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Title: 19XR Isolation Valve Potential Problem  
Category: *GENERAL*                      Termination Date:  
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Models:    CAC: 19XR centrifugal chillers  
Affected:    BDP:

## **PURPOSE:**

To inform the field of a potential problem with the crossover isolation valve between the float chamber and the cooler on frame 2,3, & 4 chillers.

## **INFORMATION:**

Several reports have been received about 19XR chillers that surge immediately after startup or trip quickly on low refrigerant temperature. First impressions have been stuck floats, low refrigerant charge, non-condensables in the chiller, & inadequate water flows. While all of these items are relatively easy to verify, it can be, in some cases, difficult and very expensive to determine which one is causing the problem.

## **ACTION:**

Another possibility is a closed isolation valve. The valve used (part # EP71BA-571) has a brass cap cover that fits over a steel valve stem. Rotation direction to open and close the valve is marked on the cap but is usually unreadable after painting. It is possible to turn the cover cap and have the appearance that the valve is open while in fact, the valve is still closed. Without too much effort the cover cap can be rotated and enlarge the slot that fits over the stem. There will still be a resistance when turning the cover, adding to the belief that the valve is turning with the cover. There has also been one instance where the valve stem broke allowing the cap and stem to turn without moving the valve.

If the above symptoms are encountered, first check the valve to verify that it is open by removing the cover and turning the valve stem. Pictures are attached.



