

## **NIR-O Process Analyzer Maintenance**

The only periodic maintenance on the NIR-O process analyzer is the lamp replacement.

Guided Wave has designed the NIR-O Lamp for superior spectrometer performance, a long life, and ease of replacement. The lamp is pre-aligned by its cartridge. No other alignment or adjustment is required.

The lamp typically continues to operate beyond the 6-month replacement period. However, we recommend replacing it on schedule to prevent unexpected failure and to ensure peak performance of NIR-O. As the lamp ages beyond the replacement date, its light output can become unstable causing instability in the results from the analyzer.

- ✓ NIR-O Light Source is a 7.25 V/15 W tungsten halogen lamp
- ✓ Expected life of 5000 hours or approximately six (6) months of continuous use
- Replacement is simple and requires only a 2mm hex key/drive
- ✓ NIR-O Lamp Part Number: #40611-00001



The operating lamp and its surrounding assembly are extremely hot to touch. Allow ample cooldown time of no less than 10 minutes.

Do not touch the glass of the lamp as it may interfere with the output (Clean with alcohol if you accidentally do touch it).

## Lamp Replacement Instructions

- 1. It is not necessary to power down the NIR-O for this procedure. (note that process results will not be valid if the schedule is active and channels on-line)
- 2. Unplug the lamp power leads from its port by pinching the connector and its retainer clip with your fingers and pulling straight out.
- 3. Allow an ample cooldown period of no less than 10 minutes.
- Remove the old lamp by turning the retaining screws counterclockwise a partial turn to align the flats on the lamp retainer so it will allow the lamp to be pulled out of the assembly.
- 5. Insert the new lamp into the assembly and tighten the retaining screws just until they stop. Verify the lamp retaining screws are securely holding the lamp in place.
- 6. Insert the lamp power leads into the port until the connector snaps into place. Verify it is secure by gently tugging on the wires.
- Power up NIR-O (if needed) and allow the new lamp to stabilize. You may observe the lamp's light energy levels while waiting for the lamp to stabilize. (Refer to the Diagnostics section of the manual). The light levels on the Reference beams should be consistent with what is normal for your NIR-O.
- 8. It is recommended to collect a new ZERO for all channels after changing the lamp.
- 9. Optionally you can log this maintenance into the event log for future reference.



