

2022 CHEVROLET CORVETTE SERVICE MANUAL

- SEARCH

1. Diagnostic Overview, Starting Point, and Programming

2. Programming and Setup

3. Repair Instructions

- 4.

K9 Body Control Module: Programming and Setup

Note:

- DO NOT program a control module unless directed to by a service procedure or a service bulletin. If the control module is not properly configured with the correct calibration software, the control module will not control all of the vehicle features properly.
- Verify 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 control module damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. When required, install a battery maintainer or power supply that provides a steady and stable voltage. DO NOT use a battery charger, as charging voltage will often fluctuate when connected to the vehicle. This may interrupt programming. If a battery maintainer is not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply.
- 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.
- Programming must begin with the Ignition/Vehicle OFF. Programming will direct the appropriate control module(s) to change power mode as needed during the procedure, independent of the vehicle's power mode.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.
- To prevent programming failure due to unintended wireless drops, it is recommended that a wired MDI connection be used when programming the control module.

Reference Information

Special Tools

- EL-52545, Tire Pressure Monitor Sensor and RF Diagnostic Tool or EL-50448, Tire Pressure Monitor Sensor Activation Tool
- EL-52100 Multiple Diagnostic Interface 2 (MDI 2)

For equivalent regional tools, refer to Special Tools.

Replace and Program Control Module

To program a replacement K9 Body Control Module (BCM), perform the following procedure:

1. Note:

Begin with the vehicle in vehicle OFF power mode. The Service Programming System will power mode the vehicle.

2. Ignition/Vehicle OFF.

3. Access the Service Programming System (SPS) and follow the on-screen instructions.

4. On the SPS Supported Controllers screen, select K9 Body Control Module - Programming and follow the on-screen instructions.

5. Place the keyless entry transmitter in the programming pocket prior to proceeding with the next step. All additional transmitters must be at least 3 m (9.8 ft) away from the vehicle. Refer to the Remote Keyless Entry (RKE) System Operation document in the owner manual for the exact pocket location. This document is located in the Keys, Doors, and Windows > Keys and Locks category.

6. Note:

- To prevent errors or immobilizer learn failure, the vehicle must be in Park (for automatic transmission) or Neutral with park brake applied (for manual transmission).

- If DTC B1987 set immediately after programming a replacement K9 Body Control Module, the Immobilizer Learn procedure was not properly completed. The Immobilizer Learn procedure needs to be performed again.
 - The Immobilizer Learn process 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.
7. On the SPS Supported Controllers screen, select Z1 Immobilizer Learn. On the next screen, select Body Control Module IMMO Learn with Existing Transponder or Remote Key and 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.
 8. Note:

When performing the Tire Pressure Monitor Sensor Learn during K9 Body Control Module setup, the EL-52545, Tire Pressure Monitor Sensor and RF Diagnostic Tool must be used to activate each tire pressure sensor for vehicles with UJM.
 9. On the SPS Supported Controllers screen, select K9 Body Control Module - Setup and follow the on-screen instructions.
 10. 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.
 11. Clear DTCs.

Reprogram Control Module

To program an existing K9 Body Control Module, perform the following procedure:

1. Note:

Begin with the vehicle in vehicle OFF power mode. The Service Programming System will power mode the vehicle.
2. Ignition/Vehicle OFF.
3. Access the Service Programming System (SPS) and follow the on-screen instructions.
4. On the SPS Supported Controllers screen, select K9 Body Control Module - Programming and follow the on-screen instructions.
5. Note:

When performing the Tire Pressure Monitor Sensor Learn during K9 Body Control Module setup, the EL-52545, Tire Pressure Monitor Sensor and RF Diagnostic Tool must be used to activate each tire pressure sensor for vehicles with UJM.
6. On the SPS Supported Controllers screen, select K9 Body Control Module - Setup and follow the on-screen instructions.
7. 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.
8. Clear DTCs.

Unsuccessful Programming Recovery

Note:

Ensure the EL-52100 is used when programming the vehicle.

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

1. Verify the K9 Body Control Module, X84 Data Link Connector, and programming tool connections are secure and the SPS software is up to date.
2. Ignition/Vehicle OFF.
3. Access SPS and follow the on-screen instructions for the K9 Body Control Module.
4. Verify the K9 Body Control Module can be reprogrammed.
5.
 - If the K9 Body Control Module cannot be reprogrammed
- 6.

1. Ignition/Vehicle OFF for greater than 1 min.
2. Access SPS and follow the on-screen instructions for the K9 Body Control Module.
3. Verify the K9 Body Control Module can be reprogrammed.
4.
 - If the K9 Body Control Module cannot be reprogrammed, replace the K9 Body Control Module.
5.
 - If the K9 Body Control Module can be reprogrammed.
6. All OK.
7.
 - **If the K9 Body Control Module can be reprogrammed**
8. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: Diagnostic Repair Verification.

For control module replacement, programming, and setup, refer to: Control Module References.