

Inspection Procedure – M2 Chassis Module

1. Secure the vehicle based on established safety guidelines by Keurig / Dr. Pepper.
2. Use compressed air to clean the outside of the Chassis Module to remove all loose dirt.
3. Remove the Chassis Module per Workshop Manual 54.13.100 (included as Appendix A).
4. Locate connection port C4 on the Chassis Module (Figure 1).
5. Inspect all pins for signs of heat damage. Please pay particular attention to Pin P & Pin J (Figure 2) as they are the 30 amps power feed. If any sign of heat damage exists, replace the Chassis Module and retain the failed part, along with the vehicle's serial number (last six of the VIN).
6. Locate connection port C3 on the Chassis Module (Figure 1).
7. Inspect all pins for sign of heat damage. Please pay particular attention to Pin J & Pin S (Figure 2) as they are the 30 amps power feed. If any signs of heat damage exists, replace the Chassis Module and retain the failed part, along with the vehicle's serial number (last six of the VIN).
8. Locate the connectors to connection port C3 and C4. Inspect for heat damage. If any sign of heat damage exists, replace the connector with part number : 23-13144-006 (C3), or 23-13144-007 (C4); terminal part number 23-13212-121. Replace the Chassis Module and retain all parts, along with the vehicle's serial number.

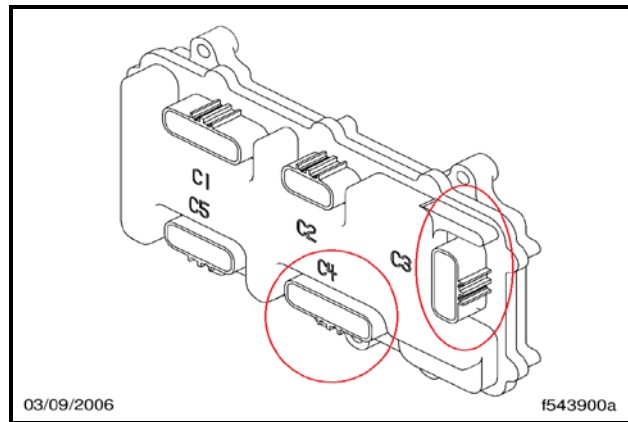


Figure 1

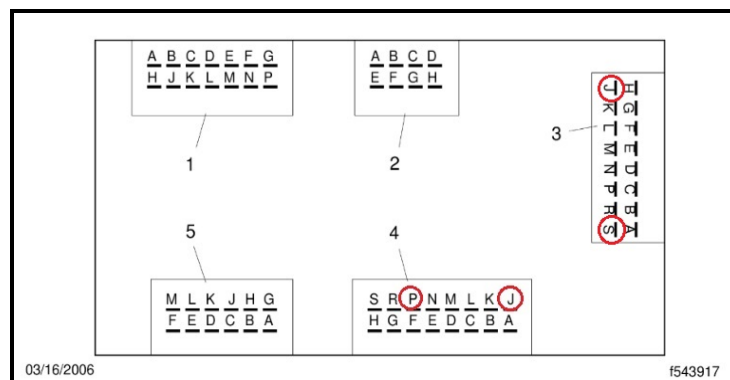


Figure 2

Chassis Module and Expansion Module

54.13

Chassis Module and Expansion Module Replacement

Replacement

IMPORTANT: It is rarely necessary to replace the Chassis Module (CHM) or the Expansion Module (EXM). Replacing the CHM or EXM should be the last resort to solving electrical problems, unless the module needs to be replaced due to physical damage. Follow troubleshooting procedures in [Section 54.12, Troubleshooting 300](#), to solve electrical problems before replacing either the CHM or the EXM. If troubleshooting indicates a malfunction of either module, try reflashing the parameters and the software before replacing the module. Also check the external wiring.

See [Section 54.00, Subject 050](#), for information about the M2 electrical system and [Section 54.00, Troubleshooting 300](#), for information on troubleshooting the entire M2 electrical system.

1. Disconnect the negative leads from the batteries or, if the vehicle is equipped with a battery disconnect switch, turn the switch to the off position.

NOTE: The Chassis Module is mounted on the left frame rail, aft of the cab. See [Fig. 1](#). The EXM is mounted on the forward spring hanger bracket of the rear suspension.

2. Disconnect the harnesses at the harness connectors on the Chassis Module or Expansion Module. See [Fig. 2](#) or [Fig. 3](#).

NOTE: The C2 and C5 connectors on the standard Chassis Module are sealed at the time of manufacture so that it is not possible to use these connectors. On a vehicle that has a full Chassis Module installed and no options on a particular connector (for example, a vehicle with air brakes but no trailer towing provision leaves the C2 connector empty), the connector will be installed and all the cavities on that connector will have sealing plugs.

NOTE: Before removing the Chassis Module from the mounting plate, note its orientation. Connector C3 is toward the center of the vehicle, and connectors C1 and C5 are toward the frame rail.

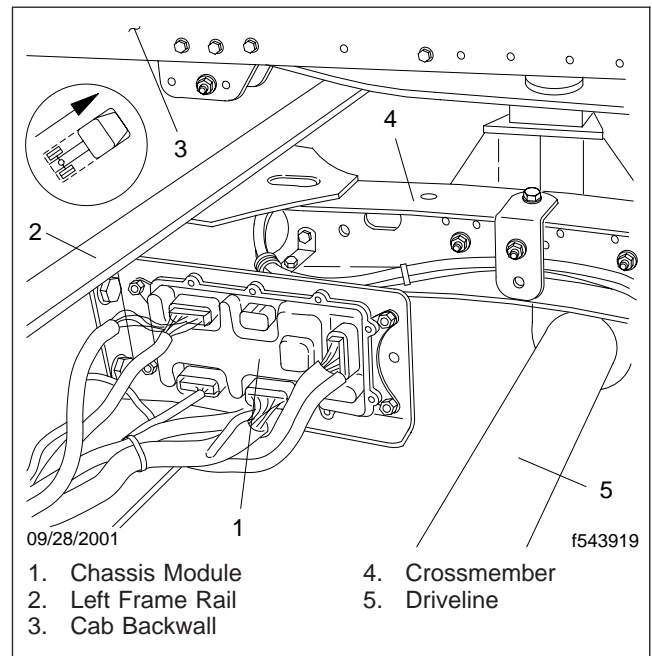


Fig. 1, Chassis Module Installation

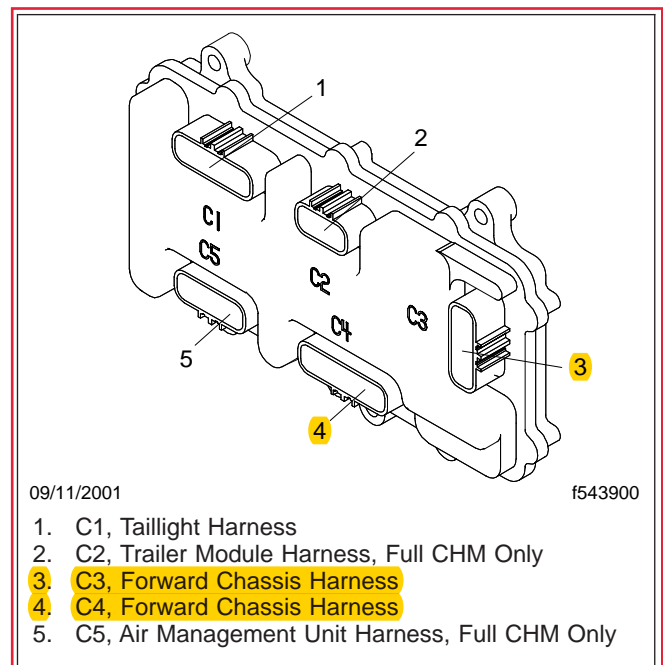


Fig. 2, Chassis Module Connectors

3. Remove the bolts and nuts that secure the Chassis Module or the Expansion Module, then remove the CHM or EXM.

Chassis Module and Expansion Module Replacement

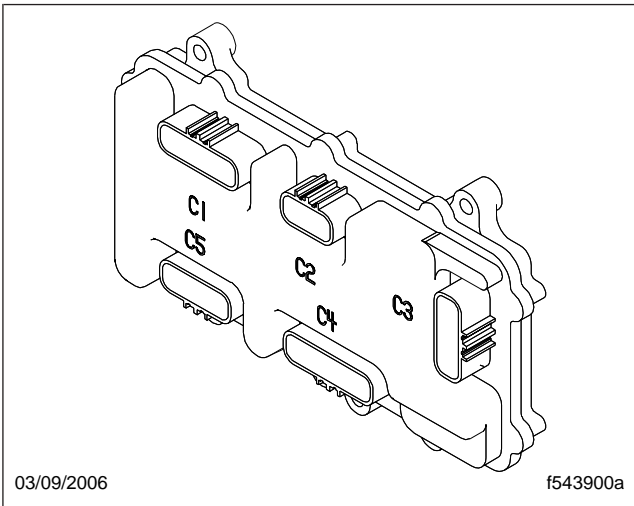


Fig. 3, Expansion Module Connectors

4. Properly orient the Chassis Module on its mounting plate. Using bolts and nuts, secure the CHM or EXM.
5. Connect the harnesses to the CHM or EXM.
6. Connect the batteries or turn the battery disconnect switch to on.
7. Check to make sure the electrical components work.