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# SERIES TT25B & TT125 THERMOSTATIC STEAM TRAP INSTALLATION & MAINTENANCE INSTRUCTIONS

INSTRUCTION PART NO. 2239100

REVISION 1

## INSTALLATION

A pipeline strainer should be installed ahead of any trap to protect the seat from dirt and scale. (See Fig. 1) Install trap at low point of equipment with a collecting leg before the trap. For best operation, the trap should be installed with the bellows in the vertical position.

## GENERAL REPAIR & MAINTENANCE

Close isolation valves and allow the trap to cool down before disassembly to prevent over expansion damage to bellows. The thermostatic bellows is the only moving part. The ball and seat must be clean for tight shutoff.

At room temperature the bellows should be contracted away from seat. If defective, the bellows usually remains slightly expanded at room temperature and does not move when placed ion boiling water.

When replacing the trap seat, make sure the gasket is in place and the seat is torqued down tight.

## MAX. ALLOW. CONDITIONS

PMO TT25B 25 PSIG  
 TT125 125 PSIG  
 TMO Sat. Steam Temp.  
 PMA 125 PSIG @ 450°F  
 TMA 450°F @ 125 PSIG

## HOW TO ORDER REPAIR KITS

State trap size and working pressure.

Example:

Kit number for 1/2" TT125 on 90 psig service would be TT-12-125

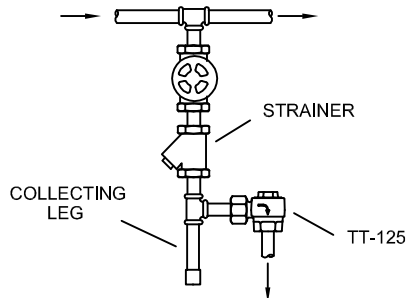


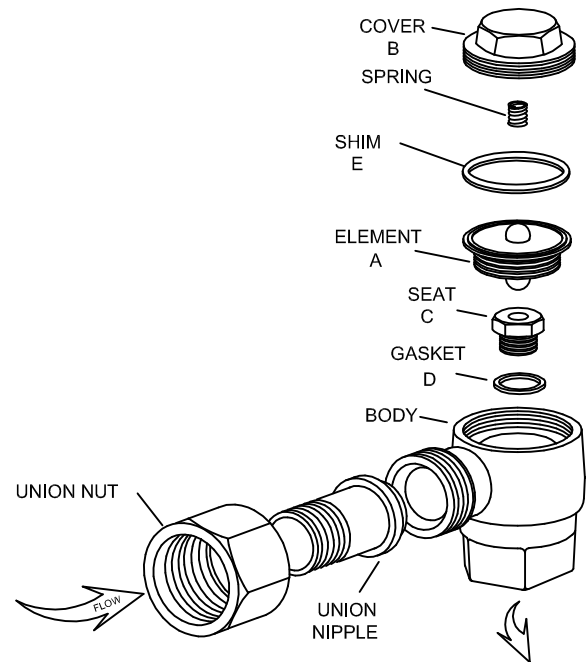
Fig. 1

## HOW IT WORKS

The thermostatic element is partially filled with a volatile liquid and hermetically sealed at the factory. This liquid vaporizes at a temperature slightly below the boiling point of water.

When cool, the trap is wide open, permitting air to be rapidly removed from the system and steam to fill the heating space. The trap remains open for the discharge of air and condensate. As condensate and steam warm the system, the liquid in the element vaporizes and expands, pushing the ball closer to the seat. When the temperature approaches that of steam, internal pressure in the element exceeds the external pressure in the trap body, causing the element to expand further and push the ball tightly into the seat.

Conversely, the accumulation of cool condensate in the trap causes the element fill to liquefy which contracts the element, opening the flow path through the trap and discharging the the condensate and air.



### MATERIALS

COVER	FORGED BRASS	CA 377
SPRING	STAINLESS STEEL	AISI 304
SHIM	COPPER	ASTM B 152
ELEMENT	STAINLESS STEEL	AISI 304
SEAT	BRASS *	ASTM B 21
GASKET	BRASS	ASTM B 21
BODY	FORGED BRASS	CA 377
UNION NIPPLE	BRASS	ASTM B 16
UNION NUT	BRASS	ASTM B 16

\* STAINLESS STEEL IN TT-125

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