Johnson Mfg & Sales N5499 County Rd E

Ogdensburg, WI 54962

(920)244-7581

Water Treatment Program for Johnson Outdoor Furnaces

The treatment program consists of two chemicals:

Prep Solution 102

And

Water Treatment 101

*Note: Prep 102 should always be used on new furnaces, and is strongly recommended each time you clean and flush your system. Prep 102 is a cleaner and metal conditioner, and will clean and condition the interior water jacket to prolong the life of your furnace. IF YOU HAVE ANTIFREEZE IN YOUR SYSTEM YOU DO NOT NEED TO DRAIN & FLUSH EVERY TWO YEARS, BUT YOU MUST TEST THE ANTIFREEZE EVERY YEAR TO MAKE SURE IT IS STILL IN GOOD CONDITION!

The following instructions should be used for Prep 102:

- 1. Drain furnace completely by removing the drain plug/boiler drain valve.
- 2. Place a garden hose at vent/fill tube located on top of furnace. Run water until clear.
- 3. Replace drain plug/boiler drain valve, and start running water into the system. After system has filled half way, add the Prep 102 at the fill tube in the following amounts: for a new furnace 1 bottle, for used or dirty furnace 2 bottles; then continue filling the furnace to normal working range.
- 4. Start the circulating pump, and then do either of the following:
 - Hot Process: Start a small fire in the furnace and bring the water temperature up to 100° or to normal working range. Once the temperature has been reached, allow the fire to go out and continue to circulate the water for 4 to 7 hours.
 - Cold Process: Let the system circulate for no more than 12 hours.

*Hot Process recommended, but is not mandatory.

5. After using either the hot or cold process, turn off the circulating pump, drain the furnace completely, open the boiler drain valve, and place the garden hose in the fill vent on top of the stove and flush the system until the water runs clear. Make sure that when you finish and replace the drain plug/boiler valve that you use pipe compound or Teflon tape on the threads.

Then complete the following steps for the Water Treatment 101:

- 1. Fill stove with soft water. If not available at your tap, Johnson Mfg & Sales sells a Softener Solution Kit.
- 2. Add approximately 1 bottle of Treatment 101 for a Little John or 2 bottles of Treatment 101 for a Big John. This may vary based on the size of your total system, and the type of water that you have available to you; you may need more then this amount.
- 3. Start the circulating pump and let circulate for a minimum of 2 hours.
- 4. After <u>one week</u>, take a water sample by pulling the sight tube off and filling the sample bottle with about a ½ cup of water (2 ounces or so,) and send the sample to Johnson Mfg & Sales for testing to determine if you water meets the proper specifications to reduce corrosion damage to your furnace.

If you do not have antifreeze in your system, you <u>must</u> drain the water and flush the system every 2-3 years. It must then be refilled with soft water and new treatment added. If you have antifreeze in your system you must check it every year to make sure the antifreeze is still good. To check the antifreeze you will need to use the appropriate tester (one for propylene glycol); we can test this for you. You also will want to look at the antifreeze to make sure that it is not black or discolored as this is a sign that your antifreeze has gone bad. Systems that have been overheated will need to replace their antifreeze, and drain and flush the system, as overheating causes damage to the antifreeze.

Water must be tested at least annually by sending a water sample to Johnson Mfg & Sales Inc. You may also purchase a water test kit from us or your local dealer to test your own water. Many dealers also offer water testing.

YOUR WARRANTY DOES NOT COVER CORROSION, SO IT IS IN YOUR BEST INTERESTS TO PROTECT YOUR FURNACE AS MUCH AS POSSIBLE FROM THE EFFECTS OF CORROSION.