

# Preventative Maintenance

Damaged connectors, contacts and cables may present hazards, resulting in inefficient battery and charger operation. To avoid these problems, conduct the following maintenance checks at least once annually. If you see any of the following problems, take corrective action immediately.

## 1. Dirty Connectors

When engaged and disengaged, the contact surfaces of Anderson™ flat wiping connectors “over wipe,” thus providing self cleaning action. To ensure the continued benefit of this feature, clean the contact surfaces and lubricate the connectors. Use a “white” lithium grease, which may be obtained from hardware stores and automotive parts suppliers.

## 2. Melting Connectors

Connector housings overheat and melt for many reasons. To prevent this:

- A. Examine the crimp between cable and contact. Ensure the crimp tooling recommended by Anderson™ has been used. Improper crimping, corrosion, and broken wires result in unnecessary resistance causing the contact to heat up.
- B. Check contact surfaces for signs of “pitting” caused by dirt or disengaging connectors under load. One badly pitted contact, particularly in a connector attached to a battery charger, can lead to pitting on surfaces of other contacts. If not corrected, this can result in an epidemic of bad connectors throughout a fleet of electric vehicles and in chargers and batteries.
- C. Check to see if batteries are being disconnected while the charger is still on. This causes the contacts to arc at the tips, resulting in progressive pitting and silver removal from tip to crown. If this practice is occurring, it should be discontinued to avoid major repairs in the future.

## 3. Other Conditions

If any of the following conditions exist, the connector housing, contact and / or cable should be replaced immediately.

- A. Housing - Cracks, missing pieces, evidence of excessive heat, discoloration. You may consider replacing the existing housing with a Chemical Resistant equivalent for improved durability against UV rays and common solvents and hydrocarbons.
- B. Contacts - Pitting, burns, corrosion, excessive wear and cracked crimp barrels, as shown in image “B”.
- C. Cable - Exposed copper near housing, cracked cable, peeling or frayed insulation.
- D. Handles - Loose attachment and signs of damage as missing or loose hardware and cracked or broken plastic (Handles should be used for connectors that are hard to reach or move).
- E. Cable Clamps - Loose attachments, signs of abraded cable jacket, missing or loose hardware. (Cable clamps should be used to relieve strain on unmounted cable).



## Your Best Connection™

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