TWIN CITY HOSE INC.

Control Rods Installation Instructions

1. Assemble expansion joint between pipe flanges in its manufactured face-to-face length. Include the retaining rings furnished with the expansion joint, if applicable.

2. Assemble control rod plates behind pipe flanges as shown. Flange bolts through the control plate must be long enough to accommodate the plate. Control rod plates should be equally spaced around the flange. Depending upon the size and pressure rating of the system, more than two (2) control rods may be required. Refer to the Rubber Expansion Joint Engineering Guide for control rod pressure ratings.

3. Insert control rods through top plate holes. Steel washers are to be positioned at outer plate surface. An optional rubber washer is positioned between the steel washer and the outer plate surface.

4. If a single nut per unit is furnished, position this nut so that there is a gap between the nut and the steel washer. This gap is equal to the joints maximum extension (commencing with the nominal face-to-face length). To lock this nut in position, either "stake" the thread in two places or tack weld the nut to the rod. If two nuts are supplied, the nuts will create a "jamming" effect to prevent loosening. Note: Consult the manufacturer if there are any questions as to the rated compression and elongation. These two dimensions are critical in setting the nuts and sizing the compression pipe sleeve.

5. If there is a requirement for compression pipe sleeves, ordinary pipe may be used, sized in length to allow the joint to be compressed to its normal limit.

6. If there is a requirement for spherical washers, these washers are to be positioned at outer plate surface and backed up by movable double nuts.

7. For reducer installations, it is necessary that all control rod installations be parallel to the piping.