

PTAC EVALUATION AND TRAINING FOR

WOODSPRING SUITES FORT WAYNE

1-4-23

I was requested to help evaluate 4 PTAC units that would not go into heat mode and check on new unit that was shipped with wrong power pigtail. Results for each room listed below:

Room 105

No heat, ac compressor operated. Ran thru two reset procedures supplied by the manufacture and turned the control board switch off to reset unit. Still no heat. Removed unit from wall and found outside air damper door dislocated. Seal needs to be replaced. Disassembled the heating element and checked the reset button. Did not seam to be tripped. Resistance coil did not show any signs of damage or burning. Checked with continuity meter thru resistance element and thermal safety reset. Circuit tested OK. Heat pump did not seem to be operating during a call for heat. Suspect damaged control board. Did notice buzzing sound coming from control board. This confirmed what Bobby had found during his inspection.

Water damage was noted on the metal sleeve for the ptac unit. Upon further inspection the sleeve was discovered to be tilting into the interior of the building by ¼ inch. This indicates that the sleeve has moved due to settling or other structural failure.

Room 204

No heat, ac compressor operated. Ran thru two reset procedures supplied by the manufacture and turned the control board switch off to reset unit. Still no heat. Disassembled the heating element and checked the reset button. Did not seam to be tripped. Resistance coil did not show any signs of damage or burning. Checked with continuity meter thru resistance element and thermal safety reset. Circuit tested OK. Heat pump did not seem to be operating during a call for heat. Suspect damaged control board.

Also noted water stain on ceiling tile at end of hallway close to room 204. This may be another water leak from the exterior EFIS. Suspect caulk failure on decorative horizontal trim board.

Room 332

Checked air conditioner occupancy sensor on door and discovered batteries were crorroded at battery terminals. Recommend all rooms door sensors have their batteries replace on an annual cycle.

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Room 425

Flaking and chipping of drywall mud form water damage around PTAC unit. Did visual inspection thru window that showed a hole in the EFIS exterior to the right of the window from the inside of the room. Took FLIR thermal scan which indicated colder areas around the window and along the top plate of the South wall. This indicated that water had saturated this area and was reducing the insulating capabilities of the wall insulation.

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New PTAC

Wrong unit shipped for this location. Model HEC094H35AXXXGA was shipped with incorrect voltage (265 Volt) This facility uses 208/230 volt units and a pigtail with a GFCI on the plug chord. Unit shipped did not have this wiring configuration.

Estimated cost to repair.	Control board	\$135
	Labor to install	\$145
	Trip Charge	\$30
	Total	\$310

This price does not include cleaning of the evaporator coil or the condensing coil. This needs to be done as well adding an additional $1\,\%$ hours.

Recommend replacement of all 4 units due to age and physical condition.

EFIS Inspection

Checked perimeter of facility with Bobby and pointed out numerous areas where water could be getting behind the EPIS causing water damage to show up in rooms adjacent and below these locations.

Phil Doege

Chief Technical and Senior Design Manager