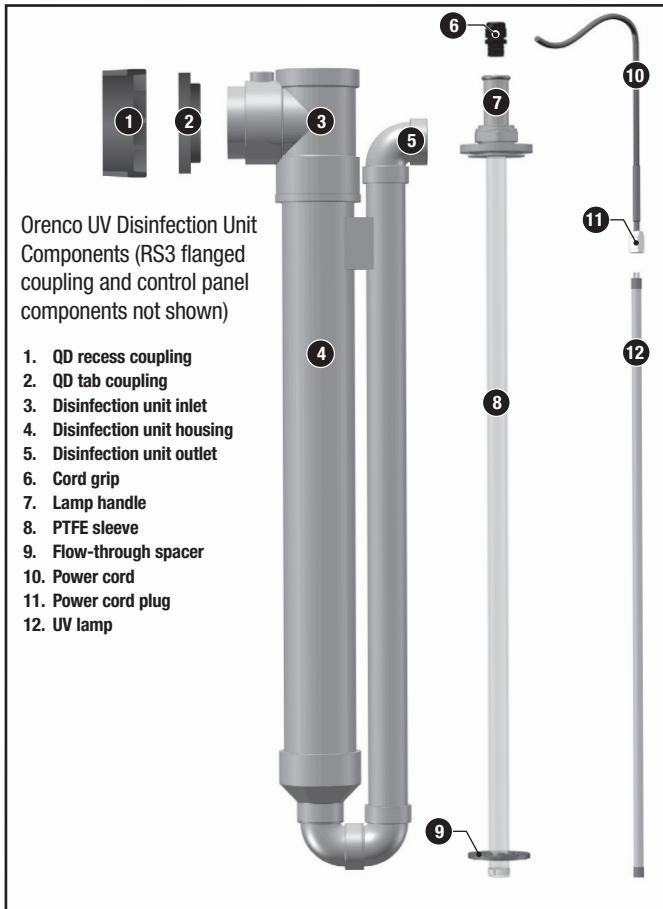


UV and AXUV Disinfection Unit



Introduction

These are instructions for installing an Orenco UV or AXUV disinfection unit and a standard 25ft or 50ft (7.62m or 15.24m) power cord into a PVC basin using an Orenco RS3 flanged coupling. For other installation options, contact your distributor or Orenco.



IMPORTANT

- UV radiation burns retinas and skin!
- Avoid exposure to UV lamp light!
- Do not splice or add length to the power cord! This will interfere with the lamp signal.

Step 1. Install RS3 Flanged Coupling

Step 1a. See if an RS3 is installed in the basin.

- If it is installed, skip to Step 2.
- If it is not installed, continue with Step 1.

Step 1b. Drill a 4in (100mm) penetration in the basin.

1. Mark the location for the inlet penetration on the basin wall.
2. Drill a 4in (100mm) hole through the basin wall, centered on the mark.
3. Deburr the hole.

Step 1c. Attach the RS3.

1. Use a clean rag to wipe around the hole.
2. Apply a generous bead of methacrylate adhesive around the outside curve of the RS3's flange (the part that matches the inside curve of the basin).
3. From inside of the basin, push the notched end of the RS3 through the basin.
4. Press the flange firmly against the inside of the basin.



Key Point — Make sure that the curve of the flange fits the curve of the basin.

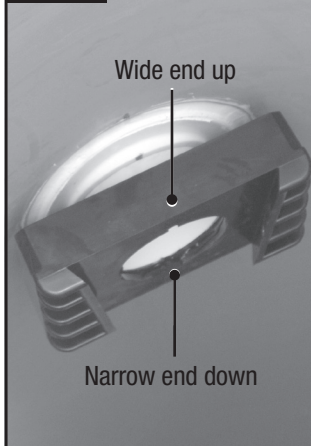
5. Secure the flange to the basin with the supplied screws.
6. Use a tongue depressor to make an adhesive fillet around the flange.



Step 2c3



Step 2c2



Step 2. Install QD Recess Coupling

Step 2a. See if a QD recess coupling is installed on the RS3.

- If it is installed, skip to Step 3.
- If it is not installed, continue with Step 2.

Step 2b. Insert a section of 3in NPS PVC pipe into the RS3.

1. Cut a section of 3in NPS PVC pipe to 9in (229mm).
2. Apply a generous bead of ABS/PVC transition cement to the inside of the flanged coupling.
3. Press the pipe section through the RS3, until there is a stub of pipe about 3in (76mm) long inside of the basin.

Step 2c. Attach the QD recess coupling.

1. Apply ABS/PVC transition cement to the pipe stub on the inside of the basin.
2. Position the wide end of the slot up toward the top of the basin.
3. Fully seat the coupling on the pipe stub.

Step 4b



Step 4b



Step 3. Set Basin

Step 3a. If necessary, install the basin per [PVC Basin Installation Instructions, NIN-PB-1](#).

Step 3b. If the transport line is not 3in NPS, connect it to the 3in pipe stub with a correctly sized adapter and PVC glue.

Step 4. Install Splice Box

Step 4a. See if the splice box is installed.

- If it is installed, skip to Step 5.
- If it is not installed, continue with Step 4.

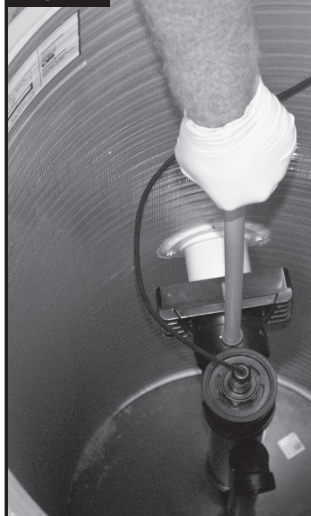
Step 4b. Install the splice box according to the manufacturer's instructions.

- For Orenco internal splice boxes, see [Internal Splice Box \(SB\) Installation Instructions, NIN-SB-SB-1](#).
- For Orenco external splice boxes, see [External Splice Box \(SBEX\) Installation Instructions, NIN-SB-SBEX-1](#).

Step 5a



Step 5b



Step 5. Install Disinfection Unit

Step 5a. Slide the disinfection unit's QD tab coupling into the QD recess coupling.

Step 5b. Firmly seat the unit's tab coupling into the recess coupling.

Step 5c. If the wire routing and connection is not being done immediately, neatly coil the excess power cord and secure it to the splice box.

Step 6. Mount and Wire Control Panel

Notes

- A licensed and qualified electrician should perform this step.
- Installation instructions, schematics, and wiring diagrams specific to the panel and float switch configuration are included with each panel. If any of these is missing, contact your distributor for a replacement.

Step 6a. Mount the control panel using the instructions included with it.

- Follow all applicable regulations for placement of the control panel.
- Mount the panel in a service-friendly location within line-of-sight to the tank.



Key Point — DO NOT mount the control panel on an exterior wall other than a garage or shop wall! The motor contactor makes a sound while engaging.

Step 6b. Route wires and connect the panel, pump, float switches, and other equipment shown in the instructions and schematics.

- Use watertight wire connectors to avoid electrical shorts and other issues.
- Be sure to seal the conduit at the control panel and at the splice box with UL-listed sealing foam, putty, or silicone sealant.
- Leave at least 5ft (1.5m) of coiled power cord in the basin so that the disinfection unit can be easily removed for servicing.



IMPORTANT

- The UV power cord is not rated for direct burial.
- Do not run the lamp's power cord with pump cords or float switch wiring! Doing so will interfere with the lamp signal.
- Do not splice or add length to the power cord! Doing so will interfere with the lamp signal.

Step 7. Perform Operational Test

Step 7a. When power is available to the control panel, turn on the main circuit breaker to the panel and the circuit breaker controlling the disinfection unit.

Step 7b. Check the numeric display on the current sensor for the UV lamp, located in the panel.

- The normal range is 0.20-0.50A with an expected value of 0.38A.
- If the sensor reading is less than 0.20A, the lamp is not correctly connected or has failed and may need to be replaced.

