

Installation Instructions Part Number

23320822

Note: To add Remote Start, the vehicle must have an automatic transmission. The BCM must know that the hood is closed before cranking the engine.

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).

Kit Contents

Qty	Description
2	Key Fobs
1	One Page Installation Instructions with Authorization Code Label

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.

Verify the vehicle is equipped with an automatic transmission, and also verify the vehicle does not already have the option BTV (Factory Remote Start). This can be done by using the GM Vehicle Inquiry System (GMVIS). Call TCSC (1-888-337-1010) to obtain a VCI number. 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.

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, programming 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.

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**.

5. On the **SPS Supported Controllers** screen, select **BCM Body Control Module - Setup** and follow the on-screen instructions.
6. 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.
7. At the end of programming, choose the “**Clear All DTCs**” function on the **SPS** screen.
8. 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;
 - 8.1. Disconnect the scan tool from the data link connector.
 - 8.2. 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.
 - 8.3. Ignition **ON**, verify **DTC C0161** is in history. If not, repeat the above step to make sure the vehicle is in sleep mode.
 - 8.4. 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 the old transmitters to customer.

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

To Erase all Fobs and Relearn

Note:

- All transmitters must be programmed in a single programming sequence. Once the Erase/Program All Key Fobs selection is made, all learned transmitters will be erased. If all the existing transmitters associated with the vehicle are not learned at this time, they will become inoperative and require additional programming.
 - Do not operate or program the transmitters in the vicinity of other vehicles that are in the transmitter program mode. This will prevent the programming of the transmitters to the incorrect vehicle.
1. This procedure will first erase all known keyless entry transmitters. After all transmitters are erased, the procedure will begin to program keyless entry transmitters in sequential order, beginning with transmitter 1.
 - 1.1. With a scan tool, access the Body Control Module Configuration/Reset Functions menu. Select Add/Replace Key Fobs.
 - 1.2. Select Erase/Program Fobs. This will erase all learned transmitters and prepare the BCM to learn new transmitters. Follow the on-screen instructions.

- 1.3. When all the desired transmitters have been programmed, cycle the ignition from ON to OFF, exit the vehicle, and operate the transmitter functions in order to verify correct system operation.
2. To keep existing fobs as 1 & 2 and learn the RVS fobs as 3 & 4:
Note: Do not operate or program the transmitters in the vicinity of other vehicles that are in the keyless entry program mode. This prevents the programming of the transmitters to the incorrect vehicle.
This procedure will program keyless entry transmitters in sequential order. If two transmitters are currently learned to the vehicle as transmitters 1 and 2, using this procedure will learn the next transmitter are transmitter 3, and so on.
 - 2.1. With a scan tool, access the Body Control Module Configuration/Reset Functions menu. Select Add/Replace Key Fobs.
 - 2.2. Select Next Available Slot. Follow the on-screen instructions.
 - 2.3. When all the desired transmitters have been programmed, cycle the ignition from ON to OFF, exit the vehicle, and operate the transmitter functions in order to verify correct system operation.