

UVP Transilluminator Ballast Replacement

Overview

The purpose of this Technical Bulletin is to explain the process of uninstalling and reinstalling a transilluminator ballast on a UVP transilluminator.

To complete this procedure, the following tools and parts will be required:

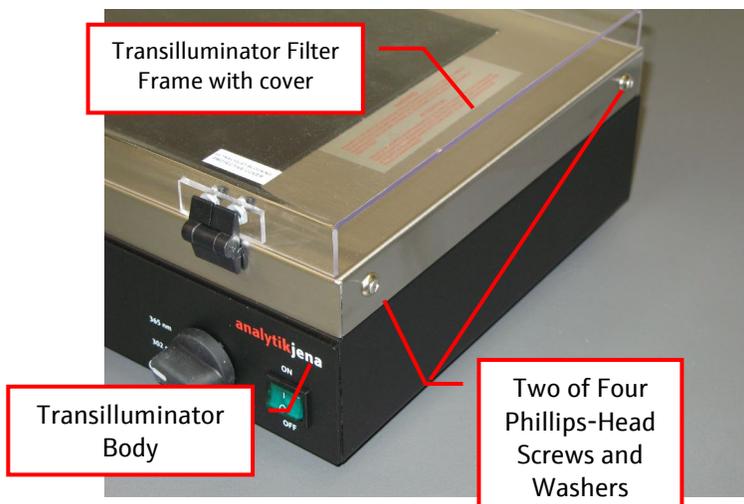
- Phillips-head screwdriver
- 1/4" nut driver
- New transilluminator ballast

Caution: This procedure requires a moderate level of technical competence. If you are not comfortable working with electronics, tools and/or related components, contact Analytik Jena for assistance.

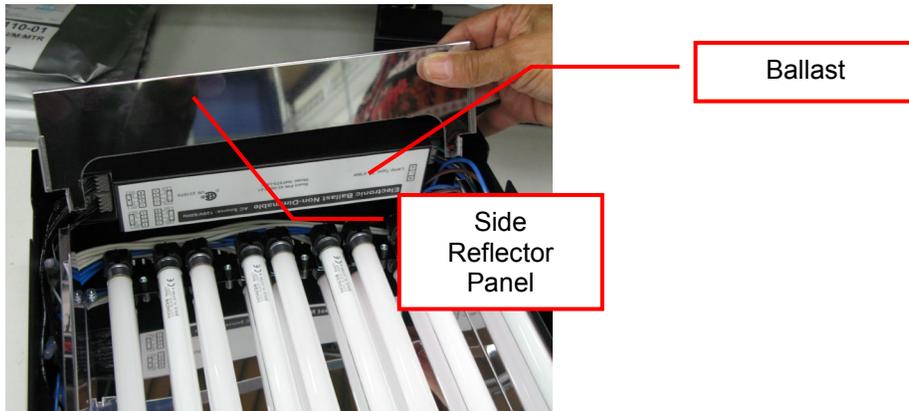
Removal Procedure

When performing the following procedure, place all components (screws, nuts, etc.) in a secure location as they will be reused for installation.

1. Turn off the transilluminator by placing the power switch on the front of the unit in the OFF position. Then, unplug the unit from the wall power.
2. Remove the four Phillips-head screws and washers securing the transilluminator filter frame to the body of the transilluminator. Lifting up, remove the transilluminator filter frame from the transilluminator body. Place the filter frame aside.

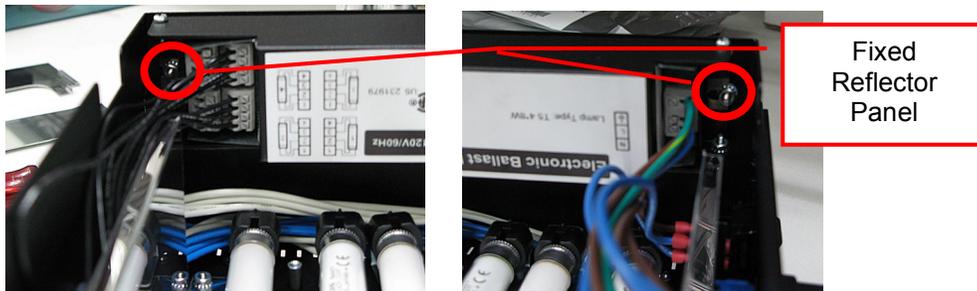


3. Inside the unit, locate the side reflector panels which are two removable reflective metal panels located at each end of the transilluminator light tubes. Note how these panels are installed prior to removal, as this will aid with reinstallation later on.



4. Pulling straight up, remove the side reflector panel nearest to the ballast from inside the transilluminator.
5. Locate the two 1/4" lock nuts on either end of the ballast (circled in red below). While carefully flexing the non-removable, fixed reflective panel out of the way, loosen and remove the two lock nuts.

Note: Take care not to drop either of the nuts into the body of the transilluminator. Doing so will require that the transilluminator be turned upside down, allowing the nuts to fall out of the unit.



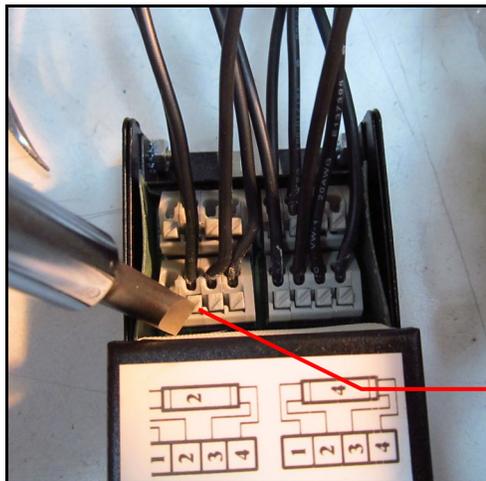
6. Carefully lift the ballast out of the transilluminator, taking care not to dislodge any of the wires attached to the ballast. Place either end of the ballast on the fixed reflector panel, above the UV bulbs, as shown below.



7. Place the new ballast next to the old ballast, also atop the fixed reflector panels, in the same orientation as the old ballast.



8. Grasp one of the wires inserted into the gray plastic wiring junction on either side of the old ballast. **Noting the location of the wire**, press down on the spring loaded, diagonally-hashed wire retainer with a flat head screwdriver to release the wire from the wiring junction.



Spring
Loaded Wire
Retainer

9. Locate the corresponding location on the new ballast's wiring junction. Pressing down on the spring loaded wire retainer, insert the wire into the correct position on the new ballast, then release pressure from the wire retainer. Slightly tug the wire to ensure that it is properly seated.



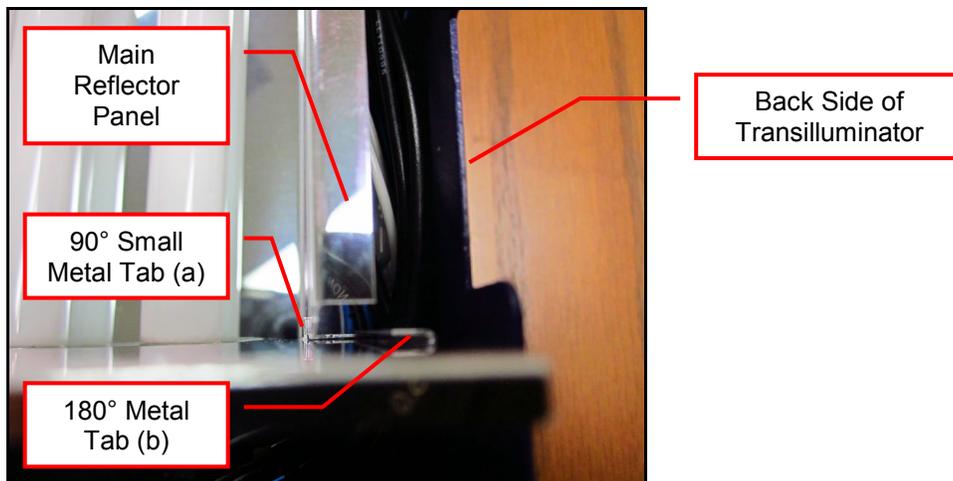
10. Working wire by wire, repeat these steps until all wires have been transferred from the old to the new ballast, taking care to match the location of the wires from the old to new ballasts. Note that there are wires which must be transferred on both sides of the ballast.

Installation Procedure

1. Place the new ballast in the transilluminator in the same position as the old ballast, aligning the two ballast mounting holes with the threaded studs coming from the transilluminator body.
2. Thread the two 1/4" lock nuts, removed earlier, onto the threaded studs. While carefully flexing the fixed reflector panels out of the way, tighten the two lock nuts snugly.
3. Using a soft cloth, clean any fingerprints or other dirt off of the surface of the side reflector panels prior to reinstallation.



4. The side reflector panels must be aligned with the main reflector panel during reinstallation.
 - a. A small metal tab (a) protrudes from the side reflector panel at a 90° angle. This tab must slide on the inside (the bulb side) of the fixed reflector panel.
 - b. Another portion of the side reflector panel is bent at a tight 180° angle to create a 180° angle tab (b). This must be aligned with a metal tab protruding from the outside (non-bulb side) of the fixed reflector panel.

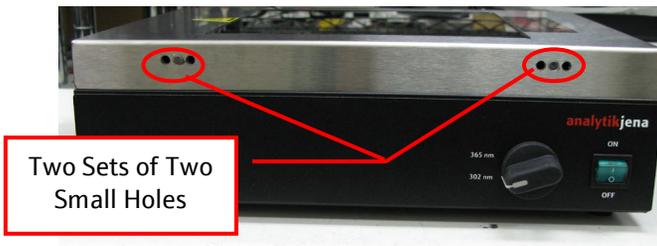


As the edges of the side reflector panels are sharp, ensure that all wiring is moved out of the way during installation of the side reflector panels to avoid cutting into the sheathing of the wiring.

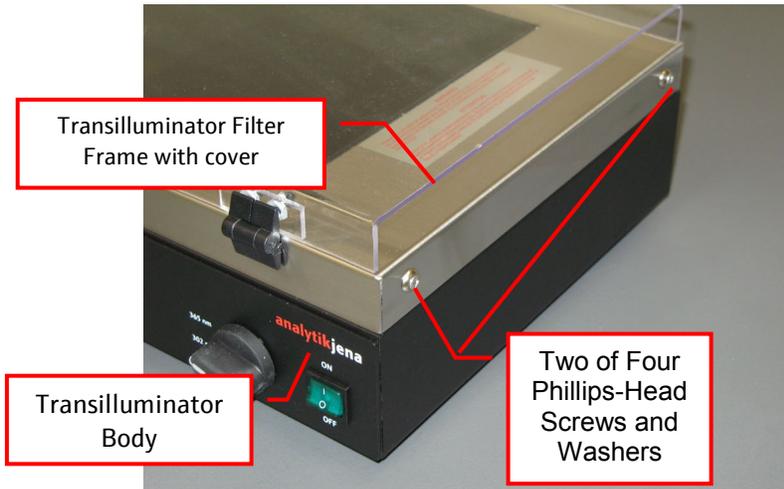
Slide the side reflector panels into place until the top edges of the reflector panels are flush with the top edges of the main reflector panel.



5. Replace the transilluminator filter frame on top of the body of the transilluminator with the two sets of two small holes on the filter frame facing toward the front of the unit.



6. Reinstall the four Phillips-head screws and washers on the sides of the transilluminator to secure the transilluminator filter frame to the transilluminator body.



Technical Support

Contact Analytik Jena US Technical Support for additional assistance:

Call (909) 946-3197, and ask for **Technical Support** during regular business days, between 7:00 am and 5:00 pm, PST.

E-mail your message to: info@us.analytik-jena.com or support@us.analytik-jena.com

Fax Technical Support at **(909) 946-3597**