



## INSTALLATION AND MAINTENANCE INSTRUCTIONS

IMI 4.107

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# Combination Vacuum Breaker/Air Vent Type VB-VS

## Operation

On start up of the system or equipment, the thermostat will be wide open providing free access for non-condensibles and air to be removed from the system. The thermostat senses the temperature difference between steam and non-condensable vapors to operate the valve head. When the system pressure falls to zero and begins to go into vacuum the small vacuum breaker will open allowing air to flow into the VB-VS body cooling the thermostat causing to open to further allow more air to flow into the system at a high rate. The unit is self adjusting and will work equally well at any pressure up to the maximum pressure of the unit. The VB-VS is not recommended for superheat service.

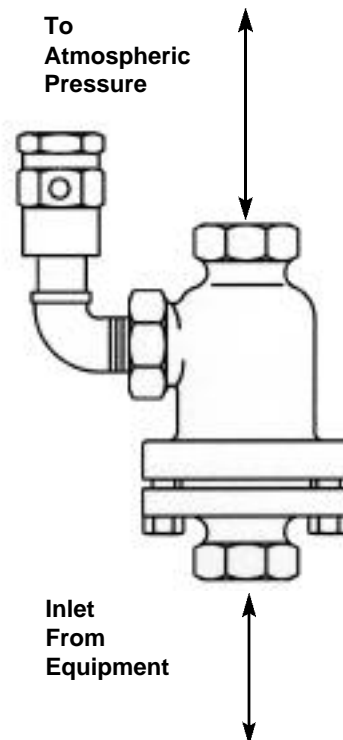
## Installation

The VB-VS should be positioned at the high point of the piping system or equipment or where air collects and vacuum needs to be broken. The VB-VS must be piped in a vertical position so only air and steam surround the thermostatic bellows and vacuum breaker. The discharge can be hot and wet. The outlet should be piped to a safe place. An isolation valve should be placed on the inlet side of the VB-VS.

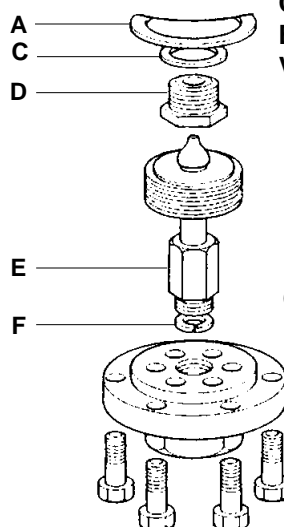
## Maintenance

This product can be maintained without disturbing the inlet piping connections. Complete isolation is required before any servicing is performed. The vent must be cooled down to prevent over-expansion of the thermostat and to prevent steam from escaping from the unit which could burn the operator.

The VB-VS should be disassembled periodically for inspection and cleaning of the valve head and seat. Worn or damaged parts should be replaced.



### Spare Parts:



Cap Gasket STK #81621  
Element Set STK #61966  
VB STK #0190190

Cap gasket A  
Element Set C, D, E, F