

Injectronics

Remanufactured Automotive Electronics Components

PRODUCT SERVICE INFORMATION

Document number: P0039a

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Vehicle: Holden Commodore VE / Captiva

Subject: BCM programming and setup

Body Control Module programming and setup introduction

A new body control module (BCM) must be programmed with the latest operating software and vehicle calibrations. Ensure that the following conditions exist in order to prepare for BCM programming:

- The battery is fully charged. The ignition switch is in the ON position.
- The data link connector (DLC) is accessible.
- All disconnected modules and devices are connected.

Programming the BCM

Important: The vehicle will not start and many other functions may not operate correctly if a replacement BCM is not correctly set up. The following procedures must be followed:

1. The BCM reprogramming – refer to Service Programming System (SPS).
2. Brake pedal position sensor (BPPS) learn.
3. Program SDM primary key to BCM.

Important: After the procedure is completed, the personalization settings of the BCM are set to default settings. Inform the customer that the personalization must be set again.

Brake Pedal Position Sensor (BPPS) Learn

Calibration criteria

Do not apply the brake pedal during the brake pedal position sensor calibration procedure. Any movement of the brake pedal during this procedure will cause the calibration procedure to fail. If this occurs, the BPPS calibration must be repeated. BPPS calibration must be performed after the BPPS or electronic brake control module (EBCM) has been serviced. The calibration procedure will set the BPPS home value. This value is used by the EBCM to determine the action of the driver applying the brake system and to provide this information to the vehicle subsystems via the serial data communication bus.

Important: Performing the BPPS learn is prohibited without TIS approval. Refer to [Obtaining TIS Approval](#) for more information.

1. Apply the parking brake.
2. Place the transmission in the park position for automatic transmission or neutral for manual trans.
3. Install a diagnostic scan tool.
4. Key on, engine off, select body
5. Select BCM (Body control module). Select programming.
6. Select the Brake Pedal Position Sensor Learn procedure & follow directions displayed on screen.
7. Obtain TIS approval then repeat steps 3-7.
8. Check all vehicle lights for correct operation.

Programming SDM Primary Key to BCM

Important: Performing the BPPS learn is prohibited without TIS approval. Refer to [Obtaining TIS Approval](#) for more information.

1. Install a diagnostic scan tool.
2. Key on, engine off, select body.
3. Select BCM (Body Control Module).
4. Select programming.
5. Select the program SDM primary key to BCM procedure and follow the directions displayed on the screen.
6. Obtain TIS approval then repeat steps 1-5.

Perform the [Diagnostic Repair Verification](#) after completing the proceeding procedures.

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Electronic Brake Control Module Programming and Setup EBCM Replacement

If the electronic brake control module (EBCM) is replaced, the following procedures must be performed:

1. The EBCM reprogramming – refer to [Service Programming System \(SPS\)](#)

Steering Angle Sensor Programming and Setup

If the steering angle sensor is removed or replaced it must be recalibrated.

1. Install a diagnostic scan tool.
2. Key on, engine off, select chassis.
3. Select EBCM (Electronic Brake Control Module).
4. Select programming.
5. Select the Calibrated Steering Angle Sensor procedure and follow the directions displayed on the screen.

Perform the [Diagnostic Repair Verification](#) after completing the proceeding procedures.

Theft Deterrent Control Module Programming and Setup

There are three programming routines available for the deterrent system:

- Theft deterrent link to ECM / Reprogram all transponder keys / Program additional transponder keys.

Theft deterrent link to ECM

The theft deterrent link to ECM will be required for three different scenarios, when replacing the theft deterrent module (TDM), when replacing the engine control module (ECM) or when replacing both TDM and ECM together.

Theft Deterrent Module (TDM) Replacement

If the TDM is replaced, the following procedure must be performed:

Important: If the TDM is being replaced you must replace the keys as they cannot be reprogrammed.

1. TDM reprogramming – [refer to Service Programming System \(SPS\)](#)
2. TDM link to ECM

Engine Control Module (ECM) Replacement

If the ECM is replaced, the following procedures must be performed:

1. ECM reprogramming – refer to [Engine Control Module Programming and Setup – 3.6L Engines](#) or [Engine Control Module Programming and Setup – 6.0L Engines](#)
2. TDM link to ECM.

Theft Deterrent Module (TDM) & Engine Control Module (ECM) replacement.

If the TDM & ECM are replaced, the following procedures must be performed:

1. ECM reprogramming - Refer to [Engine Control Module Programming and Setup – 3.6L Engines](#) or [Engine Control Module Programming and Setup – 6.0L Engines](#)
2. TDM reprogramming – [refer to Service Programming System \(SPS\)](#)
3. TDM link to ECM

TDM Link to ECM

Important: Performing the TDM link to ECM procedure is prohibited without TIS approval. Refer to [Obtaining TIS Approval](#) for more information. A new TDM is unlocked & in learn mode, therefore the 10 min wait to enter learn mode isn't required.

When linking a previously programmed TDM or ECM, or reprogramming all transponder keys, there will be a 10 minute wait while the TDM enters learn mode. There are two types of learn mode:

- When linking an ECM to an existing TDM, the TDM must be unlocked in order to transmit the security data; this does not erase transponder keys. There is no timer displayed for this learn.
- When a TDM is linked to an existing ECM or all transponder keys are programmed the TDM must be unlocked in order to transmit the security data and existing transponder keys are erased. There is a timer displayed for this type of learn. Once the first two keys are programmed, the TDM exits learn mode and allows additional transponder keys to be reprogrammed.

1. Install a diagnostic scan tool
2. Key On, engine Off, select Body
3. Select Theft Deterrent.

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Power window – programming and relearn

1. Turn ignition on and fully open the driver's window and hold the switch down for 3 seconds
2. Lift and hold the driver's window switch up and fully close the window
3. Hold the switch up for 3 seconds after the window has closed
4. Repeat for the other windows.

Sunroof – programming and relearn

1. Turn ignition ON
2. Turn sunroof switch anti clockwise to the full vent position
3. Press and hold the sunroof switch for 5 seconds or more
4. After the sunroof stops at the soft stop position, release the switch
5. Within 2 seconds, press and hold the sunroof switch until the sunroof moves back to the fully closed position
6. Release the switch
7. Check the operation of the sunroof

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