

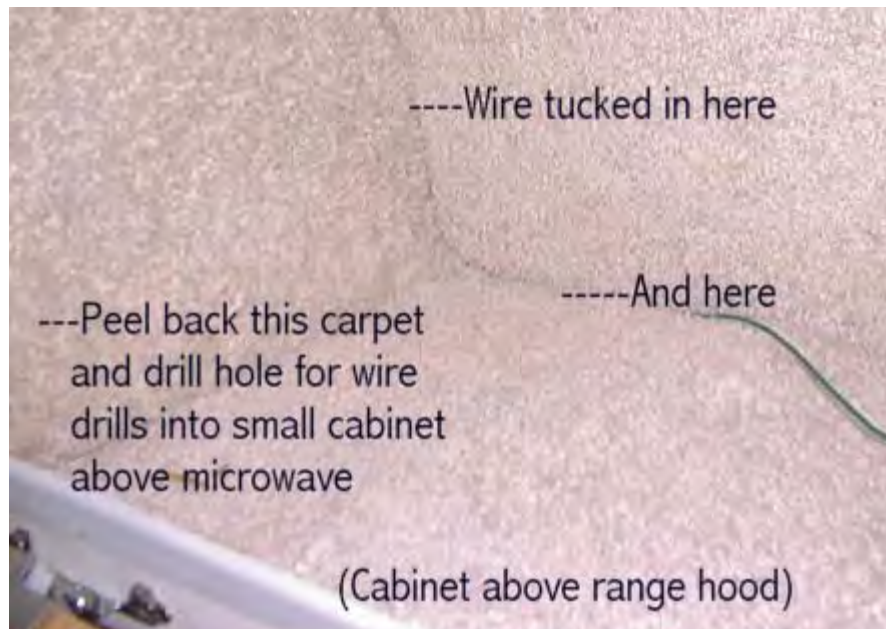
CASITA AUTOMATIC A/C MOD



Remove existing thermostat cover and drill out 1/8" pop rivets (2). Remove two existing wires to thermostat. The 12v feed was the top one on mine, check it with a test light and mark it. Drill a 3/8" hole next to existing thermostat wire hole



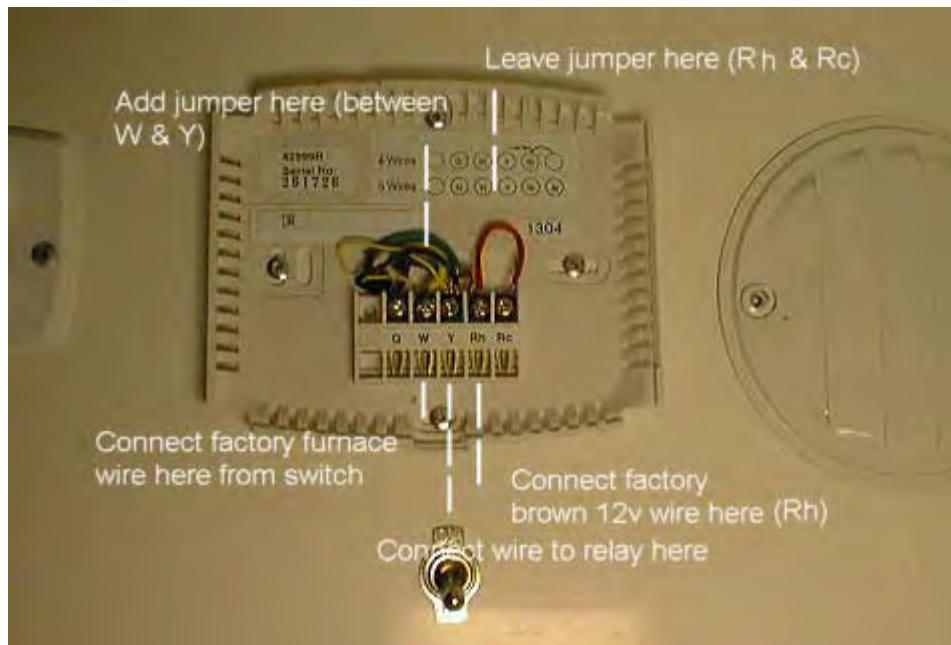
Remove cabinet door and wood strip above microwave. Next peel back corner of carpet secure with stick. Next drill a 3/8" hole. Angle drill bit towards thermostat location. Using a piece of stiffer wire as a feed wire insert it in the hole and feed thru the hole you drilled where the thermostat goes and pull the end of 8' length of 18 ga automotive wire and leave about 3" out and tie a knot so it will stay put.



Next peel back the carpet enough to drill a 1/4" hole in the front corner of the cabinet above the range hood thru to the other cabinet, then feed the wire into this cabinet. Then tuck the wire around the edge of the carpet going up first then over the top and finally along the back of the cabinet towards the rear cabinet.



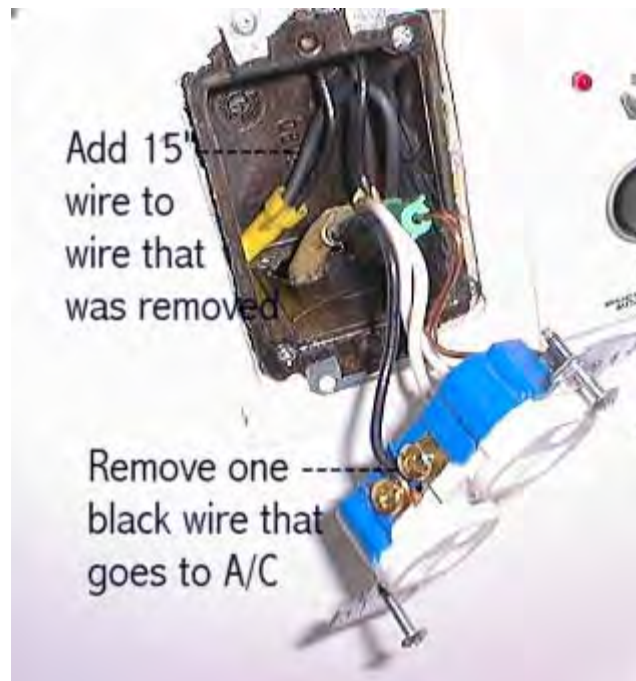
Next, from inside the rear cabinet drill another 1/4" hole at the far back corner, then feed the wire into this cabinet. Continue tucking the wire along the back edge of the cabinet.



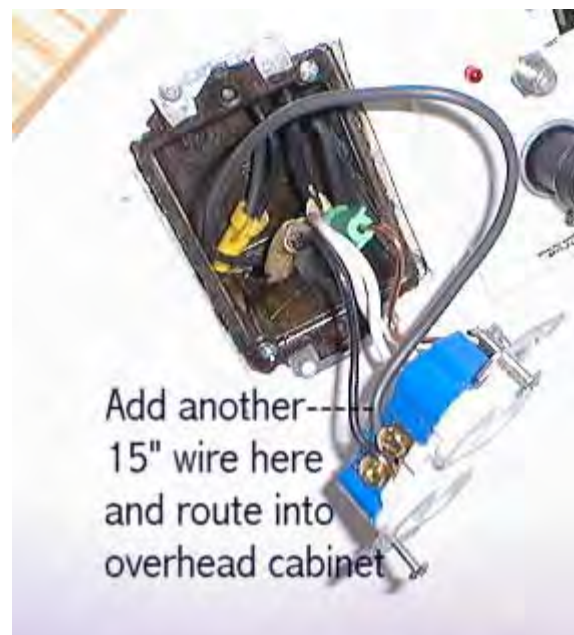
Next hold the new thermostat in place and mark a spot for the toggle switch to turn off the factory furnace. Drill a hole the size of your toggle switch. Drill out one of the two rivets holding the round vent next to the thermostat and turn the vent out of the way. Tie a wire onto the original thermostat wire that is the non 12v one and fish this factory wire back out of its hole and into the vent hole and connect to the toggle switch using a crimp-on connector. Feed another wire (the yellow one in the pic) from the thermostat wire hole to the vent hole and connect that wire to the toggle switch. Now comes the fun part--tie a wire onto the toggle of the toggle switch and fish that wire into the hole you drilled for the toggle switch and pull the switch into place and secure with the ring nut provided with the switch. Next, mount the new thermostat by drilling four new 1/8" holes for the rivets to mount the thermostat, making sure all wires are thru the housing. There should be three wires, the original 12v (brown) lead, the wire that you routed to the back cabinet relay and the wire from the toggle switch. Next, connect a "jumper" wire between the "W" and the "Y" posts. Leave the original red jumper wire where it is on the "Rh" & "Rc" terminals. Connect the brown 12v factory wire to the "Rh" terminal. Connect the wire from the factory furnace toggle switch that was installed to the "W" terminal. Connect the wire from the new relay to the "Y" terminal. Snap the housing back on and install two batteries.



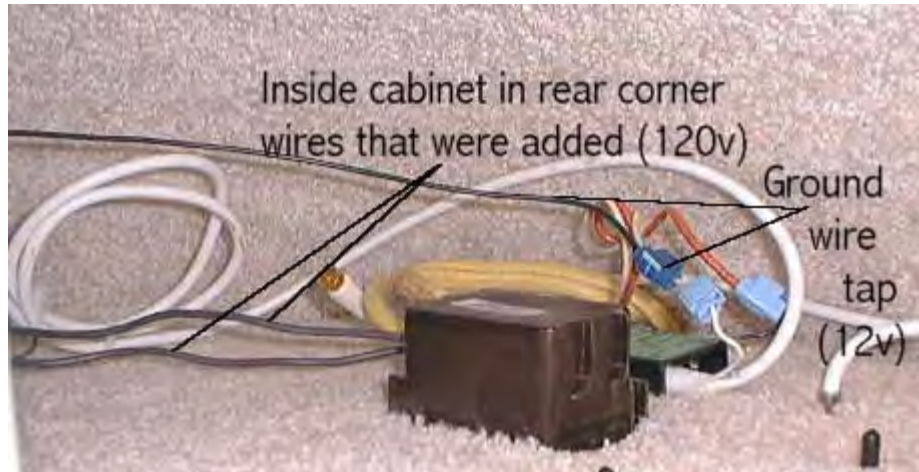
At this point your installation should look like this. To test your install this far, flip the toggle switch to "on", flip the thermostat switches to "Auto" and "Heat", push the thermostat "up" button to 90 and your factory furnace should come on. Don't forget that you need power here, either 12v or plugged in. Flip the switch on the thermostat to "Off" and remember that it takes a while for the furnace to shut the blower down.



Next, we go to the 120v plug at the rear corner and remove it. **BE SURE YOU HAVE THE POWER CORD DISCONNECTED!** Remove the black wire that goes to the A/C, you will have to determine which one that is by disconnecting one of them and then plugging in the trailer and trying the A/C (NOTE: Make sure you test the plug with the wire disconnected also as the plug should always remain hot and either of the black wires will disconnect the A/C.) (DON'T FORGET TO UNPLUG THE TRAILER AGAIN!) connect a 15" piece of 12 ga solid wire (the same type as the wire that was removed) to the one you removed with a yellow wire nut and feed this back up thru the electrical box and into the corner cabinet.



Connect a second 15" piece of 12 ga solid wire to the plug terminal (where you removed the first wire) and feed that wire thru the electrical box and up into the rear cabinet. Re-install the plug and its cover by placing all the wires as neat as possible back into the box.



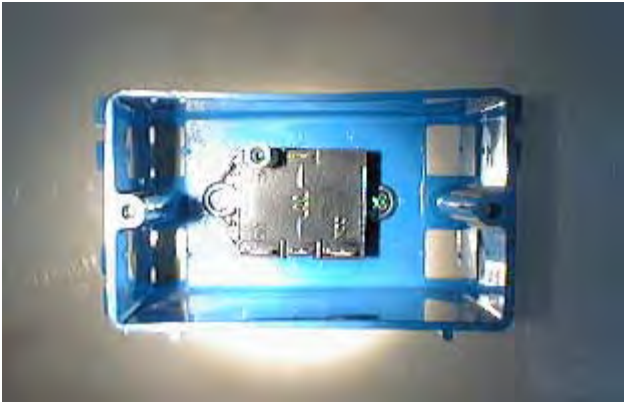
Your installation inside the cabinet should now look like this with the two 120v wires coming out of the box. Next add a 20" piece of 18 ga stranded wire and using a wire tap splice into the "white" ground wire going into the TV antenna amplifier.



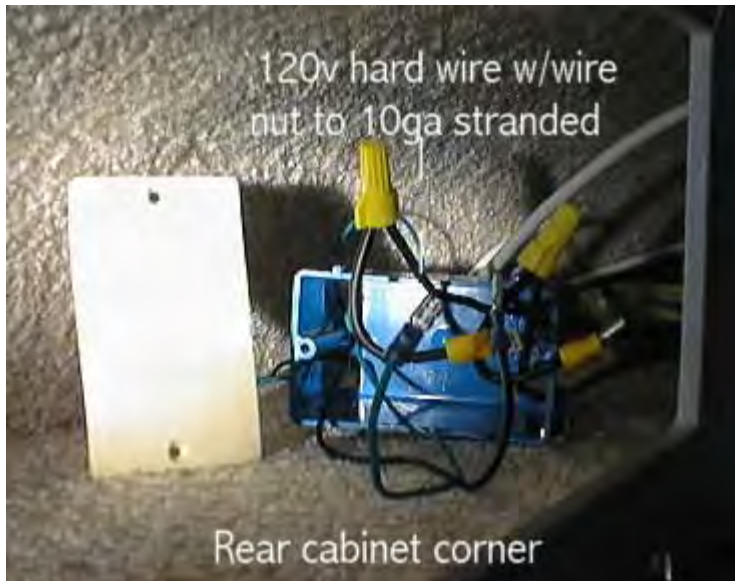
Now your install should look like this with four wires in one location (2--120V and 2--12v)



Here is the "heart" of the system--the 25 amp relay.



Screw relay to back of electrical box. Note: The bottoms of these electrical boxes have a moulding bump and will have to be drilled out so the relay will mount flat.



Feed the two 120v wires into one end of the box and the two 12v into the other end of the box. Install two crimp-on .187 connectors on the 12v wires. The two 120v connections need to be made using .250 crimp-on connectors using a short piece of 10 gauge stranded wire and wire nut that to the 120v wires coming from the electrical box. (NOTE: the relay is not shown in this picture but should be there already)



Using a "protected" crimp-on terminal, cover the unused terminal for protection. (One with no metal exposed). After securing in electrical box connect all crimp-on connectors

as shown and tuck into box. When all connections are secure install a non-metallic cover on the electrical box and secure the box near the other existing electrical box using wire ties. Note: The screws that hold the relay will now just stick down into the carpet--use short ones

To use A/C - Turn roof A/C unit to Cool (Low or High) - Turn Roof A/C thermostat to Max (Blue band) - Flip wall thermostat to Cool - Set desired temperature - Unit will cycle on and off automatically.

To use Heat Strip - Turn roof A/C unit to Low Heat - Turn roof A/C thermostat to Max (Red band) - Flip Furnace toggle switch to Off - Flip wall thermostat to Heat - Set desired temperature - Unit will cycle on and off automatically.

To use factory propane furnace - Turn off roof A/C unit - Flip furnace toggle switch to On - Flip wall thermostat to Heat - Set desired temperature - Furnace will cycle on and off automatically.