
CONTROL ROD INSTALLATION

General 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. 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 on the size and pressure rating of the system, more than 2 control rods may be required. Refer to the Twin City Hose 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 the 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 natural face to face length. To lock this nut into 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 Twin City Hose if there are any questions about the rated compression and elongation. These two dimensions are critical in both setting the nuts and sizing the compression pipe sleeve.**
5. If there is a requirement for compression, standard pipe sized sleeve may be used to allow the joint to be compressed to its normal limit per factory specifications.
 6. If there is a requirement for spherical washers, these washers are to be positioned on the 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.