



BY JOHNSON CONTROLS

# Service Information

File In/With: 155.21-OM1

SI0307

New 1015

Equipment Affected: YIA Single Stage Absorption Units

Strong Solution Overflow into Automatic De-crystallization (ADC) System J Tube

## PROBLEM

YIA chillers are designed with an Automatic De-crystallization (ADC) system to prevent the unit from crystallizing. Newer YIA units have a flow setting valve (see *Figure 1*) to modulate the solution going to the generator to avoid solution spill into the ADC J-tube (see *Figure 2*) during normal operation. This service information letter will explain how to identify if spilling is occurring into the J-tube and how to adjust the flow setting valve to prevent spilling.

## PROCEDURE

1. Run the unit at the design conditions or as close as possible (design hot water or steam flow and temperature, design chilled water temperatures and flow, etc.) for at least 30 minutes.
2. Using an infrared thermometer measure the back side of the J tube at the point shown in *Figure 2*.
3. If the temperature is noticeably higher than the ambient temperature (15° F or more), close the solution flow setting valve (*Figure 2*) by rotating the valve approximately 10° clockwise.
4. Wait 30 minutes or until the unit has had time to stabilize and then measure the J tube temperature again at the same location.
5. If spillover is still occurring, turn the valve another 10° clockwise and again wait for 30 minutes before measuring the temperature again.
6. Once the J tube temperature shows no more sign of spillover, use a bolt to lock the valve at the locations shown in *Figure 3*. Record the valve opening in degrees and tag the valve with the following label: Valve setting: xxx degrees open.

**NOTE:** If the unit does not have a solution control valve installed and spillover is occurring, please contact Product Technical Support.

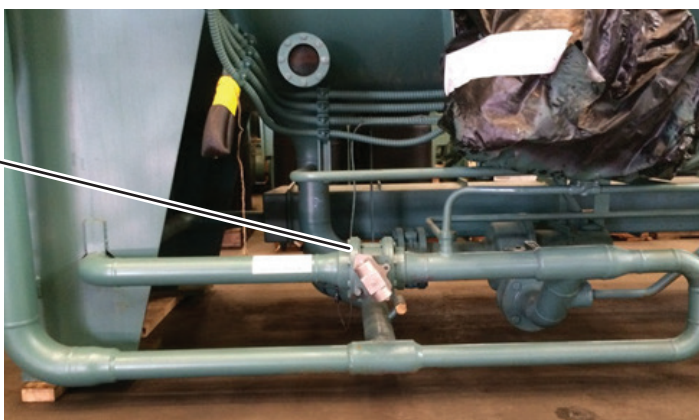
Work on this equipment should only be done by properly trained personnel who are qualified to work on this type of equipment. Failure to comply with this requirement could expose the worker, the equipment and the building and its inhabitants to the risk of injury or property damage.

The instructions on this service bulletin are written assuming the individual who will perform this work is a fully trained HVAC & R journeyman or equivalent, certified in refrigerant handling and recovery techniques, and knowledgeable with regard to electrical lock out/tag out procedures. The individual performing this work should be aware of and comply with all Johnson Controls, national, state and local safety and environmental regulations while carrying out this work. Before attempting to work on any equipment, the individual should be thoroughly familiar with the equipment by reading and understanding the associated service literature applicable to the equipment. If you do not have this literature, you may obtain it by contacting a Johnson Controls Service Office.

Should there be any question concerning any aspect of the tasks outlined in this bulletin, please consult a Johnson Controls Service Office prior to attempting the work. Please be aware that this information may be time sensitive and that Johnson Controls reserves the right to revise this information at any time. Be certain you are working with the latest information.

Product Technical Support

Flow setting valve



LD19680

FIGURE 1

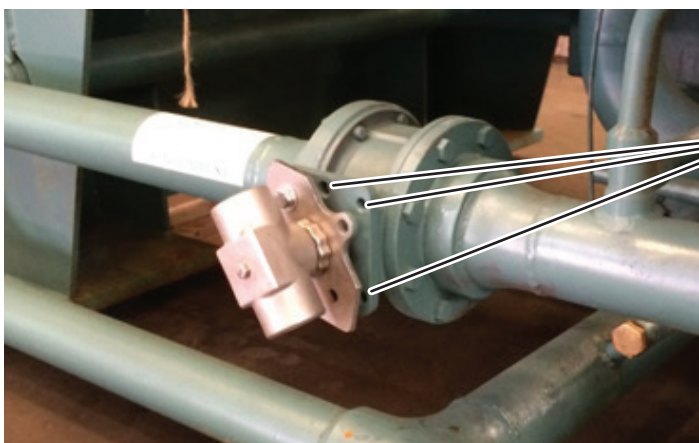


ADC J-Tube

Measure Here

LD19679

FIGURE 2



Locking Holes

LD19681

FIGURE 3