



2010 43QGP Allegro Bus

1/31/2016

ONE-HUNDRED-TWENTY-THIRD - coach modification – **UNDER COACH LED LIGHTING**. After a request from my wife for more lighting around the coach when approaching after dark, we decided to install LED lighting under the coach. Even with the Door Awning LED lighting there was a need for better lighting before getting to the coach in some RV parks. After an Internet search a 5 meter (16 foot) string of 5630 SMD Waterproof Cool White LED's was selected, one sting for each side of the coach total cost was \$ 20.00 for both 5 meter long strings. Rather than add another switch to control the ground lighting LED's instead I decided to connect the LED's to the "Assist Handle" switch. With the switch turned ON both inside and outside "Assist Handle" are lit along with the under coach LEDs.



After careful consideration, it was decided to locate the wiring for the inside assist handle and tapping into that circuit. First I needed to determine where the wiring connected to the Assist handle top or bottom of the handle, after removing two screws from the lower end of the handle I found the wiring was right there. A small flat blade screwdriver was inserted between the

dash vinyl and the back of the vent housing. Working carefully from side to side with the flat blade screwdriver the vent cover was soon removed.



After removing the vent cover two screws were removed the vent housing was carefully separated from the dash vinyl with a flat blade. The vent housing and hose were pulled forward enough to access to the two screws securing the hose to the vent housing. After those screws had been removed the hose was tucked back into the void between the dash and the back of the firewall.

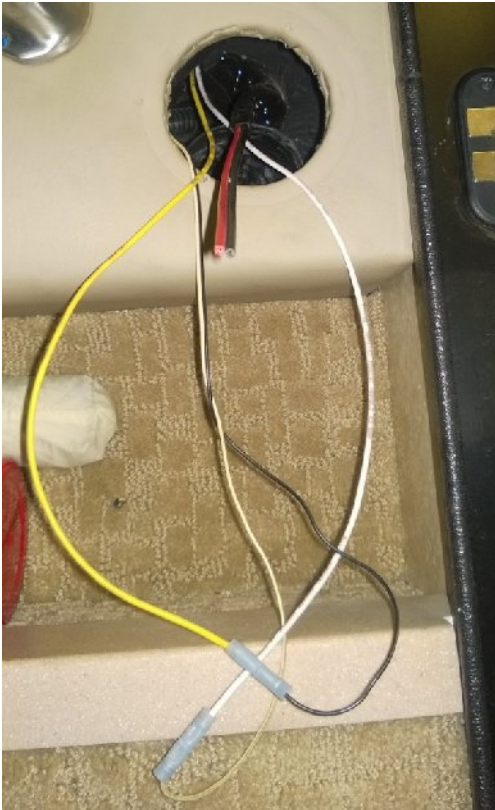
The photo below shows the back side of the firewall, the RED star is the location where a wooden dowel was pushed thru the black caulking sealing the wire access thru the firewall. After a hole was made the dowel was removed and a stiff



piece of wire with a hook in one end was inserted thru the hole made by the wood dowel to capture a pair of 16 gauge zip wires. The zip wires are covered and protected by a black 1/4" split loom, the loom was installed over the complete length of wiring to both sets of LED's.

The access thru the firewall was

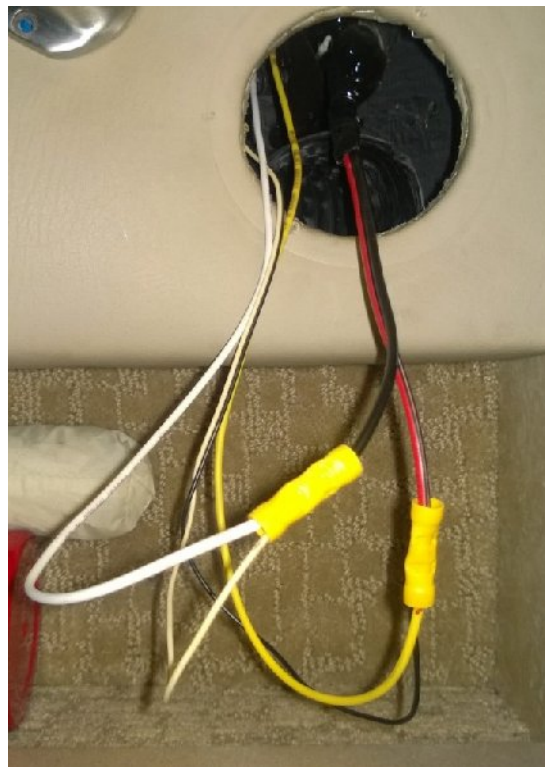
resealed with silicon. 2010 was the first year Tiffin began individually labeling the insulation for 12 volt wiring circuits, in later years the lettering is more legible, on our coach while the lettering is there in some cases it is hard to decipher the wording. The Yellow wire is 12 volt + while the White wire is 12 volt -. The 12 volt + lettering is "P - 102 < blue > Assist Handle 43 QGP", while the 12 volt - lettering is P - 102 < white > Assist Handle 43QGP.



Tiffin has gotten better at listing the beginning and ending of a wire run. P-102 is defined as 102 inches FORWARD of the first cross rib BEHIND the steer axle. FORWARD is denoted with a minus number while REARWARD behind the first rib is denoted with positive numbers. In this case the opposite end of the these two wires runs to P - 60. Which is located in the bottom of the door entry switch panel. P denote Passenger side while D denotes driver side of the coach. I decided accessing the assist handle wiring was easier at the firewall.

As seen at the right, the OEM butt splices were removed then replaced with larger yellow butt splices when the new wiring was added.

At this point everything inside the coach was closed back up. The wiring was pushed back into the void behind the dash, the heater hose was reconnected to the vent, the vent was secured to the dash and the vent cover was reinstalled. The new zip wire was protected



with split loom before being routed along the right chassis frame to the rear of the fuel tank where both driver side and passenger side LED light strings are secured inside of the lower coach frames.

Rather than attach the light strips to the coach with its attached 3M sticky tape I elected to slide the light strings inside a 16 foot piece of ½ inch ID



clear tubing. Seen below when the Assist Handle switch is turned ON (Red LED illuminated). The inside and outside assist handles are illuminated along with the two NEW strings of LED's under coach lights.



The above photo shows the Passenger Side string of LED's enclosed by the clear vinyl tubing. 24 inch long heavy duty tie wraps were used to secure the string inside the driver and passenger side lower chassis rails. Smaller tie wraps were used to secure the vinyl tubing centered inside the frame rail.

When the Assist Handle switch is turned ON the underside of the coach is illuminated along with about 15 feet to both Driver side and Passenger side of the coach.

