Orenco® SYSTEMS *Instructions*

Orenco® UV and AXUV Disinfection Units

Operating Information and Maintenance Instructions

Operating Information

When the UV lamp in is operating correctly, the current sensor in the control panel reads about 0.38 amps.

- A reading of 0.20 to 0.0 amps indicates a failed or improperly connected lamp.

Different control panel types respond differently to UV lamp failures:

- AXUV units: When the sensor reads "0.0," the AdvanTex system's discharge pump is automatically disabled to prevent the discharge of untreated effluent.
- VeriComm™ Monitoring System (VMS): If the system has an operational network connection and if the alarm delay has not been adjusted, when the sensor reads "0" ...
  - ~ An alert is sent to the service provider.
  - ~ If the unit is powered through the VMS, a local alarm will sound if the service provider does not provide service within about 18 hours.

Maintenance Instructions

All Orenco UV and AXUV units require annual servicing and lamp replacement.

Step 1: Remove Disinfection Unit

Step 1a: In the control panel, turn off all circuit breakers.

Step 1b: Lift the disinfection unit out of the Q-D coupling and out of the basin.

- Loosen the coiled power cord to allow enough slack for removing the unit from the basin. There is no need to disconnect the cord.

IMPORTANT: *DO NOT pull the unit up by the cord! This will damage the unit.*

Step 2: Remove Lamp Tube/Handle Assembly

Step 2a: Carefully grasp the lamp tube/handle assembly by the handle.

Step 2b: Pull the lamp tube/handle assembly out of the unit housing.

IMPORTANT: *DO NOT pull the lamp tube/handle assembly out by the cord! This will damage the unit.*

Step 2c: Tip the unit housing to drain the effluent back into the basin.

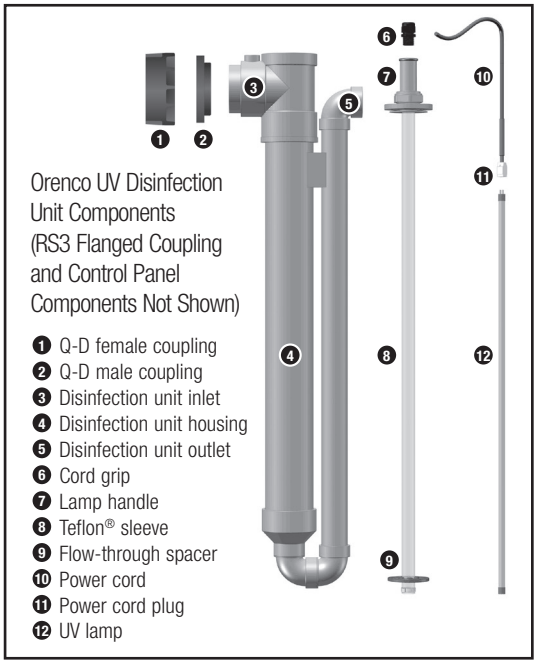
Step 2d: Lay the lamp tube/handle assembly and the unit housing on a protective sheet of plastic.

Step 3: Clean Disinfection Unit Components

Step 3a: Wipe off the outside of the disinfection unit housing.

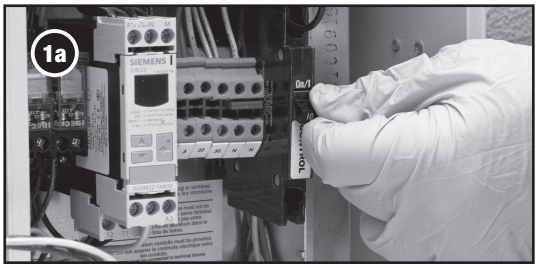
Step 3b: Use a hose and long-handled brush to clean the inside of the housing.

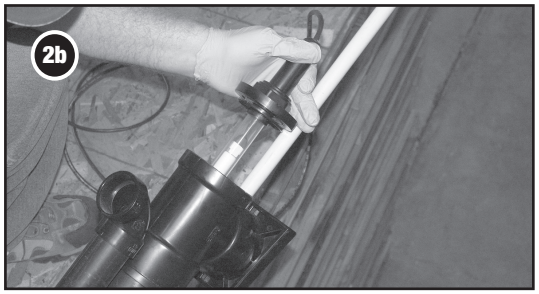
- Drain the unit back into the basin when you are finished cleaning it.



Orenco UV Disinfection Unit Components (RS3 Flanged Coupling and Control Panel Components Not Shown)

1. Q-D female coupling
2. Q-D male coupling
3. Disinfection unit inlet
4. Disinfection unit housing
5. Disinfection unit outlet
6. Cord grip
7. Lamp handle
8. Teflon® sleeve
9. Flow-through spacer
10. Power cord
11. Power cord plug
12. UV lamp





Step 3: Clean Disinfection Unit Components, cont.

Step 3c: Use a hose and soft brush to clean the lamp assembly.

- To minimize contamination, clean the lamp assembly over the basin.
- Remove stains from the Teflon® sleeve with a soft sponge and detergent.
- Remove stubborn stains with a soft sponge and isopropyl alcohol.

Step 4: Replace Lamp

IMPORTANT: *Wear clean gloves when handling the lamp. Oils from your fingers can damage the lamp and shorten its life!*

Step 4a: Loosen and remove the handle assembly from the lamp tube assembly.

- Make sure the bulb can turn freely in the sleeve while you loosen the handle.

Step 4b: Disconnect the power cord socket from the old lamp.

- The lamp contains mercury. Dispose of it in accordance with local regulations.

Step 4c: Connect the power cord socket to the new lamp.

Step 4d: Gently slide the new lamp and -cord all the way into the lamp tube assembly.

Step 4e: Thread the handle assembly onto the lamp tube assembly by hand.

Step 4f: Use a torque wrench to tighten the handle assembly nut to 35-45 in./lbs force (4-5 newton-meters).

- Be certain that the o-ring is seated properly to create a waterproof seal.
- Do not overtighten the handle assembly nut.

Step 4g: If it is necessary to remove and reinstall the cord grip, use a torque wrench to tighten the cord grip to 35-45 in./lbs force (4-5 newton-meters).

- Do not overtighten the cord grip.

Step 5: Reassemble and Reinstall Disinfection Unit

Step 5a: Press the lamp tube/handle assembly into the disinfection unit's housing.

Step 5b: Slide the disinfection unit's Q-D male coupling into the Q-D female coupling.

Step 5c: Firmly seat the Q-D male coupling into the Q-D female coupling.

Step 5d: Neatly coil the excess power cord and secure it to the splice box if the wire routing and connection work is not being done immediately.

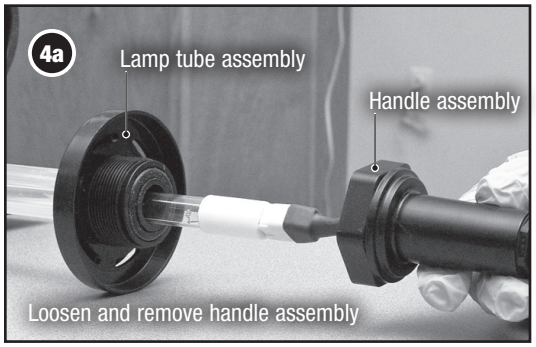
Step 5e: Reinstall the lid on the basin and secure it with the lid hardware.

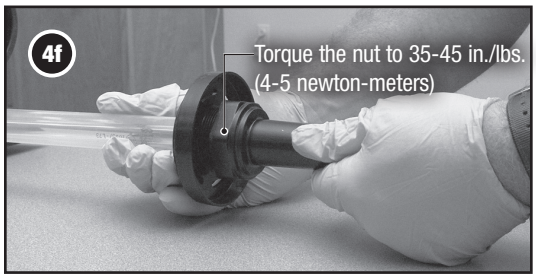
Step 6: Perform Operational Test

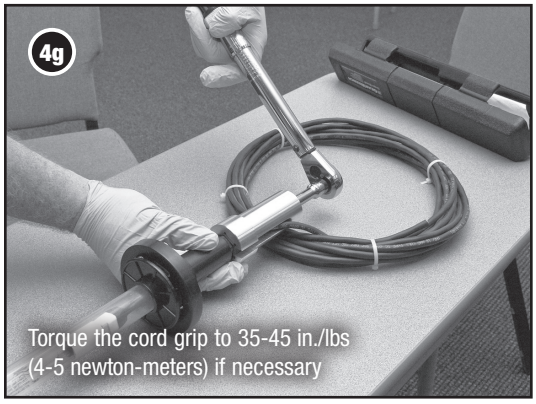
Step 6a: When power is available to the control panel, turn on the circuit breakers in the control panel.

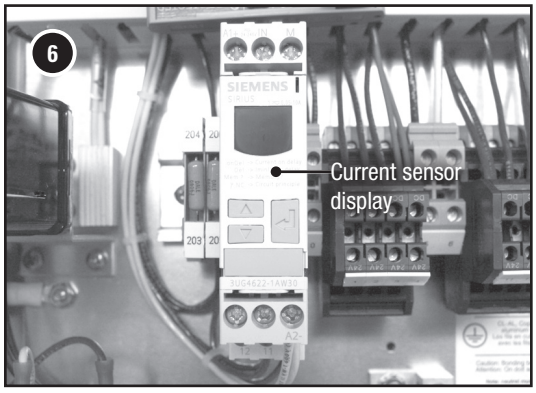
Step 6b: Check the numeric display on the current sensor for the UV lamp.

- A normal reading is about 0.38 amps.
- If the sensor reading is 0.20 amps or less, check the lamp wiring connections and UV bulb.









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