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AIH040, AIH094, AIH097, AIH102 & AIH127 QUARTZ TUBE HEATER INSTALLATION INSTRUCTIONS

- 1) Replacement of the quartz heater in a radiant infant warmer requires basic hand tools and either a service manual or diagrams of the heater housing.
- 2) Use a cloth to safely handle the new heater and inspect the quartz sheath before installation for cracks or chips that may have occurred during shipping. If you do find chips or cracks *do not install the heater* – Contact RPI for a Returned Goods Authorization (RGA) number and we will send you a replacement heater.



WARNING: Because quartz heaters can fracture without warning and can produce *very* sharp fragments and edges, using a *cloth* towel to handle them will help prevent injury. *Do not handle the new quartz heater with bare hands or powdered gloves because the oils in your skin and the pow-der on the gloves can cause a darkening of the quartz sheath and a reduction in the life expectancy of the heater.*

3) Disconnect power to the radiant infant warmer.



CAUTION: *Never work on an Infant Warmer that is plugged into a live outlet.* Many Infant Warmers contain live voltage circuits that remain active when the power switch is turned off.

4) Remove all grills or housings that prevent access to the heating element.

5) The next step will be removing the heating element. But first, note caution advisory below.



CAUTION: The old quartz heater should be treated as a hazard to staff and patients. The quartz used for the sheath can chip or crack (producing *very* sharp edges). When disposing of heating elements, use caution and comply with local and state regulations.

5) Continued

To remove the heating element:

Depending on the model, the heating element will need to be removed in one of two ways, as noted below:

- If the warmer uses wires and push-on terminals to connect the heater to the warmer, unplug the push-on terminals from their tabs and remove the heater assembly from the head. Using a cloth towel to hold the quartz heater, remove the old heater from the element holder and install the new heater in its place, ensuring that all mounting clips are fully engaged. Reinstall the heater assembly into the head ensuring that the terminals are fully engaged on their respective tabs and that the wires have been routed away from the element as far as possible. Do not replace the shielding, grills or housings at this time.
- If the warmer has ceramic sockets they will have internal contacts which are spring loaded and may be very difficult to compress. Using a cloth towel to hold the quartz heater, press the old heater further into the socket fully compressing the spring and drop down the opposite end of the heater from its spring loaded socket. Inspect both ceramic sockets and replace them if they appear arced, pitted or corroded (Heater Socket Harness RPI part #'s AIA055, AIS092 or AIS093). To replace the heating element use a cloth towel to hold the heater, insert one end into the first heater socket. Using moderate force, compress the socket spring fully and swing the opposite end of the heater into place in second socket be sure you have both heater terminals fully engaged in their sockets and that they firmly hold the heater in place, Do not replace the shielding, grills or housings at this time.
- **6)** All newly installed quartz tube heaters should receive a thorough inspection before returning the radiant warmer to service. Follow these four steps for a Safety Check:

<u>Step #1:</u> Plug in the warmer and operate the warmer at full power for at least 30 minutes. Watch and listen for small pieces of quartz that might fall from the warmer module during the first few minutes. After 30 minutes turn the warmer off for 5 minutes and then power the warmer up for an additional 5 minutes.

<u>Step #2:</u> Power down the warmer and *unplug it from the live outlet*. Allow the warmer to cool thoroughly and use a cloth towel to carefully remove the heating element from the head, or disconnect the push on terminals and remove the element holder assembly from the head. Examine the element for breaks, chips or other imperfections and physical damage – contact RPI, for replacement, if any defects are found.

<u>Step #3:</u> Reinstall the heating element or holder and replace all shields, grills or housings that were removed.

<u>Step #4:</u> Finally, plug the warmer back in and operate it for 10 minutes before returning to service.