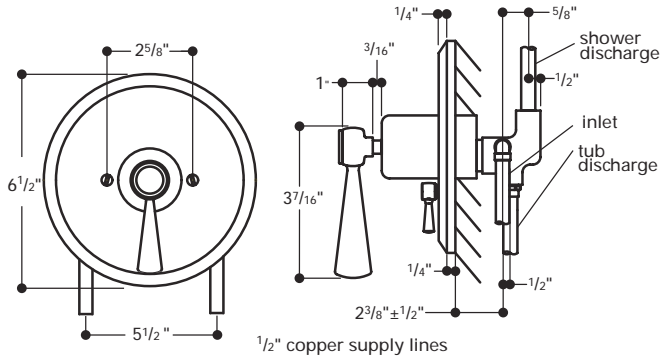
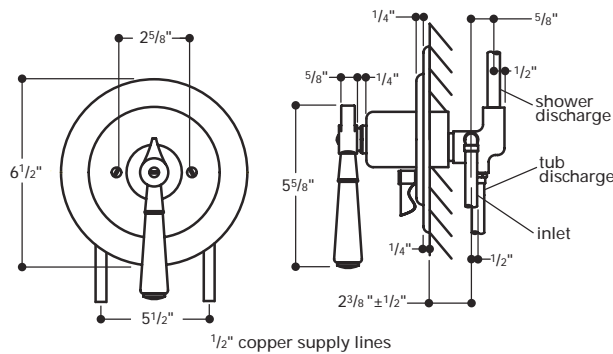


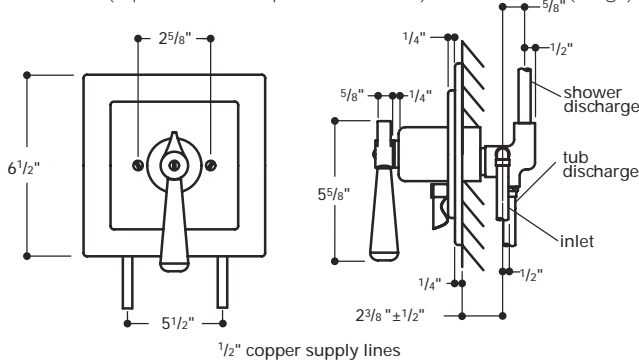
**BNSV88-K**(Beacon trim) & **GUSV87R**(rough)



**WWSV86-K**(Round trim with metal lever handle) & **GUSV87R**(rough)  
**WWSV87-K**(Round trim with porcelain handle) & **GUSV87R**(rough)



**WWSV84-K**(Square trim with metal lever handle) & **GUSV87R**(rough)  
**WWSV85-K**(Square trim with porcelain handle) & **GUSV87R**(rough)



**IMPORTANT**

- To ensure this product is installed properly, you must read and follow these guidelines.
- The owner/user of the valve must keep this information for future reference.
- The risk of scalding exists until the installer has properly set the temperature high limit stop.
- This product must be installed by a professional contractor and conform to all applicable codes

- Refer to the specification and assembly drawings attached. Valves are sold partially assembled but shown fully disassembled for illustrative and service purposes only.
- Before soldering any connections, remove cartridge to prevent damage to seals.
- This valve should be on-site prior to rough in and allows the installer to visualize the installation.
- Inspect this product to assure you have all parts required for proper installation.
- Check incoming water pressure; ideal operating pressure is 40-50 psi. The minimum is 25 psi. and the maximum is 80 psi.
- Use only a strap wrench or protected/smooth-jaw wrench on any finished surface.

**ROUGH IN:**

1. Make sure the valve body is positioned according to valve markings so the inlets are situated with hot piped on the left and cold piped on the right.
2. Remove and discard the wall mounting flange(T-177) located beneath the tile shield. The dome cover(T-19) included will not be used during the installation.
3. REQUIRED: Valve body rough-in depth is 2 3/8" +/- 1/2" from the centerline of the supplies/inlets to the face of the finished wall. Install so the back side of the plaster shield contacts the finished wall as indicated on the shield.
4. Run 1/2" copper supply lines with a 5 1/2" center spread to the proper height of the valve inlets and be sure to secure all piping and fittings.
5. Turn on the hot and cold supplies then check for leaks.

**VALVE OPERATION:**

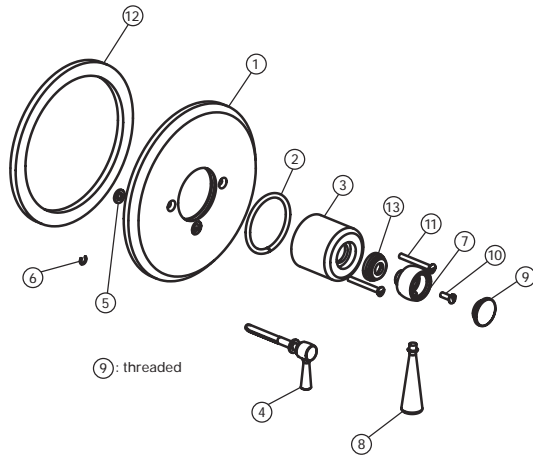
6. When the finished wall is complete, turn on the hot and cold supplies and pull off the tile shield(T-176) and discard. Both supplies must be on or the valve will not operate.
7. The larger of the 2 handles is for controlling temperature only, not volume. The smaller handle is used to divert the water flow to another fitting. Install the large handle so it rests at 6 o'clock in the OFF position then turn the handle counter clockwise through the cold position then warm and stopping at the hot position. If additional rotational friction is required to maintain the handle position, tighten the packing nut(T-17).

These guidelines have been prepared for the professional contractor to aid in the installation of:

**PRESSURE BALANCE VALVE TRIM WITH DIVERTER**  
**(BNSV88-K & GUSV87R) (WWSV86-K & GUSV87R) (WWSV87-K & GUSV87R)**  
**(WWSV84-K & GUSV87R) (WWSV85-K & GUSV87R)**

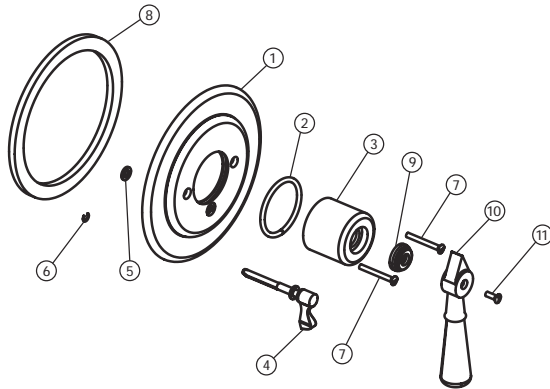
All dimensions are based on original specifications and are subject to change and variation. Please consult your Design Associate for current specifications.

**BNSV88-K**(Beacon trim)



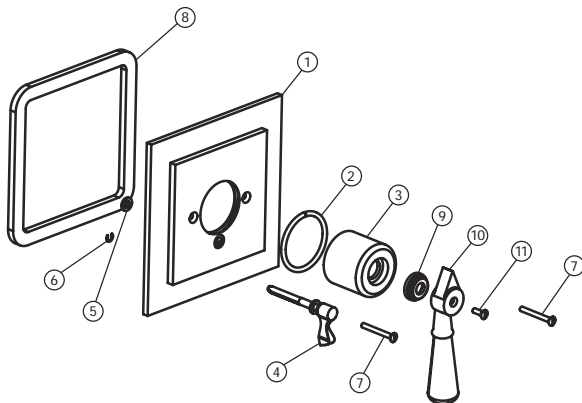
**WWSV86-K**(Round trim with metal lever handle)

**WWSV87-K**(Round trim with porcelain handle)



**WWSV84-K**(Square trim with metal lever handle)

**WWSV85-K**(Square trim with porcelain handle)



8. Allow the valve to run in warm position for a few minutes to completely flush the system. If system is quite dirty, remove valve spindle to ensure proper flushing.
9. **IMPORTANT:** This valve is equipped with a limit stop screw(T-34) to be used to limit the valve handle from being turned to excessively hot water discharge temperatures.
10. Setting the limit stop screw: Open the valve to the maximum desired temperature then turn the limit stop screw(T-34) in until it seats.
11. **WARNING: FAILURE TO ADJUST THE LIMIT STOP SCREW PROPERLY MAY RESULT IN SERIOUS SCALDING.**

**INSTALL THE TRIM:**

12. Slide the trim plate assembly(1,2,4-6) over the valve stem while making sure the diverter shaft/handle(4) is aligned with the diverter spindle(T-23A,B). **IMPORTANT:** T-23A,B must be properly aligned and the handle must rest at 6 o'clock position. If the handle and diverter spindle are not properly aligned, the valve will not function. See Figure 1.
13. Secure the plate against the wall using the screws(7 or 11) provided. If desired, a bead of clear silicone can be applied to the back side of the trim plate(1).
14. Apply a small amount of lubricant to the o-ring(2) then hand tighten the dome cover(3) completely down onto the spindle(TA-10). The dome cover **MUST** be tightened to prevent damage to the handle.
15. Slide the handle trim spacer(9 or 13) onto the valve stem then attach the handle using the handle screw provided(10 or 11).
16. Open the valve and confirm the temperature setting, adjust as required. Verify that the diverter is functioning properly. **NOTE:** After diverting to the shower head, a small trickle of water may continue to flow from the tub spout which is normal.

► If further assistance is required, please contact Product Support at 1-800-927-2120 (8am-7pm EST).

These guidelines have been prepared for the professional contractor to aid in the installation of:

**PRESSURE BALANCE VALVE TRIM WITH DIVERTER**  
**(BNSV88-K & GUSV87R) (WWSV86-K & GUSV87R) (WWSV87-K & GUSV87R)**  
**(WWSV84-K & GUSV87R) (WWSV85-K & GUSV87R)**

All dimensions are based on original specifications and are subject to change and variation. Please consult your Design Associate for current specifications.

### INDIVIDUAL PARTS

SC-15A	Handle set screw
T-1	Hot renewable seat
T-2	Cold seat O-ring
T-3	Cold renewable seat
T-5	Hot washer screw
T-6	Hot washer
T-7	Cold washer retainer
T-8	Cold washer
TA-10	Flow control spindle
T-11	Cap gasket
T-12A	Cap assembly
T-16	Packing, O-ring and washer
T-17	Packing nut
T-19/20	Dome cover and lock nut
T-21C	Diverter retainer
T-23A	Diverter spindle (Model A) (beige or gray)
T-23B	Diverter spindle (Model B) (black)
T-24	Spindle O-ring
T-27	Escutcheon
T-27CL	Diverter handle clip
T-27B	Gasket
T-28	Escutcheon screws
T-29A	Dial (Model A)
T-29B	Dial (Model B)
T-29C	Dial (Model C)

### INDIVIDUAL PARTS

T-30	Diverter and/or volume handle
T-32	Handle screw with lock washer
T-33	Plug button
T-34	Limit stop with O-ring
T-35A	Hot seat removal tool
T-35B	Cold seat removal tool
T-52A	Stop spindle assembly/ escutcheon screw retainer
T-55B	Stop plaster shield
T-55C	Stop plaster shield removal tool
T-176	Plaster shield
T-177	Wall mounting flange
T3-31 INS	Handle insert

### COMPOSITE PARTS

RC-14X	Single blade lever handle: Set screw (SC-15A)
T-52	Stop spindle assembly/ escutcheon screw retainer (T-52A)
T-101	Stop plaster shield (T-55B) Acrylic handle: Handle screw (T-32) Plug button (T-33)

### COMPOSITE PARTS

TA-4	Hot seat (T-1) Cold seat (T-3)
TA-9	Cold seat O-ring (T-2) Hot washer screw (T-5) Hot washer (T-6) Cold washer retainer (T-7) Cold washer (T-8) Cap gasket (T-11)
TA-10	Spindle assembly
TA-25A	Diverter/volume spindle (T-23A) O-ring (T-24) for Model A tub/shower valve (beige or gray)
TA-25B	Volume spindle (T-23B) O-ring (T-24) for Model B shower valve (black)
T-31	Temperature control handle: Handle screw (T-32) Plug button (T-33R)
T-31L	Loop style lever handle: Insert (T-31 INS) Handle screw (T-32) Plug button (T-33)
T-31S	Solid style lever handle: Insert (T-31 INS) Handle screw (T-32) Plug button (T-33)

