Induced Voltage Control Issue -Quest 706

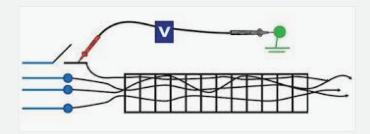
SERVICE DOCUMENT



Quest 706-50hz: #4041800

OVERVIEW:

Control wires running next to other cables can induce a voltage into the wire. This is much like how a transformer induces voltage to the secondary winding. If this voltage is high enough it can keep relays or control boards powered to cause issues. This will effect units with solid state controls more like the 506, 876, Wellington since the voltage required to cause the issue is much lower.



SYMPTOMS:

- Unit stays running after control turns off.
- Relays and/or contactors chatter.
- Intermittent tripping of breakers.
- Welded relays or contactors.

CAUSES:

Large number of cables ran next to control wires.

Long cable runs. Usually 50' + can start to cause this but shorter runs are possible. Control wires ran close to high voltage wires.





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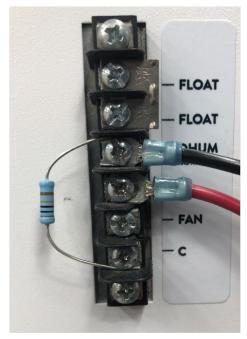


DIAGNOSIS:

- Voltage present on DHUM and/or FAN wire with control contacts open.
 - 2+ volts between C and DHUM or FAN is too high.
 - High voltage between DHUM or FAN to transformer or supply power.

FIX:

This induced voltage can be dissipated by using a 10K ohm 1 watt resistor across the DHUM or FAN terminal to the C terminal. This will effectively burn off the induced voltage.



Have Questions? Contact the Quest service department at **877-420-1330** or **service@questclimate.com**