

# Solar Six Pack Rapid Installation Picture Guide

## SOLAR SIX PACK RAPID INSTALLATION CARD ONE

1. PLAN YOUR SOLAR HOT WATER APPLIANCE INSTALLATION, KNOW THE SOLAR SIX PACK PARTS BEFORE YOU START

2. SOLAR COLLECTOR MOUNTS WITH FLASHING FOR NO RAIN LEAKS

3. SPOC (PATENTED) POSITIVE OVER-TEMPERATURE PROTECTION UNIT INSTALLATION

4. STANDARD ROOF JACK PROPERLY FLASHED PENETRATION FOR UMBILICAL

5. MOUNT PV PANEL & CONNECT 12V PLUGS

6. COVER UMBILICAL INSULATION AND WIRES WITH ALUMINUM CLADDING

NOTE:  
 1. Put the cladding in place without securing to check connections for leaks after filling.  
 2. Use screws provide to secure cladding.  
 3. Cladding may be painted to blend.

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## SOLAR SIX PACK RAPID INSTALLATION CARD TWO

\* It has come to our attention that some hot water tank outlets have a restriction below them as shown in the area below the threads

**15/16 in.**

•Install Wand in Hot Water Tank Outlet  
 •If Wand Will Not Fit Through 3/4 NPT Thread You must Drill out the Restriction Beneath it.  
 •Use a 15/16 inch Drill Bit

Outlet Port Threads

Present on only on a few hot water tank outlets.

\* If present, this restriction must be drilled out or filed off so the wand will fit through it.

Small, Half or Full, Round File

**7. INSTALL PATENTED SOLAR WAND IN TANK: SEE MANUAL FOR BLOCKED TANK PORT OR FOR BRADFORD-WHITE TANKS**

**UMBILICAL**  
BLACK RED

**WAND**  
BLACK RED

**8. MOUNT PUMP BOX ON WALL NEAR TOP OF HOT WATER TANK, WITH BRACKETS PROVIDED**

ALUMINUM UV PROTECTION

Roof Jack flashing for Weather Sealing & Rodent Sealing

ROOF DECK

FEMALE CONNECTOR  
MALE WOOD CONNECTOR

DON'T CONNECT UNTIL SYSTEM IS FILLED PUMP DAMAGE COULD RESULT

**9. ROUTE UMBILICAL FROM UNDERSIDE OF ROOF JACK AND CONNECT TO TOP OF PUMP BOX**

**WAND**

TANK TEMPERATURE SENSOR

**10. CONNECT BOTTOM OF PUMP BOX TO WAND**

BOND TO TOP OF SACRIFICIAL ANODE

SPRING CLAMP TO T/P VALVE

**11. MOUNT TANK TEMPERATURE SENSOR ON T/P VALVE USING SPRING OR BARE TANK METAL WITH EPOXY**

**12. CLEAN UP ALL WORK AREAS, PREPARE TO GRAVITY FLUSH & FILL (TO FILL WITH PUMP SEE MANUAL)**

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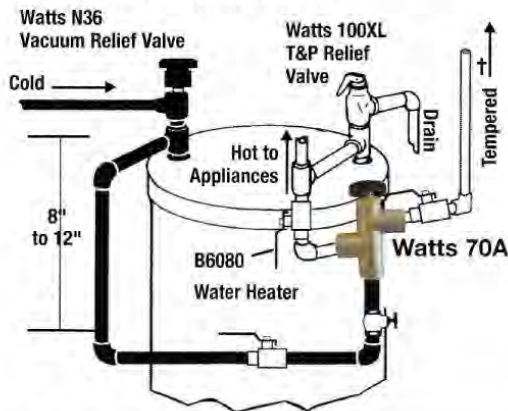
# TEMPERING AND PROPORTIONAL THERMOSTATIC MIXING VALVE INSTALLATION

Valve choice depends on local Building/Mechanical/Plumbing Codes and Water Quality  
These valves are to be placed at the hot water tank.

**IMPORTANT: BE SURE TO REMOVE THERMOSTATIC ASSEMBLY from valve before sweating connections, otherwise it will become damaged.**

**IMPORTANT: The Mixing Valve must be placed below the tank hot water outlet to provide a heat trap, so convection of hot water from the tank to the cooler valve will not deposit minerals that will clog the valve and require frequent cleaning.**

### Watts Series 70A Hot Water Extender Tempering Valves Installation Instructions



### Honeywell AM-1 Series Hot Water Extender Tempering Valves Installation Instructions

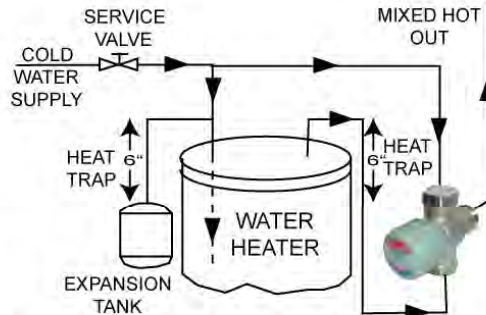


Fig. 1. AM-1 Series ASSE 1017 application solar

### WARNING

Watts Hot Water Master Tempering Valves cannot be used for tempering water temperature at fixtures. Severe bodily injury (i.e. scalding or chilling) and/or death may result depending upon system water pressure changes and/or supply water temperature changes. ASSE standard 1016, 1069 or 1070 listed devices such as Watts Series MMV, USG, and L1 11 valves should be used at fixtures to prevent possible injury.

The Watts Hot Water Tempering Valves are designed to be installed at or near the boiler or water heater. They are not designed to compensate for system pressure fluctuations and should not be used where ASSE standard 1016, 1019, or 1070 devices are required. These Watts valves should never be used to provide "Anti-scald" or "Anti-chill" service.

Minimum Flow Requirements to Maintain Set Temperature: 2 gpm for size 1/2" and 3/4"

### INSTALLATION INSTRUCTIONS

These models shall be used for supply water to tubs, shower, bathing facilities and other outlets. These valves should be installed where they will be accessible for cleaning, servicing or adjustment.

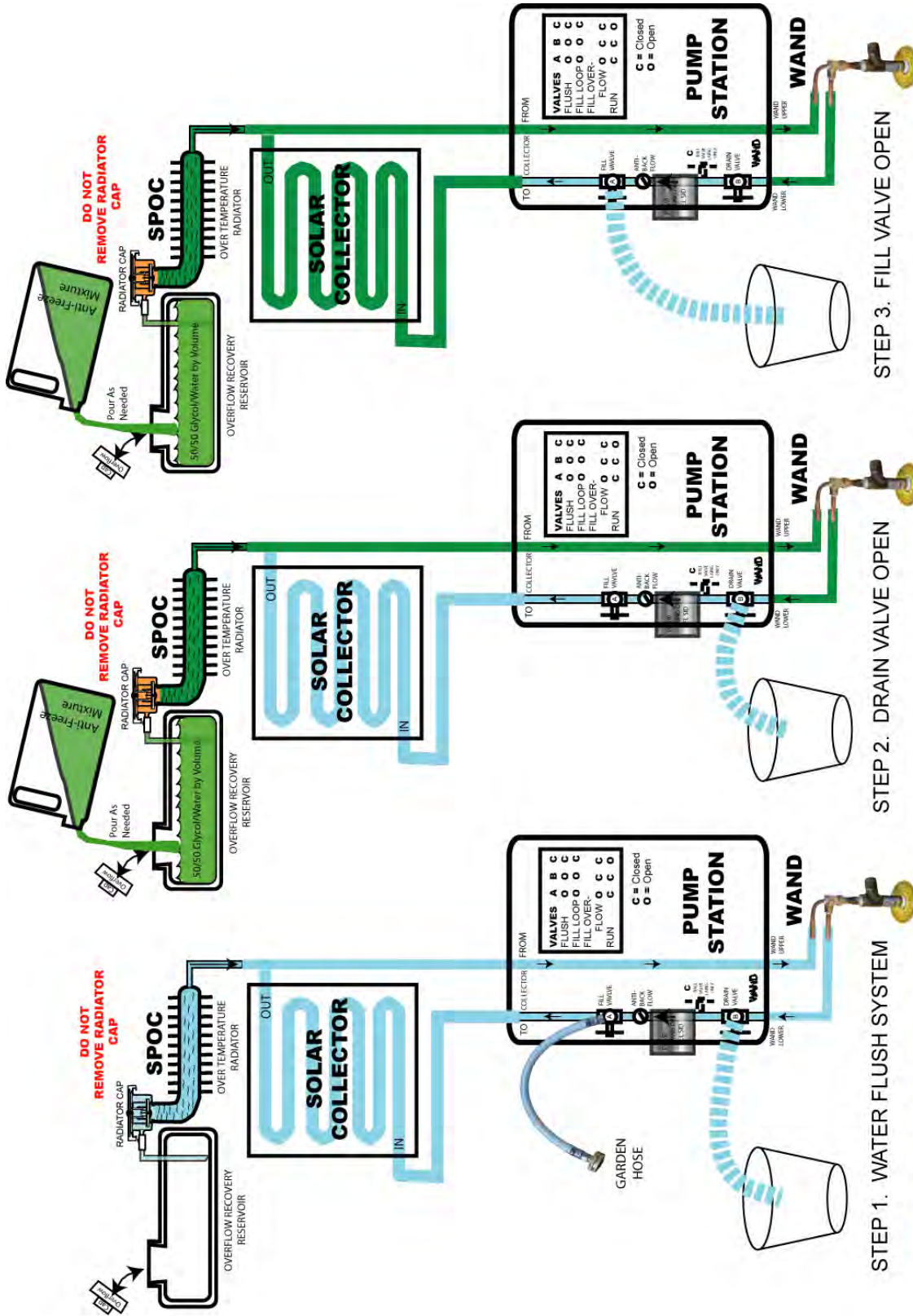
#### ASSE 1017 Applications - Point of Source

These AM-1 Series models can be installed in any position consistent with the intended use. For domestic hot water supply, the valve must be installed as shown in Fig. 1. There shall be no shut-off valves installed between the cold line and the cold water connection on the AM-1 Series valve. Check valves shall be installed as indicated. A cold water service valve may be installed, as indicated, between the cold water supply line to the distribution system and the cold water line supplying both the water heater and the AM-1 Series valve.



Butler Sun Solutions, Inc.  
Solar Hot Water

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## MANUAL FLUSHING & FILLING METHOD

