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# SERIES WSI450/WSIB450H

## INVERTED BUCKET TRAP MODULE WITH UNIVERSAL CONNECTOR

### INSTALLATION INSTRUCTIONS

INSTRUCTION PART NO. 2291000

REVISION 2

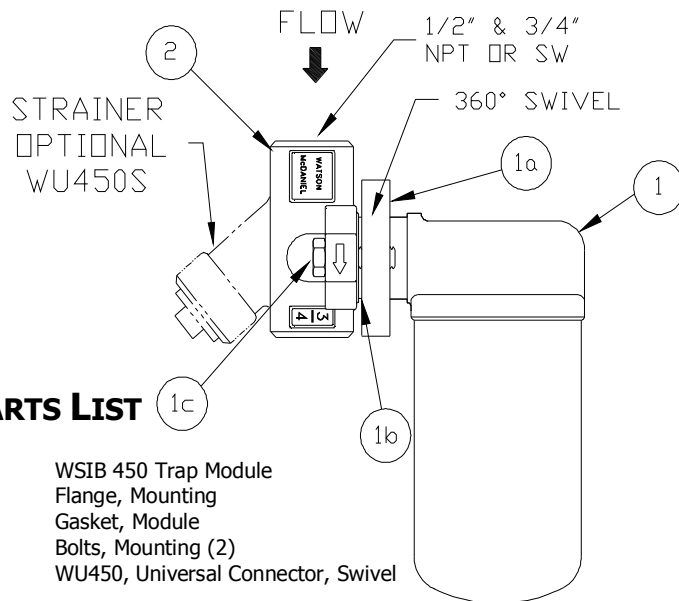
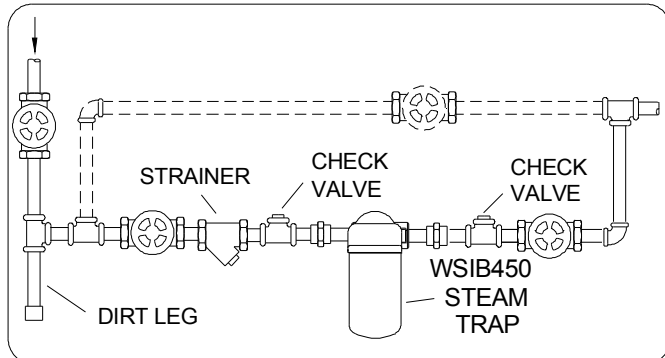
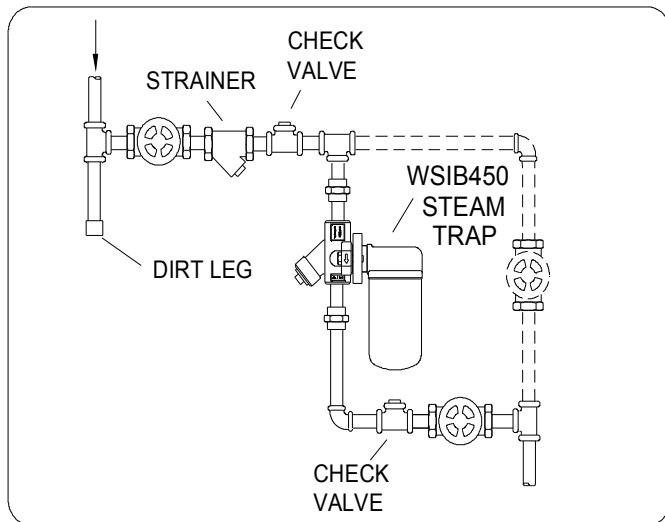
## INSTALLATION

Before installing the Watson McDaniel Inverted Bucket Steam Trap, blow down the piping that leads to the trap's inlet. Use full line pressure to remove all scale, chips, debris, etc. Be sure the trap differential pressure rating is adequate for the installation.

Install the trap with the inlet below the liquid level of the equipment to be drained. A sketch of a recommended hookup arrangement is shown below. Make inlet piping as short as possible with a minimum of elbows and other restrictions. Install a dirt leg in the line ahead of the trap. To allow for maintenance, install a valve on each side of the trap and a strainer ahead of the trap inlet. All valves should be of the full ported type to avoid restricted flow.

If the discharge piping is to be elevated, be sure that the differential pressure is adequate to overcome this lift. Install a check valve (optional) in the discharge piping near trap to prevent backflow when the system is not operational.

**NOTE:** Trap must be primed (fill with water) before start-up. Without priming trap will not operate. This style trap is not recommended for superheated steam service, as the prime may be lost to the excessive heat. (See superheat note.)



## PARTS LIST

- 1) WSIB 450 Trap Module
- 1a) Flange, Mounting
- 1b) Gasket, Module
- 1c) Bolts, Mounting (2)
- 2) WU450, Universal Connector, Swivel

## MODULE REPLACEMENT

- Isolate unit from both supply and return line pressures.
- Wait until trap module can be comfortably touched by hand.
- Remove (2) bolts and discard old WSIB450 trap module.
- Inspect seating area of universal connector & remove remnants of old gasket. Do not scratch sealing surfaces.
- Attach new trap module to universal swivel connector. Apply anti-seize compound to bolt threads and evenly torque 35 - 40 ft-lbs.
- Slowly open upstream and downstream valves.

### MAX. ALLOWABLE CONDITIONS:

PMO	450 PSIG	PMA	720 PSIG @ 100°F
TMO	750°F	TMA	750°F @ 400 PSIG

### MAXIMUM OPERATING PRESSURES

WSIB450 - 20	20 psig (1.4 barg) PMO
WSIB450 - 80	80 psig (5.5 barg) PMO
WSIB450 - 125	125 psig (8.6 barg) PMO
WSIB450 - 200	200 psig (13.8 barg) PMO
WSIB450 - 450	450 psig (31 barg) PMO

### IF SUPERHEAT IS PRESENT

To maintain prime in trap install a check valve at the trap inlet, and/or install a bypass above trap.

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