Purpose

These instructions provide a step-by-step procedure for replacing the lamp in DR/2000 and DR/2010 Spectrophotometers. Remember, a wavelength calibration adjustment must be done after replacing the lamp. See the Wavelength Calibration Adjustment instructions shipped with the lamp.

The lamp shipped with this instruction sheet is one of two designs. One lamp has a single square slot and a light slit (see Figure 1). The other lamp has a v-shaped slot and a square slot (see Figure 2). Instructions for installing each lamp are slightly different in step 4.

Lamp Replacement

If the lamp fails and must be replaced, proceed as follows.

1. Disconnect the Battery Eliminator and the RS 232 connector. Turn off the power switch and empty the cell holder. Place the instrument upside down on a padded surface.

2. Remove the two screws securing the lamp compartment cover and remove the cover (see Figure 1).

3. Remove the lamp retainer screw and metal sleeve from the lamp channel. The sleeve is tapered at the bottom end, and, because of its snug fit, probably needs to be loosened with a tool (needle-nose pliers are recommended) for removal. Remove the lamp. Loosen the two terminal screws to free the lamp leads.

4. To replace a lamp with two notches (Figure 1), place the new lamp in the lamp channel with the light slit toward the light slit in the channel. To replace a lamp with a single notch (Figure 2), place the new lamp in the lamp channel with the V-shaped groove facing the wavelength dial. The square notch in the new lamp should be placed against the side with the retainer screw.

5. Push the lamp to the bottom of the lamp channel and install. Firmly tighten the lamp retainer screw and sleeve in the channel to secure the lamp. Secure the sleeve with the beveled end down. The lamp must be held tightly in the proper position, flush against the bottom, the end, and the light slit side of the lamp channel (see Figure 2). Connect the lamp leads of the new lamp assembly at the lamp terminals (lead orientation does not matter). Do not overtighten.

6. Install the lamp compartment cover. Return the instrument to the upright position and restore power.

Note: Some internal components are sensitive to static and may be damaged by external static electricity. Always re-install the lamp cover after maintenance or servicing.

7. Perform the Lamp Calibration Adjustment procedure described in the instruction shipped with the lamp.
LAMP REPLACEMENT, continued

Figure 1  Lamp Replacement For Lamp With Two Notches

Lamp holder must be flush against bottom and the two channel surfaces indicated by arrows.
Figure 2  Lamp Replacement For Lamp With One Notch

Lamp holder must be flush against bottom and the two channel surfaces indicated by arrows.