# SERVICE BULLETIN

**Title: Dual Relief Valve Assembly**
**Models Affected: All Chillers And Storage Vessels**

**Number: C9507**
**Date: 3/17/95**
**Supersedes: New**
**Date:**

## Purpose:

Provide information on the proper operation of the dual relief valve assembly as supplied by the Henry Valve Company.

**File: Start-up, Operation, and Maintenance Instructions**

**Prepared By:** Nick Chashin

**Approved By:** Alan Johnson

## Issue:

“ What is the proper stem position for the three-way dual shut-off? Should the valve be adjusted to center position thus activating both relief valves or should it be adjusted to either the front or back seat? “

## Requirement:

The three way dual shut-off valve should be either front (Fig. A) or back (Fig. B) seated. The refrigeration system should not be run with the valve stem in the center position

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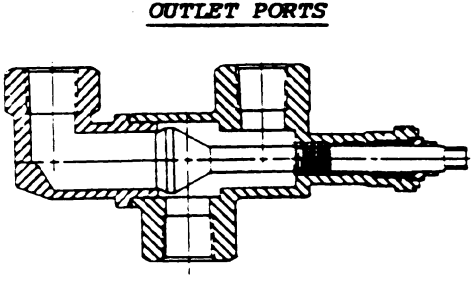


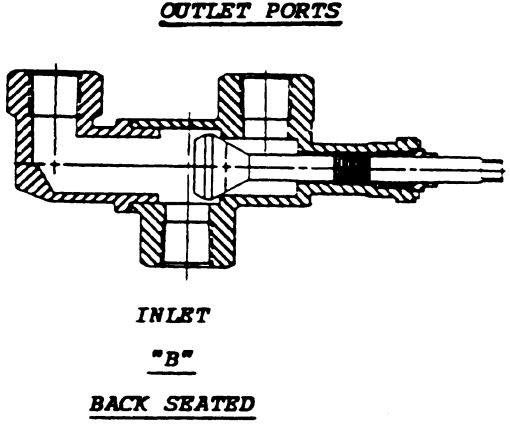

## Discussion:

There are several reasons for the above answer. The purpose of the valve arrangement under discussion is to provide a spare relief valve for testing, repair or replacement as specified in Paragraph 9.1.5 of ANSI/ASHRAE 15. If both valves are in service, we have lost our spare. Additionally, while the passages thru the shut-off valve are sized to support the flow thru the pressure relief valve, they are not large enough to support the flow thru two pressure relief valves. Consequently, total flow could be reduced due to the pressure relief valves not opening fully. This condition could also contribute to excess chattering in the valves when they are discharging.

Since each individual pressure relief valve must, by Code requirements, have sufficient capacity to protect the vessel there is no need to open a second valve.

As stated previously, the systems should be operated with the three way dual shut-off valve in either the front or back seated position. However, when leak testing a chiller or storage vessel with a dual relief valve assembly, the recommendation is to test with the stem in the mid-position. In this way system pressure is applied to both relief valves. After checking for leaks the three way valve should be returned to either the front or back seated position so that only one relief is exposed to the refrigerant pressure.