

**SUBJECT:** De-scaling Residential Steam Generators With Manual Drain (Auto Drain see Bulletin No 08-09)

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**CAUTION: HOT WATER may discharge from: Drain Plug When Removed  
Where Protective Clothing & Eyewear When Using Hazardous Chemicals**

1. Turn off main power to steam generator so there will be no chance of the boiling tank producing steam during the cleaning operation. Allow any hot water in the tank to cool to a safe temperature before draining. This can be accomplished by pouring cold water into the steam unit through the steam line union.
2. Manually drain the steam boiling tank by:
  - a) removing the drain plug **Note: See Caution Above.**
  - b) opening the factory or field installed manual drain valve. **Note: See Caution Above.**

Replace the drain plug or close the manual drain valve once the liquid has been drained.

3. Unscrew the union on the steam line so a chemical that will dissolve the mineral build-up can be poured into the boiling tank. Always follow the Manufactures' instructions when using chemicals.
4. It is suggested to use an "ice machine" cleaner that can be purchased from a refrigeration service company, as it usually can be disposed of in an environmentally friendly manner after it has dissolved the build-up. CLR, or vinegar may also be used. Always follow the Manufactures' instructions when using chemicals. Allow enough time (as per the manufactures instructions) for the build-up to be dissolved.

**JR SERIES**

- **JR-1** : use approximately 1.5 litres.
- **JR-2** : use approximately 2 litres.
- **JR-3** : use approximately 2 litres.
- **JR-4** : use approximately 3 litres.

**CR SERIES**

- **CR-9** : use approximately 5.5 liters.
- **CR-11** : use approximately 5.5 liters.
- **CR-12** : use approximately 5.5 liters.
- **CR-14** : use approximately 5.5 liters.

5. After the build-up has been dissolved, repeat step # 2. **Caution: Where Protective Clothing & Eyewear When Using Hazardous Chemicals**

6. Ensure the **water supply** is turned **on before** turning on **the electrical supply** to the steam generator.

Turn on the main power to the steam generator.

Turn on the steam generator with the timer control so that the boiling tank will fill with water. The fill should be completed in about 45 seconds.

Turn off the timer switch when the boiling tank stops filling with water so there will be no chance of the unit producing steam during the flushing operation. Rinse the chemical out of your steam unit by repeating steps 6, 1 and 2 a few times to, fill the boiling tank with water and then drain out the chemical residue.

7. Ensure that the drain plug or manual drain valve is closed when the rinsing is complete.
8. Your steam generator is now ready to be used as outlined in the installation instructions.