



LAMP REPLACEMENT & HANDLING INSTRUCTIONS



FOR HALLETT 13, HALLETT 30 OR CACTUS X-8, X-12 BEFORE YOU BEGIN, EXAMINE THE LAMPS. IF THERE IS DISCOLOURATION AT THE BASE OF ONE OR BOTH LAMPS (DARK MARKS ALL THE WAY AROUND THE BULB), THE BALLAST MUST ALSO BE REPLACED. A NEW PAIR OF LAMPS CAN BE DAMAGED BY A FAULTY BALLAST!

A) ALL UPSTREAM UNITS / HALLETT 15xs / CACTUS

Replacing and Cleaning UV Lamps

The unit contains two ultraviolet (UV) lamps that emit high-intensity UV light in the germicidal range, providing effective disinfection of the water flowing through the unit. The lamps in your unit will decay over time and should be replaced every 12 months for optimum performance. Avoid continuously starting and stopping the unit within a 24 hr period, as this will accelerate the aging of the UV lamps (note: however shutting down the system for seasonal use will extend lamp life)

Upstream and Hallett 15xs unit have an internal timer to keep track of the lifetime of the lamps. It will issue a warning when the end of their lifetime approaches (see Troubleshooting Guide). The amount of life remaining on the lamps is measured in hours and can be seen in the main section of the menu.

The lamps can be replaced in a few minutes. Draining the unit is not required. See Figure 1.

Caution: The lamps in the unit emit ultraviolet (UV) light that can cause permanent damage to the skin and eyes. **Never look at a lamp when it is operating. Always unplug the unit before replacing lamps.**

Caution: Never touch the bulb (quartz portion) of a lamp with your fingers. Handle the lamp by its ends only. If the surface of the lamp becomes dusty or dirty, use a clean lint-free cloth and some rubbing alcohol to remove the dirt. For more difficult stains such as water spots, use a scale remover to remove the stain and then rubbing alcohol afterwards. The lamps are fragile and must be handled with care.

Tools required: flat screwdriver, 3/16" hex wrench (Allen wrench)

Step 1: For Upstream/Hallett 15xs - from the Main Menu, move down to *Lamp life remaining* screen. Press Enter to move to next screen to reset counter. Press Enter again and then push Up or Down key to select YES and then press Enter. The lamp hours will reset to 9000 and the unit will turn off the lamps automatically (for older models, unit to be shut down manually). This will close the solenoid valve (optional) and temporarily shut off the water supply. Unplug power cord from left hand side of unit.

For Cactus – unplug power cord from right side of unit

Caution: The lamps heat up after continuous use and can burn your skin if touched. Allow lamps to cool for five minutes before removing them.

Step 2: Remove the top cover by pulling each side of the plastic top cover outward from the unit. This will reveal the two thumb screws (or wing nuts) that secure the front panel in place. Loosen the thumb screws (hex wrench may be required) so that the front panel may be tilted forward to reveal the lamps. **Hold the front panel** until it comes to rest at a 45° position.

Step 3: Slowly lift the old lamps out of the unit. **Do not twist the lamps when they are installed.** For assistance in this task, use a flat screwdriver and pry the lamps up (see Figure 3). Dispose of the old lamps in the same way as you would dispose of ordinary fluorescent tubes. Note that old lamps should be disposed of at a household waste management depot or transfer station; contact your local recycling and waste management authority for proper disposal procedures in your area.

Step 4: Install the new lamps into the unit, being careful not to touch the bulb. **Ensure that the lamps are aligned with the tab facing the outside of the system (left or right side of the system), or, if the lamps have a “stop sign” printed on the top ceramic, ensure that the “stop sign” is facing toward the middle/center of the system. (If you cannot see the stop sign, the position of the lamp is correct; if you CAN see the stop sign, the lamp is backward. Spin the lamp 180 degrees so that you cannot see the stop sign. (See Figure 1))** Once the pins of the lamp begin to engage into the lamp socket, push firmly down on the top of the lamp. **Do not twist the lamps when they are installed.** The lamp will come to rest when the lamp pins are fully inserted into the socket. When pressing down, be sure to position the lamp ceramic end in the centre of the hole in the lamp holders. Repeat for the other side.

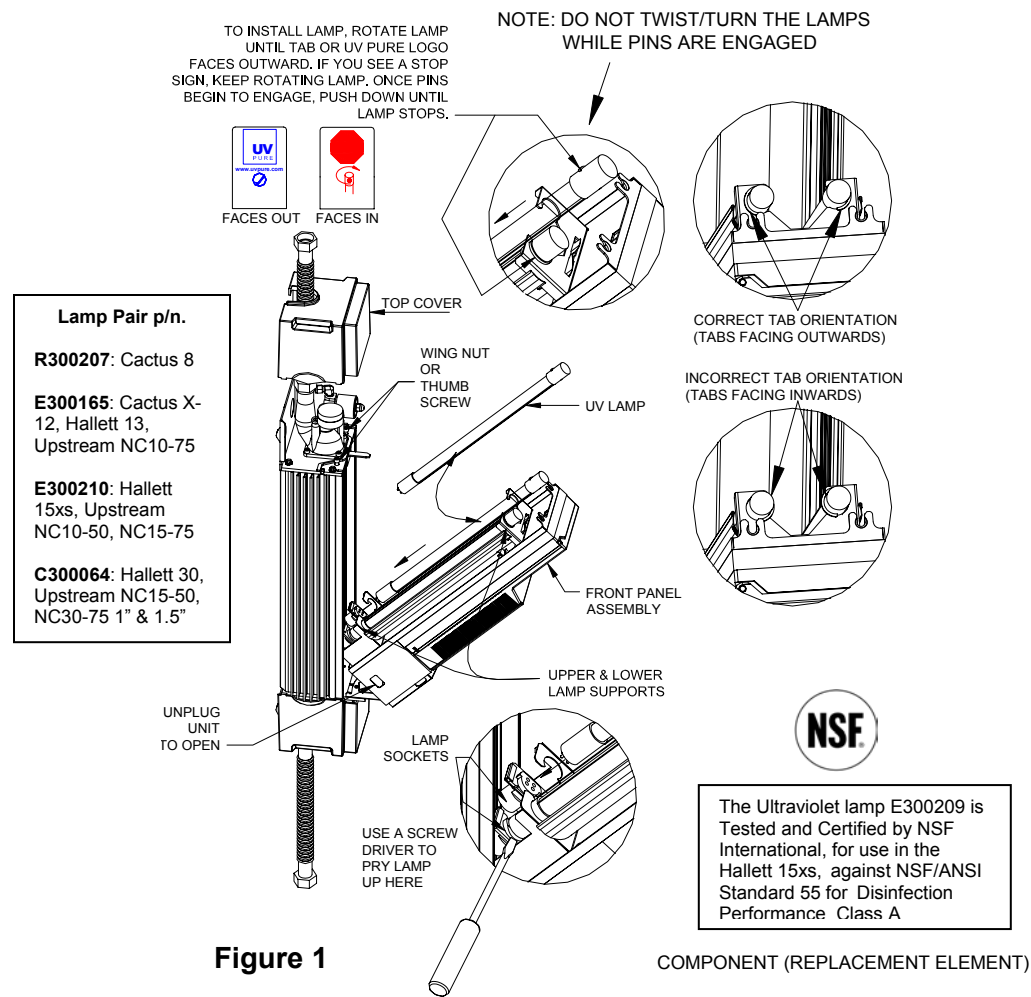


Figure 1

Step 5: Return the front panel to the upright position and secure it by tightening the thumbscrews (or wing nuts). Replace the top cover

Step 6: Record the date of the lamp replacement in your Service Record Sheet.

Step 7: Plug in the unit.

Step 8: New lamps may take from a few moments to several hours to reach full power. Continue to run the unit until the lamps reach full power. For Upstream and Hallett 15xs, the screen in the Main Menu providing the UV Intensity value can be reviewed to determine progress of lamps.

B) HALLETT UNITS – H13 & H30



The Ultraviolet lamp E300151 is Tested and Certified by NSF International, for use in the Hallett 13, against NSF/ANSI Standard 55 for Disinfection Performance, Class A.

COMPONENT (REPLACEMENT ELEMENT)

The UV lamps in the Hallett unit decay over time and should be replaced every 12 months to maintain optimum performance of the unit. Avoid continuous starting and stopping of the unit as this will accelerate the aging of the UV lamps. As a reminder to change lamps, an internal timer keeps track of the lifetime of the lamps and issues a warning when end of lifetime is approached – see System Alarms section in the Instruction Manual.

The lamps can be easily replaced in a matter of minutes. Draining of the unit is not required. Unplugging the unit during the lamp replacement will close the solenoid valve and temporarily shut off the water supply.



Caution: Always unplug the unit before attempting to install or replace lamps. The lamps heat up after continuous use and can burn your skin if touched. Allow lamps to cool for five minutes before removing them.



Caution: Never touch the bulb of a lamp with your fingers. Handle the lamp by the ends only. If the surface of the lamp becomes dirty, Use a clean lint-free cloth and some rubbing alcohol to remove the dirt. The lamps are fragile and must be handled with care.

Tools required: flat screwdriver, Phillips screwdriver

Step 1: Unplug the unit from the electrical outlet and wait five minutes for the lamps to cool.

Step 2: Remove the top cover by removing the screw.

Step 3: Slowly lift the old lamps out of the unit. **Do not twist the lamps when they are installed.** For assistance in this task, use a flat screwdriver and pry the lamps up (see Figure 2). The old lamps should be disposed of properly. They can be disposed of in the same manner as ordinary fluorescent tubes.

Step 4: Install the new lamps into the unit, being careful not to touch the bulb. **Ensure that the lamps are aligned with the tab facing the outside of the system (left or right side of the system), or, if the lamps have a “stop sign” printed on the top ceramic, ensure that the “stop sign” is facing toward the middle/center of the system. (If you cannot see the stop sign, the position of the lamp is correct; if you CAN see the stop sign, the lamp is backward. Spin the lamp 180 degrees so that you cannot see the stop sign. (See Figure 2)**



The Ultraviolet lamp C300064 is Tested and Certified by NSF International, for use in the Hallett 30, against NSF/ANSI Standard 55 for Disinfection Performance, Class A.

COMPONENT (REPLACEMENT ELEMENT)

Once the pins of the lamp begin to engage into the lamp socket, push firmly down on the top of the lamp. **Do not twist the lamps when they are installed.** The lamp will come to rest when the lamp pins are fully inserted into the socket. When pressing down, be sure to position the lamp ceramic end in the centre of the hole in the lamp holders. Repeat for the other side.

Step 5: Replace the top cover and screw. Note that the slots on the either side of the top cover must align with the top wall bracket.

Step 6: Plug the unit into the electrical outlet.

Step 7: After waiting for the start up sequence to end, push and hold the “Reset” button in for six seconds to reset the internal timer – the unit will beep. Once the lamps reach full power, the red light indicating a “Lamp Fault” will go out and the green light indicating “Unit Treating” will illuminate and the solenoid valve will open.

Step 8: Record the date of the lamp replacement in your manual.

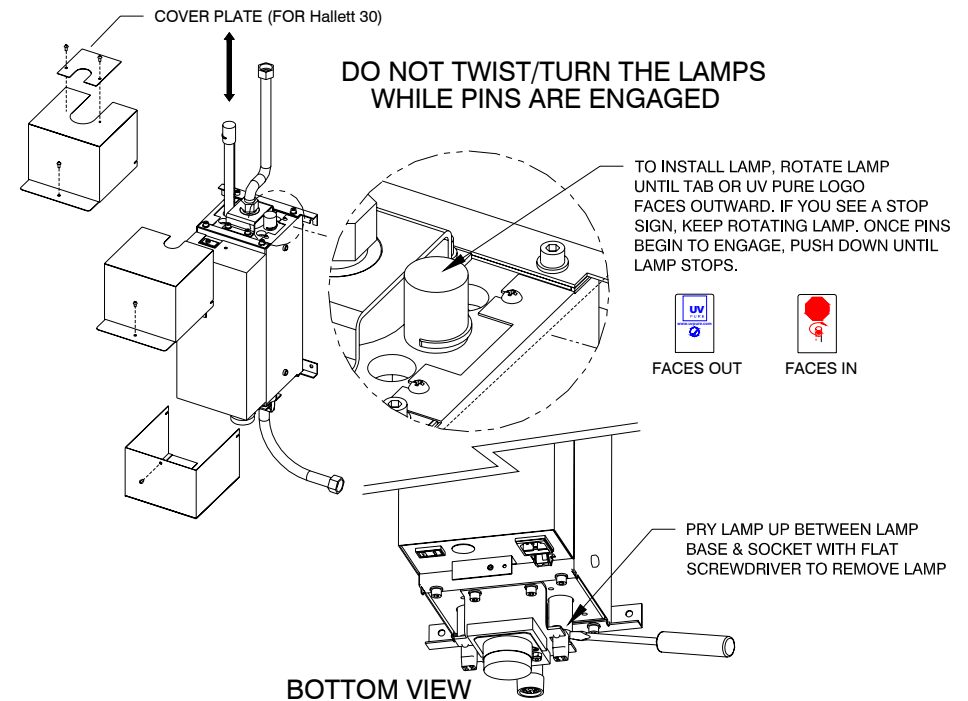


Figure 2

Use only genuine UV Lamps in all your Upstream, Hallett & Cactus units.

Purchase replacement UV Lamps from:

Your Dealer or,
UV Pure Technologies Inc.,
60 Venture Drive, Unit 5
Toronto, Ontario, Canada
M1B 3S4
416-208-9884, 1-888-407-9997
FAX 416-208-5808
safe@uvpure.com

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