Trailer LED Taillight Upgrade

In an email from **Bill Bucher**, **WBCCI # 1467**, he explains the retrofit of Light Emitting Diode (LED) tail and brake lights for his trailer. His experience and directions follow:

Yesterday I installed 4 LED taillight fixtures on my 30' Airstream Excella 2001. I had difficulty, as there is only a short 1" of wire exposed for connecting. I made the mistake of pulling the wire another inch through the vulcanizing goop they use to seal for water. I created a short behind the backing plastic plate. All this could have been avoided if instructions had come with the new lights. No instructions or wiring color diagram came with the package of four units at a cost of \$150.00 plus S&H from my local Airstream dealer. The Airstream Part Number for the LED fixture is # 511973. I am attaching my directions to help future upgrade installers to avoid the problems I had.

AIRSTREAM LED Taillight Upgrade 2001 Excella 30' Trailer

STEPS

- 1. Remove lens cap (two black screws) and four sheet metal screws from fixture plate.
- 2. **Do not pull fixture from body** (Wires are molded into the body and will tear and can cause a short behind the exterior wall) (plus water seal can be compromised)
- 3. Carefully tilt from top and cut the white wire on backside of old fixture (cut closest to the fixture leaving as much wire as possible for attaching later).
- 4. Next cut the **Black** and **Green** wires closest to the old bulb fixture. (It may be necessary to demolish the bulb socket in order to cut at the very end of the short wires. (The **Black** & **Green** wires are only 1" long and everything needs to be cut at the end to gain all possible length. Remove old fixture.
- 5. Remove lens cover on new LED fixture.
- 6. Cut off plug on new LED fixture (leaving about 4" of wire)
- 7. Using wire strippers strip approximately $\frac{1}{4}$ " to $\frac{3}{8}$ " to expose wires.
- Using heat shrink connectors make the following connections: Trailer White to new LED fixture White Trailer Green to new LED fixture Black Trailer Black to new LED fixture Red
- 9. After connections are made test the lights.
- 10. Next use lighter to heat the heat shrink connector sleeves at each end (Be careful not to burn, just shrink enough to seal)
- 11. Re-install new LED fixture using the four sheet metal screws removed earlier. (Be careful not to over tighten)
- 12. Replace new lens cover with the two black screws. (Be careful not to over tighten)
- 13. Repeat for the remaining three taillight fixtures.

Now you can enjoy the brighter LED tail and brake lights.