# Chassis Module Replacement

FLA COE FLB COE FLD Conventional Business Class FLC 112 Conventional Century Class Conventional Argosy COE Cargo

Columbia Coronado > Business Class M2 Cascadia Freightliner Service Bulletin

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# **General Information**

A wiring modification is required when the Business Class M2 Chassis Module (CHM) is replaced with the new CHM version 4.1. This modification is only necessary on vehicles with EPA07 and earlier emissions, and export vehicles built before 2010. See **Table 1** for the old and new CHM part numbers.

NOTE: The last three digits in the part numbers shown in **Table 1** (represented by "XXX") are not specified because these numbers will change based on the release version of the part.

CHM Part Numbers				
Part	Old Part Number	New Part Number		
CHM – Full	06-34530-XXX	06-75158-XXX		
CHM – Std	06-42391-XXX	06-76796-XXX		
CHM – Ltd	06-42399-XXX	06-76797-XXX		

Table 1, CHM Part Numbers

When the new CHM is used to replace the superseded model, a modification to the J1587/1708 databus wiring must be made.

Additionally, at customer request, an optional high-current circuit can be added for the new model CHM to source more amperage for additional marker lamp outputs. The new CHM marker lamp circuit can source a total of 25 amps without using an additional PDM and relay, however, an additional power feed circuit must be added.

The following instructions describe the required databus modification and the optional marker lamp wiring upgrade.

### **Parts**

See Table 2 for parts required for the databus modification and the optional marker lamp upgrade.

Parts Required					
Part Description	DTNA Part Number	Supplier Part Number	Quantity	Required/Optional	
Plug	23-13218-010	15305170	1	Required	
Plug	23-13218-011	15305	1	Required	
Adhesive Lined Shrinkable Tubing	48-02461-025	Various	4 Inches	Required	
Terminal, CHM	23-13212-121	15304720	1	Optional	
Terminal, PDM	23-13213-121	12129493	1	Optional	
Seal	23-12497-282	15366067	2	Optional	
Fuse 30 Amp	23-12537-030	Various	1	Optional	
Wire, 12 gauge (3mm)	48-25085-12x	Various	As Needed	Optional	
Convolute Conduit, 1/2 inch	48-02217-050	Various	As Needed	Optional	

Table 2, Parts Required

# Instructions

1. Shut down the engine, chock the tires, and disconnect the batteries.

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- 2. Remove the chassis module.
- 3. Remove the J1587/1708 wires from connector C3. See Fig. 1.
  - 3.1 Remove connector C3 from the chassis module.
  - 3.2 Remove the wire protection comb on the back of the connector.

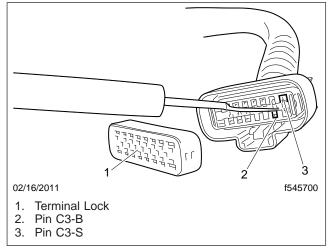


Fig. 1, Removing J1587/1708 Wires from Connector C3

- 3.3 Remove the terminal lock from the inside of the connector.
- 3.4 Remove the J1587/1708 circuit from pin C3-B.
- 3.5 Remove the J1587/1708 + circuit from pin C3-S.
- 3.6 Cut the terminals off the wires and fold 1 inch (2.5 cm) of the wire back over itself.
- 3.7 Place a 2-inch (5-cm) length of adhesive lined shrinkable tubing over the wire and heat until completely sealed.
- 3.8 Dress the wires back into the convolute conduit.
- 4. Place the plug (p/n 23-13218-010) in connector C3 cavity B.
- 5. Place the plug (p/n 23-13218-011) in connector C3 cavity S.
- 6. Assemble the lock and comb onto connector C3.
- 7. Install the new CHM and connect the batteries.

## **Installing Additional Marker Lamps**

**The following steps are optional.** To wire additional marker lamps to the CHM, perform the following modification to source up to 25 amps total through the CHM marker lamp circuit. This 25 amp limit on this circuit is the combination of pins C4-C, C4-D, C4-L, C4-M, and C2-F.

- 1. Disconnect the batteries.
- Install seal part number 23-12497-282 and terminal part number 23-13213-121 to a length of 12 gauge (3 mm) wire.

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3. Locate an unused fuse/circuit in the main PDM. Install this wire in the corresponding connector of the main PDM for this circuit. See **Table 3** for a chart of available fuses and circuits.

Typical Spare Fuses in Main PDM			
Fuses	Connector and Pin		
F1	Green A		
F3	Green H		
F4	Green G		
F6	Black C		
F9	Green D		
F10	Blue G and Green F		
F11	Blue H		
F14	Black B		
F21	Black F		
F23	Gray H and Blue E		
F24	Gray D		
F25	Gray C		

 Table 3, Typical Spare Fuses in Main PDM

- 4. Protect the wire with convolute conduit tubing and assemble it along the existing chassis wiring harness to the CHM. Place cable ties every 12 inches (30 cm) as appropriate to secure the new wire.
- 5. Install seal part number 23-12497-282 and terminal part number 23-13212-121 on the end of this wire and connect it into CHM connector C3 pin S. The plug that was installed in C3-S is not needed.
- 6. Verify that the wire size on C4-C, C4-D, C4-L, C4-M, and C2-F is a gauge that is large enough to allow the amperage that is now sourced for this circuit. An additional 15-amp marker lamp load can now be connected to this circuit.
- Connect the batteries and the Features screen in ServiceLink to apply reference parameter 26-01086-003 to the BHM. This parameter changes the diagnostic threshold to allow the 25-amp limit on the marker lamp circuit.

# Warranty

This procedure is warrantable only if the module is replaced as part of a warrantable repair within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See **Table 4** for QuickClaim damage code and labor allowance information. Refer to this service bulletin by number at the beginning of the claim comments. See **Table 5** for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #* field.

QuickClaim Damage Code and Labor Allowance				
Damage Code SRT Code Description		Time: Hours		
335-000651647	335-5015A	Wiring, Chassis Module J1587, Remove	0.2	

Table 4, QuickClaim Damage Code and Labor Allowance

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OWL VMRS Codes and Labor Allowance				
Component Code	Cause Code	SRT Code	Description	Time: Hours
003-006-011	77	335-5015A	Wiring, Chassis Module J1587, Remove	0.2

 Table 5, OWL VMRS Codes and Labor Allowance