

# Auxiliary Heater for Whirlpool Spa INSTALLATION INSTRUCTIONS

## READ ALL INSTRUCTIONS BEFORE BEGINNING CONVERSION.

An auxiliary heater, gas fired or electric, can be added to your spa, offering a faster water temperature rise than the integrated electric heater provided on the spa. Do not use a heater with a rating greater than 60,000 BTU's for spas of up to 250 gallon water capacity, and not more than 150,000 BTU's for spas up to 400 gallon capacity.

Converting to an auxiliary heater will involve some electrical wiring, providing a gas line (for a gas heater) and modifications to the spa plumbing and components. We recommend that a qualified spa installer or licensed contractor perform this conversion.

**IMPORTANT:** Locate the heater at least 5 ft. but not farther than 20 ft. away from the spa; make sure the base of the heater is on the same level as the base of the spa. Refer to the heater manufacturer's installation instructions for proper placement and clearance around the heater as well as specific plumbing and electrical details.

**IMPORTANT:** Proper installation of an auxiliary heater and compliance with local codes is the responsibility of the installer. The spa manufacturer does not warrant auxiliary heaters or connections of auxiliary heaters, nor is it responsible for damage to the spa which occurs during installation procedure. See auxiliary heater manufacturer's warranty packed with the heater.

### Preparation:

1. Turn OFF electrical power to the spa at the main service panel breakers.
2. Drain the spa completely.
3. Open the spa skirt equipment door. Temporarily remove the skirt panel(s) as required to cut the PVC pipe to make connection into the discharge plumbing of the 2 pump system (Figure 1) or 1 pump system (Figure 2).
4. On the two pump system, locate the U-shaped heater loop in the filter pump discharge plumbing and cut where indicated. Note the direction of water flow indicated by the labels on the heater loop. Refer to Figure 1.
5. On the one pump system, look for a straight run of rigid PVC in the pump discharge line nearest to the pump. Cut 8 1/2" out of the pipe. Note the direction of water flow as indicated by the labels on the pump discharge line. Install Bypass Kit D827000 (available from your spa dealer) in this opening. Refer to Figure 2.

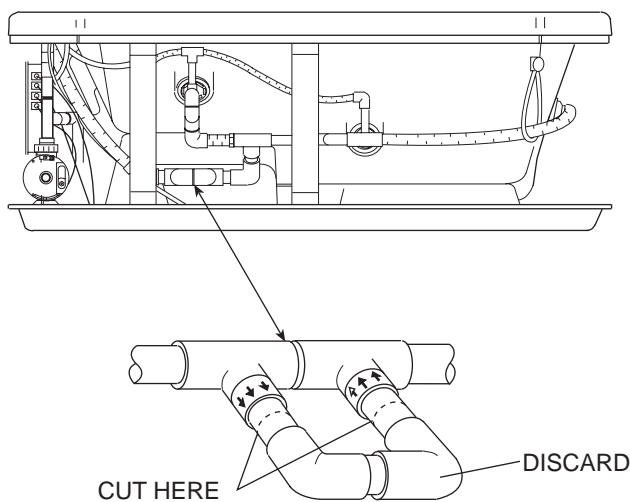


FIGURE 1. TWO PUMP SYSTEM

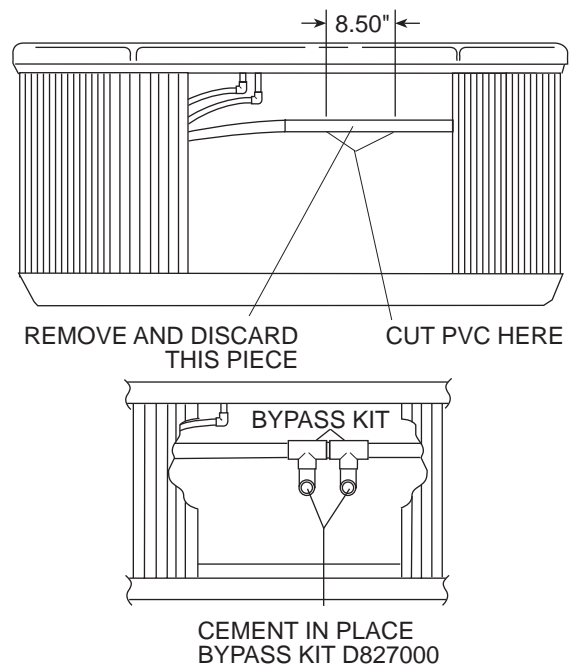


FIGURE 2. ONE PUMP SYSTEM.

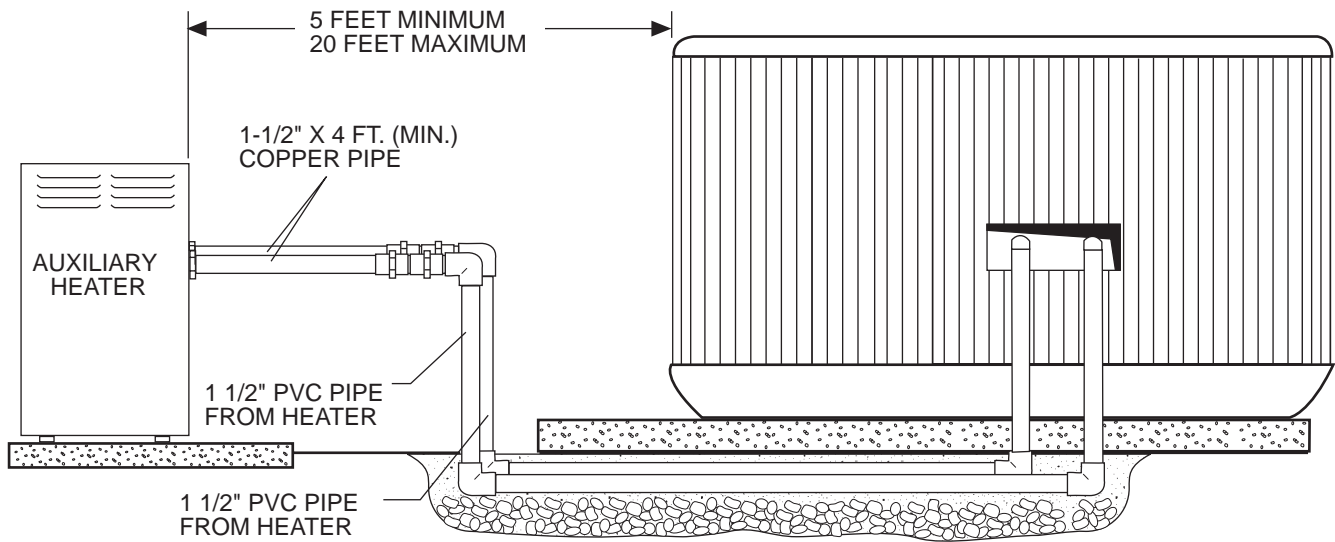


FIGURE 3. SPA WITH INTERCONNECTING PIPING TO AUXILIARY HEATER.

**Preparation (continued)**

6. Interconnecting piping between the heater and the spa should be 1-1/2" minimum, schedule 40 PVC. We recommend that you use at least 4 feet of copper 1-1/2" pipe at both the inlet and outlet connections on the heater. Use as few fittings and bends as possible and avoid any vertical or elevated horizontal piping configurations which would trap air. If a chlorinator is to be used, install a check valve, and install the chlorinator in the return line from the heater to the spa, after the check valve. Follow chlorinator manufacturer's instructions.
7. Starting at the auxiliary heater, dry fit the piping up to the spa. Refer to Figure 3. (Figure 3 is a suggested plumbing layout; actual installation sites will vary.)
8. To accommodate interconnecting piping from the auxiliary heater, glue a 2" x 1-1/2" reducer bushing onto the piping stubs remaining after the modification made in Step 4-5.
9. Cut clearance holes in the skirt panel(s) as required to accommodate the piping between the spa and the auxiliary heater. Reinforce cut panel(s) with 3/8" thick plywood sheet(s). Refer to Figure 4.
10. Prepare the optional heater installation site according to the heater manufacturer's instructions. Make sure the heater is located so the interconnecting piping between the spa and the heater will pass through the skirt panels as modified in Step 9. It may be necessary to modify the insulating foam batts to clear the auxiliary heater's interconnecting piping.
11. Cement the fitted interconnecting piping and connect and glue inlet piping into the bypass loop on the spa. Connect and cement return piping to the bypass loop.
12. Fill the spa with water. Check for leaks.
13. Reinstall skirt panels if no leaks are present.
14. Turn power ON to the spa at the main service panel.
15. Set the water temperature at the control panel per instructions in the Owner's Manual.

**Note:** The following steps are for **gas heaters only**.

16. Adjust the thermostat on the gas heater as follows:
  - a. Select standard mode on the spa control panel.
  - b. Set the gas heater thermostat to its maximum setting.

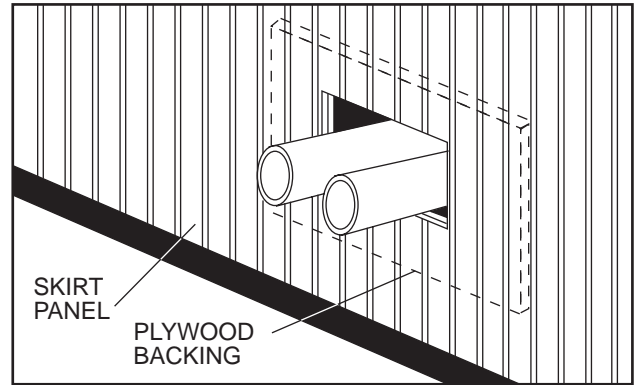


FIGURE 4. PLYWOOD REINFORCING.

- c. When the spa water reaches the desired temperature.
  - set in Step 3, turn the gas heater thermostat down until the gas turns off.
- d. Mark the point at which the heater turns off on the gas heater thermostat dial for future reference. **Do not increase the setting past this point. Lock in place if possible.**

**CAUTION:** The spa water will heat to the highest temperature setting on the gas heater thermostat. To ensure that the water temperature will not exceed the desired temperature, adjust the gas heater thermostat according to step 16.

17. If the gas heater is equipped with a pressure switch, adjust the pressure setting according to the manufacturer's instructions. The pressure switch is properly adjusted if the heater is operational when the low speed jets are activated. If the auxiliary heater does not operate in this manner, refer to the gas heater manufacturer's instructions. There may be insufficient water pressure to operate the auxiliary heater switch. It may be possible to operate it in the high speed (jets) mode only.
18. Test the complete spa system for proper operation.

