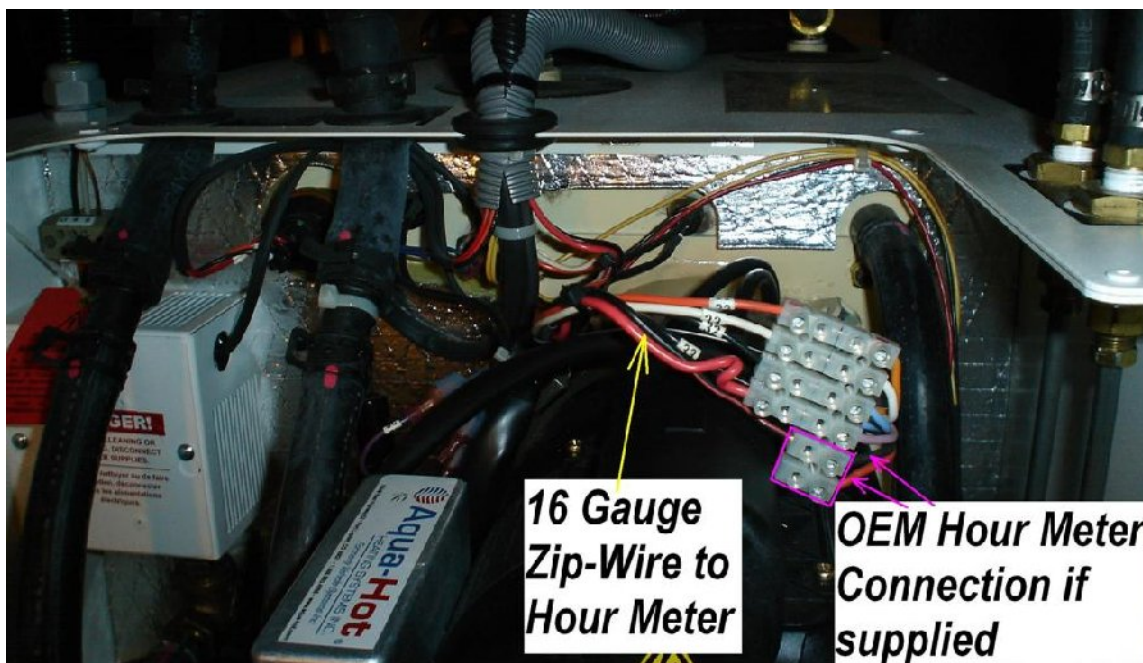




2010 43QGP Allegro Bus

5/8/2011

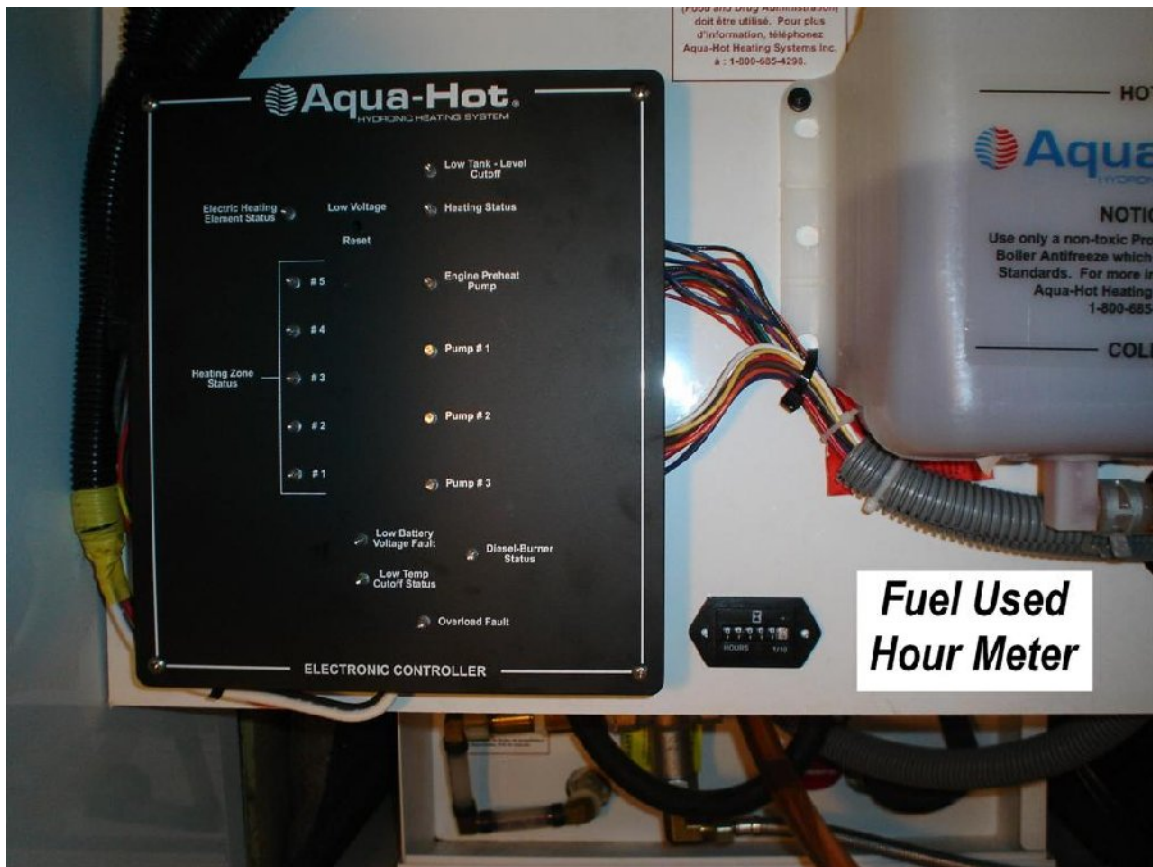
TWENTY-FIFTH - coach modification, **INSTALLING AN AQUA-HOT FUEL USED HOUR METER.** Our coach did not come with an Aqua-Hot hour meter installed. After some research and speaking with Roger Berke (Aqua-Hot Service Technician) I find the newer units do not come from the factory with an hour meter installed. In my case that was OK with me, but for one reason. The OEM supplied hour meter meters the burner motor's run time. The motor run time includes the 15 to 20 seconds for the motor to come up to speed, plus the actual time the burner is burning fuel and then a 2 minute and 30 second purge time, this sequence happens for each Aqua-Hot burner cycle. In a short test today the fuel solenoid was energized for about five minutes, however the actual motor run time was almost 8 minutes. Anyone with an OEM installed hour meter is adding about 2 minutes and 45 seconds of meter run time to each Aqua-Hot burner cycle. How can the actual fuel used be determined based on an inaccurate hour meter reading such as that?



Our Aqua-Hot did not come from the factory with the hour meter installed however they did install one side of the hour meter connections. They are the red and black leads shown in the purple square in the above picture.

After consultation with Roger and a few others I decided to experiment with the hour meter connections. My intent is to connect the meter in such a way as to display the **ACTUAL FUEL CONSUMMED** not the burner motor's run time. The motor's run time can be displayed by connecting the hour meter to the above red and black wires.

After researching and studying the schematics I found by connecting the positive side of the hour meter to the number 33 wire (Fuel Valve) and the negative side of the hour meter to the black wire from the OEM hour meter connection the **ONLY** time accumulated on the hour meter is the **ACTUAL TIME THE FUEL VALVE IS OPEN**. I do not desire to time any operation other than the time the fuel valve is open and fuel is flowing through the nozzle into the burner at a rate of .35 GPH.



Now when I fill up with diesel fuel I can look at the Aqua-Hot Fuel Used Hour Meter. At the next fuel fill up I can use the hour meter to figure the actual hours the Aqua-Hot's Fuel Valve was open allowing me to figure the coach engines fuel usage even closer than I can now.

The Quartz hour meter was purchased from Amazon.com for under \$ 23.00 including shipping.