

Subject: Intermittent Cluster, Radio and HVAC
Display Resets on Snow Plow Trucks

Models/Years Affected: 2014 Chevrolet Silverado 1500
2015-2016 Chevrolet Silverado
2014 GMC Sierra 1500
2015-2016 GMC Sierra
With Snow Plow Prep Package (RPO
VYU)

Origination Date: November 30, 2015

Revision Date: February 8, 2016

ADVISORY:

Condition/Concern:

Trucks equipped with option VYU [Snow Plow Prep] and a snow plow, may exhibit occurrences in which the Instrument Panel Cluster (IPC), Radio and HVAC displays may "blank out" or reset after changing the snow plow position. This condition is caused by a system voltage over-shoot phenomenon called 'load dump'. When the large electrical draw of the plow pump motor is suddenly removed the field energy that is built up in the alternator causes a system voltage overshoot that momentarily moves above the normal design operating levels for the module displays. As a result the displays will shut down or reset causing the momentary blank out condition. The modules are designed to do this and immediately recover. *No modules* should be replaced for this condition.

Repair/Recommendation:

Contact your local GM Dealer for an appointment to install PN 84043394 VYU Snow Plow Jumper harness.

Note: Your truck may already have the factory harness included as a loose part [in the glove box]. If not, the jumper harness and installation will be provided [one time] without charge. Installation charges will be waived only if the jumper is installed at your GM dealer. If your truck was delivered with the harness you have the option of having your snow plow dealer install it or you could do it yourself. These installation costs would not be covered by GM.

General Motors Upfitter Integration

<http://www.gmupfitter.com>

Installation Instructions:**1. Single alternator systems:**

- a) Unplug the 2-way connector on the alternator.
- b) Identify the master alternator connector [at the very tip of the harness when it is fully extended.] Insert it in the alternator.
- c) Take the original alternator connector and plug it into the mating jumper harness connector. Note: In this case the second alternator connector will be unused and will remain capped and tied to the harness bundle.

2. Dual alternator systems:

- a) Unplug the control connectors on both alternators. Take the original master alternator connector and plug it into the mating jumper harness connector.
- b) Identify the master alternator connector [at the very tip of the harness when it is fully extended.] Insert it in the alternator on the RH side of the engine.
- c) Identify the 'slave' alternator connector on the jumper harness and insert it in the LH alternator. Insert the removed LH alternator connector into the [unwired] cap on the jumper harness.

3. All systems:

- a) Route the snow plow jumper harness along the existing harness routing as shown and secure with tie straps as appropriate.

b) Mount the relay to the underside of the fender inner at the pencil brace bolt slipping the relay bracket over the threads and securing it with the nut provided in the harness kit.

c) Further secure the relay bracket with a tie strap through the remaining bracket hole to the pencil brace.

d) Route the relay coil wires [blunt cuts] out through the grille to the appropriate location to complete connections for plow motor + and ground.

Note: The lead with the inline fuse goes to motor +

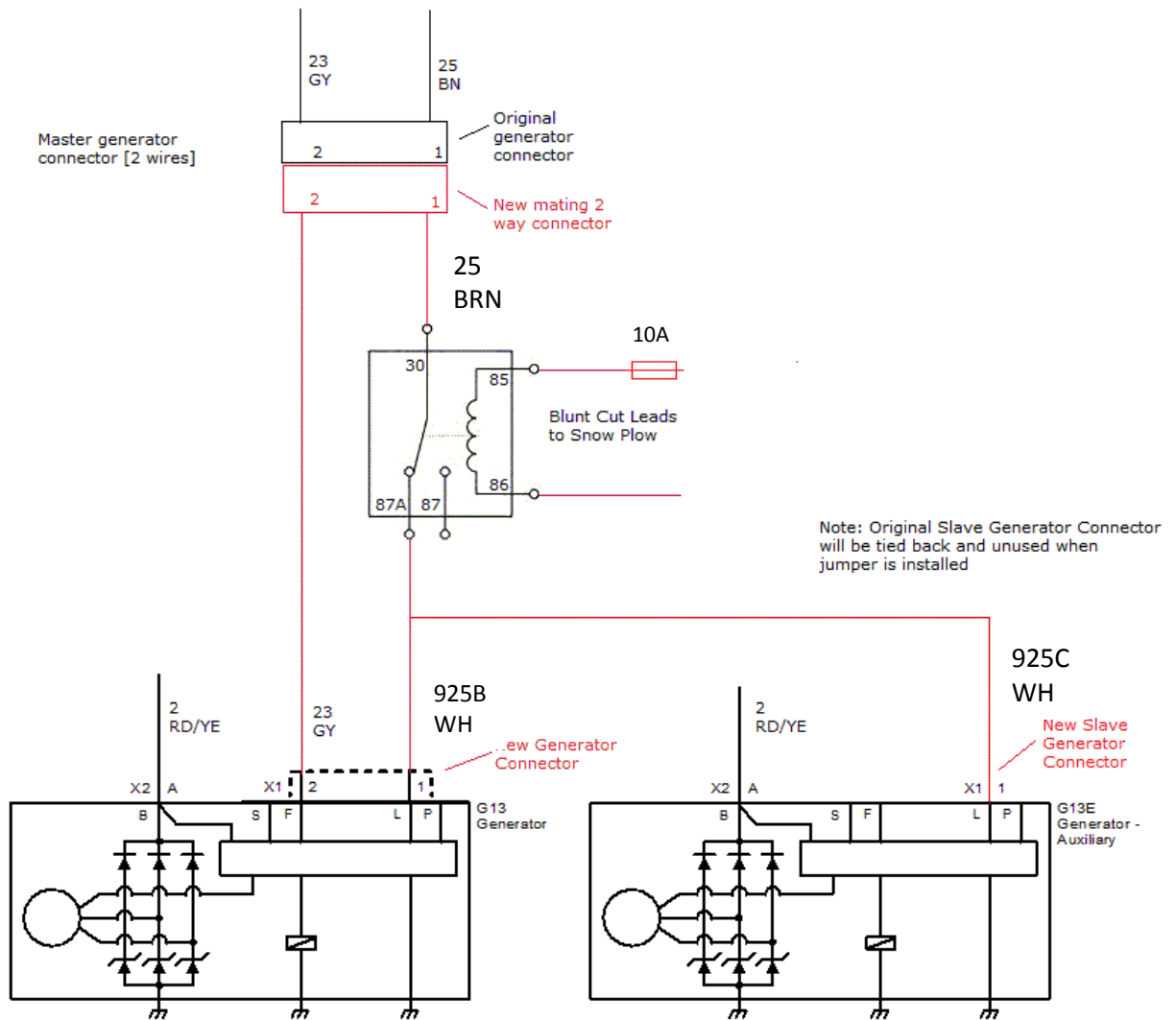
e) Route all wiring away from heat sources and any conditions that could harm the wiring over time. Attach the jumper harness to existing wiring bundle [with tie straps and edge clips provided] as per drawings below. Allow slack for engine roll and vibration.

Note:

This change will reduce the potential for the cluster/radio reset issue. It is still possible if the battery is very cold and the alternator voltage is very high that the first time the plow is cycled you might still see the symptom. Adding more electrical loads and reducing RPMs when releasing the control will help.

Additional Reference Information

Fig 1: Jumper harness wiring schematic



General Motors Upfitter Integration
<http://www.gmupfitter.com>

Fig: 2 Jumper Harness - Component Details

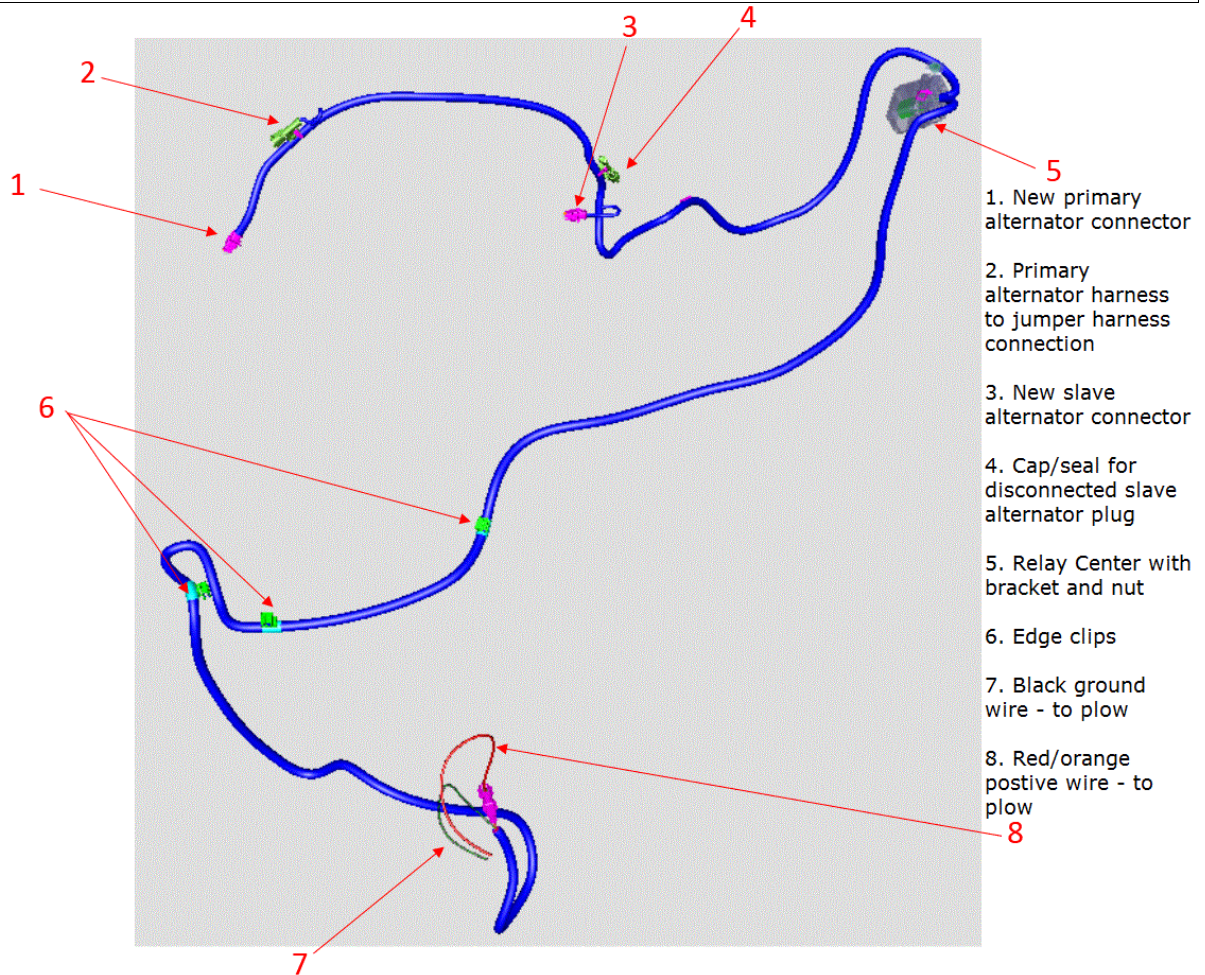
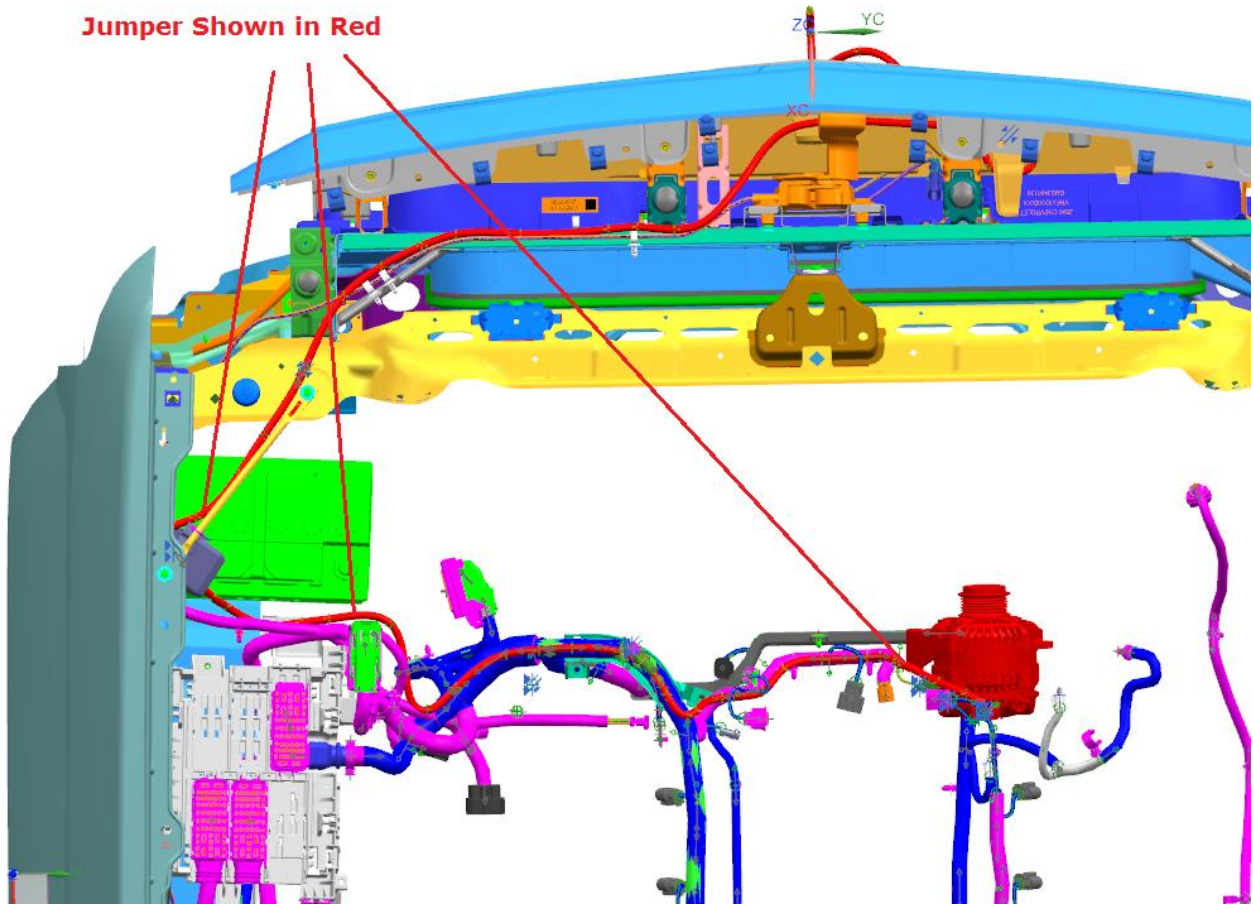


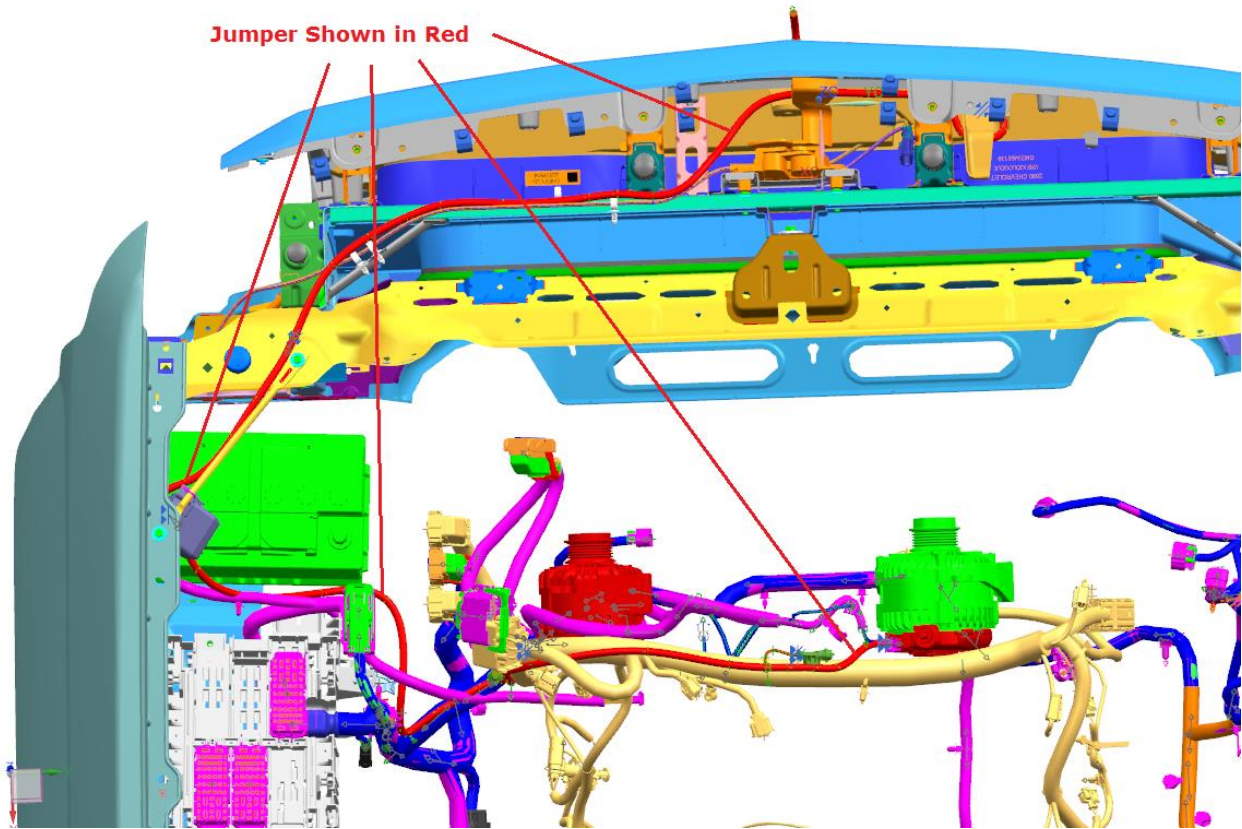
Fig: 3 Jumper Harness Layouts

VYU Single Alternator - Jumper Harness

Jumper Shown in Red

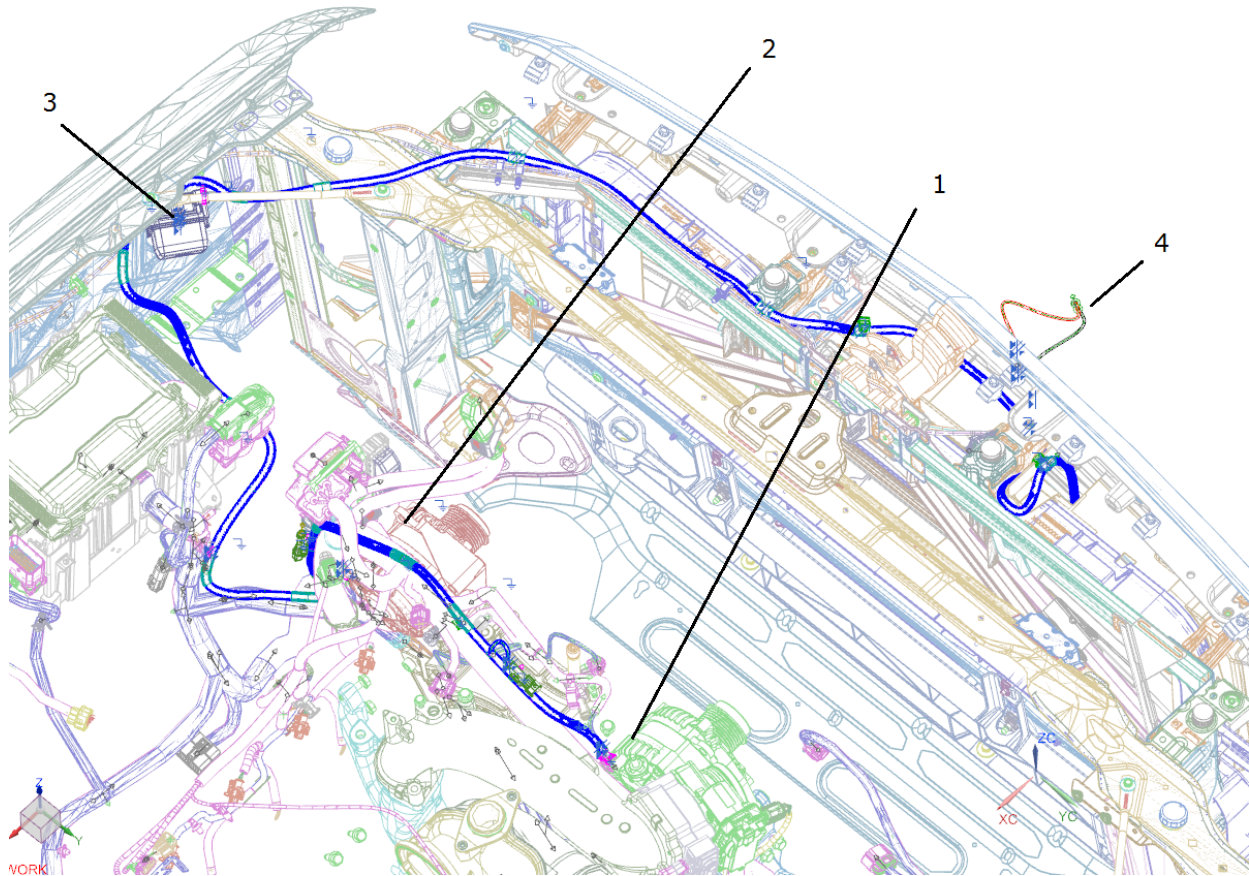


VYU Dual Alternator - Jumper Harness

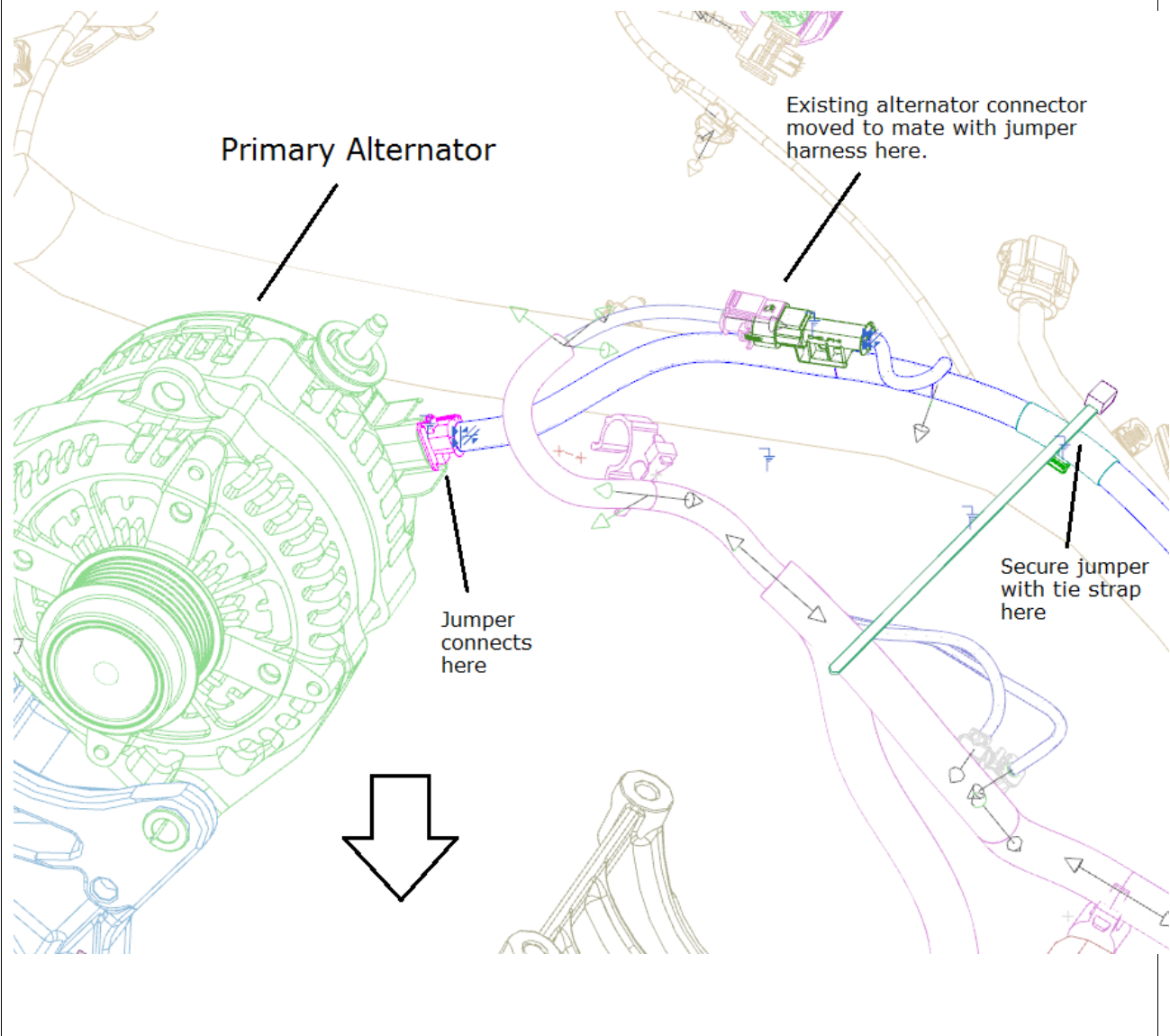


Layout Details

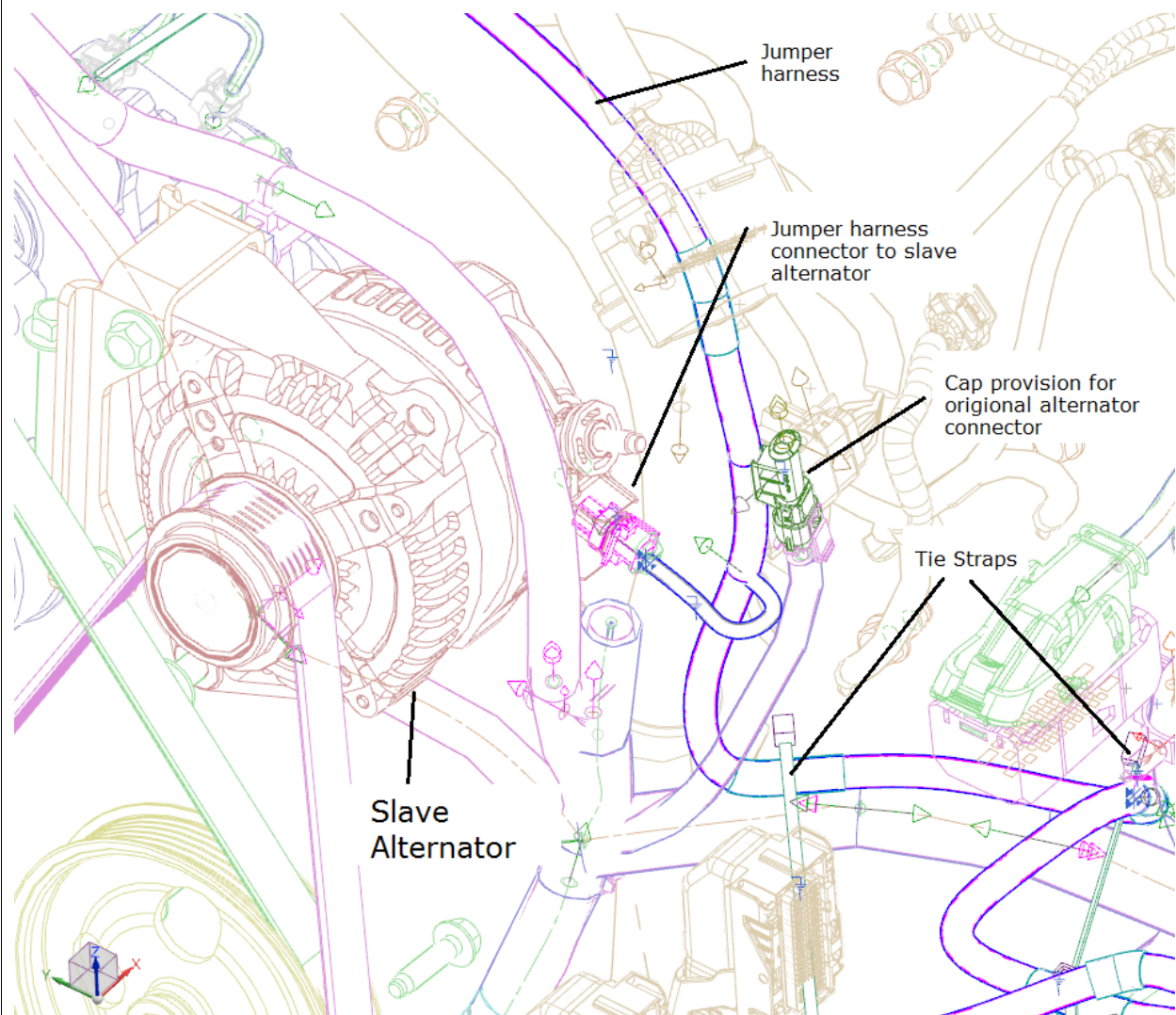
- 1. Primary Alternator
- 2. Slave Alternator
- 3. Relay
- 4. Wires to plow [fused + & ground]



Detail 1

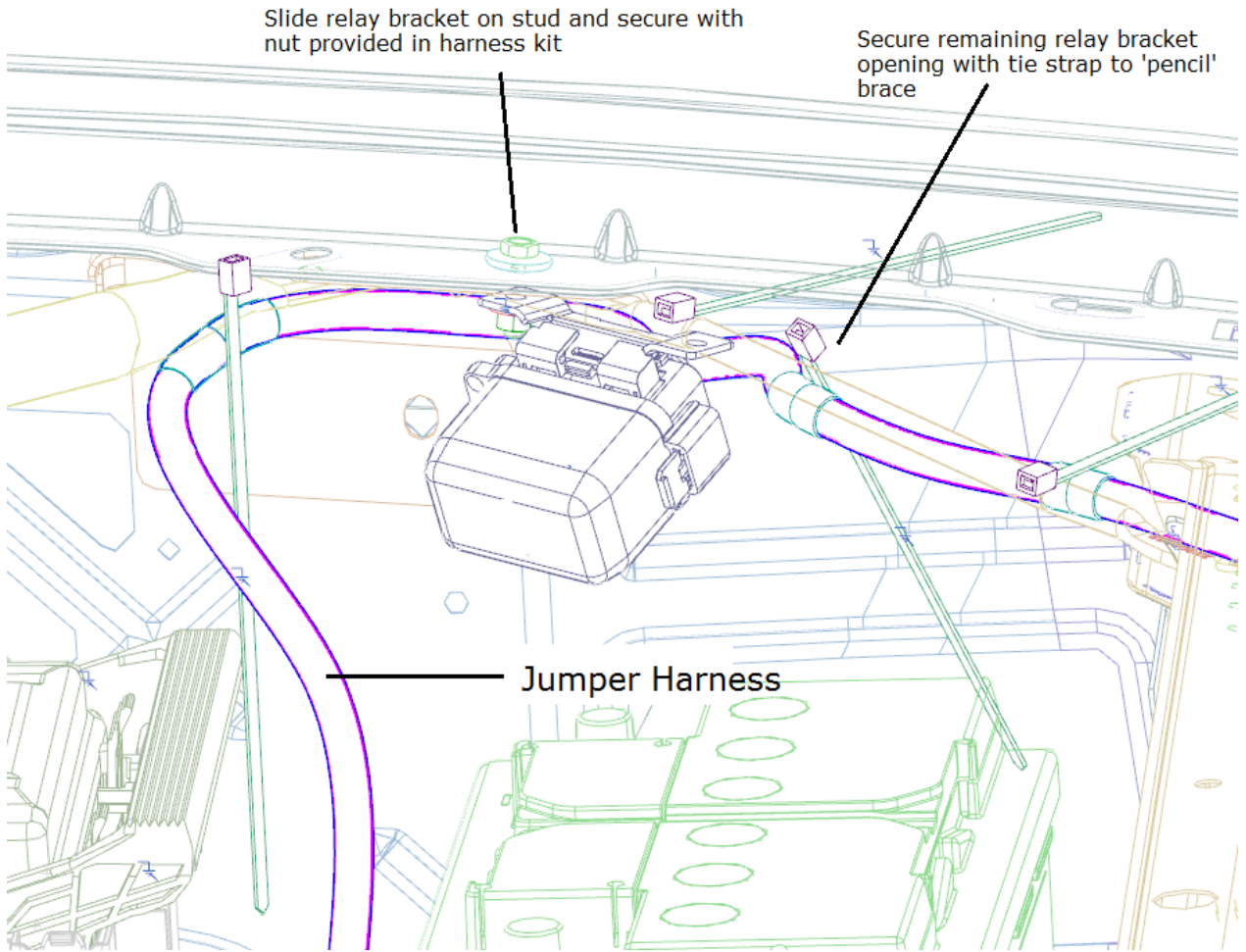


Detail 2



General Motors Upfitter Integration
<http://www.gmupfitter.com>

Detail 3



Detail 4

