

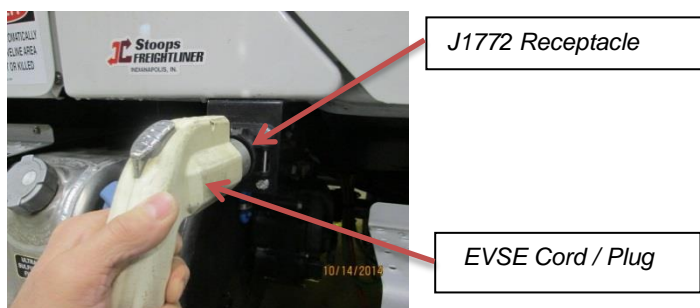
System	Date of Issue	Type of Service Information
G2V3/G2V4	1/23/18	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Procedure

## Title: Troubleshoot G2V3/G2V4 Plug-In Charge Issues

This document describes how to test the Currentways Charger, Currentways Drive Away Module, and Wiring Harness on a G2V3/G2V4 truck. Testing is typically performed when the State of Charge (SOC) of the RESS batteries is not increasing during plug-in charging.

### Test Charger

1. Turn the ignition key **OFF**.
2. Power up the Electric Vehicle Supply Equipment (EVSE).  
NOTE: The Level 2 EVSE is powered continually by a circuit breaker located in the building's breaker panel.
3. Inspect the EVSE plug and the J1772 receptacle and remove dirt or debris as needed.
4. Plug the EVSE into the J1772 Receptacle on the vehicle. The SAE J1772 charge port is located below the cab, on either the street side, curbside, or at the rear of the vehicle.



EVSE to J1772

NOTE: It may take 1-2 minutes for the system to activate and the in-dash display to turn on, before charging begins.

5. If after several minutes charging does not start, make sure the EVSE plug is fully seated and latched. If not latched, the proximity switch will not close and charging cannot begin.

The information in this Service Information is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. Warranty Policy documentation determines Warranty coverage unless stated otherwise. The information in this Service Information was current at the time of printing. Odyne Systems, LLC reserves the right to supersede this information with updates. The most recent information is available through Odyne on-line technical resources.

### Test Currentways Drive Away Module

The Currentways Drive Away Module is located under the truck near the electronics bracket.



*Drive Away Module*

The function of each wire in the drive away module appears in the table below.

<b>Wire Color</b>	<b>Function</b>
Red	12 volt supply
Black	Not Used
Green	Ground
Orange	Proximity input 1.4 VDC
Brown	Proximity out to charger 1.4 VDC
Yellow	Proximity out to HCU 12 VDC

*Drive Away Module Wire Function*

1. Plug the EVSE into the J1772 Receptacle socket.
2. Set a multi-meter to the DC volt setting, and check the voltage on the drive away module connector J16D.
  - a. Back-probe the Red and Green (ground) wires and verify battery voltage is **12 volts**. If 12 volts DC is not present, check the 5 amp fuse at F23 in PDM mounted on electronics bracket. Replace the fuse as needed.
  - b. Back-probe the Orange and Green (ground) wires and verify voltage is around **1.4 volts**. If not, verify the button on EVSE is fully engaged / latched. (If not latched, the circuit from the Proximity switch is open and the reading is usually 2.5 volts.)
  - c. Back-probe the Brown and Green (ground) wires and verify **1.5 volts**. If there is no voltage on the Brown wire or voltage is out of range (>1.5) on the Orange wire, replace the Currentways Drive Away Module.
  - d. Back-probe the Yellow and Green (ground) wires and verify battery voltage is 12 volts. If not, there is no signal from the HCU. Then, check the continuity from the J16D connector, Pin 4 to the J2 connector, Pin F1. If no continuity, there is a break in the wire or a terminal is not seated properly in the J16/J16A or J2 connector.

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### Test Wiring Harness

If the tests for charger and drive away module do not identify the problem, test the wiring harness.

There are two types of EVSE plug-in charge ports. EVSE Level 1 is 120 volt AC, and EVSE Level 2 is 240 volt AC. Specifications listed in the table below appear for both types.

1. Check the Pilot signal circuit from J1772 to the charger. Using a multi-meter, back-probe the Blue (S239) wire from J1772 socket to chassis ground. Plug the EVSE into the J1772 socket and verify the following settings are present.

<b>Level / Amp</b>	<b>EVSE Contactor</b>	<b>Voltage (VDC)</b>
Level 1 EVSE 12 amp	Open	-7.8
Level 1 EVSE 12 amp	Closed	-8.4
Level 2 EVSE 20 amp	Open	-5.0
Level 2 EVSE 20 amp	Closed	-6.0
Level 2 EVSE 30 amp	Open	-1.5
Level 2 EVSE 30 amp	Closed	-3.0

*Pilot Signal Circuit Settings*

2. Check the fuse in PDM F19 to the charger. Replace the fuse as needed.
3. Check the E-cup from charger. Plug the EVSE into the J1772 receptacle socket. Using a multi-meter, back-probe the wire on the J16/J16A pin 9 to chassis ground. Verify that 12 volts DC is present (circuit is ok). If 12 volts is not present, inspect the J16b connector for loose or damaged connection.

### Odyne Service Support Resources:

To request technical assistance, contact [ServiceSupport@Odyne.com](mailto:ServiceSupport@Odyne.com).

To request parts, contact [Parts@Odyne.com](mailto:Parts@Odyne.com).

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