

When adding spa shock (chlorine or non-chlorine) or pH balancing chemicals activate the jet pump(s) and leave the spa cover open for a minimum of 20 minutes. By doing this you will allow excessive chemical vapors to exit the spa, protecting pillows and plastic knobs from chemical attack.



**WARNING: RISK OF PERSONAL INJURY, DROWNING OR ENTRAPMENT!**

Never leave your hot tub unattended for any reason while the cover is open and accessible, especially to small children and animals!

**CAUTION: RISK OF PERSONAL INJURY OR SPA DAMAGE!**

Never add chlorine tablets (trichlor) or acid to your hot tub for any reason! These chemicals may damage components within your hot tub, burn or irritate your skin, create a rash and void the manufacturer warranty for your spa.

**14.3 Other Additives**

Many other additives are available for your spa. Some are necessary to compensate for out-of-balance water, some aid in cosmetic water treatment and others simply alter the feel or smell of the water. With our chemical products your authorized Jacuzzi dealer can advise you on the use of these additives. Jacuzzi chemicals are for use in the U.S. only.

**14.4 CLEARRAY® (Ultraviolet) Water Purification System**

CLEARRAY Water Purification System is exclusive technology utilizing natural ultraviolet technology to eliminate waterborne bacteria, viruses, and algae in portable spas. The ultraviolet light otherwise known as UV-C or germicidal light inactivates the microorganisms disrupting the DNA so that it cannot reproduce and is considered lifeless. CLEARRAY is plumbed in-line with your filtration system. After the water is drawn from the pump, filter, and heater it is then directed through the CLEARRAY system. Water passes through an ultraviolet light energy that treats and disinfects the water. The water is then pumped back into the spa giving you crystal clear water instantly. The system has a ballast that is the power supply for the purification system (Figure 14.4a); it has two LED indicator lights. The “Power On” (red color) indicating incoming power flow and the “Lamp on” (green color) indicating the system is properly working. CLEARRAY is standard for all models.

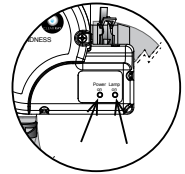


Figure 14.4a

After a year the bulb must be replaced. If the CLEARRAY timer has been programmed correctly a message will appear on the LCD display when the time allotted has expired. In order to clear the message, a new CLEARRAY UV bulb needs to be installed and the timer must be reset, page 44.

## 14.5 CLEARRAY® Bulb Replacement and Quartz Tube Maintenance

**Important:** It is **MANDATORY** that the CLEARRAY UV bulb is replaced and the quartz tube be cleaned every 12 months to maintain optimum performance.

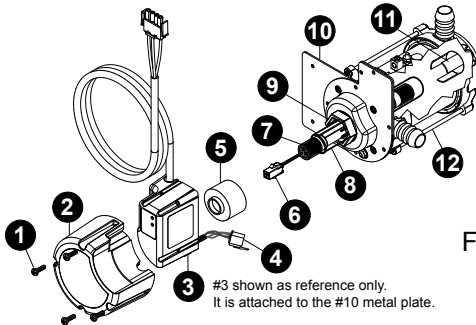


Figure 14.5a



**DANGER: TURN THE SPA BREAKER TO THE OFF POSITION!**



**WARNING: DRAIN THE SPA IF YOU ARE REPLACING OR CLEANING THE QUARTZ TUBE!**



**WARNING: ALLOW BULB TO COOL DOWN PRIOR TO REMOVING FROM QUARTZ TUBE.**



**DANGER: NEVER LOOK AT THE LIT BULB. THIS CAN CAUSE SEVERE EYE DAMAGE OR BLINDNESS.**

### UV bulb replacement and quartz tube maintenance:

**Note:** Location of CLEARRAY System and connection may vary by model.

1. Turn the breaker to the spa OFF. **DRAIN YOUR SPA.**

**Note:** If you are only replacing the UV bulb then the spa does not have to be drained. You will need to drain it if you are replacing or cleaning the quartz tube.

2. Once the UV bulb has cooled off remove the CLEARRAY System enclosure cover (2) by removing the four screws (1). This will expose the UV bulb and connections, Figure 14.5b.

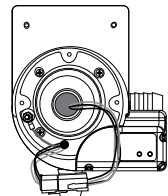


Figure 14.5b



**DANGER: NEVER REMOVE COVER WITHOUT FIRST TURNING OFF AT POWER SOURCE AND DRAINING THE SPA.**

Figure 14.5c

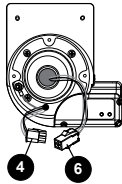


Figure 14.5d

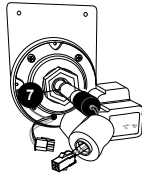


Figure 14.5e

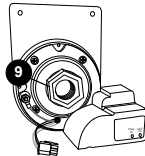
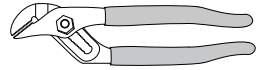


Figure 14.5f



3. Disconnect UV bulb socket (6) from the power cord socket (4), Figure 14.5c.
4. Slowly remove the UV bulb (7) out of the quartz tube, Figure 14.5d.
5. Remove the quartz seal compression nut (9) by turning it **counterclockwise**, Figure 14.5e. Use a pair of channel-lock pliers if needed, Figure 14.5f.
6. Now you are ready to clean or replace the quartz tube (8). For cleaning the quartz tube, follow steps 7 and 8 then proceed from step 9. For replacing quartz tube, skip steps 7 and 8 and proceed from step 9.
7. **Cleaning quartz tube:** Clean the quartz tube by wiping, until clear, using a paper towel or a dry cotton cloth. If needed, a household tub and shower lime removal product can be used.



**WARNING:** Do not use abrasive cleaners as they can scratch the quartz tube surface.

8. Rinse the quartz tube with clean water to completely remove any cleaning products that were used in step 7.
9. **Replacing quartz tube:** Remove the black o-ring from the quartz tube and place it on the new tube. Place the new quartz tube (8) into the water chamber (12) with the domed end first making sure it is inserted and seated inside the quartz end holder (11).
10. Reinstall and hand tighten the quartz seal compression nut (9) by turning it **clockwise**.
11. Refill your spa.
12. **System Test 1:** Assure there is no water dripping from the seal compression nut (9). If water is visible, STOP and tighten the compression nut (9) using a pair of channel lock pliers to a maximum of 1/4 turn. If that does not fix the leak, then repeat quartz tube maintenance process from step 1 through step 11. Make sure there is no water leaking before proceeding to step 13.
13. **System Test 2:** Reconnect the CLEARRAY unit to the controller. Turn breaker back ON. Turn on the pump to circulate the water through the CLEARRAY System. Wait for 5 minutes and assure no water is dripping. If water is visible, STOP, fix the leak by repeating quartz tube maintenance process from step 1 through step 12. **Make sure there is no water visible. Turn the pump and breaker OFF BEFORE proceeding to step 14.**
14. Reconnect the UV bulb socket (6) to the power cord socket (4) make sure you use the latex glove provided when handling the UV bulb.



**WARNING: DO NOT TOUCH THE NEW UV BULB WITH YOUR BARE HAND.** Oil on your skin will cause hot spot on the UV bulb and shorten the life of your UV bulb. Use the provided latex glove to handle the UV bulb.

15. Slide the new UV bulb (7) back inside the quartz tube.
16. Reinstall the black bulb boot (5) back over the quartz seal compression nut (9).
17. Reinstall the enclosure cover (2) and secure with the screws.
18. Properly dispose of the old UV bulb.



**WARNING:** This CLEARRAY System includes a UV bulb, which contains mercury. Dispose of the bulb in accordance with disposal laws. See [www.lamprecycle.org](http://www.lamprecycle.org).

19. Once power is activated you can check the ballast, Figure 14.5g, to see if the CLEARRAY System is functioning. The power on (red) light indicates that the CLEARRAY System is being provided power and should always be on. The lamp on (green) light indicates that UV bulb is activated.

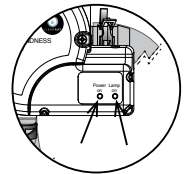


Figure 14.5g