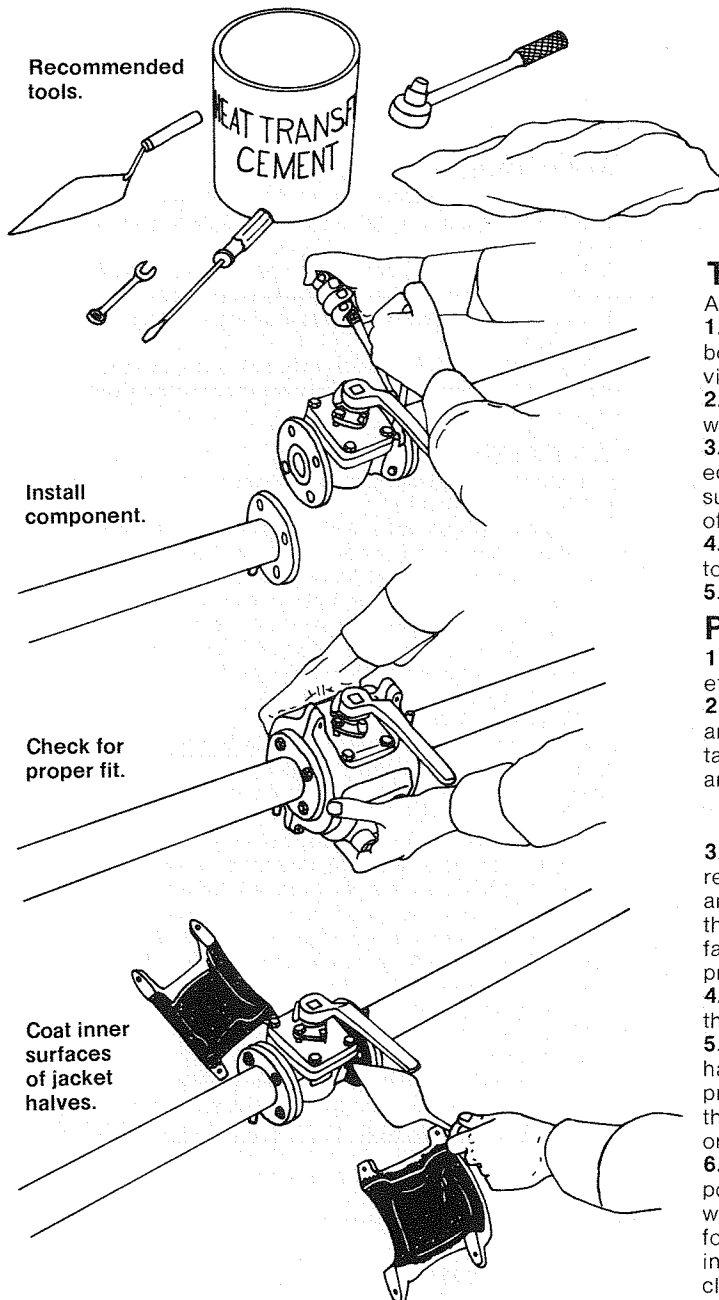


# Installation and Removal of ControHeat® Thermal Jacketing

## Scope

The following information covers the recommended installation and removal procedures for ControHeat Thermal Jacketing for various process components such as pumps, valves, fittings, and pipes. For instructions on connecting heating medium jumpovers to supply and drain couplings, see CSI Technical Bulletin I-11.

## SECTION I. Installation of ControHeat Jackets



### Tools Required.

As shown, the following tools are recommended:

1. Suitable wrenches (open-end, socket or adjustable) to bolt jacket halves together with  $\frac{1}{4}$ ",  $\frac{3}{8}$ " or  $\frac{1}{2}$ " bolts provided with jacket.
2. A screwdriver, if jacket halves are fastened together with clamps.
3. Heat transfer cement (Thermon "Standard Grade" or equivalent) to fill any slight clearance between the interior surface of the ControHeat jacket and the exterior surface of the process component.
4. A suitable mason's trowel to apply heat transfer cement to the interior surfaces of the jacket.
5. Damp paper towels or rags for clean-up.

### Procedures.

1. Install component to be jacketed (pump, valve, fitting, etc.) in the process line.
2. Visually inspect component to be jacketed and remove any foreign material (debris, packing lists, or identification tags) which might come between the inner jacket surface and the component.

**Note:** Components with painted surfaces require no special preparation. Paint should be dry.

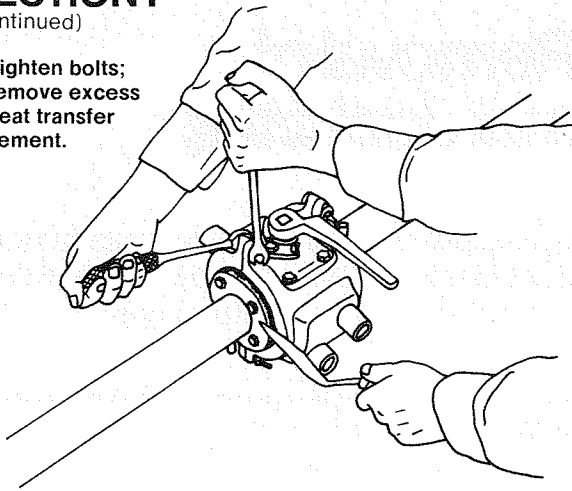
3. Check for proper fit of the ControHeat jacket halves by removing bolts or clamps which hold the halves together, and place both halves around the component. Normally there is a slight clearance between the inner jacket surface and the component. Should there be a problem that prevents the jacket halves from mating, check with factory.
4. Remove jacket halves from the component and lay them on a clean, dry work area, inner surfaces face-up.
5. With a trowel, coat the inner surfaces of the jacket halves with heat transfer cement. Coating should be approximately  $\frac{1}{8}$ " to  $\frac{1}{4}$ " thick. Also dab a small quantity of the cement on the backs of the component flanges in three or four places.
6. Place jacket halves with heat transfer cement on component and press firmly in place. Bolt jacket halves together with jacket bolts removed in Step 3. ControHeat jackets for small valves (one-inch or less) may utilize clamps instead of bolts. In this event, use a screwdriver to fasten clamps around jacket halves on the component.

(continued)

## SECTION I

(continued)

Tighten bolts;  
remove excess  
heat transfer  
cement.



7. Tighten bolts or clamps alternately to assure snug, even seating of the jacket halves on the component.

**Note:** As bolts or clamps are tightened alternately, excess heat transfer cement will extrude from edges of the jackets and at flange interfaces. Remove this excess cement with trowel and replace it in the container.

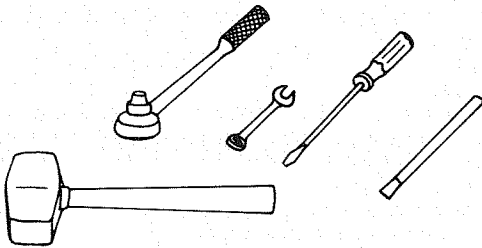
8. Use damp rags or paper towels to clean any excess heat transfer cement from the installation. Make sure there is no heat transfer cement on coupling threads of the ControHeat jacket, valve stems, operators, etc.

9. Install heating medium jumpovers. (For instructions on installation of heating medium jumpovers, see CSI Technical Bulletin I-11.

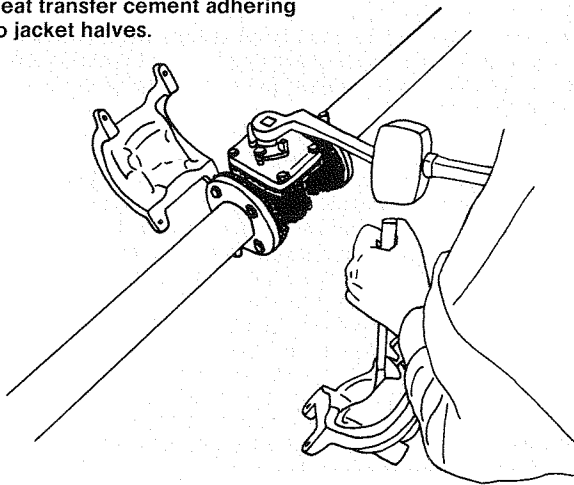
10. Allow heat transfer cement to dry for 24 hours (above 32°F) before applying heating medium to the ControHeat jacket.

## SECTION II. Removal of ControHeat Jackets

Recommended  
tools.



Remove any chunks of  
heat transfer cement adhering  
to jacket halves.



### Tools Required.

As shown, the following tools are recommended:

1. Rubber or plastic mallet to dislodge jacket halves from heat transfer cement and component.
2. Suitable wrenches (open-end, socket or adjustable) to remove bolts holding jacket halves on component.
3. A screwdriver, if jacket halves are fastened together with clamps.
4. A hand chisel to remove any chunks of heat transfer cement that adhered to the inner surfaces of the ControHeat jackets.

### Procedures

1. Remove heating medium jumpovers from jacket halves with suitable wrenches.

**Note:** If jacket halves are being removed to repair the process component or replace it with an identical component, and flexible metal hoses are used as jumpovers, it is normally unnecessary to remove the jumpovers. Work on the process component can proceed with jacket halves dislodged from the component while the heating medium jumpovers remain connected to the supply and drain couplings.

2. Remove bolts or clamps holding jacket halves on the component. Tap the jacket halves lightly with a rubber or plastic mallet to dislodge them from the component.

**Note:** Jacket halves may be pried apart with a screwdriver or hand chisel, but this should be done very carefully with only nominal force.

3. In most instances, the heat transfer cement adheres to the process component and not the inner surfaces of the jacket. The cement can be easily chipped away from the component surface with a hand chisel. Any chunks of the heat transfer cement adhering to the inner surface of the jacket halves should be removed also. Residual traces of the heat transfer cement on the inner surfaces of the jacket halves need not be removed. These traces neither affect a good fit nor inhibit good thermal performance.

4. When inside surfaces of jacket halves are clean, the product is ready for reuse. If the process component is to be repaired and reused, be sure to remove heat transfer cement adhering to its surface before reinstalling the ControHeat jacket.

For additional information and quotations, write or call:

THE JACKET CENTER

**CONTROLS**  
SOUTHEAST, INC

P.O. Box 7500 Charlotte, N.C. 28241 • 704/588-3030 • Fax 704/588-3039