## Document ID: 3963140

# **Charge Port Housing Package Installation**

 Table 1:
 P/N 84334825 Kit Contents

 Table 2:
 P/N 23413649 Kit Contents

## **Installation Instructions Part Number**

23413653

**Note:** This installation instruction sheet can be used for either of 2 interchangeable Volt Illuminated Charge Port kits, 84334825 and 23413649. Routing Aid Wire is no longer needed for installation of either kit.

## P/N 84334825 Kit Contents

QTY.	P/N	Description
1	84232971	Bezel Assembly
1	23413653	Instruction – Illuminated Bezel Assembly Install
1	84334824	Harness PKG – ACSRY WRG – Includes Tie Straps

#### P/N 23413649 Kit Contents

QTY.	P/N	Description
1	23413652	Bezel Assembly
1	23413653	Instruction – Illuminated Bezel Assembly Install
1	23446773	Harness PKG – ACSRY WRG – Includes Conduit and Tie Straps

## **Special Tools Required**

Vinyl Tape (19mm)

Electrical connector terminal pick

Plastic Wedge Trim Tool

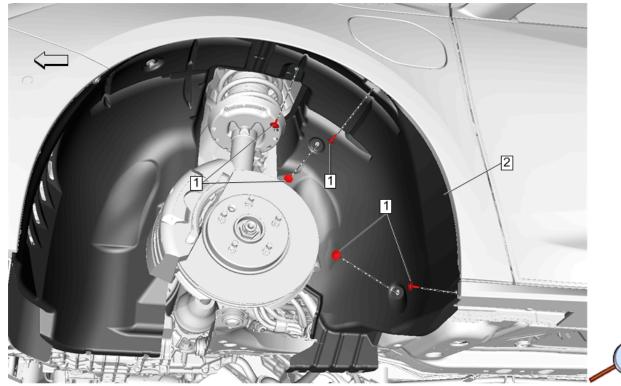
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**Note:** Routing Aid Wire is no longer needed for installation of this Accessory.

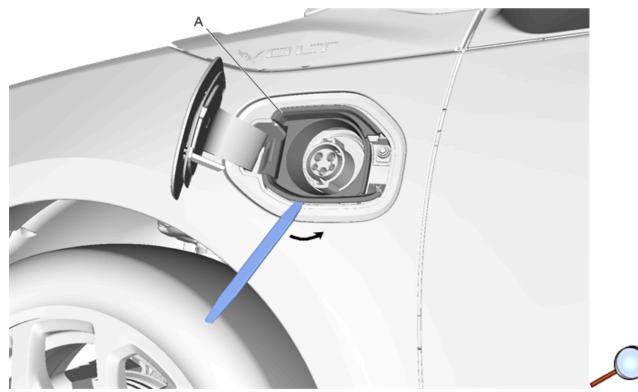
## **Procedure**

#### Note:

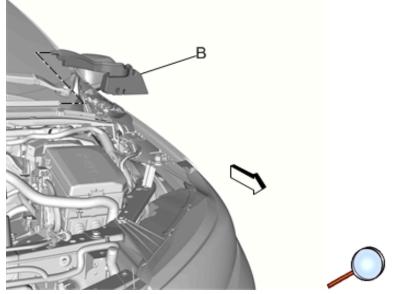
- 1. Read all instructions before performing procedure.
- 2. Inspect KIT to verify all parts are included.
- 3. Turn **OFF** the vehicle.
- 4. Disconnect the 12 Volt battery. Refer to Vehicle Service Manual.
- 1. Remove the left front wheel and tire assembly. Refer to Vehicle Service Manual.



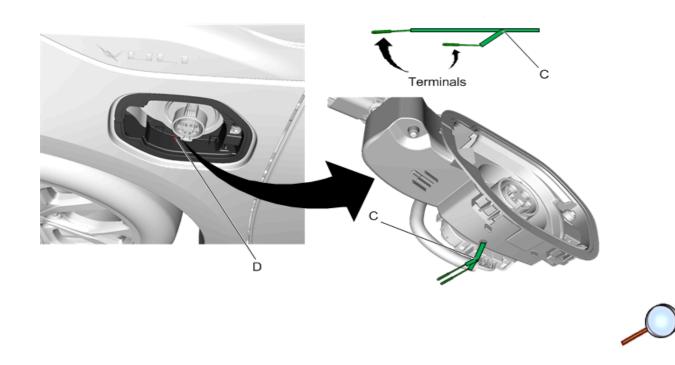
- 2. Remove the fasteners (1) holding the rear half of the left front wheel house liner (2).
- 3. Position the wheel house liner enough to view and access the rear of the charge port.



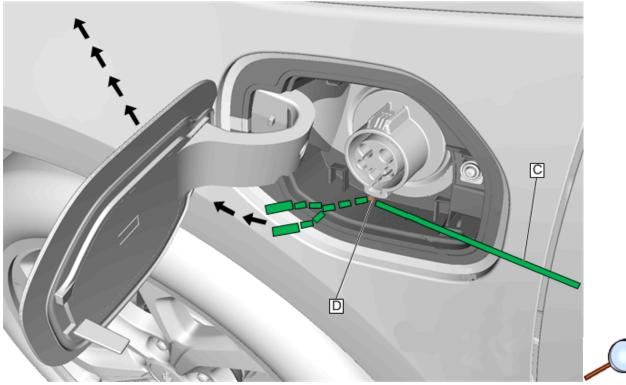
- 4. Open the charge port door.
- 5. Open the hood.
- 6. Remove the charge port housing bezel (A).



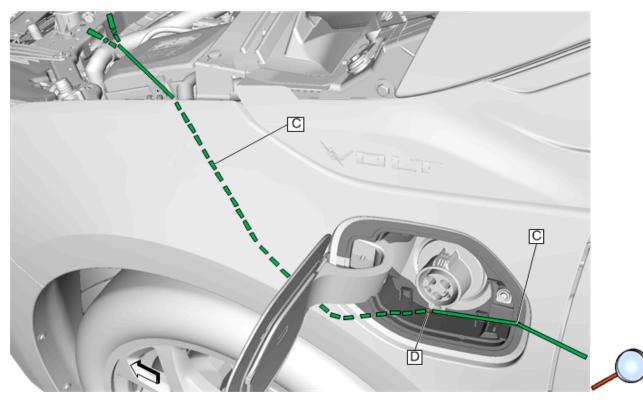
7. Move left side hood rear outer seal (B) out of the way to provide visibility when routing the accessory wire harness.



8. Stagger terminals on Bezel Assembly Pigtail (C) and route through drain hole one at a time, (D) approximately 50.0 mm taking care not to damage terminals.



9. Through the wheel well access the wire harness as it exits the drain hole (D), pull the harness (C) fully through the drain hole.



**Note:** For P/N 23413649 kit includes a separate piece of plastic tubing (conduit); install the conduit before continuing to step 11. 10. Continue to pull the wire harness until it is visible between quarter panel outer and upper rail.

11. Assure bezel pigtail has been routed through drain hole (D) and there is no slack, but with no strain on the accessory housing at the wire exit point.

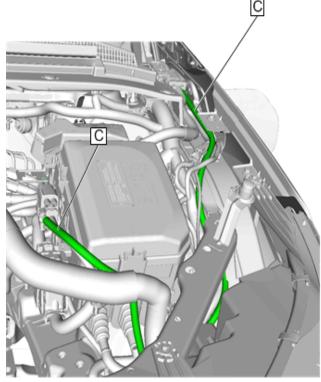
**Note:** Ensure that the production charge port housing rear shroud is seated behind the receptacle so that the shroud cannot interfere with the seating of the charge station coupler. Use the Plastic Wedge Trim Tool to adjust the shroud as needed.



12. Seat bezel assembly into charge port housing by aligning the three bezel posts to housing snap feature.

**Note:** Do not remove secured tape on back of housing.

**Note:** Install the illuminated bezel carefully. Do not pinch wire when installing, tuck wires out of the way of snap posts before seating.

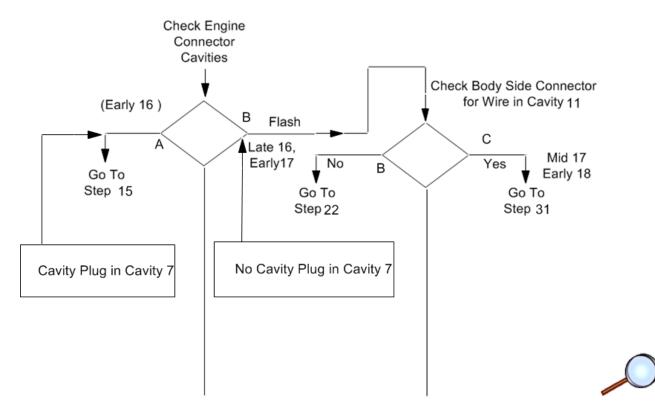




13. Route bezel pigtail (C) as shown.

⇒ Check the Rear of the Engine Side Connector

**Note:** There are 3 possible installation methods, please determine the correct method to use by following the flow chart below.

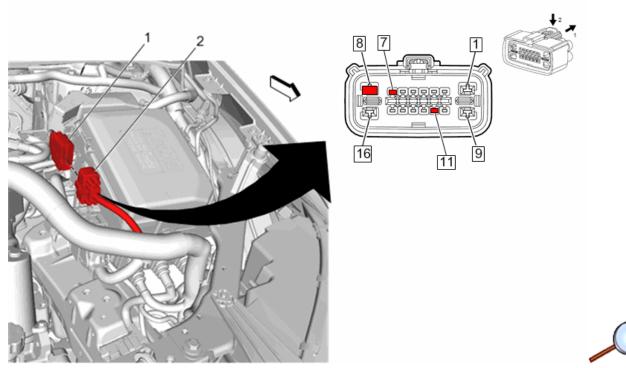


**Note:** Check if the unused cavities are sealed using individual plugs or blocked by connector body material (Flash).

14. Determine Wire Harness Version

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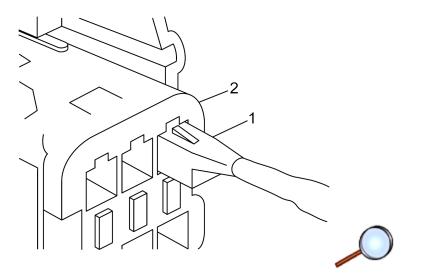
 $\Rightarrow$  **A** Early MY 16 Cavity Plug in Cavity 7



15. Disconnect main body harness (1) to engine harness (2) inline connection.

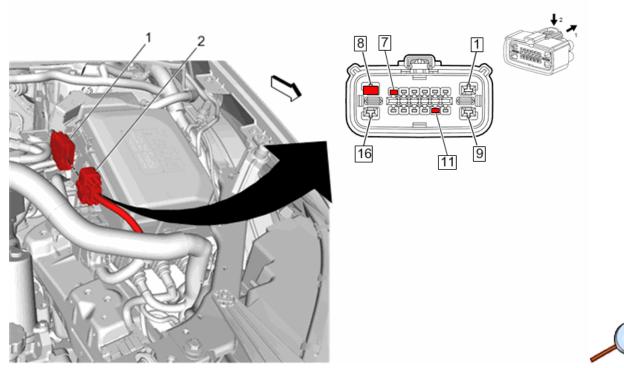
**Note:** Service Molex MX 150 service connector per GM service guidelines.

- 16. Disengage but do not fully remove TPA on the Engine Side Connector.
- 17. Using the terminal pick disengage finger lock and remove cavity plugs from cavities 7&8.

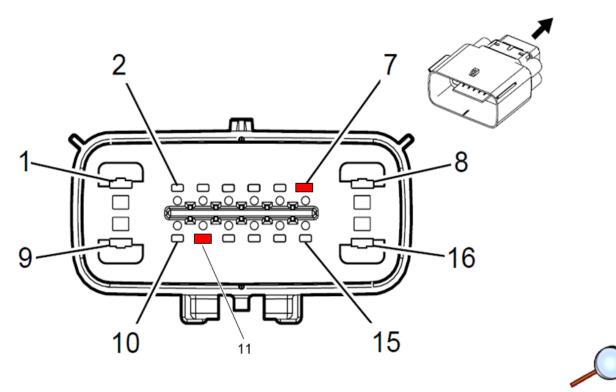


**Note:** Verify correct terminal orientation prior to inserting terminal.

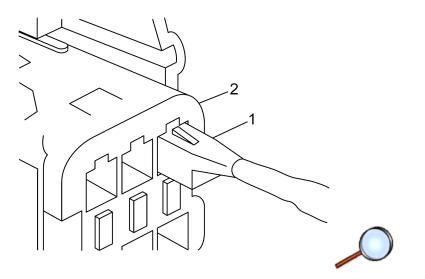
- 18. With the TPA still in the pre-lock position, insert the smaller terminal (Black Wire circuit 2750) (1) for Cavity 7 to the rear of the connector (2).
- 19. Repeat for white wire (Circuit 9000) and Cavity 8
- 20. Re-engage TPA.
- 21. Reconnect Engine to Body Inline. Go to Step 38.
  - $\Rightarrow$  **B** Late MY 16, Early MY 17 / No Plug in Cavity 7 / Circuit in Bodyside Cavity 7



- 22. Disconnect main body harness (1) to engine harness (2) inline connection. **Note:** Service Molex MX 150 service connector per GM service guidelines.
- 23. Disengage but do NOT fully remove the TPA on the Engine Side Connection.
- 24. Using the terminal pick disengage fingerlock and remove cavity plugs from cavities 8&11.

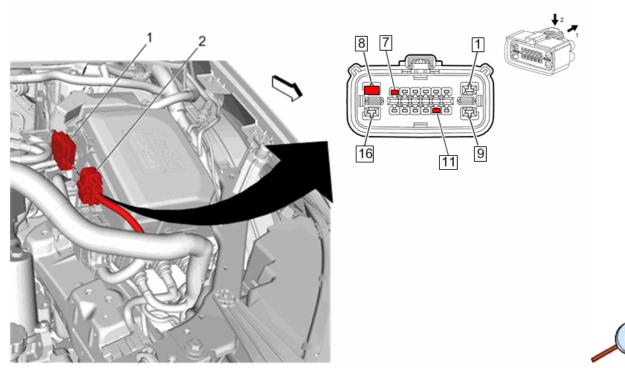


- 25. On the body side connector remove and retain cavity plug from cavity 11.
- 26. Using the terminal pick remove the terminal from cavity 7 and insert in cavity 11. Insert retained cavity plug in cavity 7.

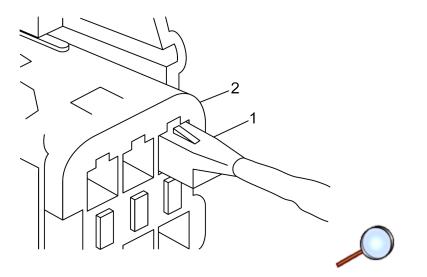


**Note:** Verify correct terminal orientation prior to inserting terminal.

- 27. "Returning to the Engine Side" With the TPA still in the pre-lock position, insert the smaller terminal (Black Wire circuit 2750) (1) for Cavity 11 to the rear of the connector (2).
- 28. Repeat for White Wire (Circuit 9000) and Cavity 8.
- 29. Re-engage TPA.
- 30. Reconnect Engine to Body Inline, re-attach inline to mounting bracket. Go to Step 38.
  - $\Rightarrow$  **C** Late MY 17 and Beyond / No Cavity Plug in Cavity 7 / Circuit in Bodyside Cavity 11

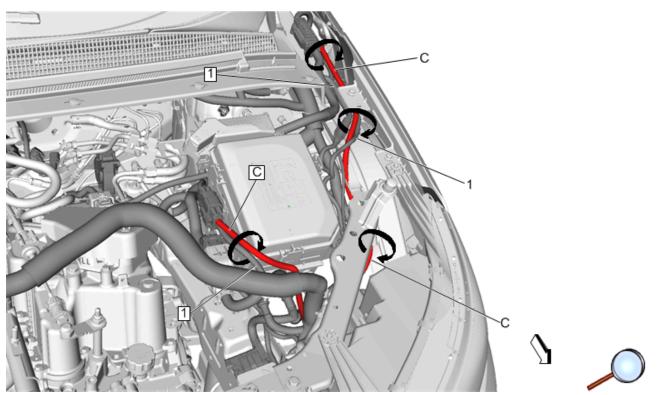


- 31. Disconnect main body harness (1) to engine harness (2) inline connection.Note: Service Molex MX 150 service connector per GM service guidelines.
- 32. Disengage but do NOT fully remove TPA on Engine Side Connector.
- 33. Using the terminal pick disengage the fingerlock and remove the cavity plugs from cavities 8&11.

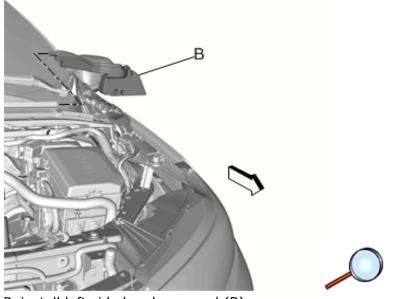


**Note:** Verify correct terminal orientation prior to inserting terminal.

- 34. With the TPA still in the pre-lock position, insert the smaller terminal (Black Wire circuit 2750) (1) for Cavity 11 to the rear of the connector (2).
- 35. Repeat for White Wire (Circuit 9000) and Cavity 8.
- 36. Re-engage TPA.
- 37. Reconnect Engine to Body Inline. Go to Step 38.
  - $\Rightarrow$  Finish Installation and Test

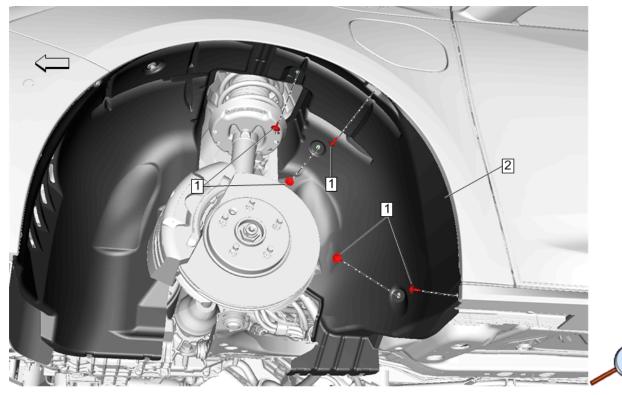


38. Attach bezel pigtail (C) to main body harness (1) using tie straps from harness package approximately 250.0 MM between each tie strap.



- 39. Reinstall left side hood rear seal (B)
- 40. Test the system to ensure it is installed properly:
  - 40.1. Reconnect the 12 volt battery.
  - 40.2. Turn on the vehicle.
  - 40.3. With the vehicle "ON", open the charge port door. The illuminated bezel will turn on for 60 seconds.
- 41. The illuminated charge port will function as follows when a charge cord is attached:
  - The light stays on for 6 seconds while the system initializes and then will begin to flash to indicate charge status.
  - Initial Light On
  - 0-25% 1 Blink
  - 25-50% 2 Blinks
  - 50-75% 3 Blinks
  - 75-100% 4 Blinks
  - 100% Light Off after 60 seconds of unblinking illumination
  - When the charge cord is unplugged after a complete, or partial charge event, the light will turn on for 60 seconds.
    - **Note:** The dashboard charge state lamp and the charge port light work identically as above EXCEPT for the full charge state, the dashboard lamp remains illuminated and unblinking even after the 60 second time out by door lamp.
- 42. Charge Port / Charge Station Coupler Test Required to ensure that the vehicle charges properly after the accessory installation.42.1. Insert the charge station coupler into the vehicle charge port. Listen for a click indicating coupler is fully seated.

- 42.2. Verify full insertion of the charge station coupler by pulling lightly on coupler. Ensure charge station coupler cannot be removed without disengaging the latch on the coupler.
- 42.3. Check that the vehicle is charging and that the charge port light is indicating the state of charge as described above.
- 42.4. Check accessory bezel to assure proper seating adjustment as necessary.



- **Caution:** Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.
- 43. Reposition the wheel house liner and install the fasteners (1) holding the rear half of the left front wheel house liner (2). **Tighten**

Tighten the wheel house liner fasteners to 2.5 N.m (22 lb in).

44. Reinstall the left front wheel and tire assembly. Refer to Vehicle Service Manual.