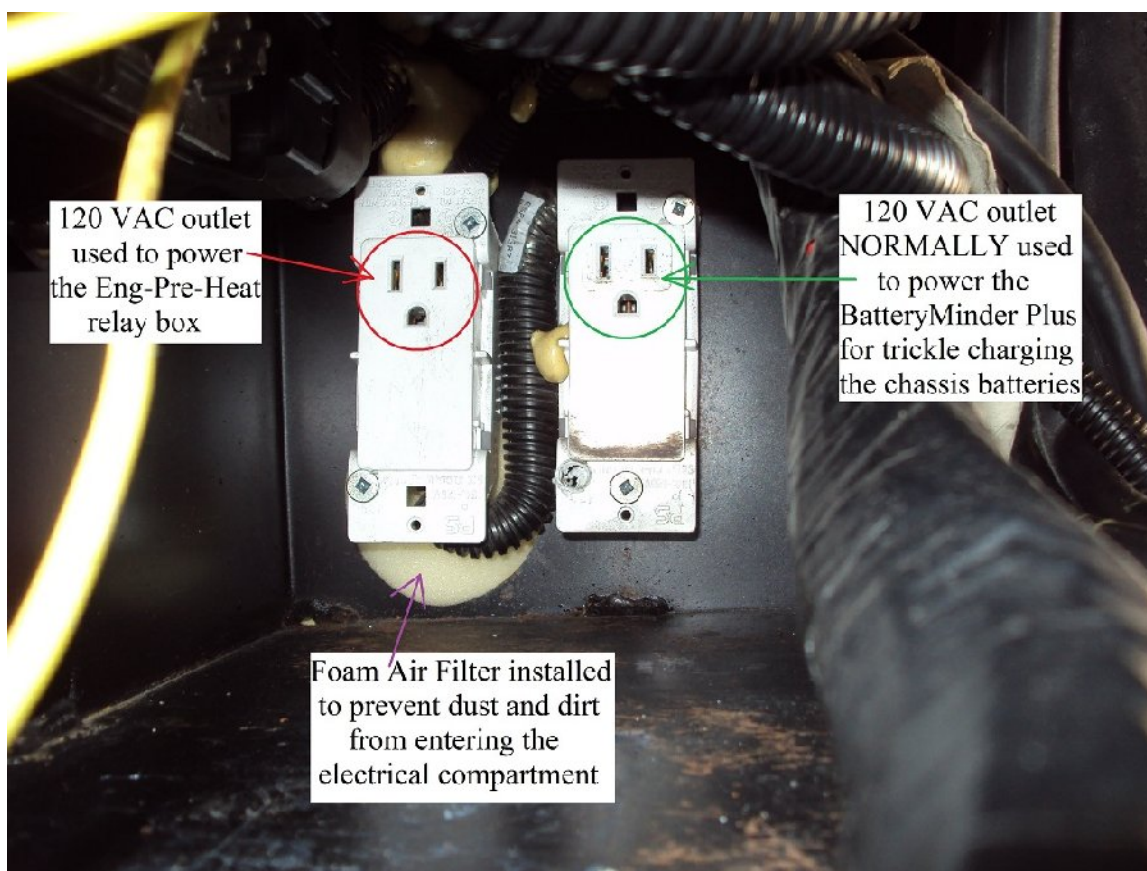




2010 43QGP Allegro Bus

5/28/2014

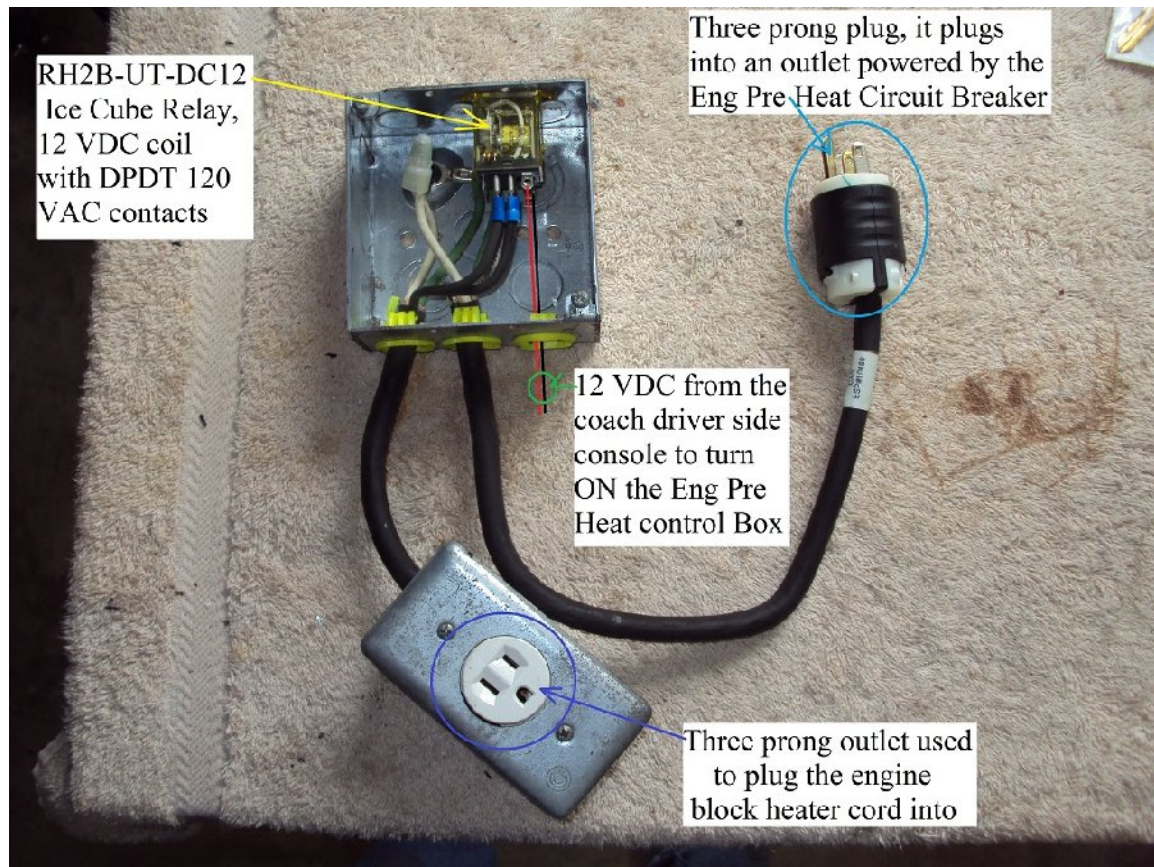
109 - FYI – ENGINE BLOCK HEATER CONTROL CIRCUIT. Tiffin at least for the past seven years designed, built and installed the following control circuit in most of its coaches. The following photo shows the location Tiffin placed the power outlet for the circuit on our 2010 43QGP Allegro Bus. While cleaning the area I found an open hole behind the two outlets that open hole allowed dirt and dust to enter the electrical compartment. I decided to install a piece of foam to act as an air filter preventing the infiltration of dust and dirt.



Tiffin designed a very simple relay control circuit containing a RH2B-UT-DC12 relay connected to a male three prong plug and a female three pin socket all contained in a 4" square work box. To make cleaning the compartment easier the control circuit was removed. It also allows me to

remove the cover of the control box making it easier for me to explain the operation of the circuit.

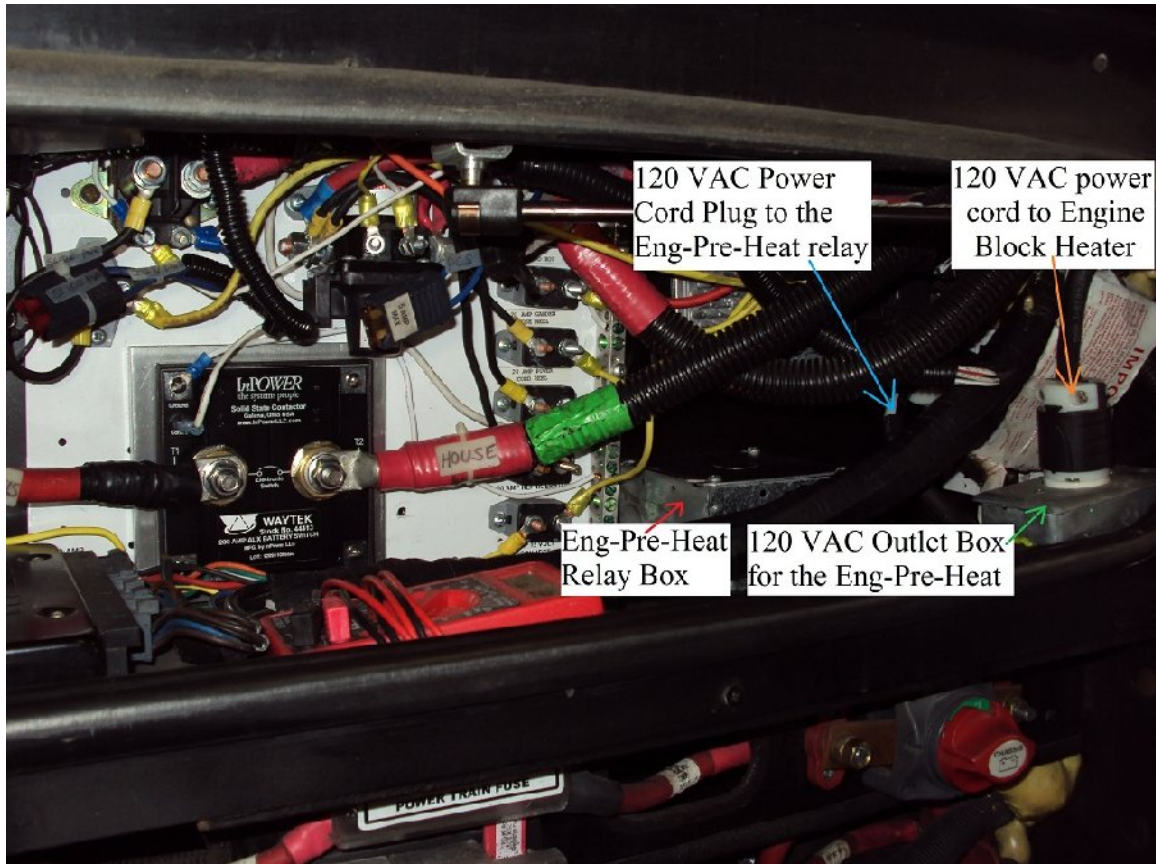
With the control box on the workbench it is easy to see there is not much to the circuit however it does a great job of automating the control circuit in this case to turn ON the 120 VAC engine block heater by just depressing a 12 VDC switch on the driver's side console, OR if this circuit is used to control the electric element in the water heater again it is just necessary to turn ON a 12 VDC switch to control the 120 VAC electric element in the water heater.



Tiffin may have other uses for this control circuit however I know Tiffin uses this circuit for both of the above purposes.

Our coach no longer needs the Battery Minder trickle charger to maintain the chassis batteries, after the recent installation of Modification # 106 (the Waytek Auxiliary Battery Switch (ABS-200)). Our coach now has an unused 120 VAC outlet where the Battery Minder was once plugged in. The following photo shows the location of the Eng- Pre-Heat control box in our passenger side rear compartment. The box, cords, plug and outlet are

tucked into the right corner of the electrical compartment over the two chassis batteries.



The wiring harness on our coach is not as neat as usually found in the production coaches as our coach was the prototype coach for many items installed in the 2011 coaches along with the Cummins EPA 2010 ISL9 engine.