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FLA COE FLB COE FLD Conventional Business Class FLC 112 Conventional Century Class Conventional Argosy COE Cargo Columbia 122SD and Coronado > Business Class M2 > Cascadia 108SD/114SD Freightliner Service Bulletin

General Information

Maintenance of all electric components against various environmental factors is important for the proper operation of the PDM. In some climates and applications, foreign material like water, snow, road salts, chemicals, or mud can accumulate on the PDM power terminal, increasing the risk of corrosion. Corrosion can damage the PDM, even on units equipped with a severe-duty PDM and a stainless steel power stud. See **Fig. 1**. The accumulation of corrosion can cause an alternate electrical path to ground through the mounting bracket or the frame rail.

Sealed-power connections provide improved protection against power terminal corrosion. See Fig. 2. Mounting the new sealed-power PDM with the connectors oriented horizontally can also reduce exposure to foreign materials.



Fig. 1, Corroded Trailer PDM

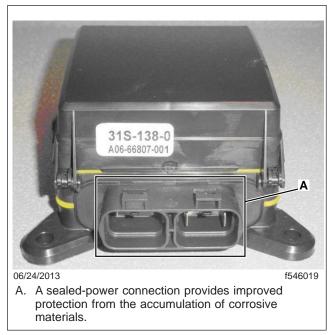


Fig. 2, New Sealed-Power PDM

Parts

Refer to **Table 1** for a list of parts required for PDM replacement.

Parts Required, PDM and Mounting Bracket Replacement			
Part Number	Description	Qty.	
A06-66807-001	PDM, Severe-Duty, Trailer	As Needed	
A06-84615-000	Harness, Sealed-Power, Severe-Duty, Trailer, Replacement	1	
A06-84616	Harness, Sealed-Power, Severe-Duty, Trailer, Modification	Cut to Length	
06-67545-000	Bracket, Severe-Duty PDM, Back-of-Cab		
A06-67547-000	Bracket, Severe-Duty PDM, Rear Crossmember, Rear Surface	T	
A06-67546-000	Bracket, Severe-Duty PDM, Rear Crossmember, Forward Surface	As Needed (See Fig. 3.)	
A06-67792-000	Bracket, Severe-Duty PDM, End-of-Frame	(See Fig. 3.)	

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Parts Required, PDM and Mounting Bracket Replacement			
Part N	lumber	Description	Qty.
_	_	Fasteners — Hexbolts, Hexnuts, and Washers	As Needed

Table 1, Parts Required, PDM and Mounting Bracket Replacement

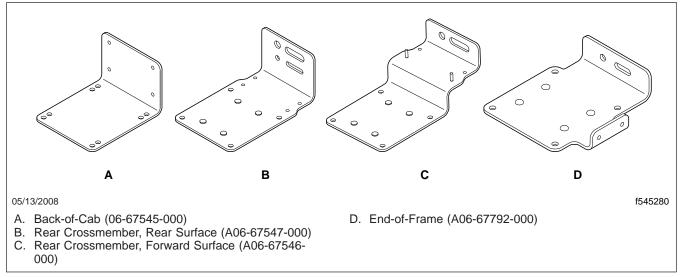


Fig. 3, PDM Mounting Brackets

Work Instructions

- 1. Park the vehicle on a level surface and set the parking brakes. Chock the tires.
- 2. Verify that a PDM with a sealed-power plug (p/n A06-66807-001) is not already installed on the vehicle.
- 3. Verify proper operation of all components powered by the PDM.
- 4. Disconnect the power input wiring from the old PDM.

IMPORTANT: In some vehicle configurations, body-related functions may operate independently of the trailer PDM. Test all vehicle body functions with the PDM disconnected. If all functions are operating normally, remove the PDM from the vehicle, and seal the power input cable. No further action is necessary.

- 5. Disconnect the batteries.
- 6. Remove the PDM from the vehicle.

NOTE: The sealed-power PDM bolt pattern may differ from earlier PDM installations. In this case, a new bracket is required. See **Table 1**. The most recent PDMs with a yellow case seal (**Fig. 2**) have the same bolt pattern as the sealed-power PDM, and should not require a bracket change.

7. Install the new PDM, making sure that it is horizontally mounted.

IMPORTANT: If the cable is corroded further than the length of the new sealed-power harness (A06-84615-000), the entire cable must be replaced with an equivalent length harness.

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8. Trim the existing cable back 12 inches (30 cm) and inspect the remaining cable. If there is evidence of corrosion, replace the corroded cable with a new cable (A06-84616).

IMPORTANT: If there is extensive power cable corrosion, the entire cable needs to be replaced with a new cable (A06-84616). See **Fig. 4**.

9. Remove enough insulation around the trimmed end of the power cable to allow it to be inserted into the open end of the sealed power harness crimp sleeve.

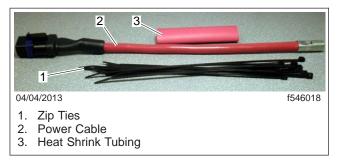


Fig. 4, New Power Cable (as needed)

- 10. Solder the exposed wire using a resin core solder. All visible strands should be coated and smooth, with no excessive build-up or solder balls. Once cooled, clean any remaining flux off the soldered cable.
- 11. Slide the pink shrink tube (A06-84615-000) down the cable.
- 12. Insert the soldered end of the existing power cable into the open portion of the connector sleeve, and crimp to match the other end.
- 13. Firmly pull-test the crimped connection to ensure the splice is secure.
- 14. Test the spliced power cable for open circuits or shorts. Repair as needed.

NOTE: Corrosion will continue to occur if the heat shrink is not installed properly (fully extruded).

- 15. Heat the shrink tube, starting in the center and moving outwards, until the tube shrinks tightly and securely. Make sure that the sealing glue extrudes from both ends of the tube evenly around the entire circumference of the cable.
- 16. Plug the output connections into the new PDM. Make sure the seal placement is correct. See Fig. 5.
- 17. Locate the fuse supplying power to the cable and replace it with a 40-amp fuse.
- 18. Connect the batteries and verify proper function of all outputs.
- 19. Remove the chocks from the tires.

Warranty

This is an informational bulletin only. Warranty does not apply.

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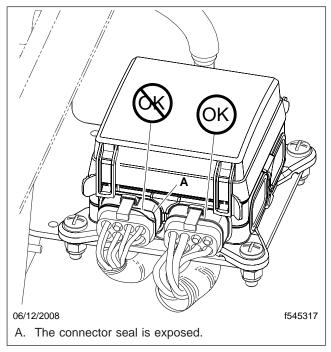


Fig. 5, Correct and Incorrect PDM Harness Connections