



Installation and Maintenance

INSTALLATION OF REPAIR PARTS FOR REFRIGERATED PURGERS

This bulletin should be used by experienced personnel as a guide to the installation of purger repair parts. Selection or installation of equipment should always be accompanied by competent technical assistance. Should you require further information, contact Armstrong or its local representative.

INSTALLATION OF AIR RELEASE MECHANISM

Armstrong has designed the new standard air release mechanism to fit both the 370, 371 refrigerated purgers and the 370H purgers. For ease of maintenance, the mechanism is now sold as an assembled unit (less float), rather than in separate parts.

1A. Remove 370 Air Release Assembly

- A. Clamp cap in vise so that gasket surface is horizontal and upward.
- B. Remove coil from cap.
- C. Remove lever pivot. The float, float lever, and valve stem assembly will now freely lift out as a unit.
- D. Unscrew the valve guide frame from the cap.
- E. If the float is to be reused, remove it from the lever.

1B. Removing the 370H Air Release Assembly

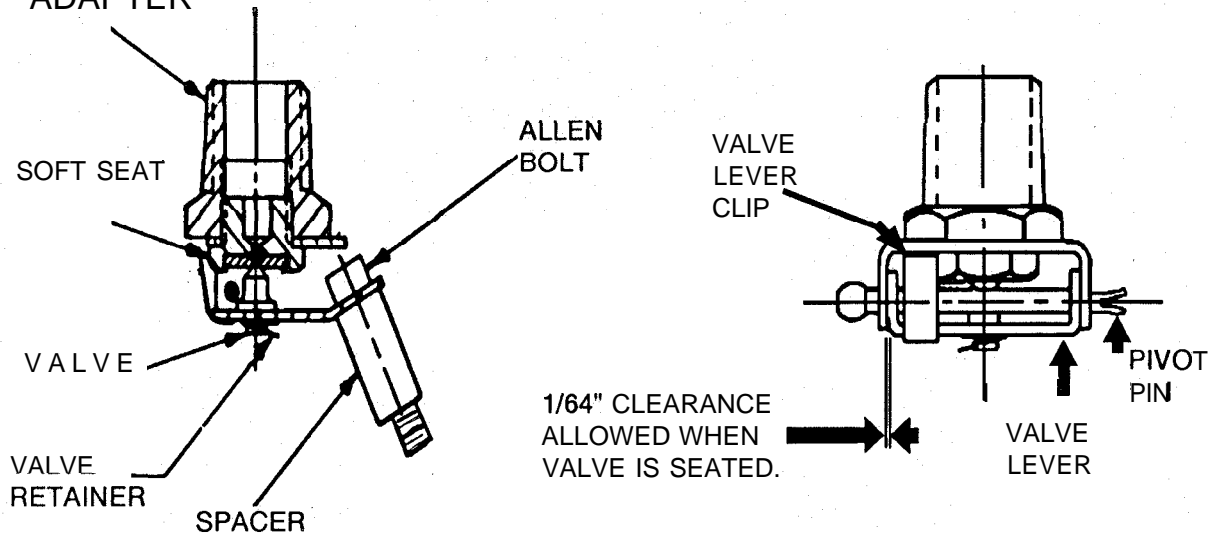
- A. Clamp the cap in a vise so that the gasket surface is facing up and is horizontal.
- B. Remove the pivot pin. The float and valve lever may now be lifted from the assembly.
- C. Use a wrench to remove the valve seat adapter from the cap.
- D. If the float is to be reused, remove it from the lever.



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Figure 1

VALVE SEAT ADAPTER



2. Installation of Air Release Assembly

The 370,371, and 370H purger caps have identical threading so that the new air release assembly will be interchangeable with our former design.

3. Mechanism has been Factory Adjusted

This allows for easy pin rotation and a 1/64" clearance between clip and lever when valve is on seat.

CAUTION: THE AIR RELEASE MECHANISM IS A SENSITIVE PIECE OF EQUIPMENT. DAMAGE TO THE VALVE SEAT OR BENDING OF THE EARS ON THE VALVE LEVER CLIP MAY NECESSITATE REPLACING THE WHOLE ASSEMBLY.

- A. To ensure no interference from metal chips or other foreign material, wipe out the tapped hole in which the valve seat adapter is to be placed. Inspect thread quality, chase thread if corroded or dirty.
- B. Carefully remove the pivot pin and the valve lever from the new mechanism. Then, fasten the float securely to the valve lever.



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- C. Use a wrench to tighten the valve seat adapter, less lever and float, into the cap. Use refrigerant grade sealant (furnished with unit). **IMPORTANT:** The adapter must be aligned so that the float will operate freely inside the coils and not come in contact with them in either the open or closed position. Be careful in tightening the adapter not to bend the valve lever clip.

DO NOT LOOSEN THE VALVE SEAT TO ALIGN THE ASSEMBLY. The mechanism has been adjusted at the factory and the adjustment must not be altered!

- D. Replace the float and valve lever by holding them in place and re-inserting the pivot pin. The pin should be sufficiently loose so that it can be rotated by hand and the valve should seat properly. **DO NOT HAMMER THE VALVE INTO THE SEAT OR BEND VALVE LEVER CLIP.**
- E. Open slot in pin to form pin stop.
- F. Remove cap from vise. Make sure the float works freely. The purger is now ready for assembly.
- G. Do not store with float installed and pressing valve into seat. This can deform the soft valve seat.

4. Installation Of Liquid Discharge Mechanism

To ensure maximum efficiency, be certain to install the liquid discharge mechanism in accordance with the recommended procedures.

The liquid discharge mechanism is sold as a complete kit except for the bucket. All parts should be used when replacing your existing liquid discharge mechanism. A liquid discharge mechanism consists of a valve lever assembly, a valve seat, a guide pin assembly, and two screws. (Fig. 2, 3, 4) Armstrong valves and seats have been carefully lapped together and are furnished for installation as matched sets. Do not use a new seat with an old valve or vice-versa.

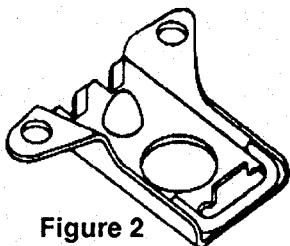


Figure 2
Valve Lever Assembly

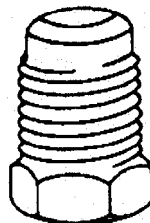


Figure 3
Valve Seat

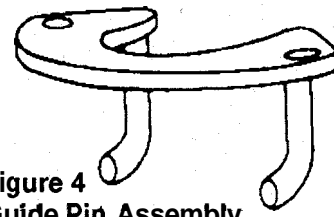


Figure 4
Guide Pin Assembly

- A. Remove body from housing and clamp housing in vise.
- B. Remove bucket, lever and guide pin assembly by removing the two guide plate screws.
- C. Unscrew the valve seat.
- D. Free cap of all dirt, pipe scale, etc., especially threaded holes.
- E. Screw the valve seat into position. Pipe dope or lubricant must not be used on valve seat



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thread. The seal is made, not by the threads, but by metal to metal contact at the ground end of the valve seat. Make sure the seating area and threads in the purger cap are clean and in good condition before screwing the valve seat into position.

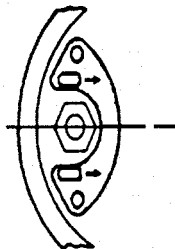


Figure 5

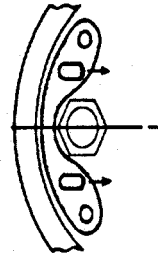


Figure 6

- F. Mount the guide pin assembly with the two screws provided. The guide pin must always point away from the adjoining gasket surface (See Figure 5 & 6).

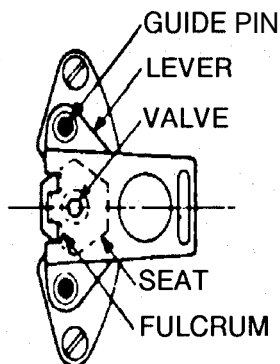


Figure 7

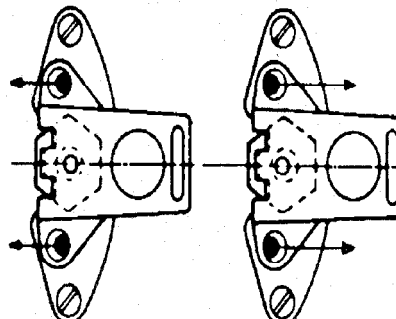


Figure 8

Figure 9

- G. Attach the valve lever. The lever simply hooks over the guide pin for installation.
- H. Check for alignment of the guide pins. Hold the lever and valve against the valve seat with the valve contacting its seat and the two fulcrum points resting on the face of the seat. When the lever is held in this position, the guide pins should be central in the guide pin holes, as in Figure 7. When correctly aligned, the lever will move sideways the same distance to the right as to the left. Should the guide pins be out of line for any reason, they should be bent slightly so that they will be central in the guide pin holes as shown in Figure 7. For example, the guide pins in Figure 8 & 9 are not properly aligned and must be tapped lightly, with a hammer or similar tool, in the direction of the arrows. If the pins are too far apart or too close together, a similar procedure should be followed to position them centrally.
- I. Hook bucket to valve lever and remove cap from vise. The purger is now ready for assembly.