

**FEATURED PRODUCT**

**AIR-DEFENSE™  
System with  
Quick-Change  
Cartridge**

*A Trailer Air Brake In-Line  
Filtration System*

- Debris is trapped in the Quick-Change Cartridge of the AIR DEFENSE™ System, reducing debris entering the trailer air lines and brake valves
- The Quick-Change Cartridge features a bypass mode which ensures full airflow at all times, even when the filter is clogged



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## Auxiliary/ISO Plug and Socket Corrosion Prevention

### Auxiliary Connection

For some, a standard 7-way electrical connection isn't enough to power everything on a trailer. An option is to add an auxiliary 7-way connection.

Although the 7-way connection is enough to power the lights as well as the ABS system, an auxiliary cable may be needed to power additional items such as on-board computers, sending units, pumps and carry data signals.

### Corrosion at the Auxiliary Connection

Because important operational equipment is dependent on the auxiliary cable connection, it's essential to keep it in top working condition. If corrosion is allowed to migrate into the electrical system via the connection, it could lead to costly repairs.

Leading factors that contribute to corrosion at the connection include moisture intrusion and lack of proper maintenance. It may be impossible to stop the intrusion of water completely, but proper maintenance of plugs and sockets can slow down the corrosion process and extend the life of vehicle equipment.

### Cleaning the Auxiliary Connection

Auxiliary plug and socket reverse ground pins present a maintenance challenge, leaving equipment vulnerable to corrosion if not cleaned properly. To clean a typical 7-way plug and socket connection, you would simply use a 7-way plug and socket brush. Unfortunately, traditional 7-way plug and socket brushes do not fit the reverse ground pin found in auxiliary plugs and sockets correctly, thus, not allowing for the brush

to clean adequately, which creates an opportunity for corrosion build up.

As an alternative, a 3/16" (0.187 O.D.) pipe and tubing brush can be used to properly clean auxiliary plugs and sockets. To clean an auxiliary plug, use the pipe and tubing brush to scrub each pin of the plug individually. Because of its small size, it will easily fit around all the pins on the auxiliary plug, including the reverse ground pin, scrubbing away contaminants and corrosive build up, leaving the plug completely clean. To clean an auxiliary socket, first take the pipe and tubing brush and clean the reverse ground pin tube. Then a 7-way plug and socket brush can be used to clean the remaining pins.

After cleaning the plugs and sockets, finish by applying lithium dielectric grease to all the pins on both the plugs and sockets to further prevent corrosion. A clean connection will maintain a better flow of energy.

Cleaning with the proper cleaning brushes and applying lithium dielectric grease to auxiliary plugs and sockets every 3-6 months will help to prevent corrosion so you can get the most out of your vehicle equipment.



Figure 1:  
Auxiliary Plug



Figure 2:  
Auxiliary Socket



- Leading factors that contribute to corrosion at the auxiliary cable connection include moisture intrusion and lack of proper maintenance.
- A 3/16" (0.187 O.D.) pipe and tubing brush can be used to properly clean auxiliary plugs and sockets.

Have technical questions?  
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