

2010 43QGP Allegro Bus

6/23/2011

14 – FYI - DISASSEMBLY & REASSEMBLY OF A CARLING

TECHNOLOGIES SWITCH. Our coach was built using the above switches for Tiffin installed components. As our coach is built on a Powerglide chassis most 12 volt switches were built by Carling Technologies.

Below is a standard pin configuration for an 8 Pin switch, looking AT THE BOTTOM OF THE SWITCH.



Pins 7 and 8 are normally used for the switch's internal lighting, for polarity purposes Pin 7 is negative or ground and Pin 8 is positive voltage.

This switches configuration can allow it to be used as an ON/OFF/ON switch or as a momentary ON/OFF/ON switch. The switch is know as a

Double Pole Double Throw Switch or (DPDT) switch. The switch can be used for controlling one or two circuit (Pins 1, 2, 3) where the double pole is normally used to control two or more circuits (Pins 1, 2, 3) or (Pins 4, 5, 6) with one switch.



A ROAD LIGHT switch from my coach is being used for disassembly/reassembly demonstration purposes. Prior to removing the switch it is best to mark each wire and where the wire is connected also to which pin number each wire is connected. My standard practice is to take pictures of **ALL WORK PRIOR TO PERFORMING ANY WORK**.



Care must be exercised in **NOT** damaging the two white tabs when removing the switch top. Spread the tabs just enough to remove the cover.



The # 6 screw is used to enable the handling of the switch top during both disassembly and reassembly of the switch top to the switch body.



During Carlings original assembly no soldering is required. All components are connected by springs between the switch body and top. The springs can be seen in the body or switch portion on the left side of the above picture.



As seen in the above picture the contacts are not held in position except by a small spring located at the bottom of the movable portion of the switch. As seen in the below picture, the desk top was used to hold the switch body both upright and in position for reassembly. Again a # 6 screw was threaded into the switch toggle, just enough to hold but not enough to make threads. After making sure all components in both top and body of the switch are lined up correctly the switch top is lowered over the switch body. The tabs on both left and right sides of the switch have guide grooves in the switch body for correct alignment during re-assembly. After making sure of alignment and making sure components have not moved depress on the switch top until the tabs lock into place on the switch body.



There is really not much skill involved in either disassembly or reassembly of the Carling switches used by Tiffin. Additional care must be exercised when working on dual pole (Double Pole) switch's as more components are involved in making the switch.

After re-assembly it is AWAYS BEST TO TEST THE SWITCH BOTH FOR COMPLETE OPERATION AND FOR ILLUMINATION OF THE SWITCH'S INTERNAL LIGHT AND THE SWITCHES <u>ON</u> LIGHT(S).