



## CERV-UV-int; Internal Installation Guide

### Overview

This guide details the installation process for the CERV-UV, **installed internally** to the CERV2. Read through instructions before attempting work to gain an understanding of the installation process. Contact [support@buildequinox.com](mailto:support@buildequinox.com) or 773-492-1893 with any questions.

**WARNING:** The CERV2 must be unplugged before servicing the unit to prevent risk of electrocution. Once installed, the CERV will produce ultraviolet light – never look directly at the UV lamp, and unplug the UV power supply before changing air filters to avoid UV exposure.

Approximate working time: 30 Minutes

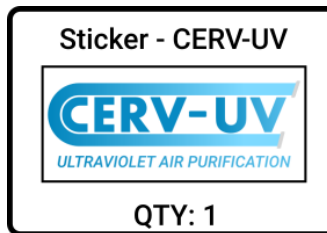
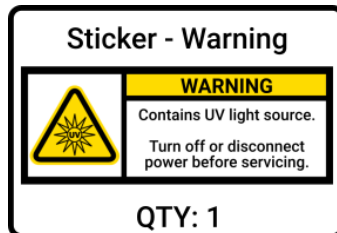
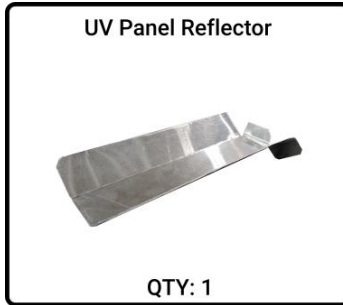
### Contents

Tools Needed .....	2
Contents of CERV-UV Internal Kit: .....	2
Remove Front Access Panels.....	3
Remove Original Duct Access Panel.....	4
Install the new UV Mount Duct Access Panel.....	6
Install the UV Lamp.....	7
Install the Panel Reflector .....	9
Attach Power Supply Connector .....	11
Connect Power Supply .....	11
Place Stickers.....	12
Setting CERV-UV Lamp Replacement Reminders .....	13

## Tools Needed



## Contents of CERV-UV Internal Kit:

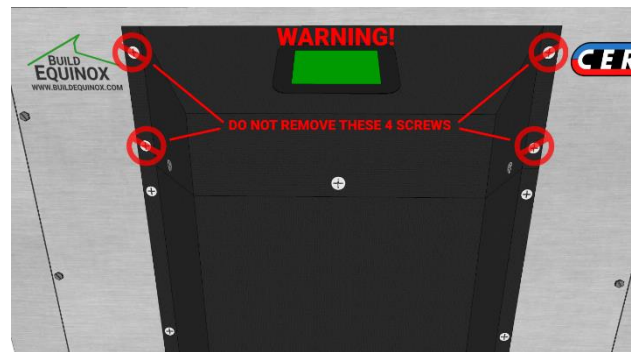


Before removing power to CERV as stated below, use touchscreen to navigate to the Main Menu -> CERV System -> Operation Mode to turn CERV into off mode. Wait 90 seconds for dampers to move into correct position, then proceed to turn power off to CERV.



**DANGER: Risk of electric shock. Can cause injury or death: disconnect all remote electric power supplies before servicing. Turn off CERV2 power switch and unplug cord from electrical outlet or turn off breaker.**

## Remove Front Access Panels

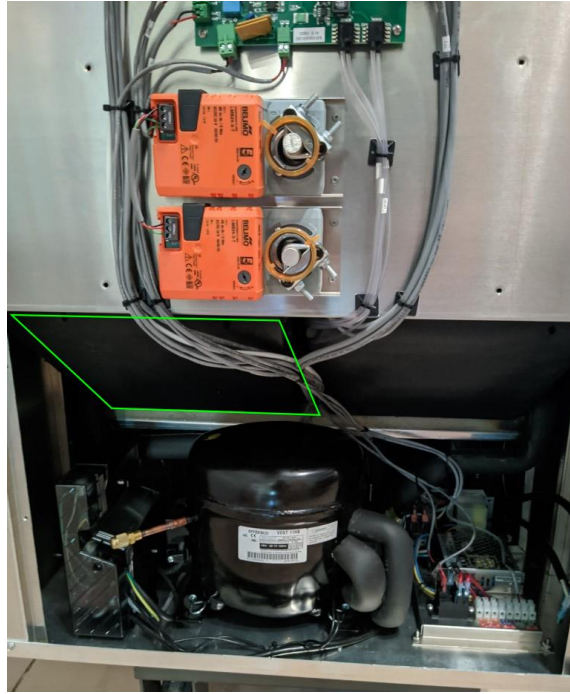


Remove the 13 black phillips head screws highlighted in green above, and set the lower black plastic housing aside. NOTE: Do not remove the four phillips screws shown in red attaching the touchscreen housing to the CERV2. An electric screw driver can be used to remove screws, but screws should be installed by hand to avoid stripping threads.

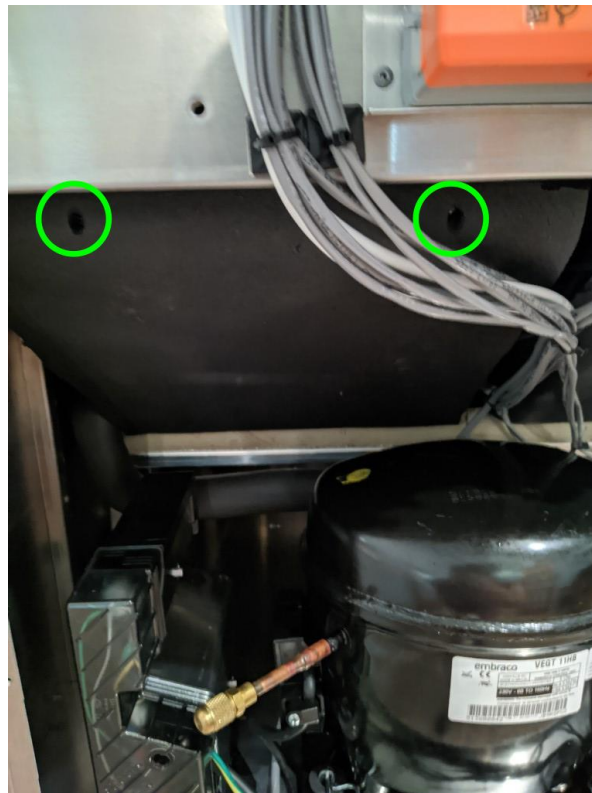


Using the 1/4" driver, remove the four hex-head screws for the lower sheet metal access panel, highlighted in green. Slide out the panel, and set aside. If a CERV2 I/O Expansion board is located on this panel make notes about wire connections and then disconnect any wires to make removing panel possible.

## Remove Original Duct Access Panel



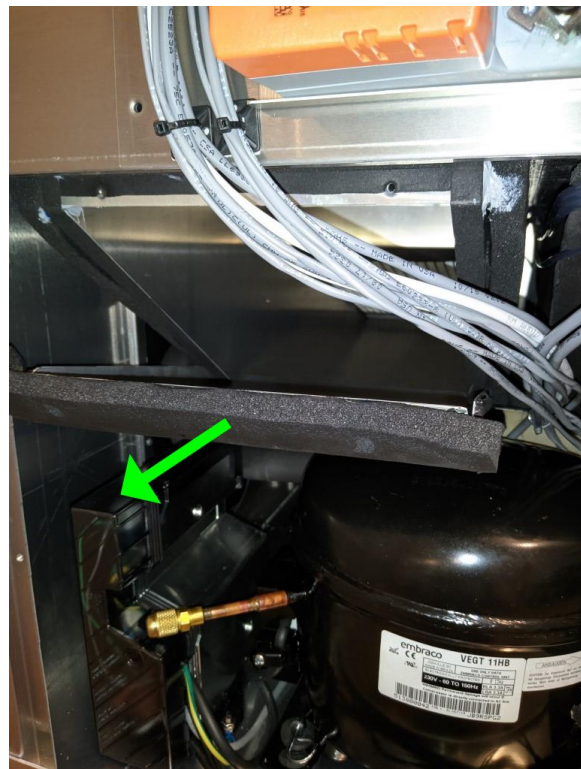
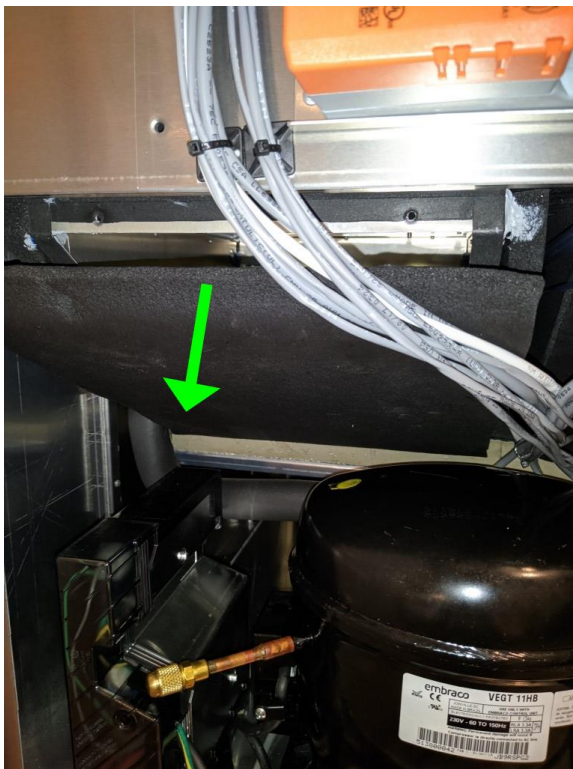
With the front enclosure and lower access panel removed, locate the duct access panel on the left side outlined in green above. This is the Supply duct for the home, and will receive a new duct access panel with the UV lamp mount.



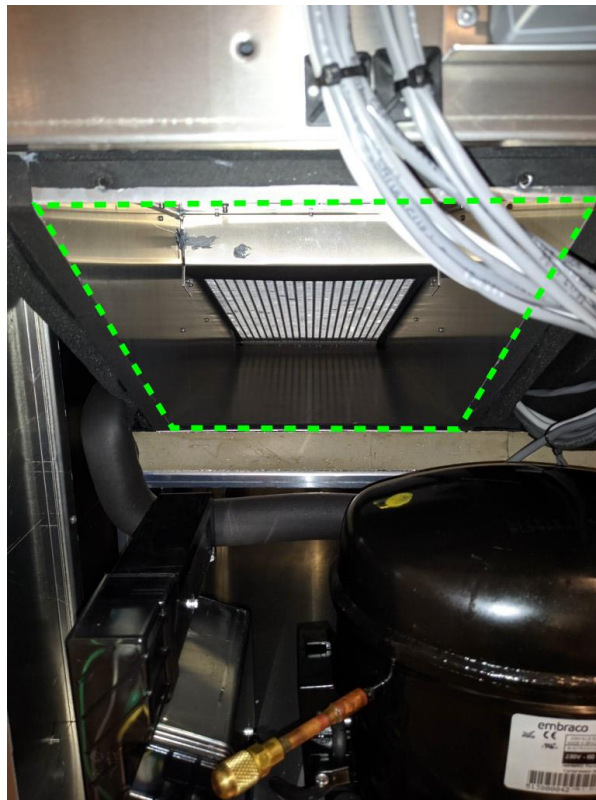
Using the 1/4" Driver, locate the two hex-head screws at the top of the access panel, and unscrew.



If there is not enough slack in the CERV2's wire harnesses, the zip-ties highlighted above may be clipped, allowing them to be moved further out of the way of the access panel when removed. If the zip-ties are removed, use the kit's included zip-ties to secure the harnesses again once installation is completed.

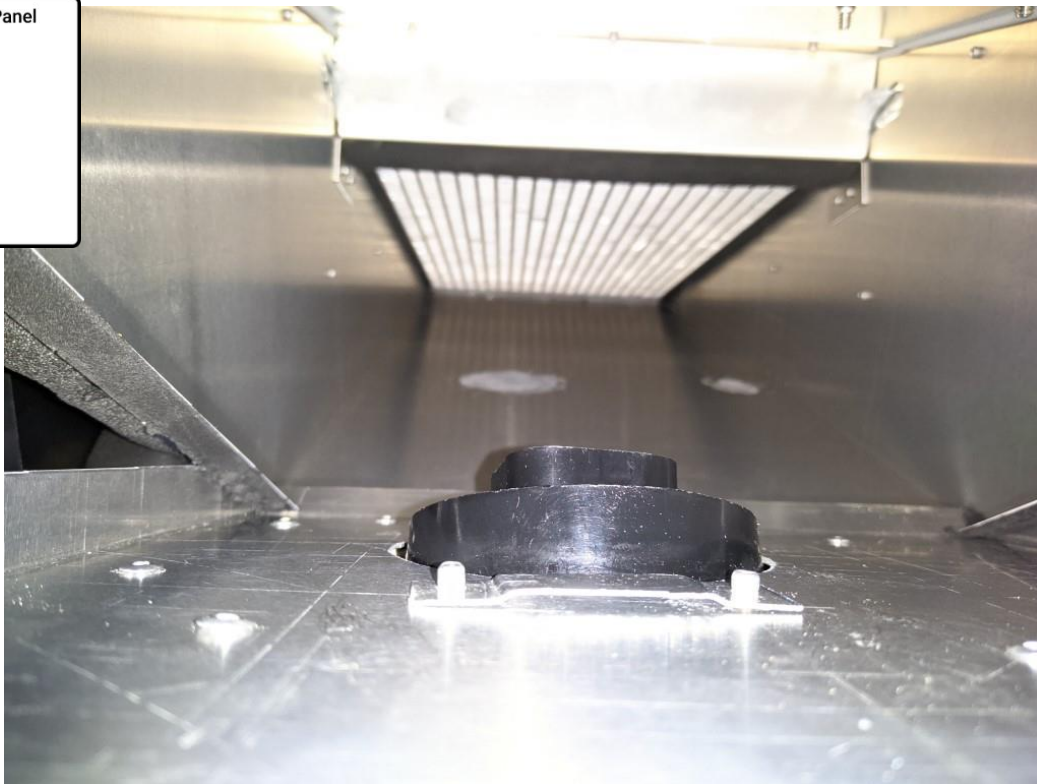


Pull down on the top of the access panel (hinging at the bottom), until the access panel pivots past the wire harnesses. Before removing, take note of how the access panel fits into the metal duct housing, as the new panel will insert the same way. Pull the access panel straight out of the unit, and set aside.



The inside of the metal duct housing is now visible. Remove or vacuum any debris inside duct. A damp cloth can be used to wipe duct surfaces if needed. Do not use any cleaning substances or solvents.

### Install the new UV Mount Duct Access Panel

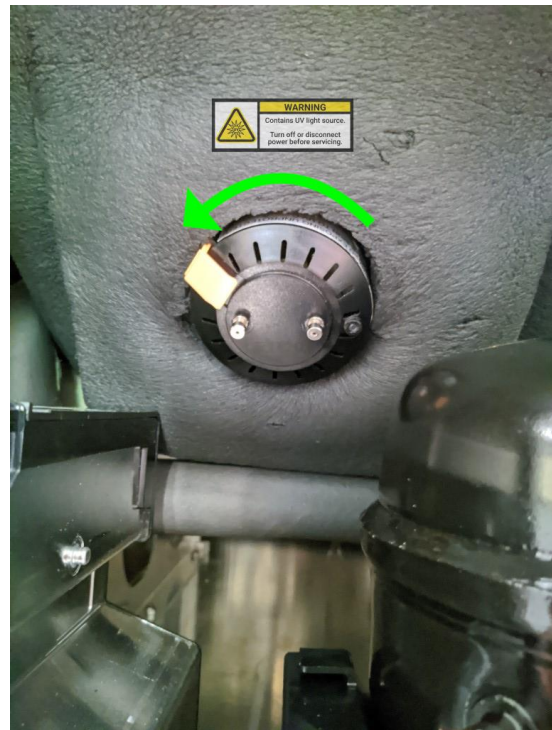




Insert the included UV into the duct opening (using the same method as removing the original panel). NOTE: The UV lamp should NOT be installed yet.

Using the 1/4" driver, screw back in the top two hex-head screws.

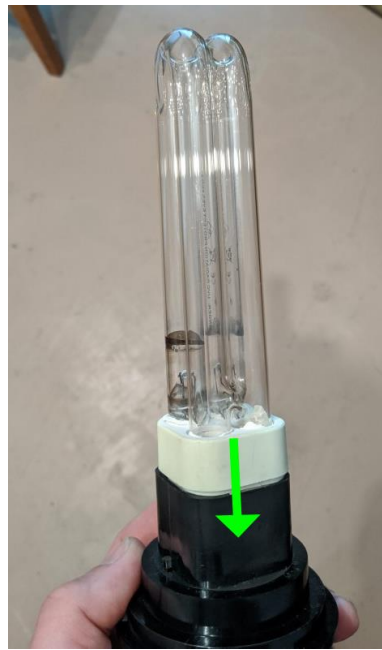
## Install the UV Lamp



Slightly pull the orange tab for the UV lamp socket, and then rotate the mount counter-clockwise (approx 30 deg.)

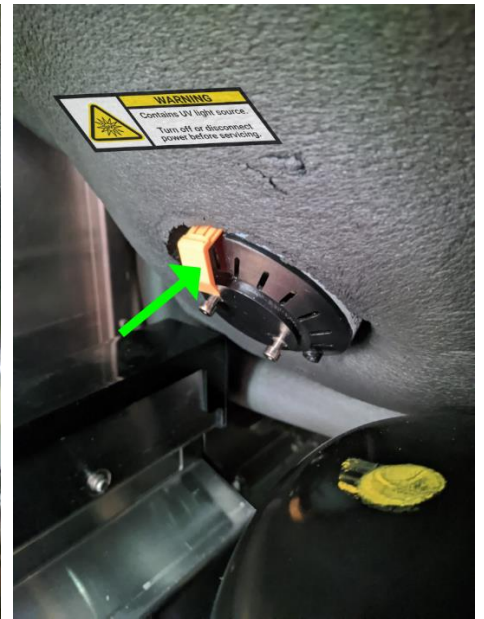


The UV lamp socket should now pull out of its plastic base. Take note of the orange latch on the mount, as well as the notches in the plastic base.



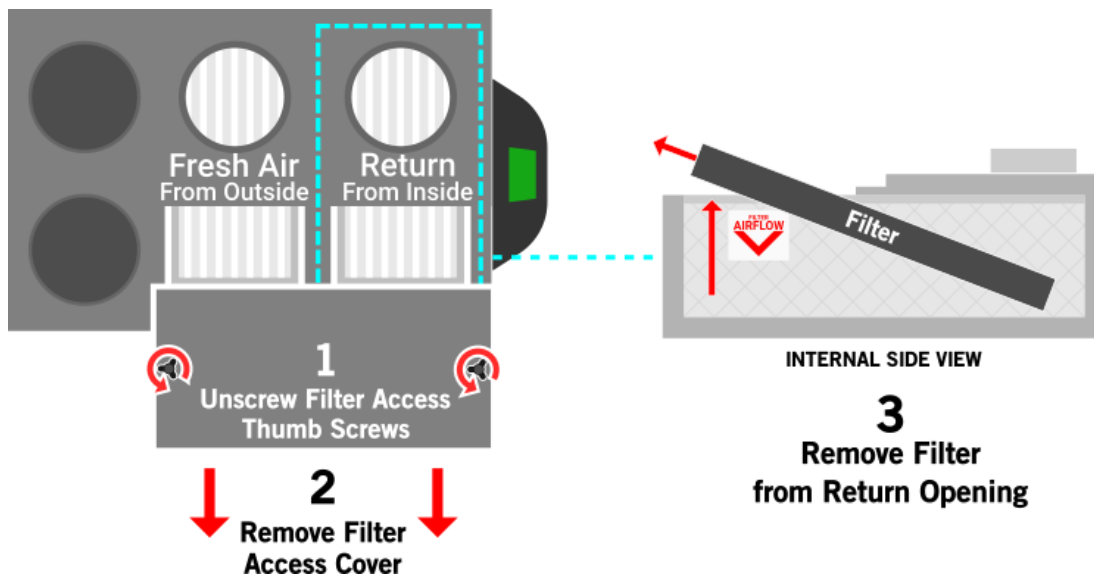
**DO NOT TOUCH THE LAMP GLASS WITH YOUR FINGERS.** Holding the UV lamp by the white base, insert lamp into the UV socket, aligning the four metal pins with the matching holes.



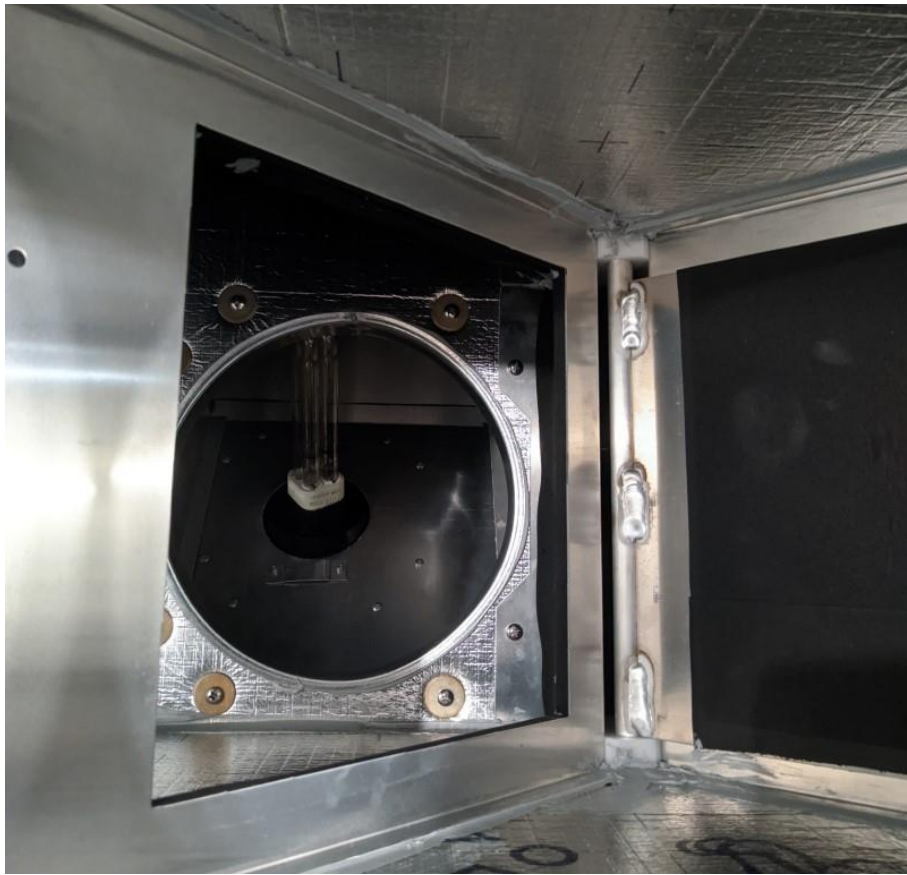


Carefully insert the UV lamp/socket into the plastic base (aligning the notches), then rotate approximately 30 degrees clockwise and press in the orange plastic clip. The mount should now be securely held in place.

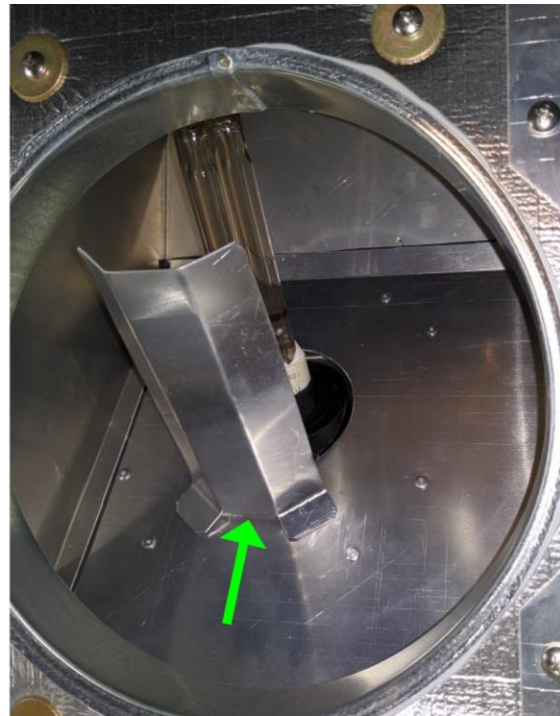
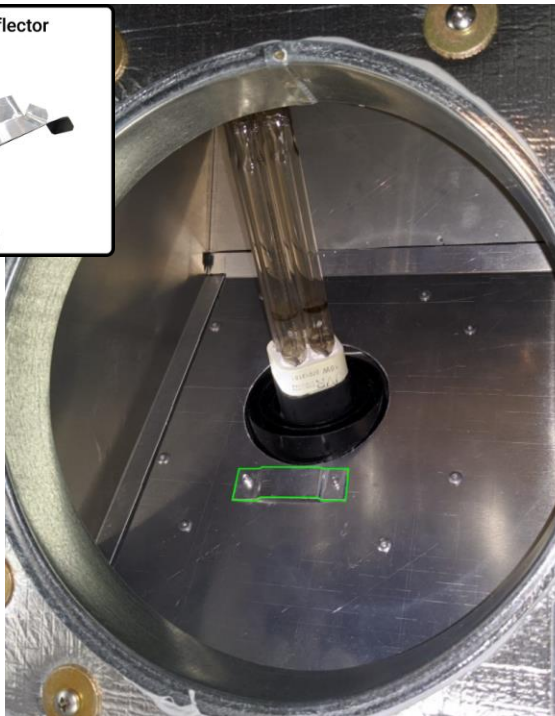
## Install the Panel Reflector



To install the panel reflector, you must first remove the CERV's top Filter Access panel, and then remove the filter from the return air opening.



Looking down (from the front of the CERV), the newly installed UV lamp should be visible. If the damper paddle is covering the opening DO NOT FORCE IT BY HAND! To move the damper paddle, turn on power to the CERV, and make sure CERV operation mode is set to off. Wait for damper to move into position, then turn power back off.



Slide the UV Panel Reflector into the raised tab above the UV lamp.

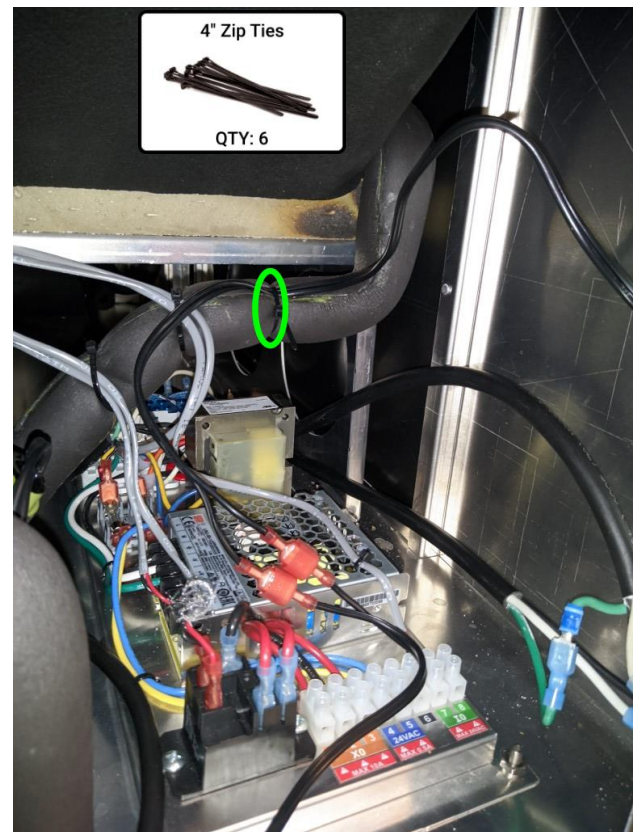
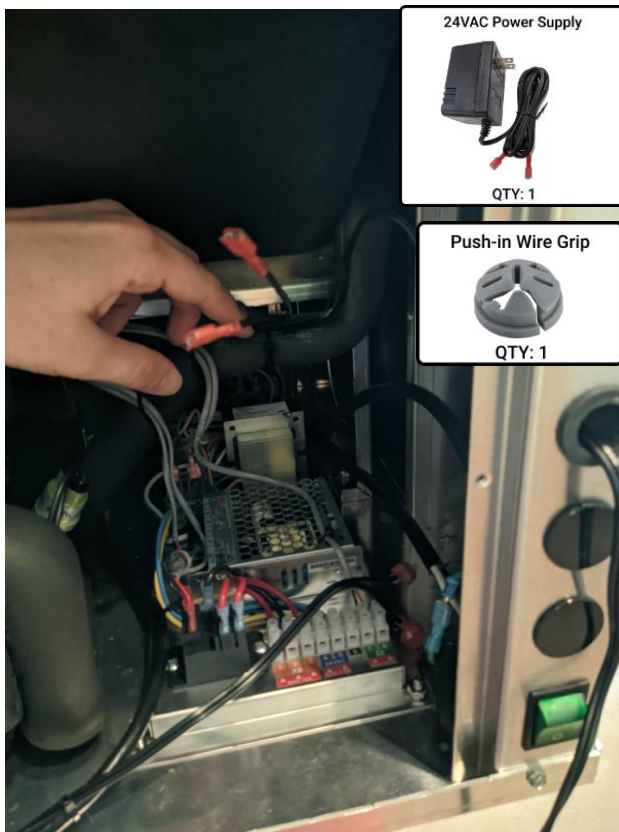
Re-insert the return air filter, and tighten filter access cover.

## Attach Power Supply Connector



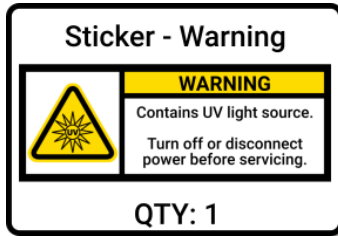
Align the pins of the UV socket to the UV power supply connector, press on, then turn clockwise to secure the connection. Use two zip ties to secure the wire harness to the existing wiring at the front of the unit.

## Connect Power Supply

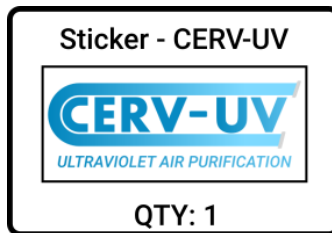


Feed the power supply harness (with the female connectors) through one of the CERV's 3/4" conduit holes, and plug into the lamp power supply connectors. Outside the CERV slide the power supply wire through the cord grip and then insert the push-in wire grip into the conduit hole. Make sure there is slack in the wire inside the CERV. Zip-tie the wire to the black insulated piping (picture on right).

## Place Stickers



Place the included Warning sticker on the filter access cover as seen above.

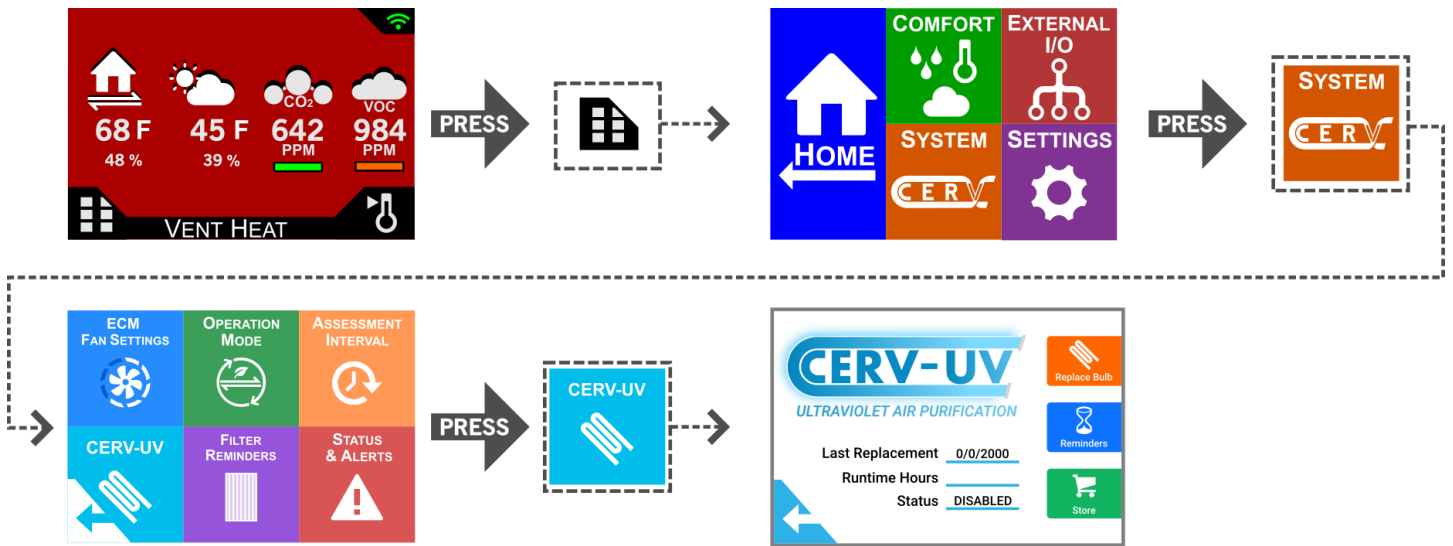


Place the included CERV-UV sticker on the front of the unit, below the CERV2 sticker.

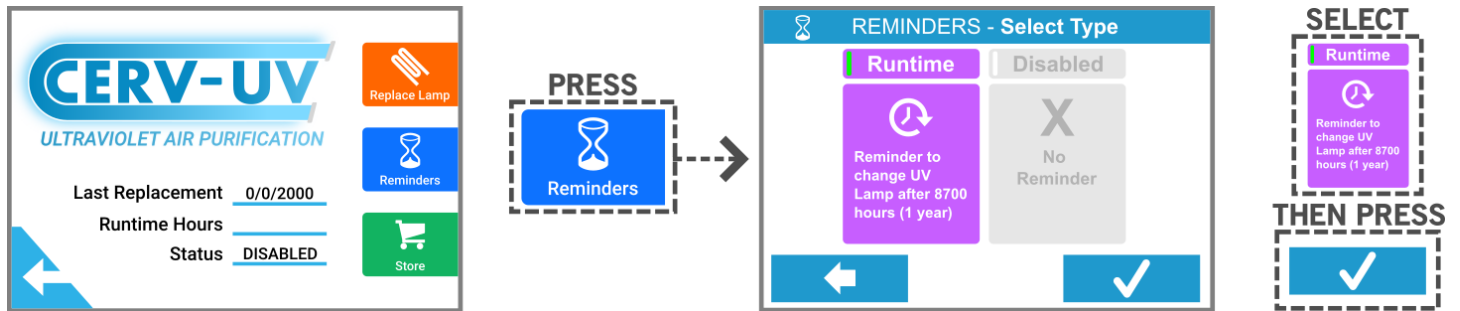
Plug UV power supply into an outlet to power UV lamp. To check lamp operation, remove the filter access cover. A blue glow should appear under the return air filter. Do not remove filter and look directly at UV light. If lamp is working kit installation is complete. The CERV lower access panel and front black plastic enclosure can be re-installed. Restore power to the CERV and set Operation Mode back to Auto. Remember, for changing filters, replacing UV lamp, or servicing the CERV the UV power supply must be unplugged to turn off UV light.

Proceed to the next step to set UV lamp change reminder.

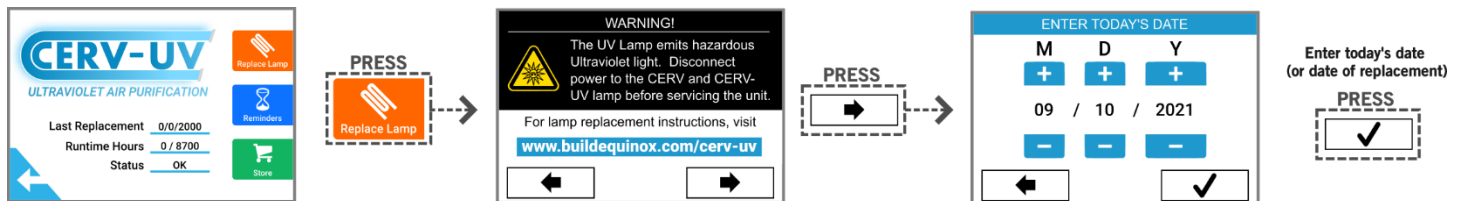
## Setting CERV-UV Lamp Replacement Reminders



Follow the touchscreen controller path below to reach the CERV-UV overview screen.



Once the CERV-UV overview screen has been reached, press the Reminders Button, select Runtime, and press the check box. The CERV-UV lamp is rated for 8700 hours (1 year), so the CERV will monitor the operation time of the lamp and display a notification when it is time to replace.



Lastly, now that the lamp has been installed, you will set the current date. Press the Replace Lamp button and enter the date.