# PHILIPS

**Qwik Tech Tips** 

## FEATURED PRODUCT

## 2 & 3 Pin AMP Connector with the STA-DRY®

- Sealed Boot
  Sealed boot adheres/
- bonds to the cable, adding additional protection to help seal out moisture and contaminants
- Sturdy and reliable contact - lanceless design eliminates contact tangling during handling operations
- Operating Temperature: -40°F to 257°F (-40°C to 125°C)
- Latch clip locks connector securely in place



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## Incandescent vs. LED Truck Lighting

FMVSS108 was established by the DOT to regulate vehicle lighting and set the minimum requirements for their locations on tractors and trailers. This means that a trailer could have anywhere from a minimum of 13 lights up to 20 or more, depending on the application of the trailer and the owner's preference. While a minimum requirement is set by the FMVSS108, more lights on a trailer offer added safety on the road.

In the industry today, LED (light emitting diode) lights have become the more popular choice over traditional incandescent lighting. While incandescent lighting does the job, LED lighting does the job with added benefits.

### Energy Efficiency

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Incandescent lights require a greater amperage draw to operate, as opposed to LED lights. For example, on average, it takes 2 amps to operate one incandescent Stop-Tail-Turn light, while the same amperage draw can operate approximately 9 LED Stop-Tail-Turn lights. This example makes it evident that LED lights are more energy efficient, and better energy efficiency allows for more lights to be spec'd on a vehicle with less amperage draw.

### Life Expectancy

On average, incandescent lights usually only have a life span of 3000 hours while LED lights boast a life span of 50,000 hours, (or possibly more). So LED's have approximately 16.5 times the life expectancy than incandescent lights. This is very significant. With incandescent lighting, bulbs will burn out quicker requiring replacement more often, which in turn relates to more down-time and higher cost for replacement product. Environmental Impact

To top it all off, when it is time to replace an LED light many of the materials within the light can be recycled. With incandescent light bulbs they merely end up being disposed of in the trash. So after the life expectancy of the light has been exhausted, the environmental impact from LED lights is far less than that of incandescent lighting.

Clearly, LED lights are the better choice when specing or replacing lights on your vehicle. They are more energy efficient with a longer life span and less of an impact on the environment than other lighting sources.

So when it's time to spec or replace the lights on your vehicle, LED is the way to go! The following tips will also ensure that you purchase LED lights that are effective, meet federal guidelines and are worth your investment:

- Make sure lights meet DOT standards
- Make sure lights have a sealed housing to protect from the elements
- Make sure lights have at least a 1 year warranty
- Confirm that all electrical connections are compatible with the lights before purchase
- If a particular light is desired, but connections are not compatible, inquire about adapters





Have technical questions? Get the latest tips from a skilled Phillips engineer! Call: <u>888-959-0995</u> OR e-mail: <u>techtips@phillipsind.com</u>

- LED's turn on 0.2 seconds faster than incandescent lights.
- LED brake lights give 20 feet more stopping distance than incandescent brake lights at highway speeds of 70 mph.
- Shock and vibration can cause incandescent lighting to fail. Installing LEDs offers a solution to this.
  - With less amperage draw, LEDs can run on a smaller gauge, which can equal a cost savings in wiring.

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