

2022 CHEVROLET CORVETTE SERVICE MANUAL

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P16 Instrument Panel Cluster 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 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. 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), and HVAC.
- 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.
- To prevent programming failure due to unintended wireless drops, It is recommended that a wired MDI connection be used when reprogramming the Instrument Cluster

Reference Information

Special Tools

EL-52100 Multiple Diagnostic Interface 2 (MDI 2)

Diagnostic Aids

The programming steps in the Service Programming System (SPS) screens may not be in functional order. Be sure to follow the programming steps in the order listed below.

Replace and Program ECU (UDD)

To program a replacement or an existing ECU, perform the following procedure:

1. Ignition ON/Vehicle in Service Mode.
2. Access the Service Programming System (SPS) and follow the on-screen instructions.
3. Ignition/Vehicle OFF.
4. On the SPS Supported Controllers screen, select P16 Instrument Cluster "Programming and follow the on-screen instructions.
5. On the SPS Supported Controllers screen, select P16 Instrument Cluster "Setup and follow the on-screen instructions.
6. Clear DTCs.

Replace and Program ECU (UDV or UHS)

To program a replacement or an existing ECU, perform the following procedure:

1. Ignition ON/Vehicle in Service Mode.

2. Note:

Ensure programming of this module is performed using the EL-52100 (MDI 2). ⚠️ Using the EL-47955 (MDI) will result in a programming failure.

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

4. Ignition/Vehicle OFF.

5. On the SPS Supported Controllers screen, select P16 Instrument Cluster ⚙️ Graphics Programming and follow the on-screen instructions.

6. On the SPS Supported Controllers screen, select P16 Instrument Cluster ⚙️ Programming and follow the on-screen instructions.

7. On the SPS Supported Controllers screen, select P16 Instrument Cluster ⚙️ Setup and follow the on-screen instructions.

8. Note:

If Ethernet programming fails, ensure Instrument Cluster is communicating over ethernet properly. Refer to Scan Tool Does Not Communicate with Vehicle

9. Clear DTCs.

Reprogram ECU (UDD)

To program a replacement or an existing ECU, perform the following procedure:

1. Ignition ON/Vehicle in Service Mode.

2. Note:

Ensure programming of this module is performed using the EL-52100 (MDI 2). ⚠️ Using the EL-47955 (MDI) will result in a programming failure.

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

4. Ignition/Vehicle OFF.

5. On the SPS Supported Controllers screen, select P16 Instrument Cluster ⚙️ Programming and follow the on-screen instructions.

6. Clear DTCs.

Reprogram ECU (UDV or UHS)

To program a replacement or an existing ECU, perform the following procedure:

1. Ignition ON/Vehicle in Service Mode.

2. Note:

Ensure programming of this module is performed using the EL-52100 (MDI 2). ⚠️ Using the EL-47955 (MDI) will result in a programming failure.

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

4. Ignition/Vehicle OFF.

5. On the SPS Supported Controllers screen, select P16 Instrument Cluster ⚙️ Graphics Programming and follow the on-screen instructions.

6. On the SPS Supported Controllers screen, select P16 Instrument Cluster ⚙️ Programming and follow the on-screen instructions.

7. Note:

If Ethernet programming fails, ensure Instrument Cluster is communicating over ethernet properly. Refer to Scan Tool Does Not Communicate with Vehicle

8. Clear DTCs.

Unsuccessful Programming Recovery

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

1. Ignition/Vehicle OFF.
2. Ensure that all ECU, DLC and programming tool connections are secure and the TIS terminal operating software is up to date.
3. Attempt to reprogram the ECU.
4. If the ECU can still not be programmed, turn the ignition OFF for at least one minute.
5. Turn the ignition ON and attempt to reprogram the ECU. The ECU should program.
6.
 - If the ECU still cannot be programmed, replace the ECU.

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