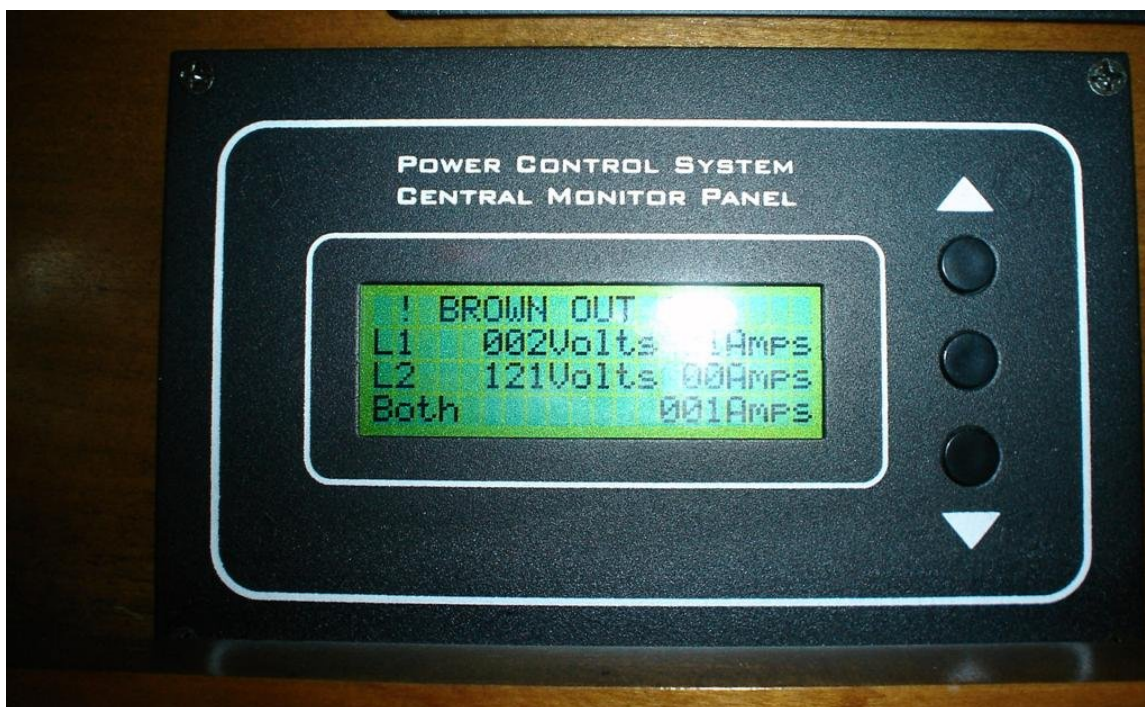




2010 43QGP Allegro Bus

3/16/2012

43 – FYI - PRECISION CIRCUITS “BROWN OUT”. Last week during a voltage test of the battery minder circuit I was reminded of a warning from the builder of the Precision Circuits instrumentation connected between the Magnum 2812 inverter and the main 120/240 volt electrical panel. Precision Circuits monitors the various loads which are operating. I had previously read all of the written material I could find on the device. One programming item I was reminded of last week was what could or would cause a “Brown Out” display on the Power Control System Central Panel.



I had earlier been tracking the source of voltage for the two 120 VAC outlets located in the passenger side rear compartment of our coach. One outlet powers the Battery Minder used to trickle charge the chassis batteries while the second outlet powers a control circuit for the engine block heater. In order to isolate the outlets I turned OFF the circuit breaker powering the Engine Block Heater, in my coach that is circuit #1 on the Main Electrical Panel. After turning OFF the #1 circuit breaker I found both outlets are powered by the same circuit breaker unknown before this test.

A few hours later when I turned ON the Aqua-Hot before showering I noticed a “Brown Out” warning displayed on the central monitor panel. The “Brown Out” message would alternate with the following low voltage message.



After seeing the above two messages, my first thoughts were “Now What” because while in Red Bay stuff happens quite often.

After checking the L1 and L2 voltage on the Progressive Industries remote display located in our bedroom I knew the coach had proper voltage on both shore power legs. Next step, check the device telling me the service on L1 had experienced a “Brown Out”. What could cause a Brown Out? After scratching my head for a while, I remembered a notation (warning) in the Precision Circuits Manual. The manual cautions the user not to turn OFF the circuit breakers routing power through the devices relay # 3 and relay # 5. Why, because relay # 3 and relay # 5 are the two circuit breakers the Precision Circuits system uses to sample voltage which is used to tell the system “Hey, I have 120 VAC on both L1 and L2 they are out of phase so the shore power connection I have is 50 Amps at 240 VAC.

On our 2010 43QGP Allegro Bus, Circuit Breaker # 1 (Precision Circuits Relay # 3) powers the Engine Block Heater and the Battery Minder. Circuit Breaker # 4 (Precision Circuits Relay # 5) powers the Dryer.

SO, this FYI is just that, For Your Information keep this message in mind IF YOU TURN OFF A CIRCUIT BREAKER THE SYSTEM USES TO DETERMINE IF 240 VAC SHORE POWER IS AVAILABLE.