Service Bulletin

CVHE-SB-41

Library	**Service Literature**
Product Section	**Refrigeration**
Product	**Centrifugal Liquid Chillers**
Model	**CVHE/F/G**
Literature Type	**General Service Bulletin**
Sequence	**41**
Date	**May 1, 1997**
File No.	**SV-RF-CTV-CVHE-SB-41-597**
Supersedes	**New**

Subject: CVHE/F/G Rupture Disc Installation Procedure

Introduction:

This service bulletin describes the proper procedure to follow when changing or installing a rupture disc on a CVHE/F/G CenTraVac®.

Discussion:

In order to prevent premature failure of the carbon rupture disc used on low pressure centrifugal chillers, it is imperative to follow the proper rupture disc installation procedure. The disc must be oriented in the proper direction, centered in the clamping flanges with gaskets located on both sides of the disc, and the bolts tightened gradually to specified torque value. (See Figures 1 and Figure 2). No spacers should be used between the flanges. Two methods of bolt retention are used. The first method (Figure 1) utilizes a nut and shows a non-threaded flange (used prior to 1997). The second method (Figure 2) uses a tapped threaded flange (starting about 1997).

Recommended Action:

When installing a new rupture disc, make sure the discs' smooth flat face is positioned toward the "outside" pipe assembly, as shown in Figure 1 or Figure 2. While the bolts are loose, position the disc and rubber gaskets so that their outside diameter is approximately the same distance from each of the four retaining bolts. This will give a good concentric orientation. While in this position, tighten the bolts by hand to prevent the disc and gaskets from moving. Using a torque wrench set to **20 ft-lbs.** Gradually tighten each bolt, using an alternating sequence of opposite bolts until the final torque is reached. Be sure to tighten gradually in a series of steps and not all at once. This will allow the disc to be clamped uniformly.

Figure 1
Cross Section of Rupture Disc with Non-Threaded Flange

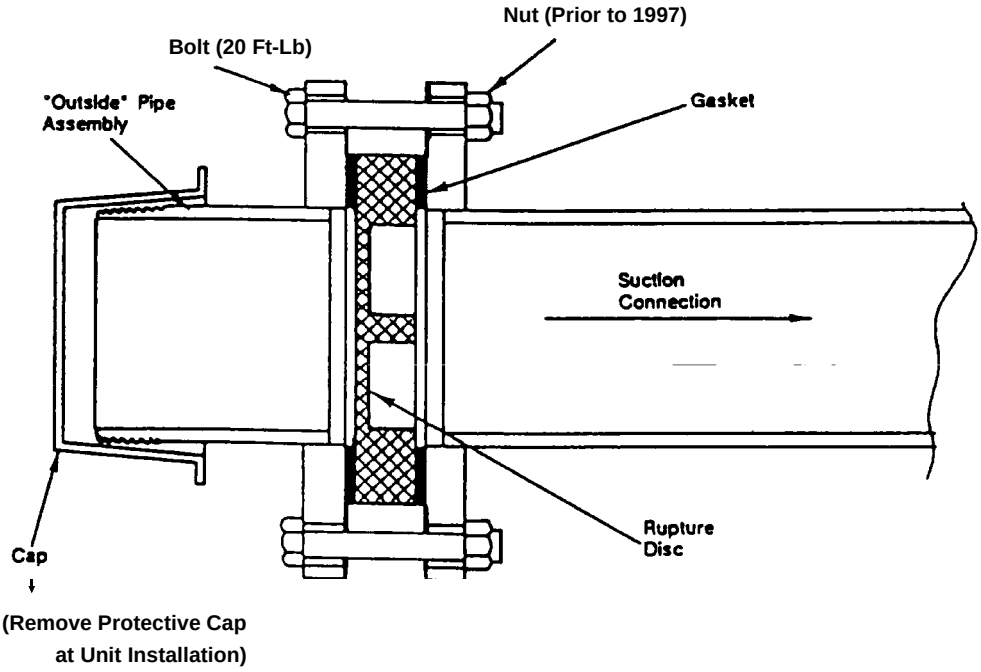

Figure 2
Cross Section of Rupture Disc with Threaded Flange