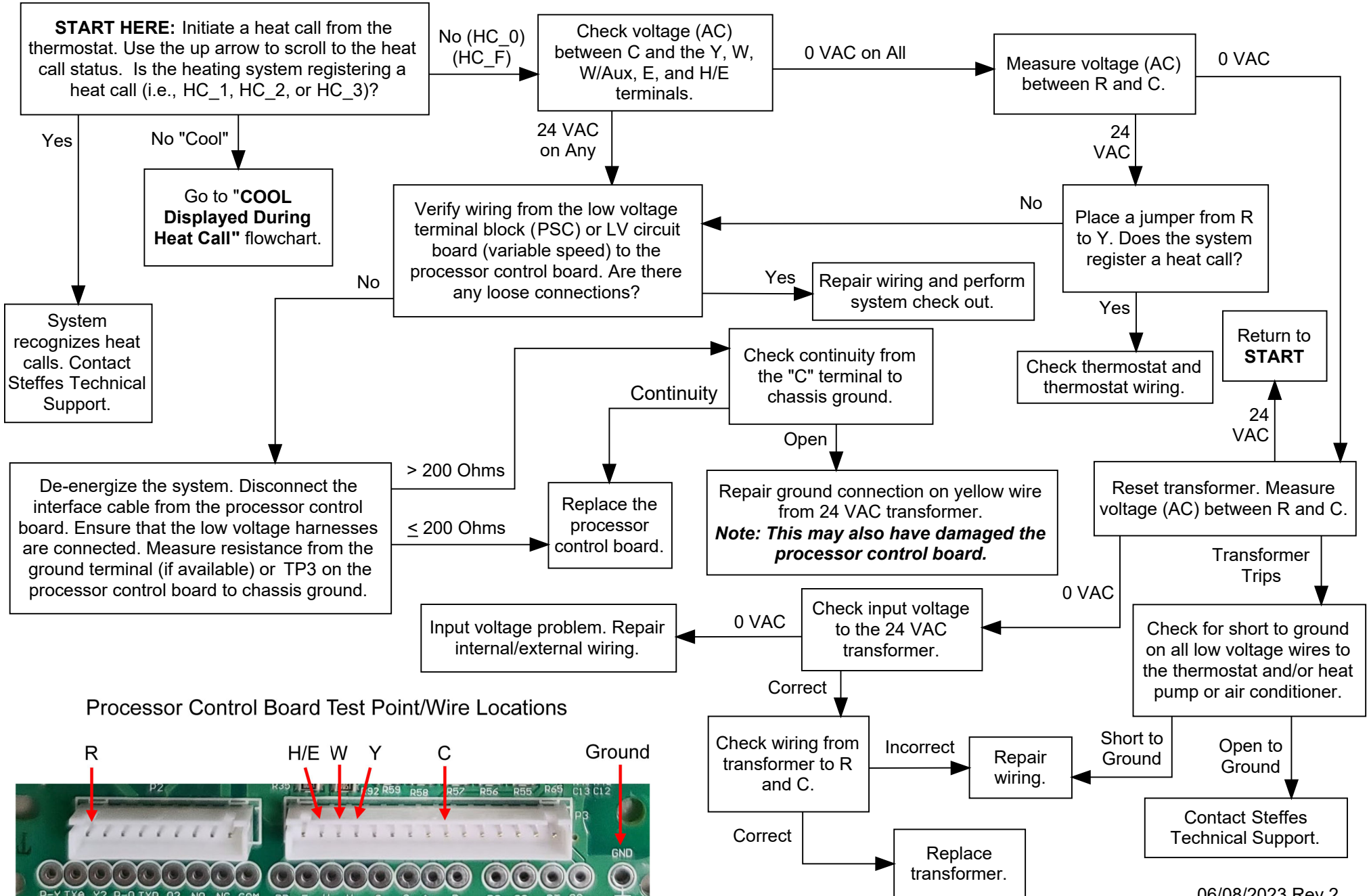# Heat Call Not Recognized
3100/4100/5100 Series and 6100/7100/8100/9100 Series If Using Thermostat

Note: This flowchart is not applicable in applications with building load management systems.

START HERE: Initiate a heat call from the thermostat. Use the up arrow to scroll to the heat call status. Is the heating system registering a heat call (i.e., HC_1, HC_2, or HC_3)?

- Yes → System recognizes heat calls. Contact Steffes Technical Support.
- No "Cool" → Go to "**COOL Displayed During Heat Call**" flowchart.
- No (HC_0) (HC_F) → Check voltage (AC) between C and the Y, W, W/Aux, E, and H/E terminals.

Check voltage (AC) between C and the Y, W, W/Aux, E, and H/E terminals.
- 0 VAC on All → Measure voltage (AC) between R and C.
- 24 VAC on Any → Verify wiring from the low voltage terminal block (PSC) or LV circuit board (variable speed) to the processor control board. Are there any loose connections?

Measure voltage (AC) between R and C.
- 0 VAC → (to Reset transformer...)
- 24 VAC → Place a jumper from R to Y. Does the system register a heat call?

Place a jumper from R to Y. Does the system register a heat call?
- No → Verify wiring from the low voltage terminal block...
- Yes → Check thermostat and thermostat wiring.

Verify wiring from the low voltage terminal block (PSC) or LV circuit board (variable speed) to the processor control board. Are there any loose connections?
- Yes → Repair wiring and perform system check out.
- No → De-energize the system...

De-energize the system. Disconnect the interface cable from the processor control board. Ensure that the low voltage harnesses are connected. Measure resistance from the ground terminal (if available) or TP3 on the processor control board to chassis ground.
- > 200 Ohms → Check continuity from the "C" terminal to chassis ground.
- ≤ 200 Ohms → Replace the processor control board.

Check continuity from the "C" terminal to chassis ground.
- Continuity → Replace the processor control board.
- Open → Repair ground connection on yellow wire from 24 VAC transformer. **Note: This may also have damaged the processor control board.**

Return to **START**
- 24 VAC → Reset transformer. Measure voltage (AC) between R and C.

Reset transformer. Measure voltage (AC) between R and C.
- 0 VAC → Check input voltage to the 24 VAC transformer.
- Transformer Trips → Check for short to ground on all low voltage wires to the thermostat and/or heat pump or air conditioner.

Check input voltage to the 24 VAC transformer.
- 0 VAC → Input voltage problem. Repair internal/external wiring.
- Correct → Check wiring from transformer to R and C.

Check wiring from transformer to R and C.
- Incorrect → Repair wiring.
- Correct → Replace transformer.

Check for short to ground on all low voltage wires to the thermostat and/or heat pump or air conditioner.
- Short to Ground → Repair wiring.
- Open to Ground → Contact Steffes Technical Support.

Processor Control Board Test Point/Wire Locations

R   H/E W Y   C   Ground

R-Y TXA Y2 R-O TXP O2 NO NC COM   RP E W Y O G A P   DS OS RT SC

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