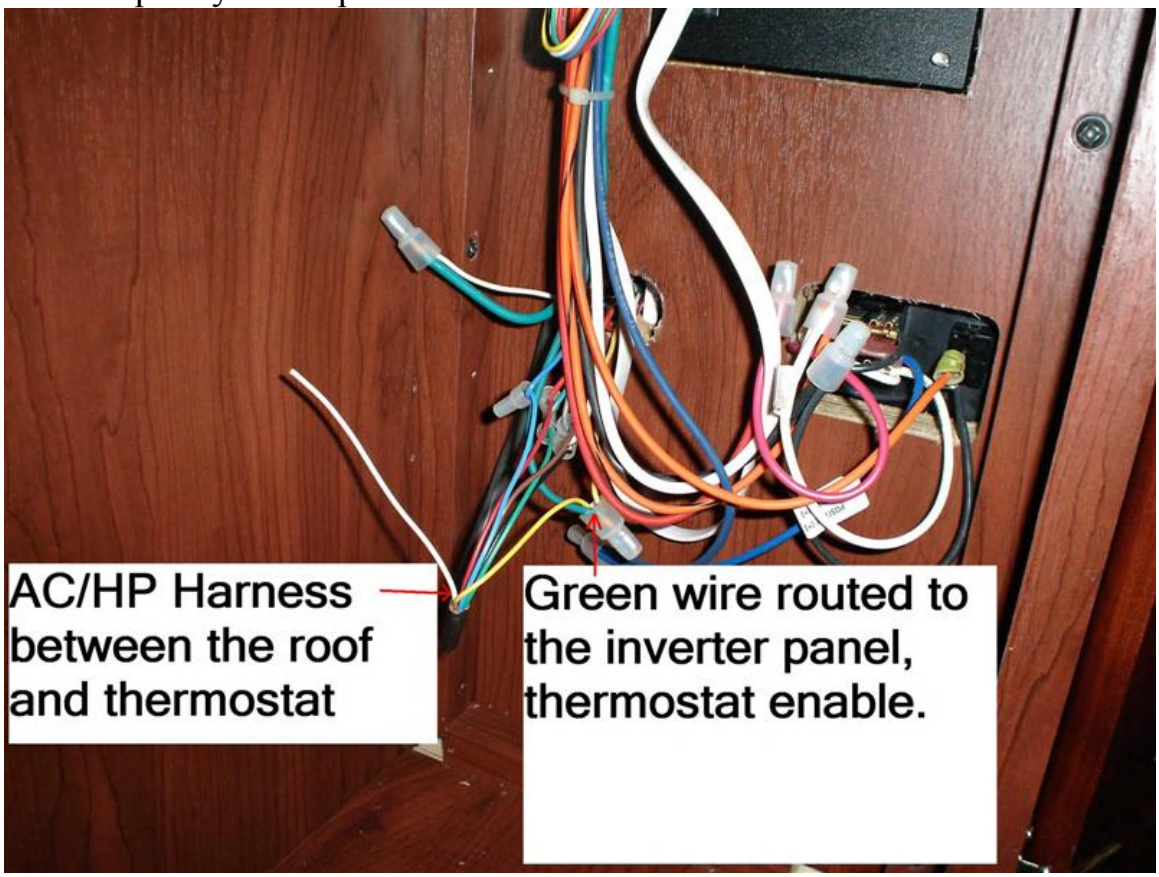
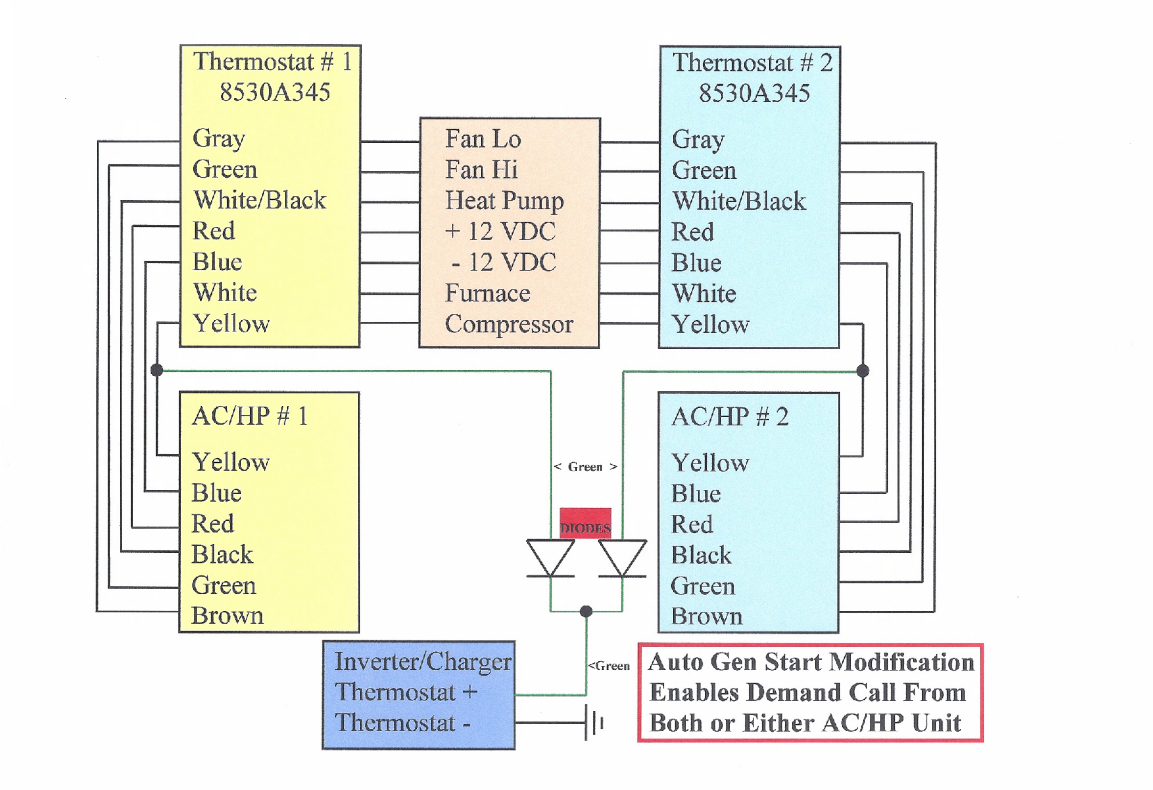
Modifying the Thermostat Enable Feature of the Auto Generator Start Feature on Xantrex RV Series Inverters

During the 2007 build year, Tiffin wired the Xantrex RV series inverter with the RC/GS remote panel to be able to start the generator based on a thermostat demand on AC/HP # 1. The # 1 unit is usually the first unit from the front of the coach.
Tiffin usually routes all of the AC/HP harnesses out of the roof in the same area and that area is near the thermostat in the hallway or near the hallway. In my 2007 40QSH Phaeton the two AC/HP harnesses are routed into the top of the pantry and then the front AC/HP harness is routed down the inside wall of the pantry, behind paneling. The rear AC/HP is routed toward the bedroom and into the overhead TV cabinet where the thermostat is mounted on the cabinet. Here is a picture of the backside of my hallway thermostat with the pantry inside panel removed.



You can see where the green wire is spliced into the yellow thermostat wire. This green wire is then routed to the inverter and connected to the thermostat

enable + terminal. Tiffin by running this wire is then enabling the thermostat to tell the inverter Hey I want to start the generator so I can satisfy my demand to the thermostat which is switched to either the AC or HP mode.
I modified the wiring to enable EITHER OR BOTH AC's or HP's to tell the inverter to start and to continue to run the generator until the thermostat demand is satisfied.
The only wiring I needed to add was about four foot of green 18 gauge wire and two diodes. I cut the green wire near the yellow splice and inserted a diode. I found the rear #2 AC/HP harness in the top of the pantry and spliced the four foot piece of green wire into the yellow wire (#2 AC/HP harness) then routed the other end of the green wire down to the back of the # 1 thermostat where I added another diode. I took the other end of both diodes and spliced them into the green wire running back to the inverter.
This is a copy of my wiring modification and the wiring schematic.



This modification allows either or both thermostats when switched to AC or HP to place a demand (call) on the inverter which in turn will tell the generator to start and continue to run until the thermostat demand is satisfied. Additional diodes and green wire can be installed for a third or even a fourth AC/HP.