## **Watts Vacuum Breaker Assembly Instructions**

Vacuum Breaker Assembly may be used for 11/2" or 2" Header solar panels based on the Reducer Bushing size.

## **Parts Included:**

Model VB-TS-W-1.5 - For 1½" Headers

- Watts Vacuum Breaker 1/2" #N36-M1
- Reducer Bushing 1½" x ½" Slotted x FPT
- Elbow 90° ½ x ½" MPT x FTP

## Model VB-TS-W-2- For 2" Headers

- Watts Vacuum Breaker ½" #N36-M1
- Reducer Bushing 2" x 1/2" Slotted x FPT
- Elbow 90° ½" x ½" MPT x FTP



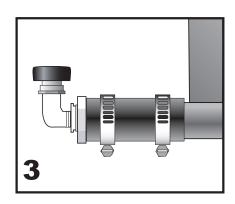
Seal all threads with Teflon tape (tape not included). Screw the vacuum breaker into the Elbow 90°



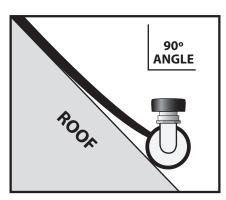
**Model VB-TS-W-1.5** Screw the Elbow 90° into the 1½" x ½" Reducer Bushing.



Model VB-TS-W-2 Screw the Elbow 90° into the 2" x ½" Reducer Bushing.



Install the vacuum breaker assembly at the upper or lower end of the panel row. Insert the 1½" or 2" reducer bushing end of the assembly into the rubber coupling, then use a hose clamp to secure the vacuum breaker assembly; position the clamp over the slot in the reducer bushing.



The Watts Vacuum Breaker should be positioned at or near 90° from horizontal plain.

## **Notes:**

The Vacuum Breaker is used with solar pool heater collectors to break the vacuum, by letting air into the system, and allow the solar panels to drain when the pump is turned off.

For proper drainage to occur, the feed line must run downhill to the 3-way valve. The 3-way valve must be open or "non-positive seal." A positive seal may be converted by removing the seal from the diverter or drilling a 3/16" hole in the center of the diverter inside the 3-way valve. You may also leave the "positive seal" 3-way valve open slightly to achieve the same results.

When needing to isolate the solar, and still run the pump, an isolation ball valve will need to be installed on the solar feed line to the solar to achieve total shutdown capabilities.