

FEATURED PRODUCT

QBOX™

- Over 50% more interior room which keeps trailer wires organized and pinch-free
- Features our award winning QCS2® (Quick-Change Socket), for fast and easy socket replacement
- Quick change amp circuit breakers available
- Durable weather resistant housing
- Interior wiring sealed against corrosion, chemicals and extreme weather



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PAST ISSUES

7-Way Sockets and Trailer Harness Wire Connections – Which is Best?

When wiring a socket to the trailer's electrical harness it's important to keep in mind that proper wire insertion, as well as the different types of connections available, can affect the overall "health" of the electrical system. When done incorrectly, or if the connections are left exposed to corrosion causing elements, the driver is put at risk for possible CSA vehicle maintenance violations due to flickering and/or inoperable lights.

Standard – Wire Insertion

The standard 7-way socket is connected to the trailer harness by inserting the wires into the back of the socket. Each wire is held in place by an individual screw that is tightened down to help avoid pull out.

Pros:

- Cost effective and will get the job done.

Cons:

- Requires solder dipped wires to properly seat conductor in terminal.
- The rubber boot covering the back of the socket is not 100% moisture/water proof, which can lead to corrosion.
- If wire insertion is done improperly a stray wire can cause a short or other lights to come on.

Better – Ring Terminals

A better alternative to wire insertion is the 7-way socket that uses ring terminals to connect the trailer harness to the socket. Ring terminals are securely attached with screws to the studs on the back end of the socket, creating a more solid connection.

Pros:

- The wiring is securely attached to the back of the socket with ring terminals.
- The heat shrink connectors offer additional moisture/corrosion protection to the harness system.

Cons:

- The screw terminals are exposed on the back of the socket.
- The rubber boot covering the back of the socket is not 100% moisture/water proof, which can lead to corrosion.
- Stray wire strands can cause a short or other lights to come on.

Best – Sealed Harness System with Bulleted Socket

Some harness manufactures, such as Phillips, offer sealed harness systems, which incorporate a completely molded boot around the cable of the wiring system. With a completely sealed harness, the need to connect the electrical wiring directly to the back of a socket is completely eliminated. Instead, a socket with bulleted terminals on the back is plugged directly into the harness boot.

Pros:

- Eliminates the need for traditional wire insertion or ring terminal connections to the back of a socket.
- Creates a virtually moisture proof system.
- Saves time and money.

No matter what type of connection the socket on your vehicle uses, utilizing the tips below will help maintain the best connection for your socket and harness wiring system which translates into a longer life for your electrical system.



Standard Wire Insertion

Ring Terminals

Bulleted Socket



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

- Standard Wire Insertion/Ring Terminals: Be sure that all wires are inserted properly to avoid a short or energizing another circuit.
- Ring Terminals: Always use ring terminals with heat shrink tubing to prevent moisture from infiltrating the wire harness system.
- All Methods: Use dielectric grease on the inside pins of the socket housing, as well as on the back of the socket where the harness wires are attached to avoid build up from corrosion.
- Use a foam socket seal for additional corrosion protection when using metal sockets.