

The installation kit contains the installation guide, a registration card, the ELD-2000D device/dock, Android MDT (tablet), antenna, 6-pin harness, diagnostic pass-thru cable, security cover and screws, one RAM mount, backing plate kit, one rubber grommet, ground screw, star washer, ring terminal, twelve 8-in. (20 cm.) and two 14-in. (35 1/2 cm.) cable ties.

Additional tools you may need include a digital multimeter, cordless drill, 1in. (25mm.) hole saw, 3/16-in. (5mm.) drill bit, razor knife, wire strippers, P2 bit, Philips PH0 screwdriver, T20 security bit, adjustable wrench, electrical tape, cable ties, tamper seal compound, ink pen, and fine tip marker.

## Installation Steps

The following steps provide an overview of the installation process:

1. Install Preparation.
2. Pass-Thru Cable Installation.
3. 6-pin Harness Installation.
4. RAM Mount Installation and Cable Connections.
5. Verify Installation.
6. Tamper Proof and Secure Installation

### 1. Install Preparation.

Locate the registration card, ink pen, tools to remove dash panels, 6-Pin Harness, cable ties, wire strippers and multimeter.

1. Complete the registration card by locating the serial number of the ELD-2000D and Android MDT (tablet) and copying it onto the card.

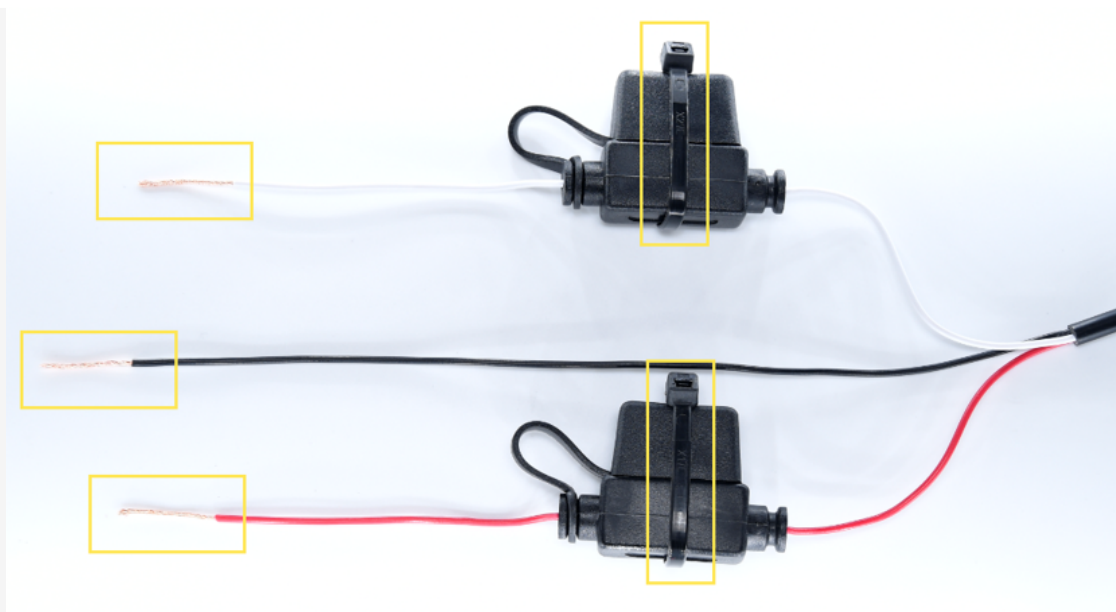
#### ELD-2000D



**Android MDT Tablet**



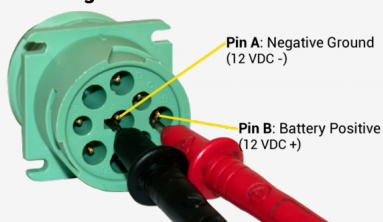
2. Remove the lower and upper dashboard panels to run cables within the dash to the device mounting location.
3. Remove 1 ½-in (4cm) of insulation of the harnesses White, Red and Black wires, twist the wire strands of each and place cable ties over the inline fuse holders



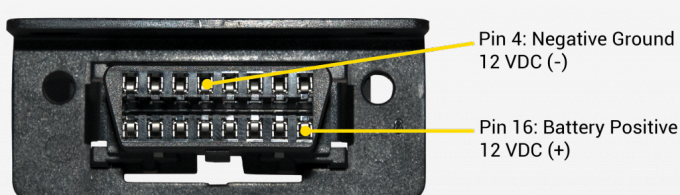
4. Locate the vehicle's diagnostic port under the dashboard. Using a digital multimeter, test the constant power at each port:
- For the 9-pin connectors, place the positive probe on pin B and the negative probe on pin A
  - For the 16-pin connectors, place the positive probe on pin 16 and negative probe on pin 4.

In order to proceed, the port must provide between 12 and 24 VDC (+) when the vehicle is on or off (keys removed).

#### 9-Pin Diagnostic Port



#### 16-Pin Diagnostic Port



**Note.** If the ports do not provide 12 to 24 VDC (+) or the vehicle has a master cut-off switch, please follow the instructions listed in the [HD Pass-Thru Cable Power Reroute Guide](#), or contact Technical Support for further assistance.

## 2. Pass-Thru Cable Installation.

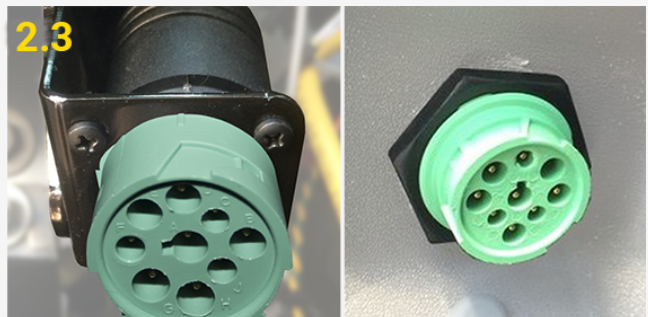
Locate the Philips screw driver, and diagnostic pass-thru cable.

1. Free up the existing diagnostic port from its current location in the vehicle.
2. Plug the pass-thru cable connector into the vehicle's diagnostic port.
3. Mount the replacement diagnostic port using the original screws or locking nut.
4. Route the pass-thru cable through the dash toward GPS device/dock mounting location. Stay clear of any moving parts, and ensure the cable will not be pinched or cut when the dashboard is reassembled.

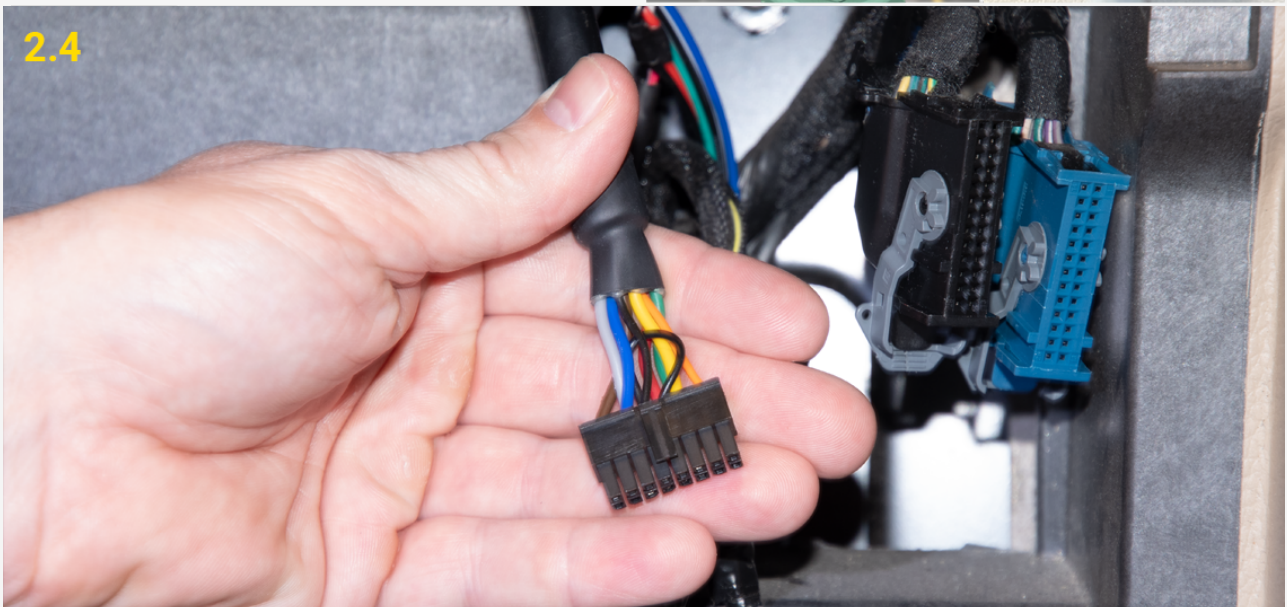
2.2



2.3



2.4



## 3. 6-pin Harness installation.

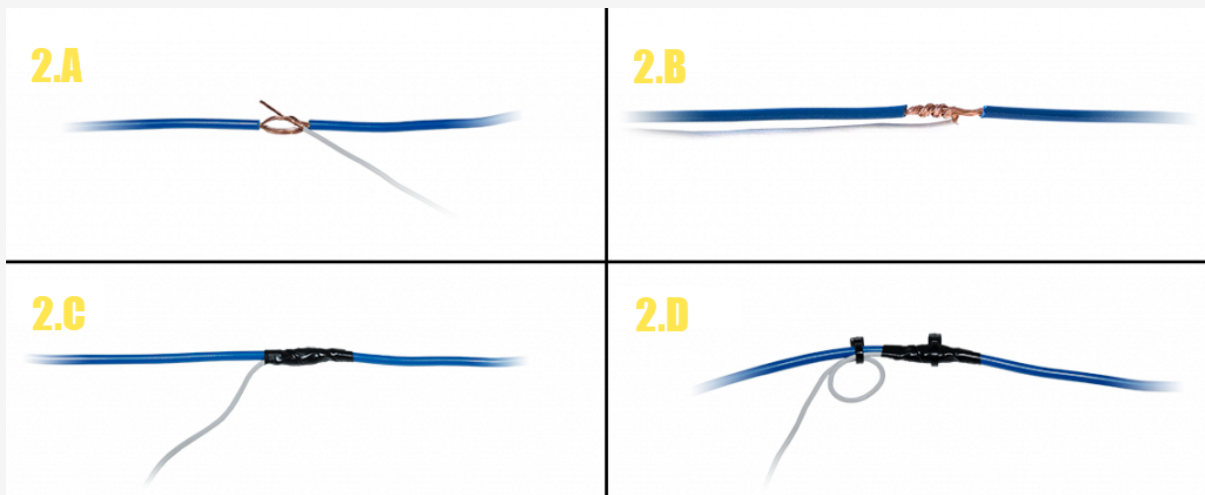


Link: <https://help.nuvo.solutions/installation-guide/eld-2000d/> Last Updated: March 18th, 2019

Locate the 6-pin harness, multimeter, electric tape, razor knife, wire strippers, ground screw, star washer, ring terminal, and four 8-in. (20 cm.) cable ties.

Locate an ignition source that provides at least 12 VDC (+) while the key is in the On position, and 0 VDC (+) when the key is in the Off or Accessory position. Once identified, remove the keys from the ignition. This will be the device's Switch Source of Power (Harness White Wire - Pin 6).

1. Find a loose section of the ignition source wire, remove 1 in. (2 1/2 in.) of insulation with a razor knife/wire strippers, and gently poke something non-conductive between the exposed wires to create an even loop.
2. Secure the 6-pin harness white wire to the ignition source using the poke-and-wrap technique:
  - A. Twist the end of the white wire and poke it through the loop that you created.
  - B. Squeeze the loop shut, and tightly wrap the bare wire around the exposed wire at least 3 times.
  - C. Fold the wire back, and generously wrap electrical tape around the connection, crossing over the insulation on both sides.
  - D. Secure the connection with one zip tie directly over the wire-to-wire connection and another zip tie on a stress loop created about 1 in. (2 1/2 cm.) away from the connection.

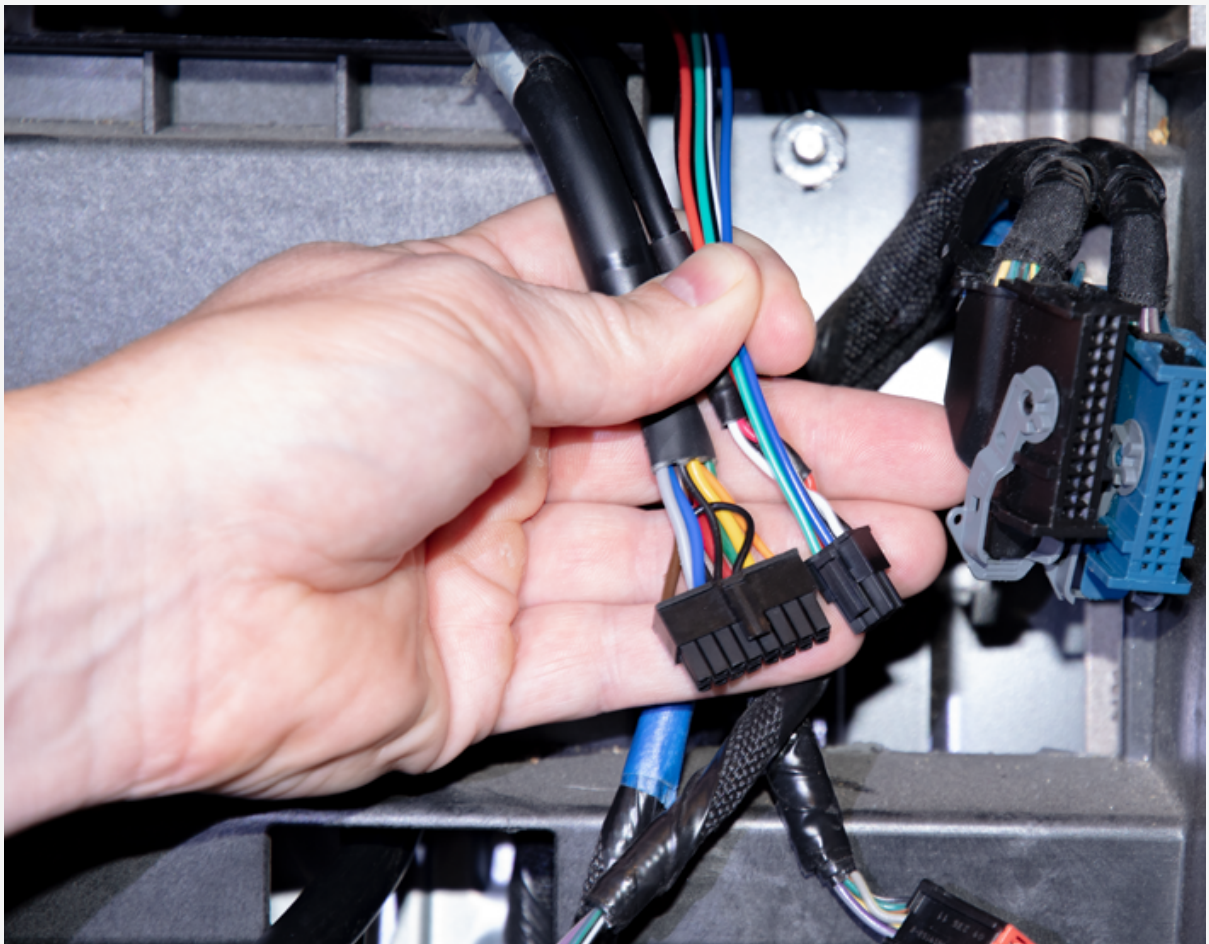


3. Test for a vehicle wire that provides between 12 and 24 VDC (+) with the vehicle On, Off and Keys Removed. This will be the device's Constant Source of power (Harness Red Wire - Pin 1).
4. Complete the same poke and wrap steps mentioned above in Step 2.2: A-D, connecting the Red wire to the Constant Power Source.
5. Locate a suitable location on the chassis to mount the ground wire.
  - A. Fold and crimp to the ring terminal.
  - B. Slip the star washer over the self-tapping screw first, then through the ring terminal.

- C. After confirming there is nothing behind the mounting location, screw the ring terminal to the chassis.



6. Route the 6-pin harness connector to GPS device/dock mounting location staying clear of any moving parts and ensure the cable will not be pinched or cut when the dashboard is reassembled.



#### 4. RAM Mount Installation and Device Connections.

Locate the ELD-2000D device/dock, RAM mount, backing plate kit, 1in. (25mm.) hole saw, 3/16-in. (5 mm.) a drill bit, cordless drill, fine tip marker, grommet, P2 Philips bit, PH0 Philips screwdriver, adjustable wrench screws, security cover, security cover screws and two cable ties.

1. When determining the mounting location, keep in mind the size of the Android MDT (tablet) and length of the ELD data cable; the Android MDT (tablet) must be within reaching distance of the driver while seated and NO part of the tablet should be above the top of the dashboard, or obstruct usage of any gauges or switches.
1. Separate the RAM mount base by loosening the tightening screw in the middle of the arm.
2. Using the RAM mount base and backing plate, identify the holes by lining up the two before marking the holes needed to secure the mount to the dashboard.



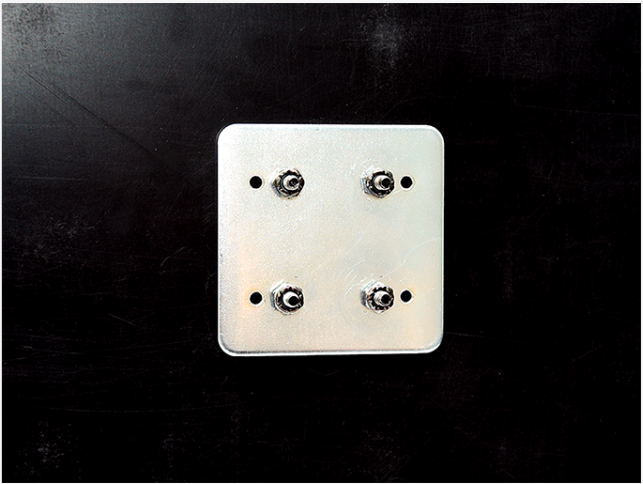
**Note.** Before you continue, verify there are no wires, air lines, or anything else behind the





mounting location that might be damaged by the drill bit.

1. Drill out the four holes marked in the previous step with the 3/16-in. (5 mm.) drill bit, and then line up the base of the RAM mount with the backing plate and secure it to the dashboard using the four nuts and bolts included in your kit.



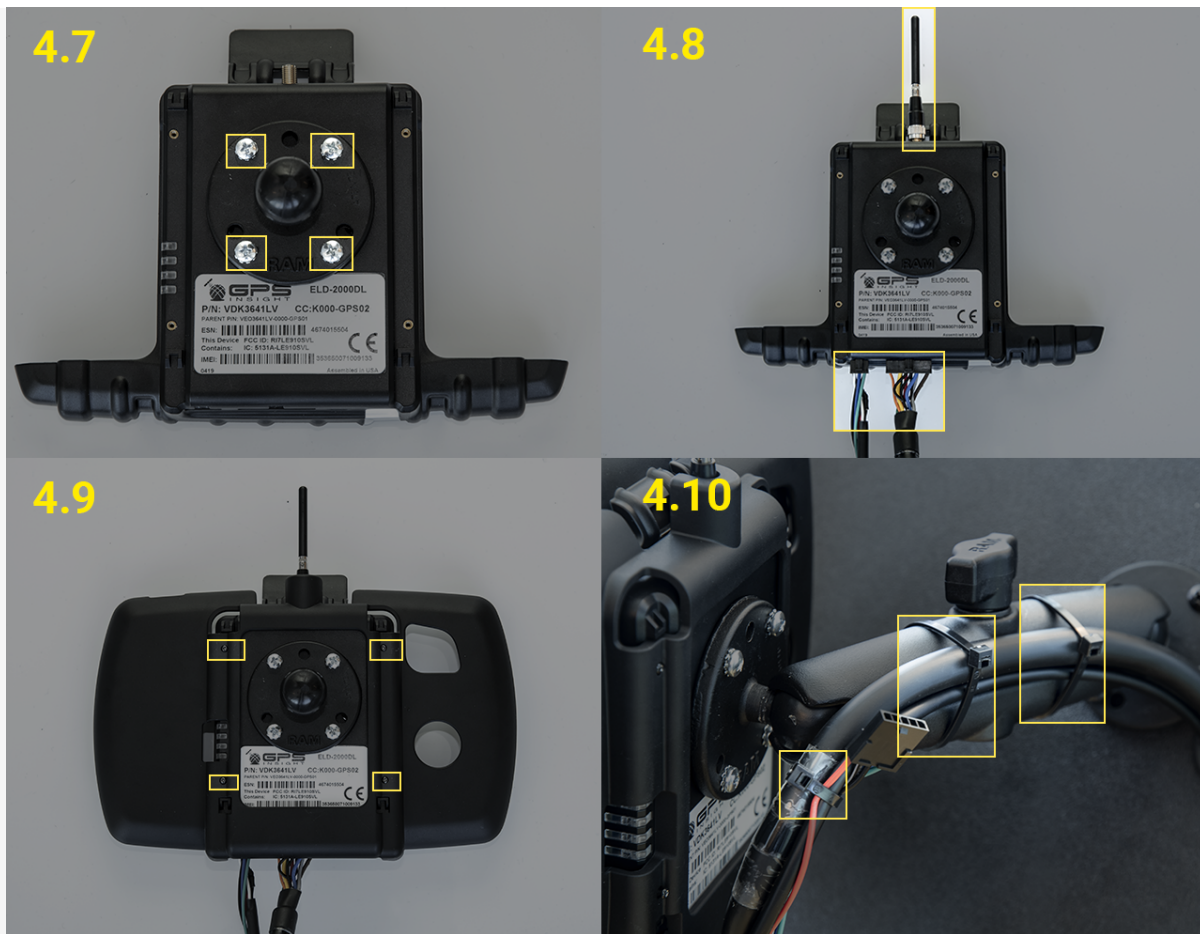
**Note.** The backing plate is required for every install. If you are unable to use the backing plate without significant modifications, consult with your project coordinator. Do not secure the RAM mount to the dashboard with self-tapping screws.

1. Identify a location near the base of the RAM mount that is hidden once the tablet is docked, and drill a hole approximately 1 in. (2.5 mm.) in diameter.
2. Feed the 16-pin and 6-pin connectors through the hole, then cut and slide the grommet into place.






3. Using the four zinc screws, secure the other RAM mount base to the back of the MDT dock.
4. Connect the antenna and both the 16 and 6-pin molex connectors to the device.
5. Place the security cover over the device and secure it with the four screws.
6. Connect the two RAM mounting plates together with the RAM arm, secure the 5 pin AUX wires to the harness and secure both cables to the RAM arm using cable ties.



## 5. Verify Installation.

1. Do not start the vehicle.
2. To activate and register your device, with your completed registration card in hand, call 480-508-7478.
3. Be prepared—Technical Support instructions will consist of the following:
  - A. Start the vehicle; engine running.
  - B. Confirm the Android MDT (tablet) powers up on its own and indicates it is charging.
  - C. From the Android MDT (tablet), open the **Vehicle Data Services** app  and confirm the following:

Field	Value
<b>Odometer (km)</b>	Technical Support will convert this value and confirm it matches your dashboard odometer.
<b>Ignition On</b>	True
<b>BB Connected</b>	True
<b>ECU Connected</b>	True
<b>Comms Connected</b>	Connected

D. From the Android MDT (tablet), open the **eFleetSuite** app  and enter the following:

Field	Value
<b>Device ID</b>	Delete current value and enter the tablet serial number from your registration card.
<b>Vehicle ID</b>	Enter the vehicle ID provided by the project coordinator.
<b>Organization ID</b>	Enter exactly what was provided by the project coordinator.
<b>Provisioning Key</b>	Enter exactly what was provided by the project coordinator.
<b>Host Name</b>	Enter exactly what was provided by the project coordinator.
<b>Port</b>	Enter exactly what was provided by the project coordinator.

E. Tap **Done**.

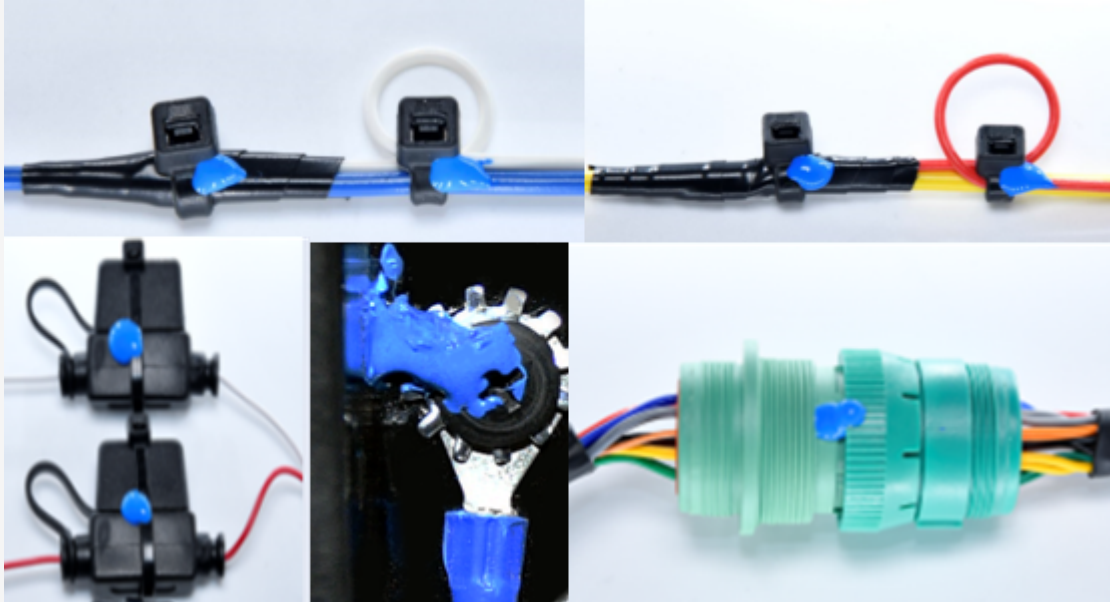
F. Verify additional accessories.

G. Turn the vehicle off.



## 6. Tamper Proof and Secure Installation.

1. Apply tamper seal to all connections.



2. Reassemble the vehicle's dashboard and give the registration card to your GPS administrator.