

Installation Instructions for **X-Factor** Fluorescent Tube Replacements

Thank you for Purchasing Cabin Bright!

You don't have to be a mechanic or an electrician – Here's how you do it:

**PLEASE READ INSTRUCTIONS ALL THE WAY THROUGH BEFORE STARTING INSTALLATION!
THIS PRODUCT IS FOR 12-volt INSTALLATION ONLY!!!**

IMPORTANT: Please dry fit the Cabin Bright replacement and ensure proper installation and operation **BEFORE** installing the peel-and-stick pads permanently in your fluorescent fixture.

All you need are a pair of wire cutters and a screwdriver, (probably a Phillips head).

1. Turn off power to the fixture.
2. Remove plastic diffuser lens and unscrew Fixture from ceiling.
3. Cut supply wires to the fixture leaving enough wire from ceiling to reconnect the fixture.
4. Remove the glass tubes and insert the wire ends of the Cabin Bright LED X-Factor Fluorescent Tube Replacement through the existing hole in the fixture closest to the switch or where the wires come into the fixture. NOTE: Do NOT cut any wires to or from the ballast in case you want to use it in the future...by the way...you won't! **YOU DO NOT HAVE TO REMOVE THE BALLAST !!!**

**AT THIS POINT YOU MAY WANT TO USE THE SWITCH ON THE FIXTURE. IF YOU DO,
THE SWITCH WIRING INSTRUCTIONS ARE ON THE BACK!**

5. Use the enclosed alcohol wipe to clean the surface of the inside of the fixture **BEFORE** applying X-Factor Light Boards and let dry. Stick down each Light Board in the space where the glass tubes were – evenly spaced depending on which Cabin Bright product you purchased and the length of your fixture. (You may use a hair dryer or heat gun to warm up the adhesive before you stick it down.) It will look like this for a 2 board 10-inch installation in a 12-inch fixture:



NOTE: The procedure is the same for 10 inch or 15-inch X-Factor units.

REMEMBER: Plan **CAREFULLY** where you will put these light board as once they are down, they **STAY** down!

This is the 12-X installed in a 12-inch fixture. We have removed tube sockets for clarification. You do not have to remove the sockets for a perfect installation.

6. Strip 3/8 of an inch from each of the wires hanging in the ceiling and connect (using the enclosed wire nuts) the Cabin Bright converted fixture ensuring the positive lead from the ceiling is connected to the two red wires, and the negative lead is connected to the two black wires. Check proper operation by switching on the fixture. If it doesn't light, reverse the wires.
7. Screw fixture to ceiling and replace plastic diffuser lens.
8. Enjoy your new, bright, clean looking light – with a lot less power draw!

Any questions or problems please call me, Joe Brignolo, at 513-899-9152, or email me at joe@cabinbright.com

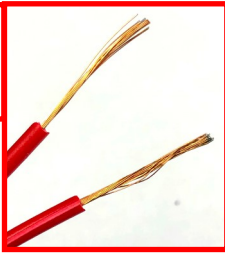
Connect BOTH red wires together at the downstream end of the switch using the enclosed flag connector. That would be the blade of the switch where the ballast was connected. (The other blade of the switch will be connected to the positive feed of the coach.) Connect BOTH black wire together and connect them to the negative feed from the coach with the wire nut provided. The circuit is complete. **SEE DETAILED PHOTOS BELOW↓**

- 12v DC from Coach

+12v DC from Coach

SPST Switch

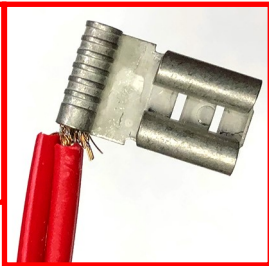
1. Strip about a 1/2 inch off the RED wires.



2. Twist the wires together and fold them in half.

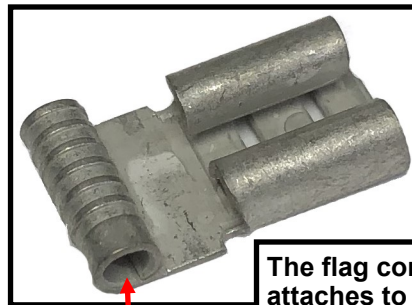


3. Insert the folded and twisted wires in the flag connector. Then solder or crimp the wires in the flag connector.



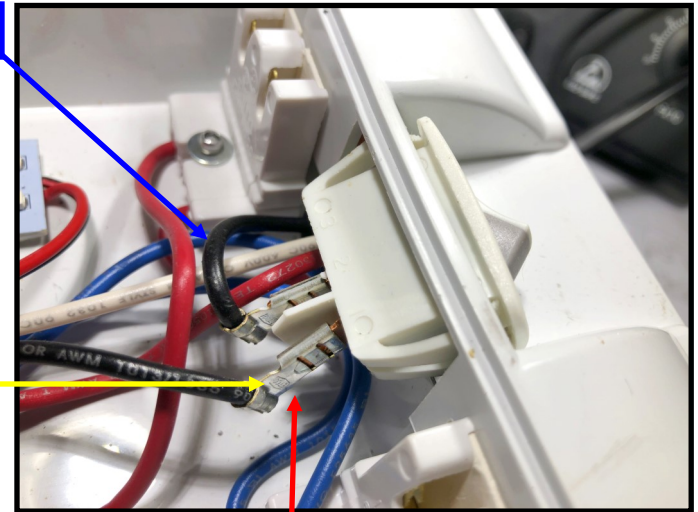
FLAG CONNECTOR INSTRUCTIONS: Bring each of the red wires to the switch on the fixture. Cut each of the red wires AFTER you have installed the Light Boards in the fixture. Leave an extra 1 and a half inches. Because the wires are so thin, you should strip off about 3/4 of an inch off of each red wire. Twist them together then fold them over 3 or 4 times and insert them into the hole in the flag connector. At this point you can solder then in, being careful not to let the solder flow into the blades of the connector. OR you can simply crimp the connection with a pair of pliers. Either method or BOTH are acceptable. **SEE DETAILED PHOTOS BELOW↓**

This wire goes to the +12VDC in the coach ceiling



Twisted and folded wire go in this hole.

The flag connector attaches to where the ballast connector was.



You will remove this connector that leads to the ballast. This is where you will attach the 2 RED wires from the X-Factor Light Boards.