## SB-10055133-2130



# **Service Bulletin**

File in Section: 08 - Body and Accessories

Bulletin No.: 12-08-45-001A

Date: February, 2014

# **INFORMATION**

Subject: Diagnostic Information for Intermittent 110/220V AC Plug-In Charging

Models: 2014 Cadillac ELR

2011-2014 Chevrolet Volt 2014 Chevrolet Spark EV

This bulletin has been revised to add the 2014 Spark EV, ELR and 2013-2014 Volt models.

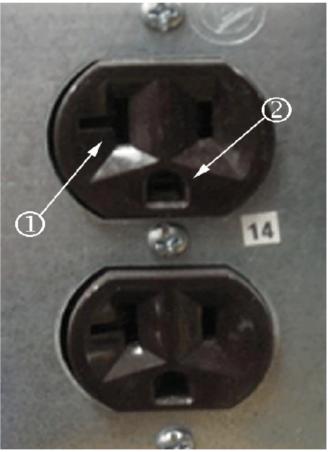
Please discard Corporate Bulletin Number 12-08-45-001.

The first step in any diagnosis on a charge cord is to duplicate it on a known good dedicated circuit. Intermittent issues with electrical noise or inadequate grounding can only be checked by a licensed electrician.

If the condition only happens at the customers home or other charge locations, a licensed electrician may be need to inspect the circuit and wall outlet including checking for:

## **Inadequate Ground**

The symptoms for this condition include both LEDs on the EVSE flashing red and the vehicle charge status indicator turning off. This condition can happen intermittently or it may cause a no charge condition. Changes in the electrical load on the circuit may trigger the fault. A good way to identify this condition is to measure the AC voltage between the left flat blade of the wall plug (callout (1) below) (neutral) and the rounded pin (callout (2) below) (ground). If the AC voltage between neutral and ground exceeds 4 volts while the vehicle is charging, have a licensed electrician check the ground and neutral connections for the circuit that supplies the outlet. (Note: this ground to neutral check does not apply to the charge station).



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#### **Electrical Noise**

The symptoms of this condition can include the right LED on the EVSE periodically flashing red, which will also cause the vehicle charge indicator to change from green to off to amber repeatedly. This condition can also occur with both LEDs green, or the right LED apparently continuously red or changing from green to red . When the EVSE is unplugged from the vehicle, the LEDs will go back to green. While the dash light is changing colors you will be able to hear an audible clicking coming from the EVSE. This condition may or may not be accompanied by the P0D3F DTC.

Another response to this condition that has been observed is the vehicle charge status indicator stays off and the right LED is flashing red while the cord is plugged into the vehicle, and no audible clicking is heard from the EVSE. Immediately upon removing the vehicle plug, the right LED goes back to green.

This condition is caused by certain types of electrical noise on the AC supply line that induce problematic frequencies on the control pilot circuit in the cord, thus triggering a fault condition. Engineering is investigating a solution to this condition, but replacing the EVSE will not correct the condition.

#### DTC P0D3F, DTC P0D3E, DTC P1EE6

Device Power Circuit Voltage Below Threshold: The first thing is to check for low A/C supply voltage. If the circuit is not dedicated with good wall plug, charging should be done at reduced rate. Refer to the Owners Manual.