

New Severe-Duty Taillight and Trailer PDMs (Power Distribution Modules)

54-224

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**

Description of Revisions: *This bulletin replaces the version dated August 2008. The part numbers in Fig. 1 have been updated.*

General Information

New taillight and trailer PDMs are available for replacing the existing PDMs on Business Class M2 vehicles. The new PDMs feature several design improvements to protect against water and dust intrusion. They include the following:

- a cover that overlaps the base
- a larger cover seal
- silicone-sealed terminals and seams
- a Gortex® vent
- a heat-staked assembly, eliminating rivet holes
- a stainless steel power stud

The new PDMs will connect to the existing wiring with no modifications; however, because they have a larger footprint, it is necessary to replace the existing PDM mounting bracket.

Parts

Parts are available from the PDCs. See [Table 1](#) for the new PDM and mounting-bracket part numbers. If any of the existing electrical connections are damaged or corroded, see [Table 2](#) for the correct replacement parts.

Parts Required, PDM and Mounting Bracket Replacement		
Part Number	Description (number of part being replaced)	Qty.
A06-66807-000	PDM, Severe-Duty, Trailer (A06-47383-000)	As Needed
A06-66808-000	PDM, Severe-Duty, Taillight (A06-48216-000)	
06-67545-000	Bracket, Severe-Duty PDM, Back-of-Cab (A06-41982-000)	As Needed (See Fig. 1.)
A06-67547-000	Bracket, Severe-Duty PDM, Rear Crossmember, Rear Surface (A06-52483-000)	
A06-67546-000	Bracket, Severe-Duty PDM, Rear Crossmember, Forward Surface (A06-52482-000)	
A06-67792-000	Bracket, Severe-Duty PDM, End of Frame (A06-41982-001)	
—	Suitable Fasteners — Hexbolts, Hexnuts, and Washers	As Needed

Table 1, Parts Required, PDM and Mounting Bracket Replacement

Parts Required, Harness Connector Replacement		
Part Number	Description	Qty.
BUS32006A22	Connector, 8-Pin, Sealed, Black	As Needed
BUS32006B22	Connector, 8-Pin, Sealed, Gray	
BUS32006TP2	Lock, Terminal	
23-13213-120	Terminal, Female, 16 to 20 Gauge Wire	
23-13213-121	Terminal, Female, 12 to 14 Gauge Wire	
23-13213-122	Terminal, Female, 10 to 12 Gauge Wire	
23-12497-000	Seal, Cable, 12 to 16 Gauge Wire	
23-12497-001	Seal, Cable, 10 to 14 Gauge Wire	
23-13218-001	Plug, Cavity	

Table 2, Parts Required, Harness Connector Replacement

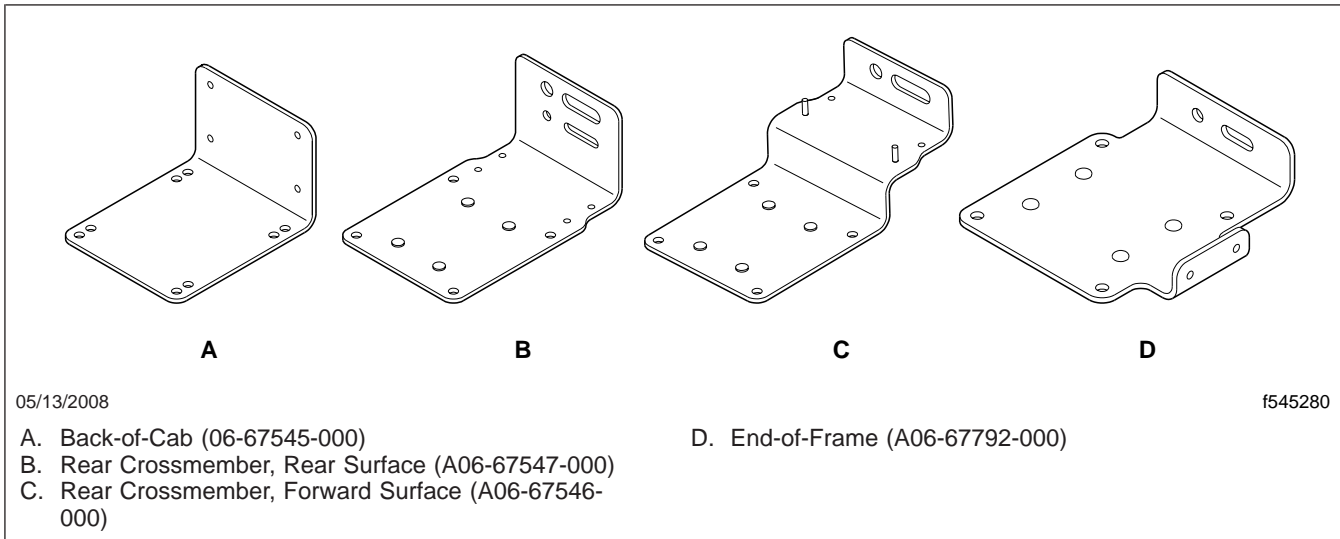


Fig. 1, New PDM Mounting Brackets

Procedure

1. Shut down the engine, apply the parking brakes, and chock the tires.
2. Disconnect the batteries at the negative terminals.
3. Find the trailer or taillight PDM. It may be located on the frame rail behind the cab, or mounted on one of the rear crossmembers. See [Fig. 2](#).
4. Remove the trailer or taillight PDM as follows.
 - 4.1 Disconnect the power cable(s) from the PDM.
 - 4.2 Disconnect the two harness connectors from the PDM.
 - 4.3 Remove the PDM from the mounting bracket. Discard the fasteners.
 - 4.4 If present, remove the PLC filter from the underside of the PDM mounting bracket.
 - 4.5 Remove the mounting bracket. Save the fasteners.
5. Inspect the power cables. Replace any loose ring terminal(s).

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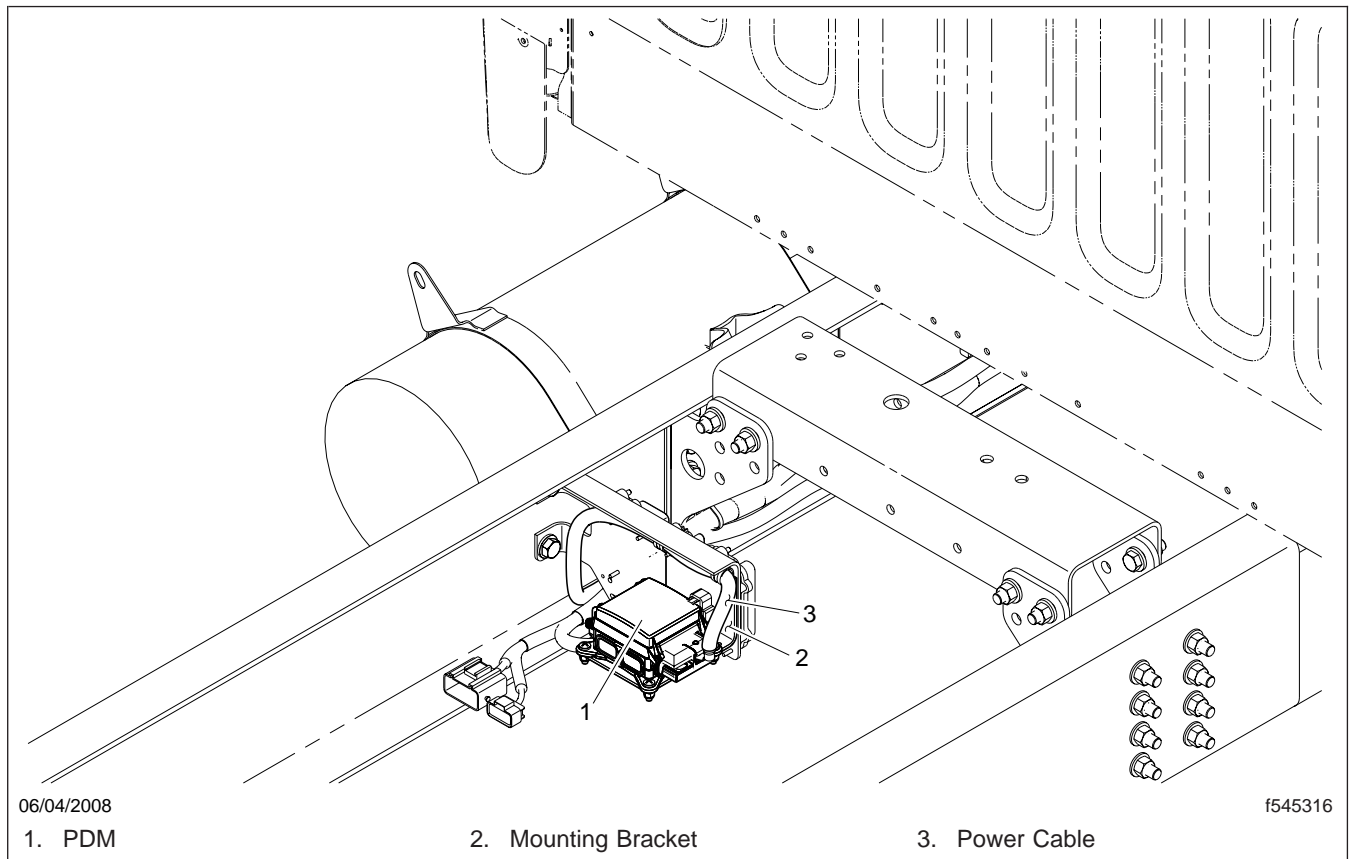


Fig. 2, Location of Trailer/Taillight PDM (typical)

6. Using a wire brush or fine emery cloth, clean all debris from the terminals.
7. Inspect the terminals on the harness connectors for corrosion or debris. If there is any corrosion on a connector terminal, replace that terminal. See **Table 2** under "Parts" for connector and terminal part numbers.
8. Inspect the wire seals. There should be no gaps between the wire and the seal, or the seal and the connector. Replace any missing or damaged seals. See **Table 2** under "Parts" for seal part numbers.
9. Install the new PDM as follows.

IMPORTANT: The following installation procedure is general in nature. Due to the many variations in the affected vehicles, make sure you thoroughly check the fit of all the new components before starting the installation procedure. It may be necessary to do some or all of the following:

- use new fasteners
- use extra fasteners
- relocate the new PDM and mounting bracket

- 9.1 Using the applicable fasteners, install the new PDM mounting bracket.
- 9.2 If applicable, install the previously removed PLC filter.
- 9.3 Using new fasteners, install the new PDM to the mounting bracket.

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- 9.4 Apply a small amount of dielectric grease, such as Nyogel 760G, to each terminal in the PDM connector.
 - 9.5 Attach the two harness connectors to the PDM.
 - 9.6 Using the applicable fasteners, connect the power cable to the PDM. Tighten the nut(s) 13 lbf-ft (18 N-m).
10. As needed, secure the harnesses and the connectors. The harnesses should be routed so the wires are not pulling the connectors out of the PDM or pulling against the wire seals. See [Fig. 3](#).
- Where possible, route the cables and harnesses so they come from underneath the PDM to prevent water from flowing down the cable to the PDM.

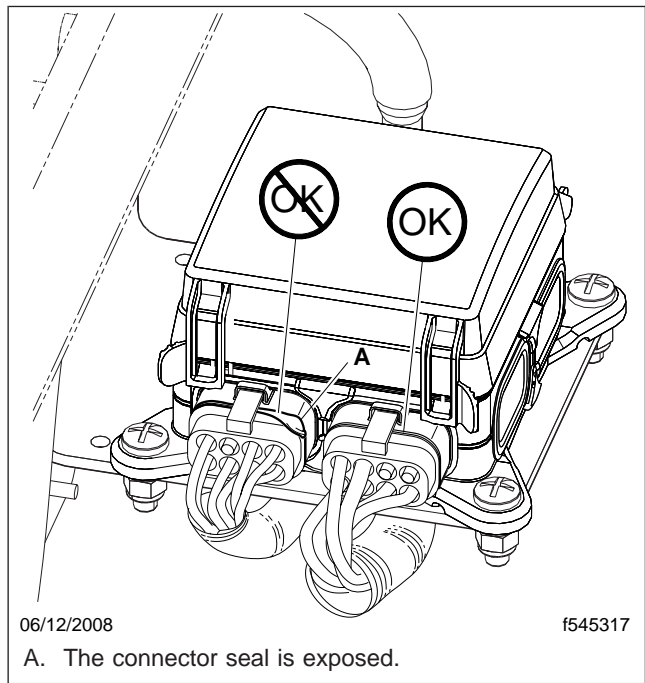


Fig. 3, Correct and Incorrect PDM Harness Connections

- 11. Apply red dielectric enamel to the power stud(s) and at least 2 inches (50 mm) of the power cable(s).
- 12. Connect the batteries.

Warranty

Normal warranty applies. See [Table 3](#) for damage code and labor allowance information, and refer to this bulletin by number in the story of the claim.

Damage Code and Labor Allowance					
VMRS CK33	VMRS CK18	Damage Code	SRT Code	Description	Time: hours
034-004-008	45	335-000021982	335-5005A	PDM, Severe-Duty, Replace	0.5

Table 3, Damage Code and Labor Allowance