Electronic Brake Control Module Replacement (LHD) Removal Procedure

Caution: Refer to Brake Fluid Caution in the Preface section.

Caution: Refer to Brake Fluid Irritant Caution in the Preface section.

Notice: Refer to Adding Fluid to the Brake System Notice in the Preface section.

Notice: Refer to <u>Brake Fluid Effects on Paint and Electrical Components Notice</u> in the Preface section.

Important: If the electronic brake control module (EBCM) or brake pressure modulator valve (BPMV) is to replaced under manufacturer's warranty, do not disassemble the EBCM/BPMV assembly. If the EBCM or BPMV is faulty, replace the EBCM/BPMV as an assembly.

Important: The area around the electronic brake control module (EBCM) must be free from loose dirt to prevent contamination of dissembled ABS components.

1. Turn the key to the ignition OFF position.





- 2. Remove the EBCM/BPMV assembly. Refer to <u>Brake Pressure Modulator Valve Assembly</u> <u>Replacement</u>.
- 3. Clean the EBCM/BPMV assembly.
- 4. Rotate the EBCM connector tab (2) up to the unlocked position.

Notice: To prevent equipment damage, never connect or disconnect the wiring harness connection from the EBCM with the ignition switch in the ON position.

5. Disconnect the EBCM electrical connector of porand positions out of the way.



Important: EBCM to BPMV retaining screws are a single use only component. NEW EBCM to BPMV retaining screws must be installed whenever the EBCM to BPMV retaining screws are removed.

6. Remove the EBCM to BPMV retaining screws (1) and discard.

Discard the screws.

7. Clean the surface of the EBCM/BPMV assembly.



Important: The EBCM (1) cannot be repaired. If faulty, the EBCM (1) must be replaced.

8. Separate the EBCM (1) from the BPMV (2).

Installation Procedure

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Important: The seal is not available as a spare part and the mating surfaces cannot be mechanically reworked. If the seal or mating surfaces are damaged the EBCM/BPMV assembly must be replaced.

- 1. Inspect the EBCM (1) to BPMV (2) mating surfaces and seal.
- 2. Clean the seal surface of the BPMV.

Important: Make sure the coils for the solenoid valves are aligned correctly. If they are not correctly aligned the EBCM (1) must be replaced.

Important: Make sure the contact pins of the hydraulic pump are aligned correctly.

3. Install the EBCM (1) to the BPMV (2).

Notice: Refer to Fastener Notice in the Preface section.



4. Install the NEW EBCM to BPMV retaining screws.

Tighten

Tighten the EBCM to BPMV screws in sequence 8 Nm (71 lb in).



Notice: To prevent equipment damage, never connect or disconnect the wiring harness connection from the EBCM with the ignition switch in the ON position.

- 5. Connect the EBCM electrical connector (1) to the EBCM (3).
- 6. Rotate the EBCM connector tab (2) to the locked position.
- 7. Use the scan tool in order to clear any DTCs.

- 8. Perform the Auto Bleed Procedure. Refer to <u>Antilock Brake System Automated Bleed</u> <u>Procedure</u>.
- 9. If installing a new EBCM it is necessary to program the EBCM. Refer to <u>Service Programming</u> <u>System (SPS)</u>.
- 10. Perform the System Check-Vehicle. Refer to Diagnostic System Check Vehicle .
- 11. Recalibrate the brake pedal position sensor. Refer to Stop Lamp Switch Adjustment .