

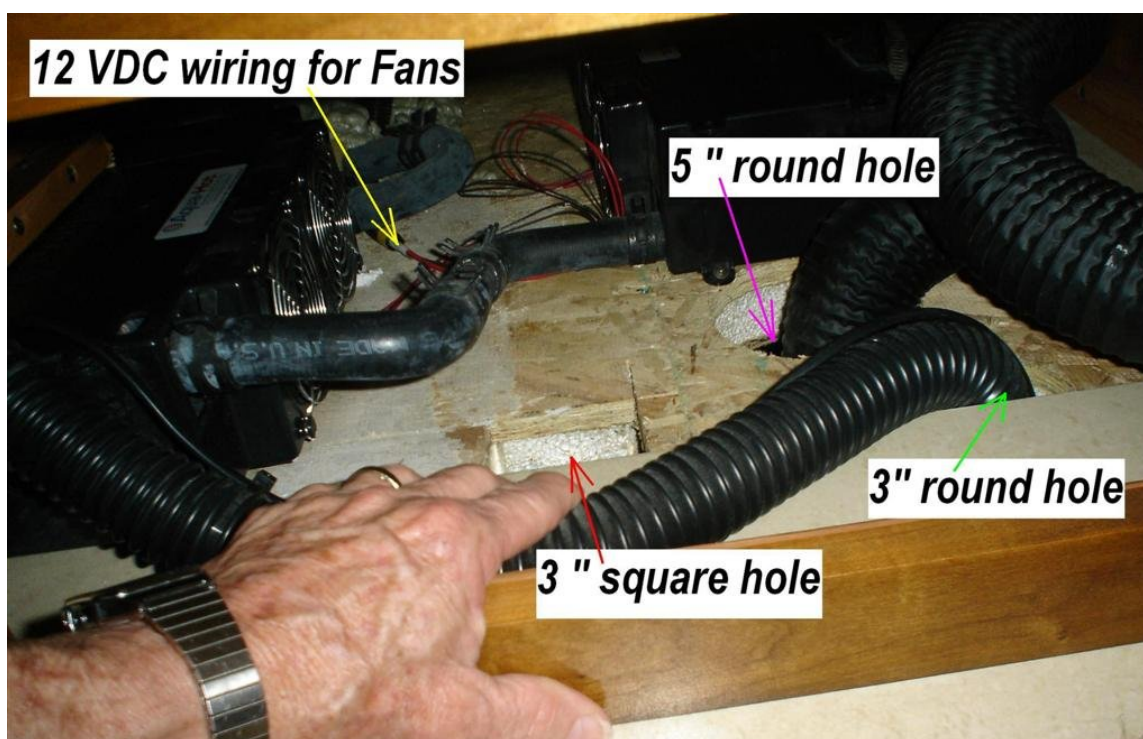


## 2010 43QGP Allegro Bus

1/29/2012

### **FORTY-EIGHTH - coach modification - HALF BATH HEATER FAN.**

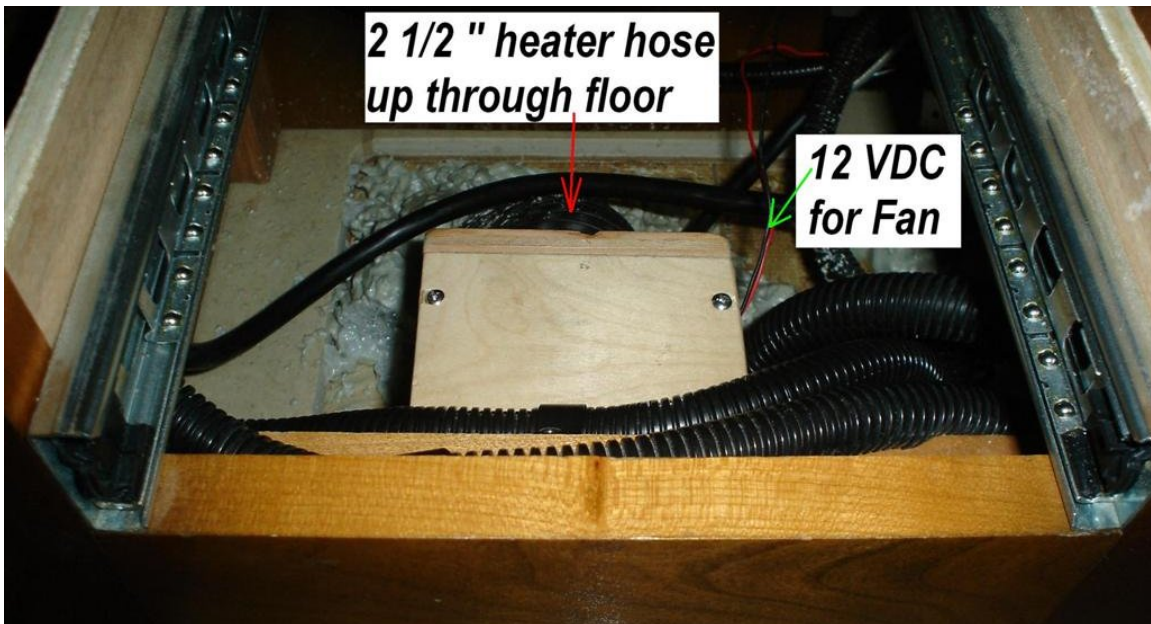
We found the heat into the half bath at best inefficient which leaves a lot to be desired. In an effort to make the half bath area more user friendly (as in warmer) especially during the night a decision was made to install a 12 VDC fan in the heater hose in an effort to assist the cozy heater exchanger fans which are installed under the washer/dryer in our coach in heating the half bath. The cozy heater fans PUSH the heat through the hose while the added fan PULL'S the heat through the same hose. The heater hose in question is routed through the 5 inch hole in the photo below it supplies the ONLY heat to the half bath through a vent in the baseboard.



The wiring for the added half bath fan was connected at the above splice for the bedroom/half bath cozy heat exchanger fans. Also seen in the above photo are three holes which were not sealed by Tiffin after installing the half bath heater hose and a hose for the vacuum cleaner. The 3 inch square hole did not have a purpose, it is just a hole into the wet bay. After installing the 12 VDC wiring all floor holes were sealed using large pieces of foam sponge.



A plywood box was built to house the above fan. A cover with a 2 1/2 inch hole was attached to the back of the box this hole allows the heater hose to pass through and also to be attached to the box. 12 VDC wiring was routed from the cozy heat exchanger fans to the new half bath fan. When the Aqua-Hot Zone for the bedroom/half bath is operating the below fan will assist in providing more heat to the half bath.



The following photo shows the box and fan installed behind the wooden grill in the bath cabinet.



1 1/2 inch "L" brackets were installed on both sides of the fan box. A screw was installed through the "L" bracket into the back of the cabinet toe kick to secure the fan box against the back of the cabinet toe kick.

To provide heat at the above vent requires the heat to pass through almost 9 feet of 2 1/2 inch hose with a minimum of four 90 degree bends. I doubt the air flow through the hose would be enough to extinguish a lighted match if the match were held in front of the vent.

I hope this modification will make the night trip to the bathroom a little warmer.