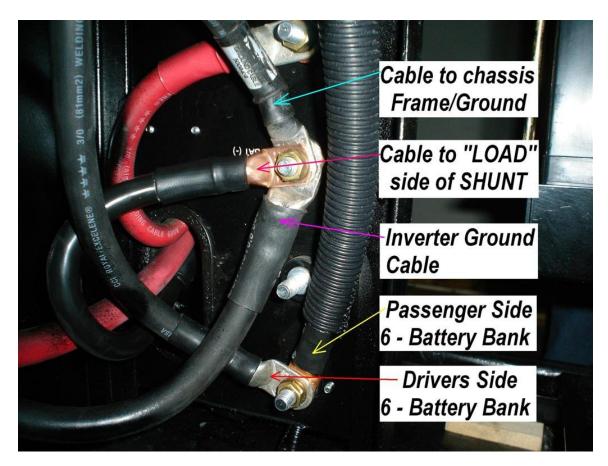


2010 43QGP Allegro Bus

7/27/2011

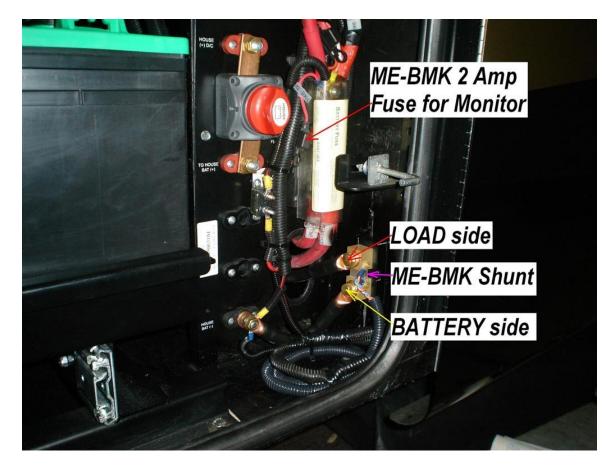
THIRTY-SECOND - coach modification, **INSTALLING A MAGNUM BATTERY MONITOR KIT.** The magnum battery monitor is sold as the Magnum Energy ME-BMK (Battery Monitor Kit). The kit can be purchased on line or through Magnum Energy. The lowest price including shipping found at this time was through an E-bay seller for \$ 150.20.

After reading the manual the first order of business was to sort the cables into two categories, one is the LOAD side and the second is the BATTERY side. Tiffin installed a copper ground bus bar to join three separate ground studs into one multi-terminal ground bus. To install the shunt the LOAD and BATTERY grounds need to be isolated from each other. To isolate the grounds the copper bus bar linking the three terminals was removed.



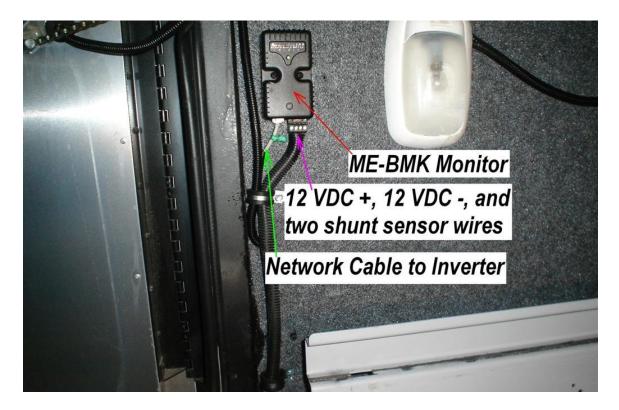
The LOAD cables are the ground cables to the chassis frame, the inverter ground cable they were both secured on an isolated ground stud then a new

cable ground cable was attached and routed to the front side of the panel and attached to the LOAD side of the SHUNT. The BATTERY cables (both passenger and driver side banks) were attached to a second isolated ground stud. This BATTERY ground isolated terminal has connected studs on both front and rear sides. A new cable was secured to the front side of that stud, the opposite cable end was routed over to the BATTERY side of the shunt.

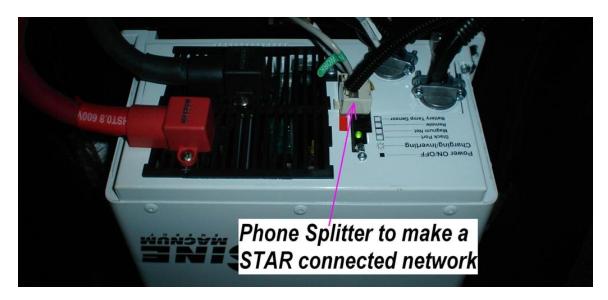


The loom coiled in the bottom of the compartment contains most of the five feet of twisted orange and blue 18 gauge wires connected between the monitor and the shunt. The length of this cable needs to be left as is, because the length of these two wires is part of the design. Two additional wires were added, one (red) wire to provide 12VDC + power for the monitor a 2 amp fuse was also installed. The second is a (black) ground wire, as there is no measurable load on this wire it was attached to the front side of the panel on the isolated BATTERY side stud.

The monitor is located on the forward wall of the first driver's side basement compartment (on the opposite side of the wall where the Shunt is mounted), this is necessary to remove it from possible damage by battery fumes and to also locate the monitor in a dry environment.



The network cable to the inverter is a 10 foot data cable with standard RJ-11 connectors. In order to connect the network in a STAR pattern which can make trouble shooting easier than when the network is connected in a DAISY chain pattern a phone splitter is required. The splitter is plugged into the (green) network port then the original network cable is plugged into one port and the new ME-BMK monitor is plugged into the second port.



The ME-RC is programmed, the ME-BMK and everything is ready to roll.