

Installation Instructions Part Number

23349597

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.

Note: For key start vehicles, the remote start replaces the remote trunk release function on the new key fob. The trunk can still be released utilizing the vehicle trunk release buttons.

Note: 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).

Updating the Transmitter to a Coded Key (for key start vehicles)

Note: Updating the transmitter to a coded key applies to the United States and Canada only.

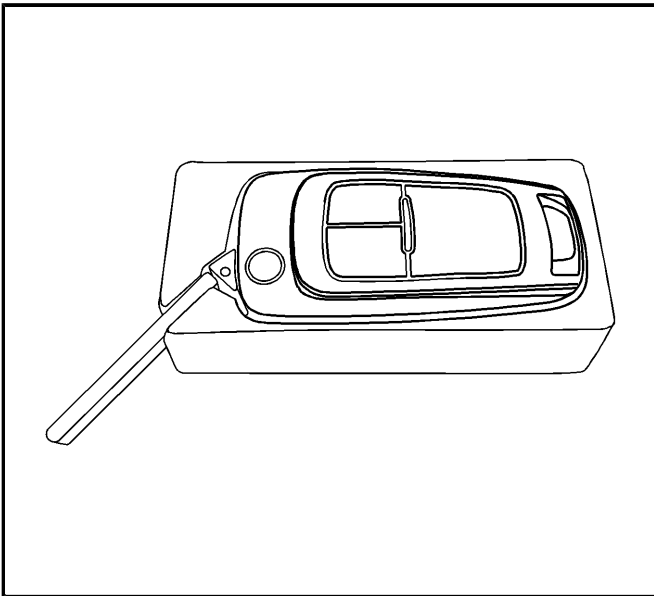
Export dealers are to contact their local Technical Assistance Center (TAC) for further information.

Due to the uniqueness of the ignition/door lock key, special equipment is required to cut a key.

For equipment details, refer to Service Bulletin #09-00-89-029J: Key Cutting Procedure for Obtaining Replacement Key.

If you do not have the required equipment, use Flip Key Blade Fixture Tool BO-51098 to swap coded key from OE Transmitter and install on Accessory Transmitter. Refer to procedure below:

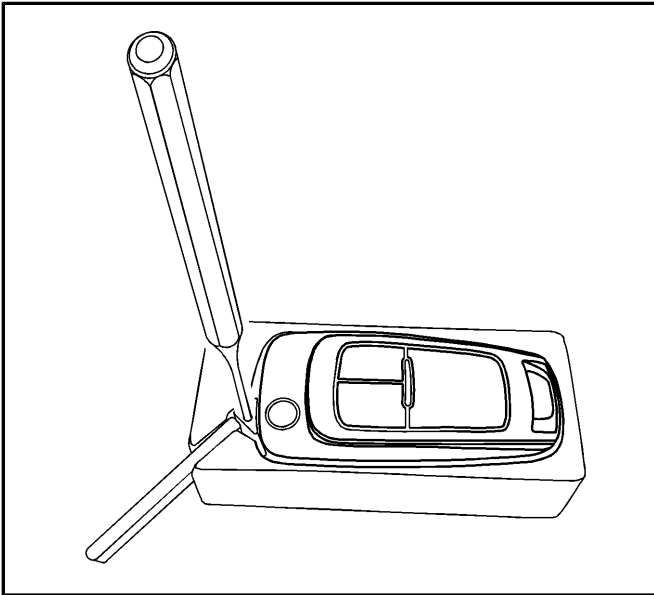
Door Lock and Ignition Lock Folding Key Blade Removal and Installation



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Caution: Failure to properly support the Remote Keyless Entry (RKE) transmitter assembly while replacing the key blade may cause internal damage to the transmitter assembly.

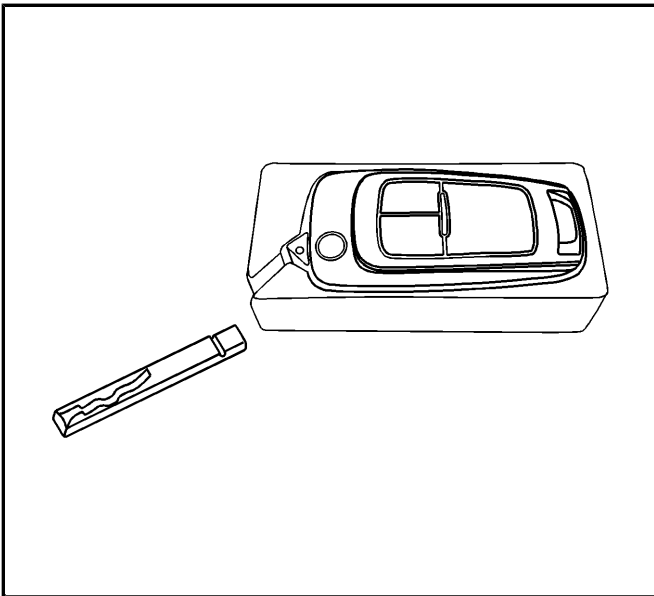
1. Insert the RKE transmitter in the fixture as shown.



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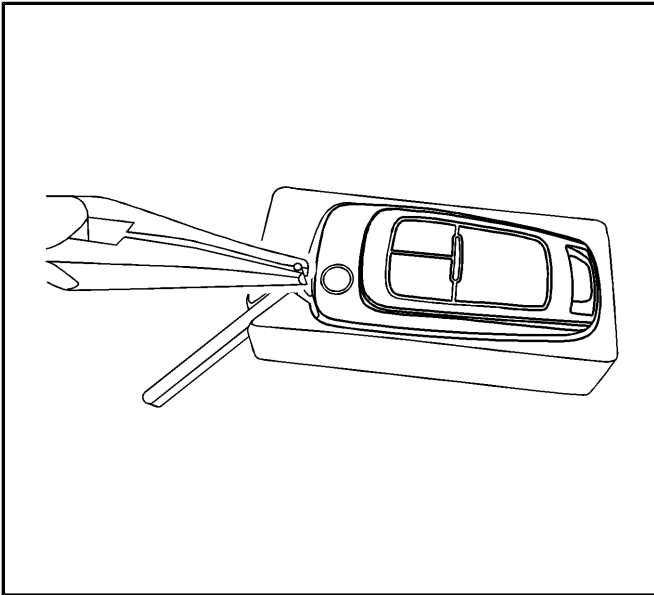
Note: It may be necessary to dress the pin drift on a grinder to maintain the diameter in order to drive the pin through the housing.

2. Using the *BO-51098* fixture, drive the retention pin from the transmitter assembly as shown.



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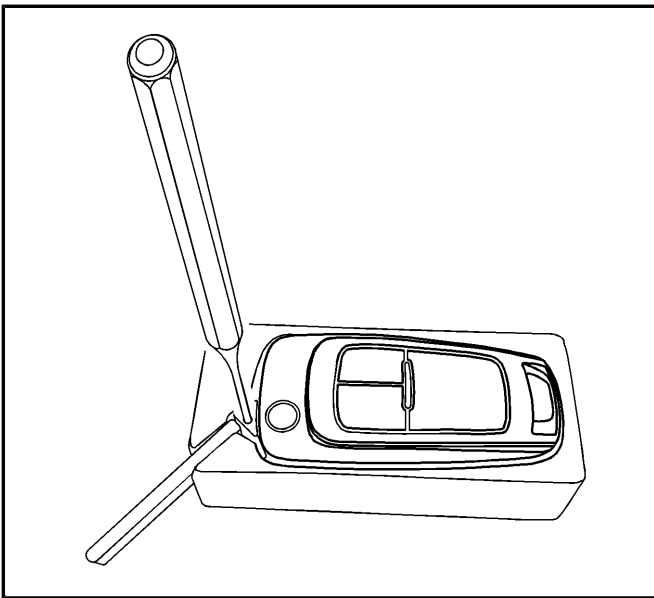
3. Remove the key blade from the transmitter assembly.
4. Install the coded blank into the transmitter assembly, insure the indentation on the key blade faces the retention pin.



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Note: Use caution not to damage the surface, chrome plating, in the following steps.

5. Using needle nose pliers, insert the pin half way into the transmitter assembly.



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6. Using the *BO-51098* fixture, drive the roll pin flush to the surface.

Tip: The new key and transmitter will need to be programmed to the vehicle. Refer to Programming Vehicle at the end of these instructions for details.

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)
- J - 46079 Tire Pressure Monitor Diagnostic Tool (for key start vehicles)
- BO - 51098 Flip Key Blade Fixture (for key start vehicles)

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 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.

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.
 - 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: Deleting existing Keys or Transponders without remote start button – this will render the subject key(s) inoperable. This step will however, allow the new transponders to correspond with the memory seat locations. – Skip Step 5 if the vehicle is NOT equipped with Memory Seats.

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.

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 the 2 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.