

Component Procedures: Electronic Brake Control Module

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Component Procedures: Electronic Brake Control Module

Parts and Labor (itype_189)

Parts

Qualifier	Part #	Name	Price	Note
Control Module	92242286	Control Module	1150.20	
Control Module	92199861	Front Speed Sensor	26.83	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Anti-Lock Brakes > Control Module, R&R	B	0.7	0.5

Electronic Brake Control Module Replacement (Article 10573)

Removal Procedure

- Place the ignition switch in the OFF position.
- Thoroughly clean the area around the electronic brake control module (EBCM) of all dirt and debris. Click for full-size image
- Disconnect the EBCM electrical connector.
- Remove the EBCM bolts (1).
- Carefully separate the EBCM (1) from the brake pressure modulator valve (BPMV) by pulling straight away from the BPMV. Do not force the components apart. Click for full-size image

Installation Procedure

- Clean the sealing surfaces of the EBCM and the BPMV with denatured alcohol and allow to dry. Click for full-size image
- Install the EBCM (1) to the BPMV.
- Install the EBCM bolts (1) and tighten in a cross pattern to 3 Nm (27 lb in) . Click for full-size image
- Connect the EBCM electrical connector.
- Program the EBCM. Refer to Control Module References .
- Perform the Diagnostic System Check - Vehicle .

All New Technical Service Bulletins (itype_432)

Tsbs

- Multiple U-code Diagnostic Information – With one having symptom Byte 71 (PIT5569C, 2024/09/06)

All Technical Service Bulletins (itype_100)

Tsbs

- Multiple U-code Diagnostic Information – With one having symptom Byte 71 (PIT5569C, 2024/09/06)

Electronic Brake Control Module Programming and Setup (Article 10733)

- 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.
- 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.

Replace and Program Electronic Brake Control Module or Reprogram Electronic Brake Control Module

To program a replacement or an existing Electronic Brake Control Module, perform the following procedure:

- Access the Service Programming System (SPS) and follow the on-screen instructions.
- On the SPS Supported Controllers screen, select Electronic Brake Control Module – Programming and follow the on-screen instructions.
- On the SPS Supported Controllers screen, select Electronic Brake Control Module – Setup and follow the on-screen instructions.
- On the SPS Supported Controllers screen, select Electronic Brake Control Module – Configuration and follow

the on-screen instructions.

- On the SPS Supported Controllers screen, select Electronic Brake Control Module – Learn/Setup and follow the on-screen instructions.
- At the end of programming, choose the “Clear All DTCs” function on the SPS screen.
- If the ABS , Traction Control and/or Stability indicators are ON after programming and setup, do the following:
 - Disconnect the scan tool from data link connector.
 - 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.
 - Ignition ON, use the scan tool to clear the DTCs.
 - If the ABS, Traction Control and/or Stability indicators are still illuminated, operate the vehicle at speeds greater than 16 km/h (10 MPH) to complete the self test. The electronic brake control module should request all indicators to turn OFF.
 - If indicators remain ON with no DTCs set after the drive cycle, disconnect the battery for at least 60 seconds then reconnect the battery.

Unsuccessful Programming Recovery

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

- 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.
- Attempt to reprogram the ECU.
- If the ECU can still not be programmed, turn the ignition OFF for at least one minute.
- Turn the ignition ON and attempt to reprogram the ECU. The ECU should program.
- If the ECU still cannot be programmed, replace the ECU.