Installation Instructions Part Number

23487384

Note: To add Remote Start, the vehicle must have an automatic transmission. For the mid-sized pickup (Colorado / Canyon), there are four Accessory Remote Start Kits available. They are differentiated by the logo on the key fob and whether a new hood latch with an integral ajar switch is required. The BCM must know that the hood is closed before cranking the engine. If the vehicle does not have UTJ, Electrical Theft Deterrent, the hood latch will have to be replaced and add wiring and a ground eyelet. The hood latches are different between the GMC and Chevrolet because of the shape of the finger release lever. Most vehicles do have UTJ, Electrical Theft Deterrent.

Adding remote vehicle start requires programming of the vehicle. This is done with a Service Programming System. The installer needs to call the Techline Customer Support Center (TCSC). The TCSC will provide a Vehicle Configuration index (VCI). The VCI is good for only one specific Vehicle Identification Number (VIN).

Programming of vehicles that do not have Keyless Entry (ATG) will require additional calibrations to be updated to add the Keyless Entry feature so that the Remote Start feature will work properly. TCSC can provide the software reconfiguration to add keyless entry to the vehicle. There is a reconfiguration fee associated with this change.

Kit Contents

Qty	Description
2	Key Fobs (GMC or Chevrolet)
1	One Page Installation Instructions with Authorization Code Label
1	Hood Latch with integral ajar switch and wiring pig-tail (GMC or Chevrolet) (if required)
1	Wiring Kit - Wiring Harness and 4 loose tie straps (if required)

Tools Required

- Scan Tool (with Pass Thru programming capability)
- Service Programming System (SPS – TIS 2000 or equivalent system with Pass Thru programming capability)

Procedure

Note: Please review this entire procedure before trying to perform it.
Note: When calling the TCSC, you must use the Authorization Code from the kit.

1. Verify the vehicle does not have the option BTV. Vehicle start must never be added to a vehicle equipped with a manual transmission. Verify the vehicle is equipped with an automatic transmission, and also verify the vehicle does not already have the option BTV. This can be done by using the GM Vehicle Inquiry System (GMVIS). Call TCSC to obtain a VCI number. United States 1-888-337-1010 Canada (English) 1-800-828-6860 Canada (French) 1-800-503-3222. You must have the vehicle's VIN that will be upgraded and the following Authorization Code from label: This will allow you to access the software to enable the remote vehicle start option.

2. Transfer New Transmitters to Old Coded Keys:

    ⟹ For Original Transmitters (not equipped with BTV)Press blade release button to release coded metal blade from transmitter housing.
    ⟹ For New Transmitters (equipped with BTV)Insert coded blades from Original Transmitters into new transmitter housings. The original transmitters will now be bladeless.
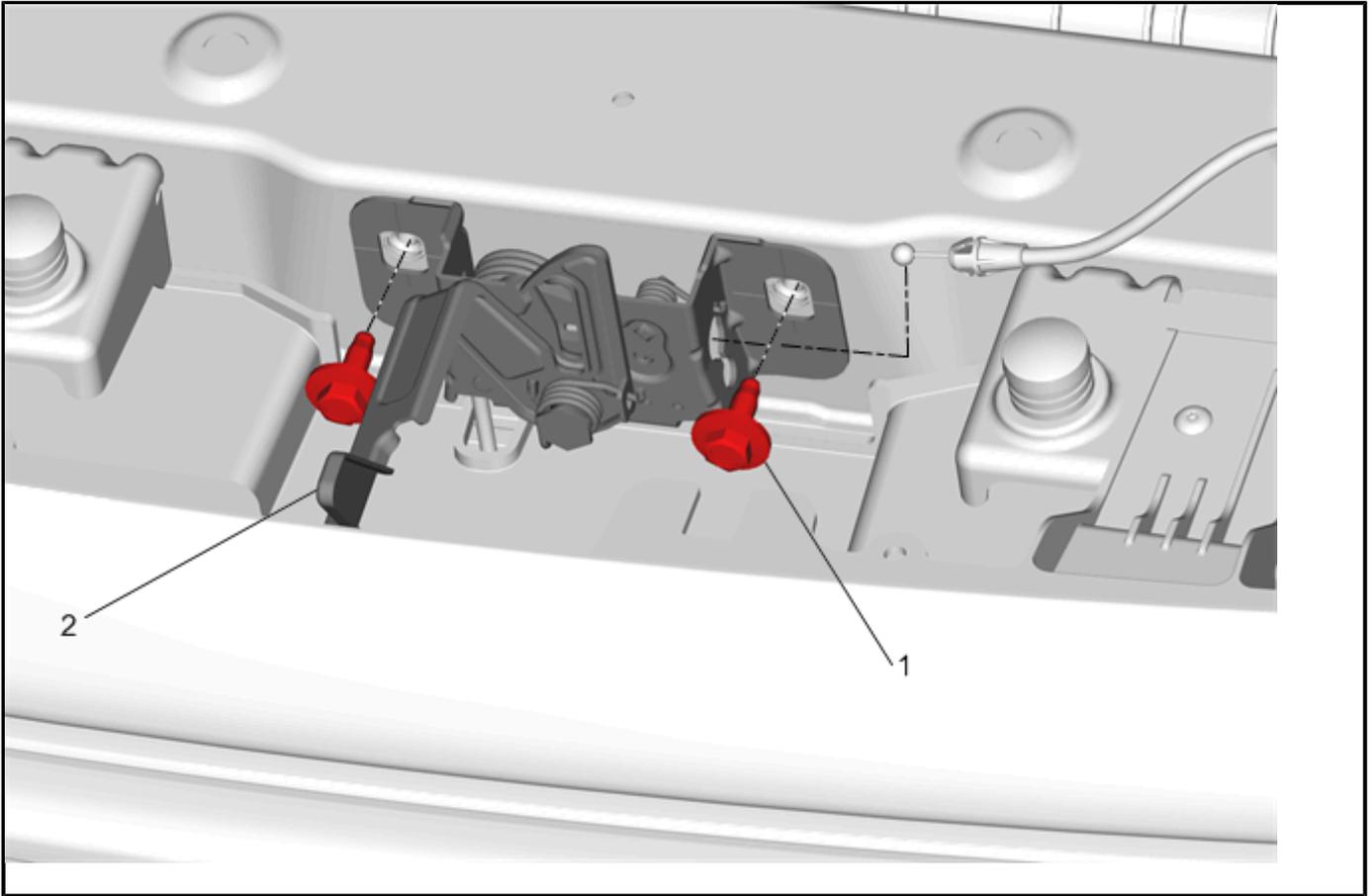
Hood Latch Wiring and Installation
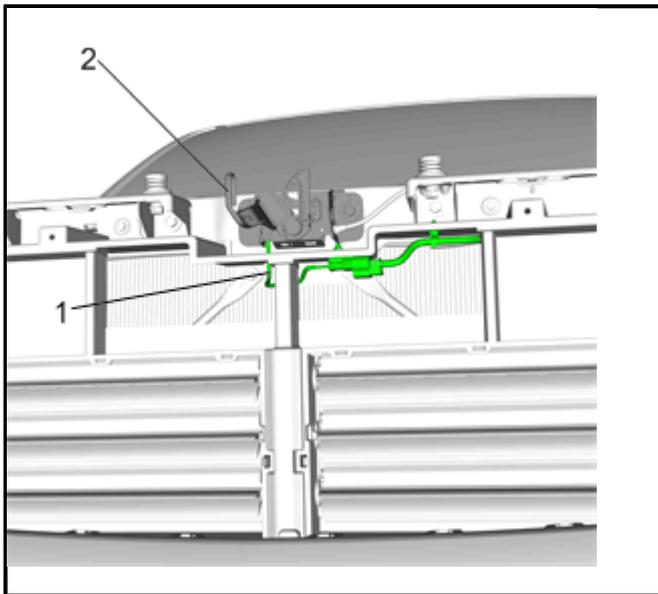
3807486

1. Check to see if there is a hood latch (2) present with wiring (1) going to it. If there is, skip to the **Programming Section.**
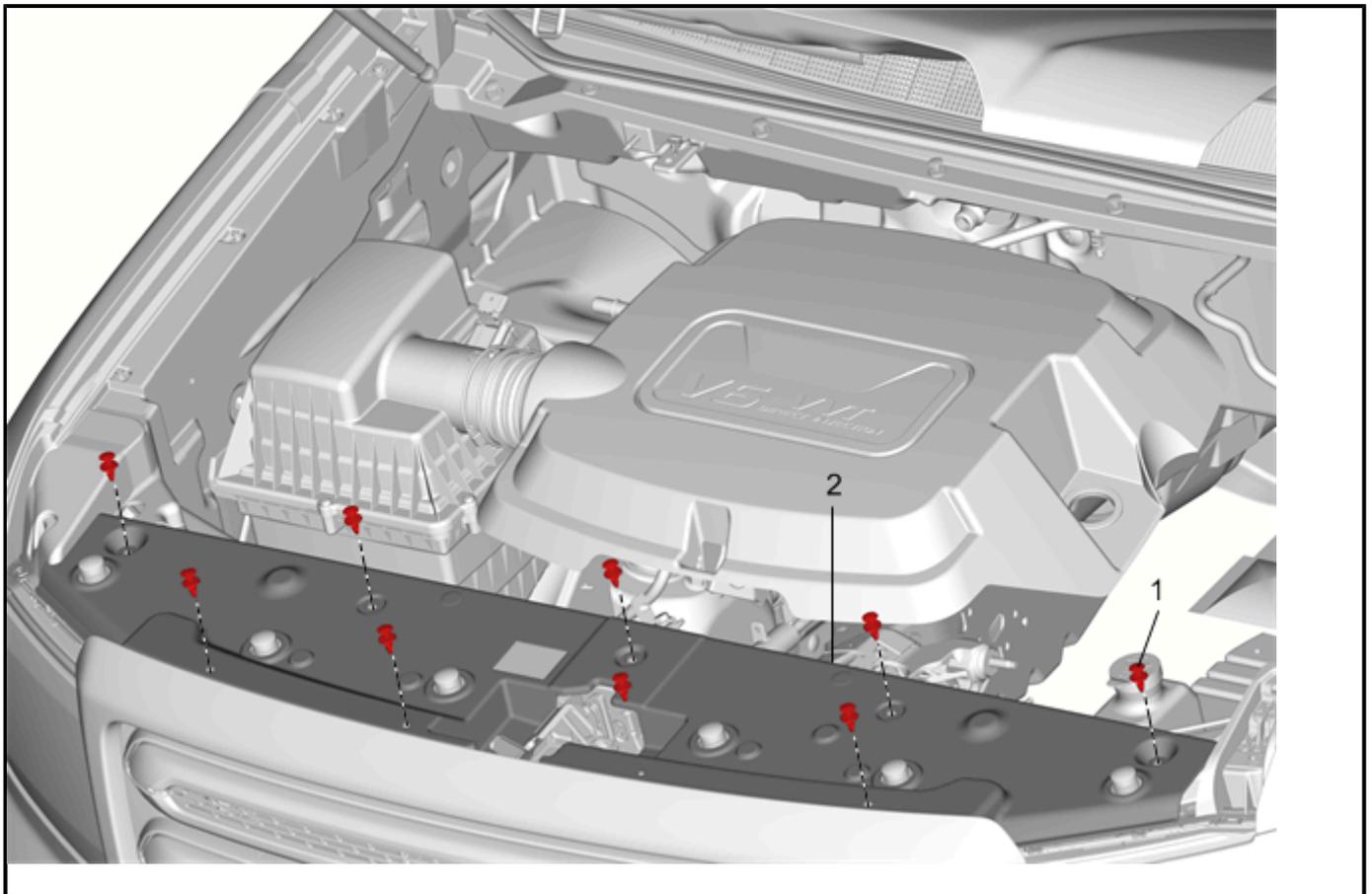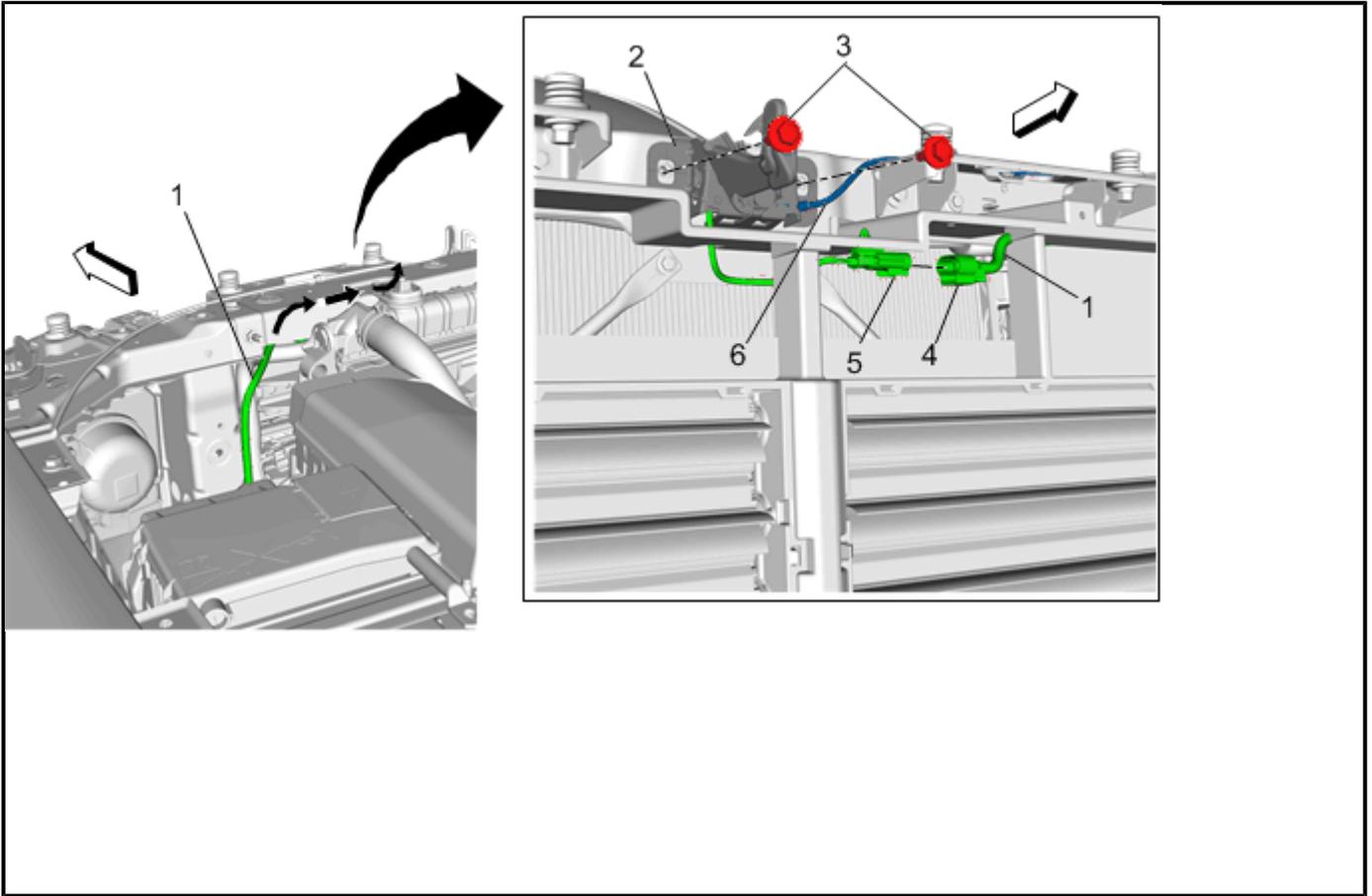

3711942

2. Remove the nine push-in retainers (1) and front compartment sight shield (2).

3711392

Note: Use a grease pencil to mark the location of the hood latch before removing the bolts.

3. Remove the hood latch bolts (1).
4. Disconnect the hood release cable and remove hood latch (2).

3807490

5. With a fish tape or a hooked rod, fish the wiring connector (4) and harness (1) from the left side of the radiator to the hood latch area.

6. Install the hood latch cable (6) to the new hood latch (2).

7. Connect the wiring to the hood latch (5) to harness connector (4) and install the hood latch (2) into position.

8. Secure the hood latch with the bolts (3).

    Tighten the hood latch bolts to 25 N.m (18 lb ft).

9. Remove the left front wheel and tire assembly. Refer to Vehicle Service Manual.

10.   Remove the left front wheelhouse splash shield. Refer to Vehicle Service Manual.
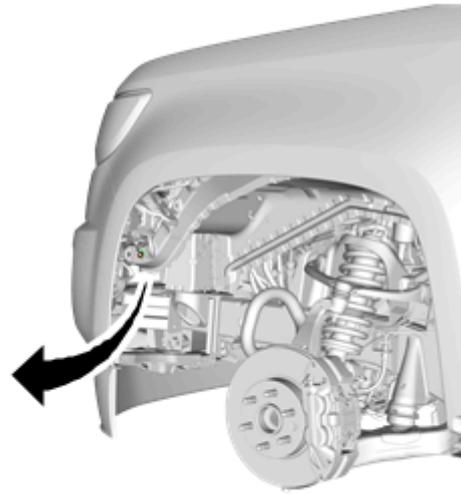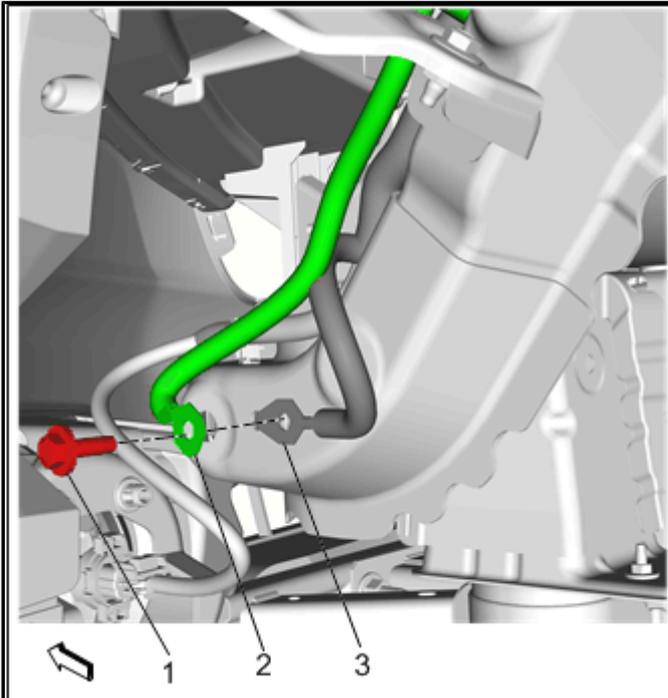
3807493

11. Route the wiring and ground eyelet (2) low, to the left and double stack with the existing ground eyelet (3). Tighten the M6 ground bolt (1) to 25 N.m (18 lb ft).
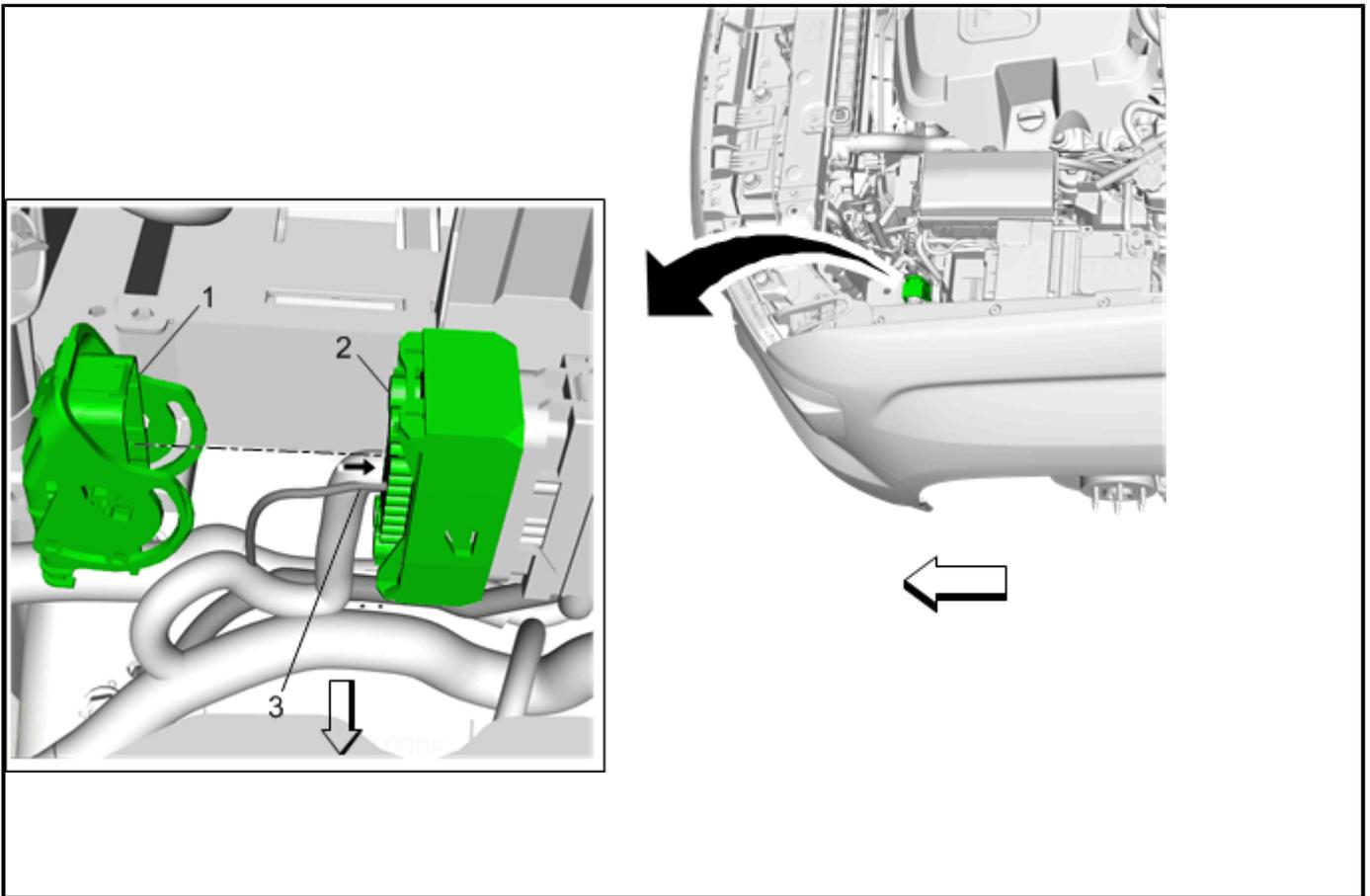
3807495

12. Locate the in-line YELLOW connection between Body and Front End Lighting harnesses, just forward of the Underhood Electrical Center (UEC). Separate the connectors by rotating the lever lock (1). Unseat the CPA on the Front End Lighting harness side.

13. Locate cavity #15 in the 48-way connector (2). Insert the lone terminal (3) into cavity #15, reseat the CPA and mate the two 48-way connectors to each other.

14. Using the tie straps that are already attached to the accessory harness, wrap the tie strap around the front end lighting harness between the ground eyelet and radiator.

15. Use the four loose tie straps, tie the added harness to secure locations on the left of the radiator, near the latch if possible and where ever else it may be needed.

16. Reinstall the front left wheelhouse splash shield and left front wheel and tire. Torque to proper specifications.

Programming Section

Programming Vehicle

Body Control Module Programming and Setup (Calibrate the BCM for BTV)

Note:
- **DO NOT** program a control module unless directed to by a service procedure or a service bulletin. If the **ECU** is not properly configured with the correct calibration software, the **ECU** will not control all of the vehicle features properly.
- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programing failure or **ECU** damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install the **EL - 49642 SPS Programming Support Tool** to maintain system voltage. If not available, connect a fully charged **12V** jumper or booster pack disconnect from the AC voltage supply. **DO NOT** connect a battery charger.
- Turn **OFF** or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.
- During the programming procedure, follow the **SPS** prompts for the correct ignition switch position.
- Clear **DTCs** after programming is complete. Clearing powertrain **DTCs** will set the Inspection/Maintenance (I/M) system status indicators to **NO**.

Reprogramming ECU

To program an existing **BCM**, perform the following procedure:

1. Install EL - 49642 **SPS** programming support tool.
2. Access the Service Programming System **(SPS)** and follow the on-screen instructions.
3. On the **SPS** Supported Controllers screen, select **BCM Body Control Module** – programming and follow the on-screen instructions.
4. Perform the following for the appropriate ignition type prior to proceeding with the next step:
   - **Key Ignition System**: key in the ignition and any additional keys must be away from the vehicle at least 3 meters.
   - **Push Button Start System**: Keyless entry transmitter must be in the console programming pocket. Refer to the Help section button on the **SPS Immobilizer Setup screen** for the exact pocket location. All additional transmitters must be away from the vehicle at least 3 meters.

Note: The following programming step may take between 10 - 12 min. and progress will appear to have stopped during this process. This is a normal security timer response and a restart should not be performed. If the **DTC B389A** set immediately after programming a replacement **BCM**, the Immobilizer Learn procedure was not properly completed. The Immobilizer Learn procedure needs to be performed again.

   Note: If the vehicle is equipped with Memory Seats, Radio Recall or Approach Detection, the old fobs will have to be deleted and the new Remote Start key fobs learned in the #1 and #2 position. The old fobs can be relearned at positions #3 and #4. If these features are not present in the vehicle, the new Remote Start fobs can be learned as #3 and #4. The fobs can be learned either through the GDS2 or SPS systems.

5. On the **SPS Supported Controllers screen**, select **IMMO Immobilizer Learn - Setup**. On the next screen, select **(Program Transponder or Remote Key (Delete)**. To Delete existing keys and remotes, follow the on-screen instructions. When Delete existing keys and remote is complete, follow on–screen instructions and exit the **Immobilizer learn mode**. repeat this step to delete any remaining remotes.

   Note: Adding new Keys or Transponders with remote start button.
6. On the **SPS Supported Controllers** screen, select **IMMO Immobilizer Learn - Setup**. on the next screen, select **(Program Transponder or Remote Key (Add)**. To add existing Transponder or Remote Keys, follow the on-screen instructions. When Immobilizer Learn is complete, press the **Unlock button** on the keyless entry transmitter to allow the keyless entry transmitter to exit the **Immobilizer Learn mode.** Repeat this step to add any additional remotes.

   Note: When performing the **Tire Pressure Monitor Sensor Learn** during **BCM** setup, the EL-46079 tire pressure monitor diagnostic tool must be used to activate each tire pressure sensor for vehicles with **UJM**.
7. On the **SPS Supported Controllers** screen, select **BCM Body Control Module - Setup** and follow the on-screen instructions.
8. Check the driver information center display for additional messages regarding further calibration instructions. If there are no additional driver information center instructions present, programming is complete.
9. At the end of programming, choose the "**Clear All DTCs**" function on the **SPS** screen.

10. If **ABS**, Traction Control and/or Stabilitrak indicators are **ON** and **DTC C0161** is set in the electronic brake control module after performing **BCM** programming and setup, do the following;

    10.1. Disconnect the scan tool from the data link connector.

    10.2. Ignition **OFF**, all access doors closed, all vehicle systems **OFF**, and all keys at least 3 meters away from the vehicle. it may take up to 2 minutes to power down.

    10.3. Ignition **ON**, verify **DTC C0161** is in history. If not, repeat the above step to make sure the vehicle is in sleep mode.

    10.4. Use the scan tool to clear the **DTCs**.

Unsuccessful Programming Recovery

In the event of an interrupted or unsuccessful programming event, perform the following steps:

1. **DO NOT** turn the ignition **OFF**. Ensure that all **ECU, DLC** and programming tool connections are secure and the **TIS** terminal operating software is up to date.
2. Attempt to reprogram the **ECU**.
3. If the **ECU** can still not be programmed, turn the ignition **OFF** for at least one minute.
4. Turn the ignition **ON** and attempt to reprogram the **ECU**. The **ECU** should program.

    If the **ECU** still cannot be programmed, replace the **ECU**.

- Add the transmitters to the customer key rings and return to customer.
- Return bladeless non-BTV transmitters to customer.

Note: The first two transmitters programmed will serve as the master keys, identifying seat positions with each of the two transmitters.

Note: If the customer wishes to purchase replacement coded keys for their (non-BTV) transmitters, keyblades can be purchased through SPO at an additional cost. Refer to Door Lock and Ignition Lock Folding and Non-Folding Key Cutting.