



Number: SHT-PS363-01

Date: August 18, 2008

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VARIAN

SERVICE How To

Model Number: PS 363 Fluorescence	Originator: P. van Poppel	Topic Optical alignment Procedure
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Optical alignment Procedure:

(to be conducted by a trained Varian Service Representative only)

1. Focusing mirror adjustment

- Remove the optical unit from the PS 363.
- Remove the Lamp house assembly.
- Place the optical alignment base (03-926131-29) and post (03-926131-28) in front of the focusing mirror.

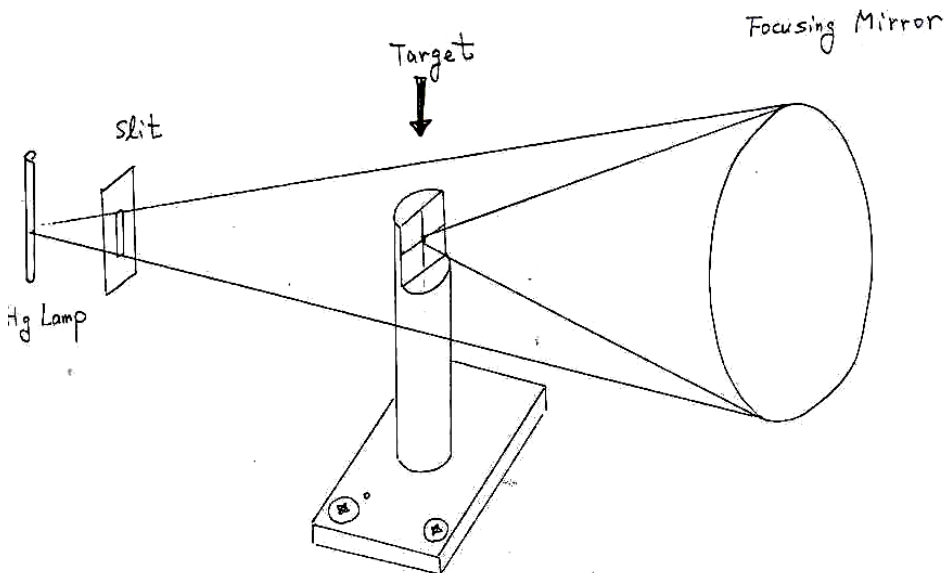


Figure 1 Focusing mirror adjustment

- Insert a Hg pen lamp behind the first slit (EX entrance slit) between the slit and the grating. The light from the lamp must completely cover the slit.
- Rotate the jig so the target area faces the Hg lamp and adjust the lamp position to focus on the center of the jig.

- Turn the jig towards the focusing mirror and focus the beam spot on the + of the jig. Adjust the mirror position so that a rectangular spot () is on the target. The size of the rectangle on the jig is dependent on the position of the Hg Lamp.
- Move the mirror back and forth to obtain the smallest point on the mirror (focus point). The height can be adjusted with the 2 screw on the mounting post. The tilt can be adjusted with the center hex screw. There should be no reflection on the jig. A final check of the alignment can be done using the Xenon lamp.
- Connect the optical compartment to the power supplies and adjust the lamp to focus on the entrance slit.
- Set the Ex wavelength to 550nm. Two bright beams should be on the grating and a bright green beam spot should be on the light diffuser in the sample compartment.

***Note:** If the ceramic plate is not center of the Lamp Holder, light beam to the slit cannot adjust the center with Xe Lamp position adjustment (Vertical, Horizontal and focus).*

2. Final Wavelength Calibration

The final wavelength adjustment can be made by adjusting the photo-coupler position. A +/- 5 nm from center can be adjusted. The cam position value can also be firmware adjusted.