

PHILLIPS

Qwik Tech Tips

Volume 6 Issue 6

June 2016

FEATURED PRODUCT

Battery Terminals

- Centered bolt holes improve clamp efficiency and strength
- Gauge, polarity and crimp information printed on barrel for easy identification
- Copper battery connectors are tin plated for added conductivity and corrosion resistance



De-icing Chemicals and Corrosion Do Not Take a Summer Break

The weather is warming and the snow has melted leaving clear roads ahead. The risk of damage caused by corrosive de-icing chemicals seems to be behind you, but don't let your guard down. What most people don't know is that corrosion causing de-icing chemicals that are used on winter roads can still wreak havoc on your vehicle during the summer months and throughout the entire year.

The ever increasing demand for better winter road maintenance has led to the use of de-icing chemicals like magnesium chloride and calcium chloride. These chemicals are dispersed on roads before storms even hit and stay on the road long after the winter months have passed. These chemicals then come into contact with vehicles through road dust and debris, leaving vehicles vulnerable to these chemicals year round.



De-icing chemicals may find their way into plugs and sockets, causing irreversible damage

In contrast to ordinary road salt, which is corrosive in wet conditions, these chemicals are "hygroscopic". This means that the chemicals can pull moisture from the air even in dry and low humidity weather conditions, causing corrosion during summer months. The molecular make up of the chemicals are about 50% smaller than that of ordinary road salt, giving them the ability to migrate deeper into tight crevices.

Since corrosion can't be removed once it has developed, preventative maintenance is the best method to combat against it. Making sure that

your vehicle is thoroughly cleaned throughout the year is a great way to prevent corrosion.

Another cause for concern is chipping paint and other areas of damage, which are extremely vulnerable to corrosive chemical build up. Fixing damaged areas quickly can prevent the process from starting.

Electrical connections can also be irreversibly damaged by this build up and can create a gateway for corrosion to enter into the electrical system. Cleaning plugs and sockets with water (not soap) and a plug and socket brush, and then applying dielectric grease to plug and socket pins help to prevent corrosion from forming.

To further prevent corrosion caused by de-icing chemicals from entering your vehicle's electrical system choose anti-corrosive molded nylon plugs and sockets that create a water-tight seal to keep moisture from entering the electrical system. Some products may look like they are sealed, but they may not be, so it is important to make sure they are designed to be water-tight.



Replaceable water-tight plug-in sockets are a great way to prevent corrosion

Corrosion caused by de-icing chemicals may seem like a winter problem, but the risk follows your vehicle all-year round. Staying on top of your vehicle's preventative maintenance and catching problem areas before corrosive build up has a chance to start, will keep your equipment safe and corrosion free.

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- Watch for corrosion, as the chemicals used for de-icing roads during the winter can find their way on your vehicle all year round.
- Make sure to address paint chips and other damage to the vehicle as soon as possible because these areas are more susceptible to corrosion.
- Cleaning plugs and sockets with water (not soap) and a plug and socket brush, and then applying dielectric grease to plug and socket pins help to prevent corrosion from forming.

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