WARNING: Prior to working on the valve, the supply of steam to the system should be turned off. Within the following package contains the Danfoss valve insert:

![Insert Diagram]

The internal replacement of the SWRF B with the Danfoss insert provides the ability of individual control to the radiator via a non-electric thermostatic operator, thus reducing overheating within the room.

Prior to installing the Danfoss insert, the installer should read through the installation instructions and be familiar with the process involved in replacing the internals of the valve body.

**STEP 1: Removal of SWRF-B Internals**

- Carefully remove the convector cover. (if applicable)
- Loosen the packing nut (2) from the valve and fully turn the knob of the SWRF-B counter-clockwise, opening the valve.
- Remove the internals of the valve (3 thru 6). Refer to Table 1.

**Troubleshooting:** In the event the shut-off valve (6) has a difficulty of being removed, a screwdriver and a pair of needle nose pliers will aid in removing this part from the valve.

**Table 1**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Handle screw</td>
</tr>
<tr>
<td>2</td>
<td>Packing nut</td>
</tr>
<tr>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>4</td>
<td>Insert</td>
</tr>
<tr>
<td>5</td>
<td>Stem washers</td>
</tr>
<tr>
<td>6</td>
<td>Shut-off valve</td>
</tr>
</tbody>
</table>

**STEP 2: Evaluation and Valve Preparation**

- With a wire brush or resurfacing tool (contact local Danfoss distributor for details on resurfacing tool), clean the valve seat by running it in the taper and valve stem opening to provide a clean base to accept the Danfoss insert.
- Clean or vacuum the seat opening of debris.
- Perform a visual inspection of the valve seat. If the valve seat is damaged the valve body should be replaced before installing an insert.
STEP 3: Danfoss Internals Installation

- Align the internal insert replacement (2) within the valve body.
- Twist the insert as it is being installed within the valve stem opening to ensure the lower insert gasket (3) seats properly.
- The upper lip of the internal insert should not sit on the shoulder of the valve body. A gap should be visible between the lip and shoulder on the valve as seen in the figures below.
- Evenly apply thread locker, Loctite Red 271, to the male threads of the valve body’s bonnet base.
- Screw the bonnet assembly (1) to the body of the valve. When the bonnet assembly can no longer be turned easily by hand, tighten the bonnet with a torque wrench and a 1” 6-point deep socket to a minimum 25 ft/lbs. 

Failure to apply thread locker and properly tighten the valve bonnet can result in the leakage of steam from the valve bonnet.

STEP 4: Installation of Danfoss Thermostatic Operator

Follow the standard mounting procedures for the Danfoss RA2000 operator that has been selected.