



# BESTOBELLSTEAM

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## PT Series

### Installation & Maintenance Instructions for Bestobell Steam PT Series Traps

**Warning:** Bestobell Steam products must only be used, installed and repaired in accordance with these Installation & Maintenance Instructions. Observe all applicable public and company codes and regulations. In the event of leakage or other malfunction, call a qualified service person; continued operation may cause system failure or a general hazard. Prior to servicing equipment, disconnect, shut off, drain and/or bypass all pressurized fluids.

## Please Read These Instructions

The Bestobell PT Series will provide you with long, trouble-free service if it is correctly installed and maintained. A few minutes of your time spent reading these instructions may save hours of trouble and downtime later.

## Ideal Installation

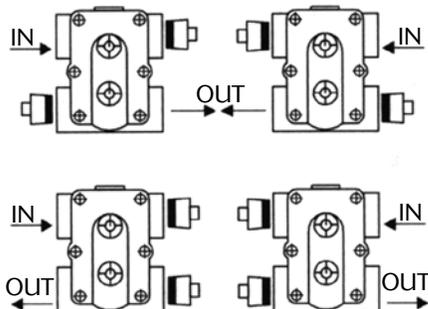
Prior to installation:

- Blow out piping to remove any scale or dirt.
- Verify that your Bestobell steam trap will meet system conditions by checking the nameplate for operating differential pressure and maximum pressure and temperature limits of the trap body.

## Installation & Operation

Bestobell float & thermostatic steam traps feature double inlet and double outlet connections (see installation below). However, only one mounting position is possible, **with the outlet positioned below the inlet**. All unused ports should be plugged.

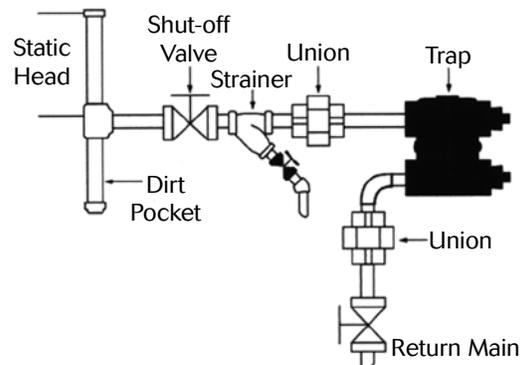
The ball float is connected by a lever to the valve and seat and, once the condensate reaches a certain level in the trap, the float begins to rise. This opens the orifice and the condensate drains until the float is lowered and the valve rests tightly on the seat. The float is positioned above the orifice so the condensate forms a water seat and eliminates the loss of any live steam.



At the top of the trap is a thermostatic air vent that discharges all air and noncondensable gases as soon as they reach the trap. This allows for maximum condensate drainage. The air vent reacts to the system temperature and will close at a temperature a few degrees below saturation to prevent steam leakage. A drain plug is located at the bottom of the trap body to permit easy flushing of dirt.

## Maintenance

Note: Trap users sometimes confuse flash steam with leaking steam. If the steam blows out continuously in a *blue* steam, it's leaking steam. If steam floats out intermittently each time the trap discharges, in a *whitish* cloud, it's flash steam. If traps are found to be leaking steam, the following steps should be taken in the order shown.



**Warning:**

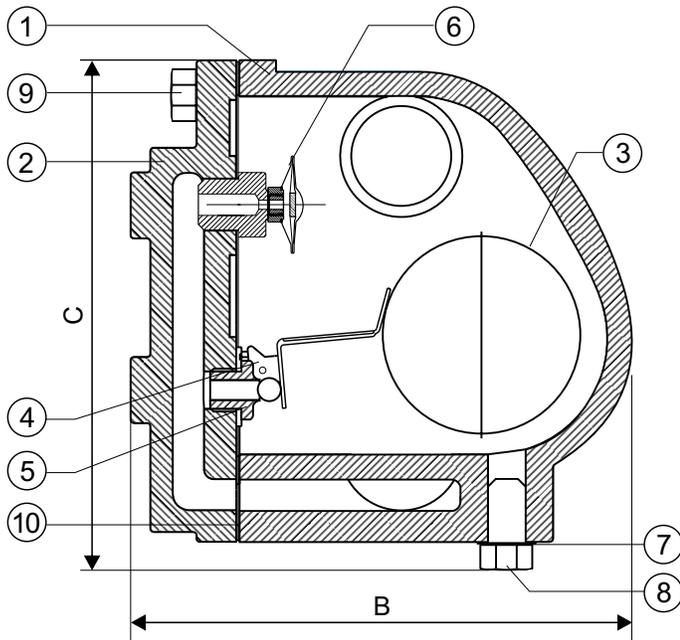
Be sure that there is no pressure in the trap before loosening any fittings or joints. Shut off the steam supply and permit the trap to cool to prevent rupture or distortion of the disc. Isolate connection to condensate system as required.

1. Remove drain plug (8) to empty condensate from trap.
2. Trap does not need to be removed from piping to perform maintenance procedures. Remove cover bolts from around the flange. Lift off the cover (2) of the steam trap, which will bring with it all internal working components.
3. Wipe out or rinse out interior of steam trap body (1).
4. Dismantle the valve mechanisms by removing the bracket pivot pin and pulling away the float lever assembly (3).

Inspect valve seat (5) and plug for any scale build-up, worn or pitted sealing surfaces. If slight evidence of above conditions exist, then the seating surfaces can be touched up by lapping the plug (8) to the seat (5) by hand with a very fine grinding compound paste.

If the surfaces are badly pitted or worn or do not clean up by above method, replace the seat and plug.

5. If the seat (5) has been removed, inspect its seating surface and clean the old gasket material completely away. Replace seat gasket as required.
6. Inspect the float mechanism (3) linkage points for wear, especially at pivot points and pivot pins. Replace if worn.
7. Inspect flat ball for corrosion, pitting splits or pin-holes. Replace if there is any evidence that the float may leak. Replace if the float is dented or crushed.
8. Inspect the air vent mechanism (6) for fatigue cracks, corrosion and worn seats. Replace if it shows any sign of wear or if there is any doubt about its condition.
9. After cleaning all gasket surfaces, reassemble trap in reverse order. Lubricate the lever pivot points with small amounts of graphite paste. An anti-seize compound on all threads will aid in the disassembly of the trap at a later date.
10. Before putting cover and attached mechanisms back into the trap body, make sure linkages move smoothly and freely. Also, check that the valve plug seats properly on the seat (5).
11. Replace cover assembly (2) into the trap body (1) using a new body gasket. Tighten bolts evenly, then test for any leaks after replacing drain plug (8).



No.	Part	Material
1	Body	Cast Iron
2	Cover	Cast Iron
3	Ball Float & Lever Assembly	Stainless Steel
4	Bracket	AISI 304
5	Valve Seat	Cr. Steel
6	Air Vent	Stainless Steel
7	Gasket	Non CAF
8	Drain Plug	Carbon Steel
9	Bolt	High Tensile
10	Gasket	Non CAF

