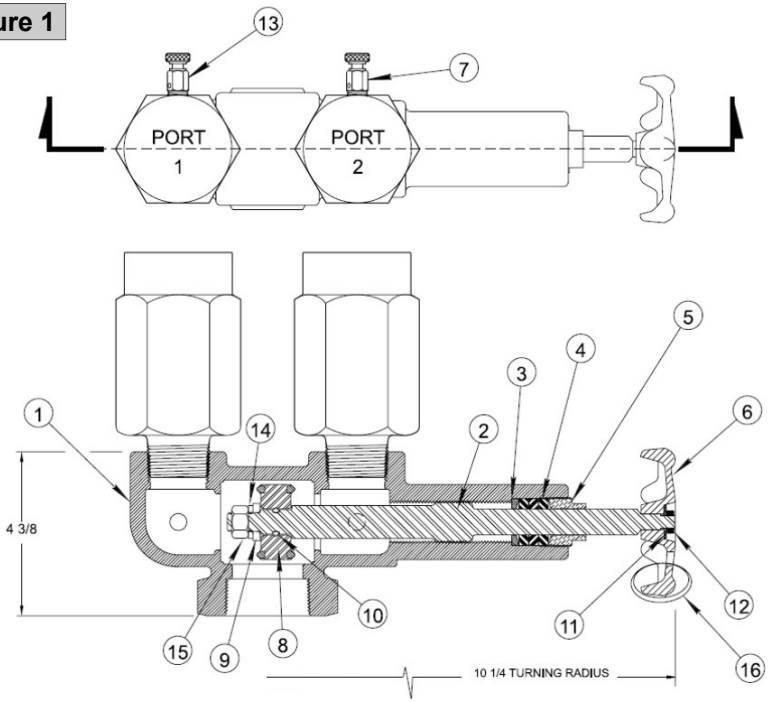
CAUTION:	**EXTREME CARE MUST BE TAKEN TO MAKE SURE THAT THE STEM REMAINS IN THE CLOSED POSITION DURING REPAIR. WITH THE FOLLOWER AND PACKING REMOVED, THE STEM ② CAN BE MOVED VERY EASILY, WHICH COULD RESULT IN THE RELEASE OF AMMONIA.**

6. Replace the Hand wheel ⑥, Washer ⑪, and Nut ⑫.
7. Close the Bleed Valve ⑦
8. Rotate the Hand wheel ⑥ clockwise 1 turn and check the Stem Packing ④ for leaks around the Stem ② and the Follower ⑤. Retighten the Follower ⑤ if necessary.
9. To return the Model A1416 Relief Valve Manifold back to service, rotate the Hand wheel ⑥ clockwise 11-1/2 turns to place the Disc Holder ⑧ in the center position shown in Figure 1.

NOTE: BEFORE TURNING HANDWHEEL ⑥, LOOSEN FOLLOWER ⑤ 1/2 TURN. AFTER REPOSITIONING VALVE RETIGHTEN FOLLOWER ⑤. ADDITIONAL TIGHTENING MAY BE REQUIRED IF STEM SEAL LEAKS. THIS PROCEDURE MUST BE FOLLOWED EACH TIME VALVE IS REPOSITIONED.

To order Parts, Packing, or new Safety Relief Valves, contact your nearest Squibb-Taylor Distributor.

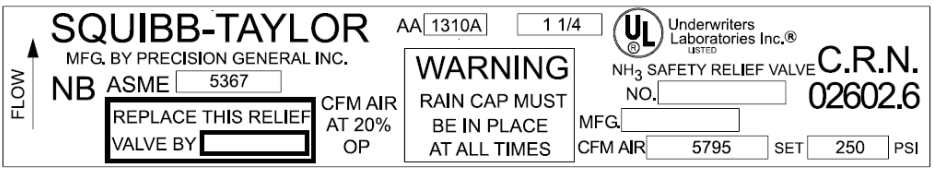
Figure 1



ITEM	DESCRIPTION	PART NO.
1	BODY	1415-5001
2	STEM	1415-2012
3	RETAINER	1415-5006
4	PACKING	1415-2007
5	FOLLOWER	1415-5008
6	HANDWHEEL	479-3013
7	BLEED VALVE	1911-1000
8	DISC HOLDER	1415-5010

ITEM	DESCRIPTION	PART NO.
9	STEM WASHER	1415-5011
10	O-RING	P5-057-R0
11	WASHER	312-2014
12	NUT	312-2015
13	BLEED VALVE	1911-1000
14	LOCKWASHER	P6-121-10
15	HEX NUT	P6-111-10
16	WARNING LABEL	308-2021

Figure 2



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User Safety Responsibility Statement for All Parker Products

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