



P.O. Box 20
Lewisburg, PA 17837-0020

(717) 524-2281
FAX: (717) 524-8447

May 10, 1991

Director U.S. Nuclear Regulatory
Commission Region I
Nuclear Materials Safety Section B
475 Allendale Road
King of Prussia, PA 19406

Dear Sir:

Enclosed is a revised copy (revised by William R. Prendergast, LFE Radiation Safety Officer) of the window replacement procedure for an LFE Profitmaster 5000 or 5001. This new procedure was developed as a result of Mr. Prendergast's discussions with the NRC.

My request is that you substitute the attached procedure for the one submitted with our license application. If you have any questions please feel free to contact me at (717)524-2281, Ext. 458.

Thank you,

Jeffrey Loss
Radiation Safety Officer

:ke
encl.

B/14

Device Window Replacement

A. Source Housing Window Replacement

1. The window on the source housing is replaced from the outside of the device. The material of the source housing window of the LFE Model SCL-77A or SUP77A device is aluminum with a thickness of 0.8 mil.
2. Before attempting to replace a window, make certain that the device shutter is closed. Closure is indicated by illumination of the green indicator light. After removing power from the device, check again for shutter closure by observing green (no red) in the viewing port. Remove the detector housing to gain access to the window. To remove the detector housing, remove the electrical connector and the four bolts that secure the detector housing to its mounting bracket or remove the electrical connector and the two bolts that secure the detector housing and its bracket to the frame, depending on the type of frame.
3. The window is secured by means of a steel ring which is held in place by four screws. To remove the damaged window, remove the screws and lift off the ring. The window may now be removed.
4. Before installing the new window, make certain that the "O" ring beneath the window is in place. Place the new window in position and make a small hole in it for the first screw. Align this hole with the screw hole. Place the ring over the window, aligning one of the holes with the screw hole. Place a screw in the hole and engage about two turns. On the opposite side of the ring, make another small hole in the window for the second screw and align with the screw hole. Place a screw through the hole in the ring into the screw hole. Engage about two turns. Repeat the process for the remaining screws. Tighten all screws. With a knife, trim excess window material.
5. Return the detector housing to the frame. Reconnect the electrical connector.

B. Detector Window Replacement

1. The window on the detector housing is replaced from the outside of the device. The material of the detector housing window is aluminum with a thickness of 2.0 mils.
2. Before attempting to replace a window, make certain that the device shutter is closed. Closure is indicated by illumination of the green indicator light. After removing power from the device, check for closure of the shutter by observing green (no red) in the viewing port. For window replacement, the detector housing must be removed from the frame. To remove the detector housing, remove the electrical connector and the four bolts that secure the detector housing to its mounting bracket or remove the electrical connector and the two bolts that secure the detector housing and its bracket to the frame, depending on the type of frame.

3. The window is secured by means of a steel ring which is held in place by six screws. To remove the damaged window, remove the screws and lift off the ring. The window may now be removed.
4. Before installing the new window, make certain that the "O" ring beneath the window is in place. Place the new window in position and make a small hole in it for the first screw. Align this hole with the screw hole. Place the ring over the window aligning one of the holes with the screw hole. Place a screw in the hole and engage about two turns. On the opposite side of the ring, make another small hole in the window for the second screw and align with the screw hole. Place a screw through the hole in the ring into the screw hole. Engage about two turns. Repeat the process for the remaining screws. Tighten all screws. With a knife, trim excess window material.
5. Return the detector housing to the frame. Reconnect the electrical connector.