Body Control Module (BCM)

Special Tool(s) / General Equipment

Interior Trim Remover

Removal

NOTE: Removal steps in this procedure may contain installation details.

1. **NOTE:** If the <u>BCM</u> did not respond to the diagnostic scan tool, As-Built Data may need to be entered as part of the repair. This step is only necessary if the <u>BCM</u> is being replaced

Using a diagnostic scan tool, begin the PMI process for the BCM following the on-screen instructions.

2. NOTE: If equipped, the <u>PAM</u> is integral to the <u>BCM</u>. This step is only necessary if the <u>BCM</u> is being replaced.

Using a diagnostic scan tool, begin the <u>PMI</u> process for the <u>PAM</u> following the on-screen instructions.

3. Release the clips and remove the <u>RH</u> scuff plate. Use the General Equipment: Interior Trim Remover



4. Release the clips and remove the lower RH cowl trim panel.



5. Release the harness retainer and position the harness aside.



6.

Remove the nut and the <u>BCM</u>. • Disconnect the electrical connectors. *Torque*: 71 lb.in (8 Nm)



Installation

 NOTE: If installing a new <u>BCM</u>, the ignition cannot be turned on until a parameter reset is performed and 2 keys are programmed to the vehicle. The <u>BCM</u> still communicates with the diagnostic scan tool with the ignition off. Use the previous diagnostic scan tool session or start a diagnostic scan tool session using the <u>PCM</u> part number or tear tag number located on the <u>PCM</u>.

To install, reverse the removal procedure.

NOTE: Carry out the remaining steps only if installing a new <u>BCM</u>.

2. NOTE: A diagnostic scan tool should not be used to program keys for this specific step.

Program the keys.

- Place the first key in the backup starting location.
 Refer to: <u>Passive Anti-Theft System (PATS) Component Location</u> (419-01B Passive Anti-Theft System (PATS), Description and Operation).
- Press the START/STOP button and wait approximately 6 seconds.
- Press the START/STOP button and remove the first key.
- Place the second key in the backup starting location.
- Press the START/STOP button.
- 3. Before programing the new <u>BCM</u>, make sure the vehicle is not in valet mode through the center display screen prior to running the <u>PMI</u> installation for the <u>BCM</u>. Not doing so may cause the process to fail.
- 4. NOTE: A new <u>BCM</u> may be shipped in factory mode.

If necessary, complete the factory mode deactivation procedure. Refer to: <u>Factory Mode Deactivation</u> (419-10 Multifunction Electronic Modules, General Procedures).

- 5. Using a diagnostic scan tool, complete the <u>PMI</u> process for the <u>BCM</u> following the on-screen instructions.
- Carry out the parameter reset.
 Refer to: <u>Anti-Theft Key Programming Scan Tool</u> (419-01B Passive Anti-Theft System (PATS), General Procedures).
- 7. Using a diagnostic scan tool, carry out the Configuration Engine Immobilizer (CEI) configuration following the on-screen instructions (Toolbox > Body > Service Functions > CEI Lock Configuration).
- 8. Using a diagnostic scan tool, carry out the battery monitor sensor reset following the on-screen instructions (Toolbox > Body > BMS Reset).

- 9. If equipped with video rear parking aid, using a diagnostic scan tool, carry out the new module initialization following the onscreen instructions (Toolbox > Electrical > Service Functions > LIN New Module Initialization).
- 10. NOTE: This step is only necessary if equipped with Electronic Steering Column Lock (ESCL).

Carry out the <u>BCM</u> to Electronic Steering Column Lock (ESCL) configuration/training procedure. Refer to: <u>Anti-Theft Key Programming - Scan Tool</u> (419-01B Passive Anti-Theft System (PATS), General Procedures).

- Configure the customer preference programmable parameters. Refer to: <u>Module Configuration - System Operation and Component Description</u> (418-01 Module Configuration, Description and Operation).
- Train the tire pressure sensors. Refer to: <u>Tire Pressure Monitoring System (TPMS) Sensor Location Calibration</u> (204-04B Tire Pressure Monitoring System (TPMS), General Procedures).
- 13. Carry out the <u>BCM</u> self-test (must include an on-demand self-test) and then repeat the self-test to confirm all Diagnostic Trouble Codes (DTCs) have been cleared.

14. If equipped with <u>PAM</u>, using a diagnostic scan tool, complete the <u>PMI</u> process for the <u>PAM</u> following the on-screen instructions. © Copyright 2024, Ford Motor Company.