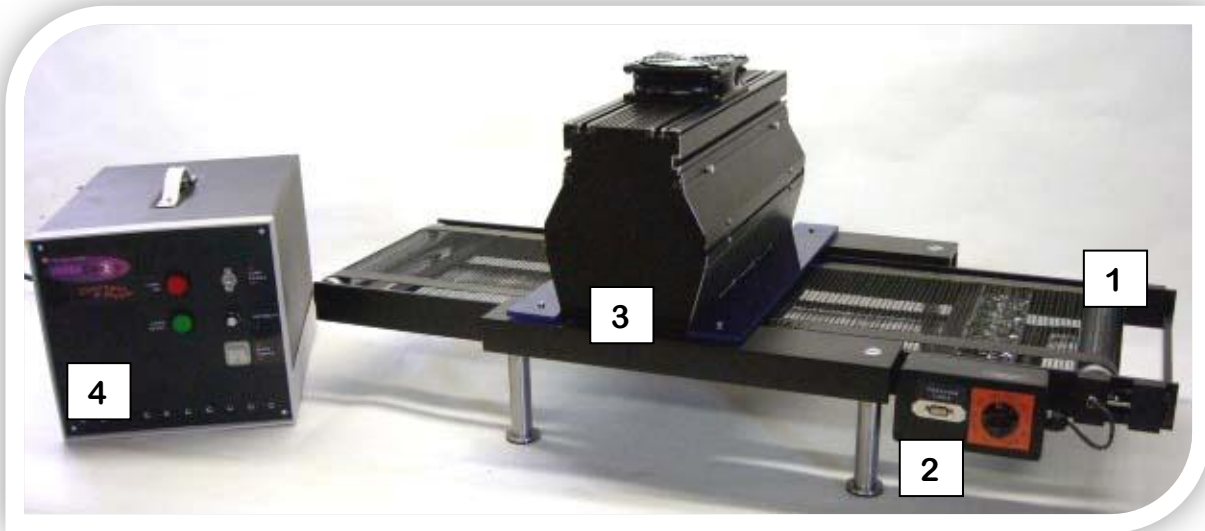


Orientation:

- 1 *In-feed Section*
 - a. The in-feed section consists of the motorized drive roller and belt tracking adjustments.
- 2 *Conveyor Power Section*
 - a. The conveyor power section consists of a DB-9 connector where 24VDC power from the main power supply is connected to the conveyor and the speed control dial.
- 3 *UV Curing Section*
 - a. The UV Curing section consists of the UV Lamp and Lamp Housing. This rests on the conveyor between two Blue UV Safety Shields, and is aligned from right to left between two aluminum stop plates.



- 4 *Main Power Supply*
 - a. The Main power supply is the source for both the UV Lamp housing power (High Voltage) and the Conveyor Power (Low Voltage.)
- 5 *Main Power Supply Controls*
 - a. Main Power On/Off
 - i. This switch arms all internal components, turns on the primary power supply cooling fan, and starts the conveyor belt.
 - b. Lamp Power On/Off
 - i. This switch turns the UV Light on and off. When switched off, the lamp housing cooling fan continues to run for a preset cool down period (factory set at 5 minutes) Therefore it is important to not switch off the main power until the lamp housing cooling fan turns off.
 - c. Lamp Intensity Control
 - i. This dial has 10 settings for intensity from 40% to 100% lamp power.

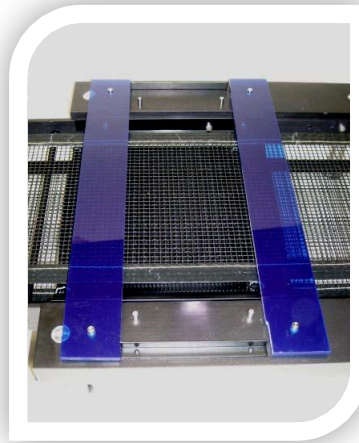


Main Power Supply Controls - CONTINUED

- d. Lamp Power On Indicator
 - i. This red light indicates that the lamp power switch is in the ON position
- e. Lamp Ready Indicator
 - i. This green light indicates that the lamp has warmed up to at least 85% of nominal and is ready for use. The lamp housing cooling fan activates when this green light turns on, and intensity controls are now active. When the green light is not on, manual adjustment of intensity is not possible. Once the green light is on, the lamp will adjust to the setting on the intensity dial. Therefore it is important that you initially have the dial on 100% power, to ensure the lamp warms up thoroughly before use.

Initial Set Up:

- 1 Place the conveyor onto a level and sturdy bench-top surface.
- 2 Set the UV lamp housing (with lamp installed) into the UV Curing section of the conveyor. The lamp housing only rests on the conveyor it does not fasten down. Do not move the conveyor and lamp housing together, always move the two parts separately. Note: If lamp is not installed, please refer to section: INSTALLING LAMP before proceeding.



- 3 Attach the Yellow Lamp Power cable to the lamp housing. This lamp cable has a reference key on the receptacle and slot on the cable for proper alignment.

- 4 Also attach the Conveyor Power cord to the DB-9 connector on the conveyor. It is important to screw down this cable so it is properly seated and cannot become accidentally detached when UV Lamp is on. **The cable has an integrated safety circuit that when detached; it will not allow the lamp to operate.**



- 5 Before plugging the power supply into the appropriate power outlet, ensure that all switches are in the off position.
- 6 Plug main power cord in.

Basic Operation: (For 1.8kW and 3.1kW systems)

Please review this entire manual prior to first use.

Do not attempt to operate this UV curing equipment until you have a thorough understanding of all the components, controls, and procedures.

!! IMPORTANT: UV radiation can cause severe burns to eye and skin. Use protective materials (goggles, glasses, lotions) to ensure personnel safety. Install UV Safety Shielding as deemed necessary to isolate the UV system and to prevent accidental UV exposure. Proper maintenance procedures, including maintaining an inventory of spare lamps and reflectors, should also be practiced in order to ensure maximum efficiency and to prevent costly downtime.

NOTE: Be certain to allow unobstructed air flow from above the lamp housing so the fan can draw in cooling air from the room. Also, there are hot air exhaust ports on the bottom of the housing which should not be blocked. Use same precautions with the fans and air intake ports for the power supply.

- 1 Ensure all connections have been made as outlined in the **initial set up section**.
- 2 Turn main power switch on. Fan in power supply and the conveyor belt should start.
- 3 Flip lamp switch to on position and lamp should start. It takes about 4 - 6 minutes for lamp to come up to full power after it ignites. You will get a green ready light when the lamp has reached 85% power, and if necessary you may begin using the system at this time. If possible, waiting the full 4 - 6 minutes will ensure that the lamp has reached 100% efficiency prior to use, improving consistency. It is important that during the entire warm up period you have the lamp intensity control dial set to full power (full clockwise rotation)
- 4 If lamp does not ignite within 5 seconds flip switch back to off and then back to on again. If lamp still does not start, flip switch back to off and unplug main power cord from the wall.
- 5 Look inside of the lamp housing to ensure both wire ends from the lamp are connected to the corresponding spade connector on the lamp holder. Reconnect if necessary and repeat steps 4 and 5.
WARNING – exposed wires near terminals – risk of shock! Never work inside lamp housing with power cord connected to an outlet. For added safety you can also disconnect the yellow cable from the lamp housing while you are performing these inspections.
- 6 The UV Conveyor is designed for use with card stock or heavier materials. If lightweight materials are to be used, a low profile aluminum clipboard has been included. Use this clipboard as a carrier for lightweight materials. There is an updraft inside the lamp housing because of the amount of airflow necessary for proper cooling. Lightweight materials not attached to the clipboard may jam inside the lamp housing resulting in potential fire hazard.
- 7 After you have finished using the system, turn lamp off with lamp switch, but leave Main switch on to allow the fan to cool the bulb down before next use. Lamp will not re-strike when too hot. Cooling fan will automatically shut off after preset time has elapsed (factory setting is 5 minutes)

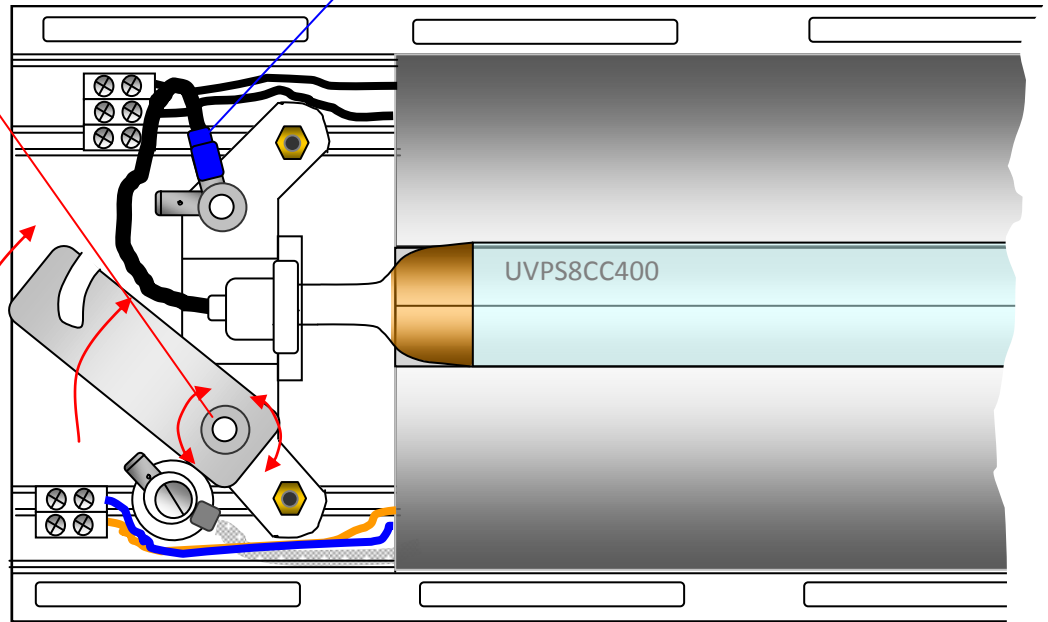
NOTE: Lamp intensity cannot be adjusted until the green ready light illuminates. The power supply is on auto pilot prior to green light while warming up the lamp for use. This overrides the manual dial interface. If you have the dial set to a position less than 100%, you may notice the lamp intensity drop off after the green light comes on. This is because the lamp control came off of auto pilot and returned to your dial setting.

While the UV Lamp is on, but it is not currently being used for production (Idle time), we recommend setting the intensity control dial to its lowest position. This will keep the conveyor temperature cooler, extending belt life.

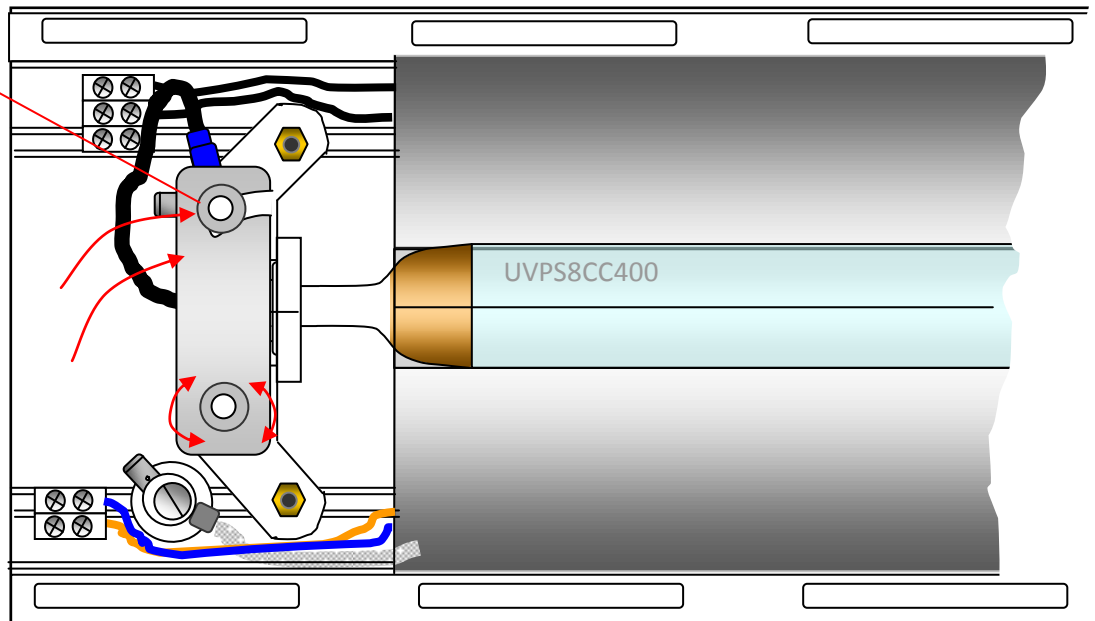
Lamp Installation:

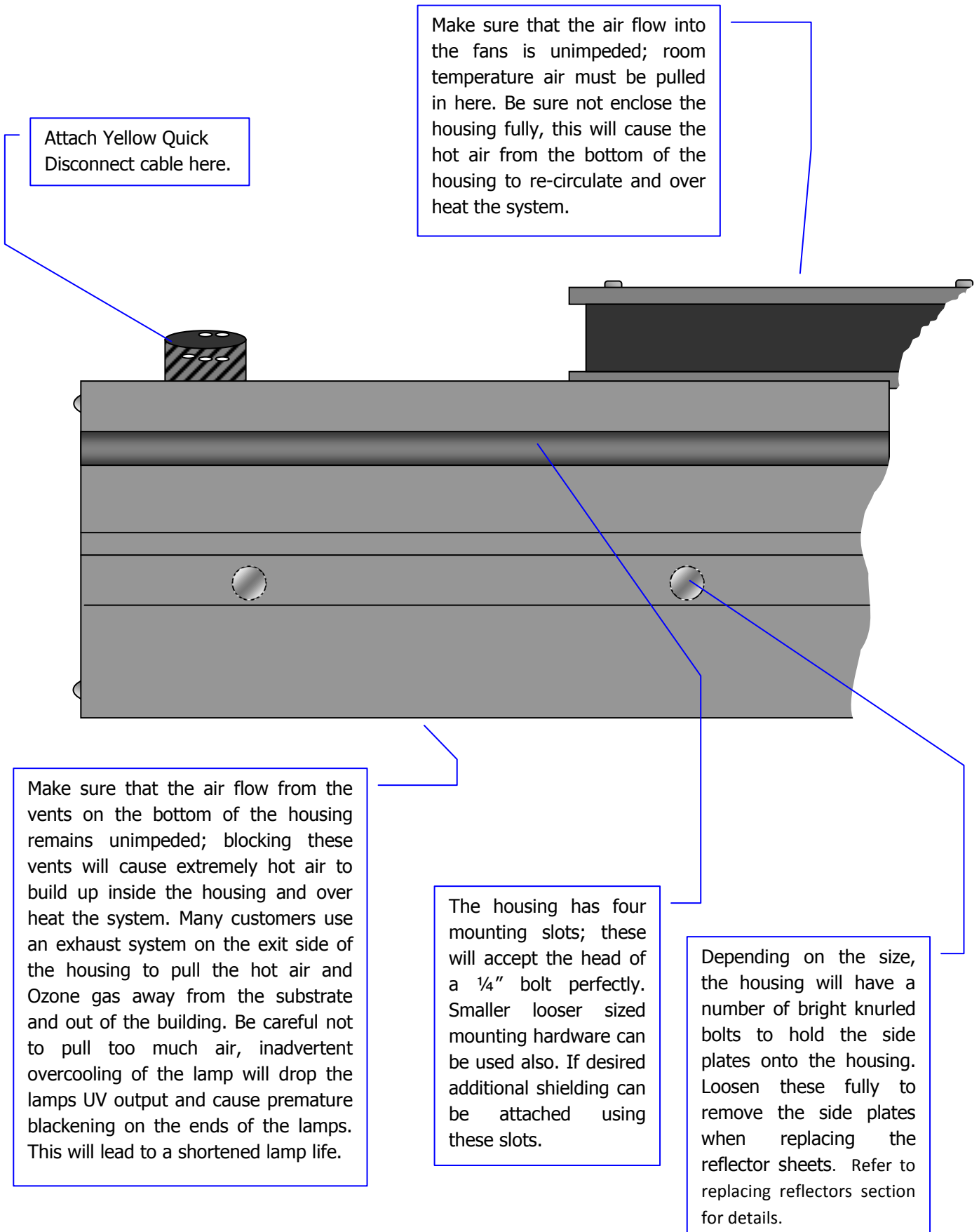
To install the lamp, loosen the knurled thumbscrews on the lamp holder, do not remove them. Swing the top part of the holder (this has a slot not a hole) clear. Lay the lamp in gently. The bracket is designed to remain loose, this is to compensate for the expansion of longer lamps when they get hot.

Connect the lamps wire by pushing the stab connector firmly onto the bright metal connection point.

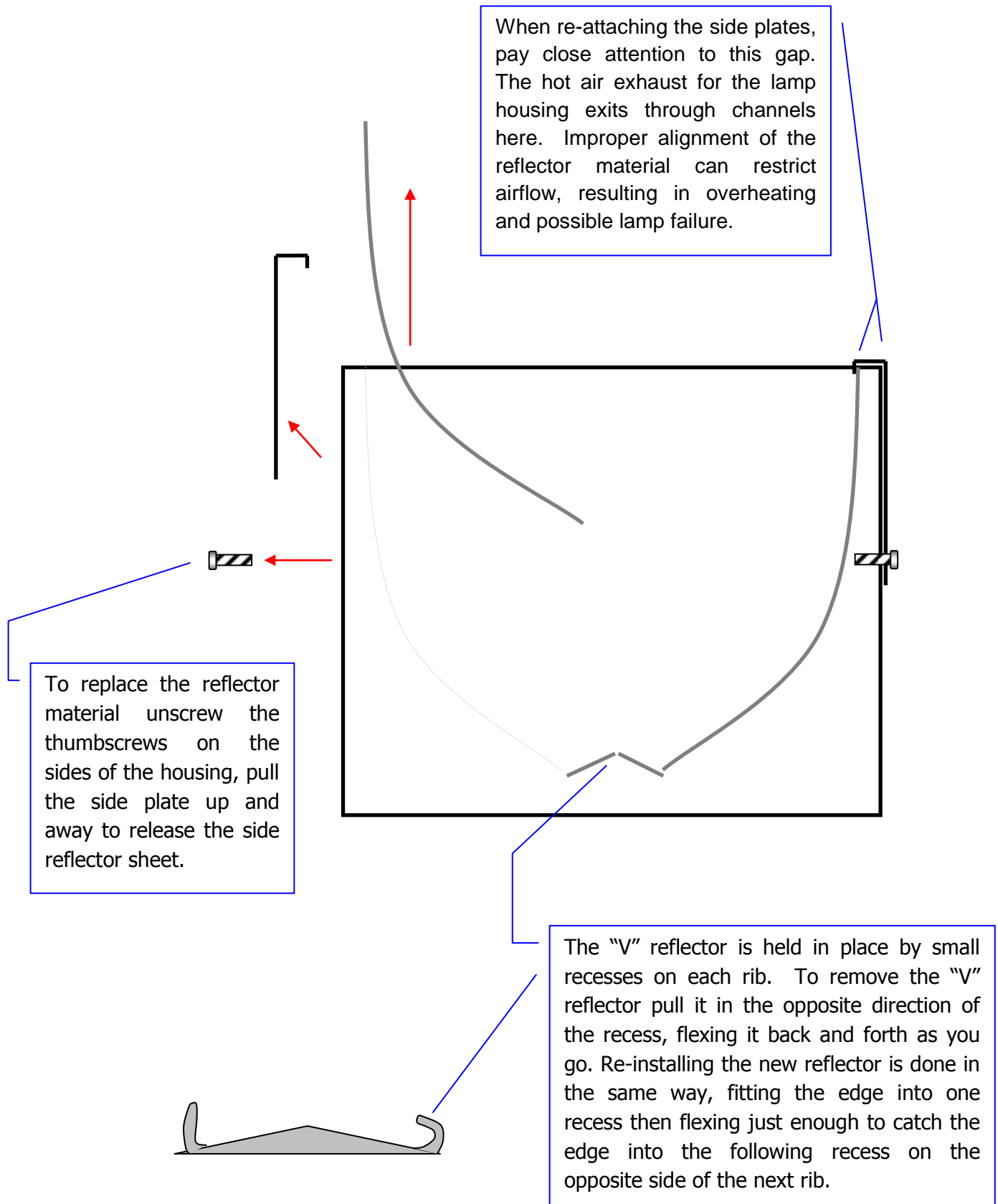


To clamp the lamp in place, swing the top part back into place and gently tighten the thumbscrews.



General Housing Notes:

Maintenance – Replacing the UV Reflectors



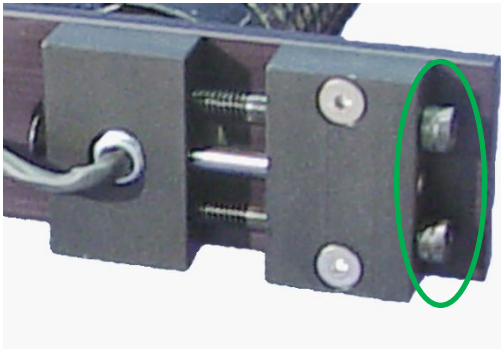
Safety Interlock (OVERRIDE KEY)

To permit use of the lamp housing without the conveyor, attach the furnished “DB-9 key” to the end of the conveyor power cable. This will complete the safety circuit, permitting the lamp to be ignited without the conveyor running.

This key is provided for troubleshooting purposes only. Operating the UV Lamp off of the conveyor is dangerous because the UV light is no longer shielded. UV radiation can cause severe burns to eye and skin.

Belt Tensioning Adjustment

The belt is preset at the factory for proper tension and tracking. Through normal use, heat will cause the belt to expand and therefore it may need to be tightened slightly to maintain tracking. **Do not over tighten.** Excessive tension will stretch the belt, and also cause additional strain against the Drive Roller Motor, resulting in a potential premature failure of the belt and/or drive roller.



To adjust tracking:

Locate the double Allen screws on the ends of the tensioning adjusters. (There is a pair on the left and right side of the conveyor)

On the side the belt is drifting towards; turn either one of the two screws clockwise to tighten the belt on that side. This forces the belt back the other way. Make small adjustments to avoid over tensioning. You may want to manually slide the belt to center first, and then make an adjustment. This prevents over adjusting.

Once the belt is tracking stable, carefully turn the second screw clockwise until it seats into the adjuster at the same amount as the first screw. Be careful not to over tighten because this will further adjust the roller, which in turn will put slack in the opposite screw. The purpose of the second screw is to secure the roller so that the belt tension and vibration does not cause the roller to travel backwards (loosen) on its own.

Changing the Belt

To remove the belt, loosen all four adjusting screws (counter-clockwise) until the roller is at its closest point toward the lamp housing. Locate the metal splice on the belt (looks like a zipper). There is a wire pin interwoven through this splice. Simply slide the pin completely out (either side) and the belt will separate.

Reverse the process for putting on a new belt. Always tension the belt evenly and lightly. Over tensioning a new belt will cause it to stretch quickly especially when heated by the lamp for the first time. This can cause premature failure of the belt, and/or create stress cracks in the edge seams.

Specifications:

Lamp Power Supply	3.1kW (208-277V 50/60Hz)
Lamp Part Number	UVPS8CC400
Reflector Part Number	U004-020 Length 10.8 inch
Conveyor Power Supply	24VDC (Integrated within main power supply)
Conveyor Speed	30 fpm – 125 fpm
Conveyor Belt	B002-007
	Dimensions 10" x 78 ½ "Alligator Splice, Sewn and Sealed edges
Conveyor Weight	26.0 lbs
Lamp Housing Weight	10.5 lbs
Power Supply Weight	20.5 lbs