

FLA COE
FLB COE
FLD Conventional
Business Class
FLC 112 Conventional

Century Class Conventional
Argosy
Cargo
Columbia
122SD and Coronado

> Business Class M2
Cascadia
> 108SD/114SD
New Cascadia

**Freightliner
Service Bulletin**

General Information

Due to a shortage of electronic components, Business Class M2 and 108SD/114SD vehicles built from September 2021 were assembled using low content bulkhead modules (BHM) part number A66-28523-000. On these vehicles, the heated mirror control circuit is hardwired (non-multiplexed) instead of being controlled by the BHM (multiplexed). See G66-28964 (module 74E). On some of these vehicles, the heated mirror power supply circuit connected to the underhood power distribution module (PDM) is not terminated, causing the heated mirrors to be inoperative.

If a vehicle's heated mirrors are not operating, follow the steps below to check for proper power supply termination.

For detailed information about low content BHMs, see service bulletin 54-351 Low Content Bulkhead Module (BHM) and Chassis Module (CHM).

Parts

Parts are available from the PDCs. See [Table 1](#).

NOTE: The following parts may or may not be required to complete the repair outlined in this bulletin.

Parts		
Part Number	Description	Quantity*
23-13213-121	Terminal	1
Delphi (Aptiv) p/n 12103506 or equivalent†	Ring Terminal (M8 x 14 gauge)	1
23-12537-015	FUSE-MINI,15A,BLUE,MP280,PF	1
Littlefuse p/n 0FHM0001ZXJ or equivalent†	Inline Mini-fuse Holder	1
PHM 1 1862	Phillips Sta-Dry Inline Connector, for cases where the wiring needs to be extended	1

* The quantities listed may or may not be required depending on which repair action is taken.

† Parts availability from Daimler Truck may be limited. This item may be available at local or online retail stores.

Table 1, Parts

Procedure

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Verify that the heated mirrors are non-multiplexed by checking module 74E in PartsPro® for the presence of harness A66-28959-000 or A66-28959-001. See [Fig. 1](#). Is one of these harnesses present in the 74E parts list?

YES → This service bulletin is applicable. Go to the next step.

NO → Stop here. This service bulletin does not apply.

Parts List: 74E-C02803
WIRING-MIRROR

Ref	SL	AD	Description	Part Number	QTY	UM	Alt Part
			FUSE-MINI, 15A, BLUE, MP280, PFD	23-12537-015	1	EA	
			SW-RCKR, MIRROR HT, SPST	A06-30769-002	1	EA	
			HARN-MIR, DASH, OL, HEAT_SWITCH	A66-28958-000	1	EA	
			HARN-LT_WRK_FWD, OL, DASH	A66-13457-000	1	EA	
			SEAL-CABLE, GT150S, GT150SFB, BL	23-12497-151	1	EA	
			TERM-FEM, M1.6, 0.5-0.8(20-18)	23-13211-400	1	EA	
			TERM-FEM, M1.6, 1-2(16-14)	23-13211-401	1	EA	
			TERM-FEM, GT150S, 0.8-1(18-16)	23-13212-020	1	EA	
			TERM-FEM, MP280T, DBL, 0.8-1	23-13213-140	1	EA	
			TERM-FEM, MP630, 0.5-0.8(20-18)	23-13213-400	4	EA	
			TERM-FEM, MP630, 1-2(16-14)	23-13213-401	4	EA	
			HARN-MIR, FW, OL, HTD, LITE	A66-28959-000	1	EA	
			HARN-MIR, FW, UL, HTD, LITE	A06-67224-001	1	FA	

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Fig. 1, PartsPro Harness Description and Part Number

3. Locate circuit 76A at the underhood PDM. The circuit may be terminated in one of the PDM connectors, typically the black one, or it may have been left loose by the manufacturing plant in the harness near one of the PDM connectors. If it was left loose, the wire will typically be wrapped in yellow or green electrical tape. **Fig. 2** shows the location of the PDM mounted on the vehicle.

If circuit 76A is terminated in a connector, stop here. This bulletin does not apply.

If circuit 76A is loose in the harness, go to step 4.

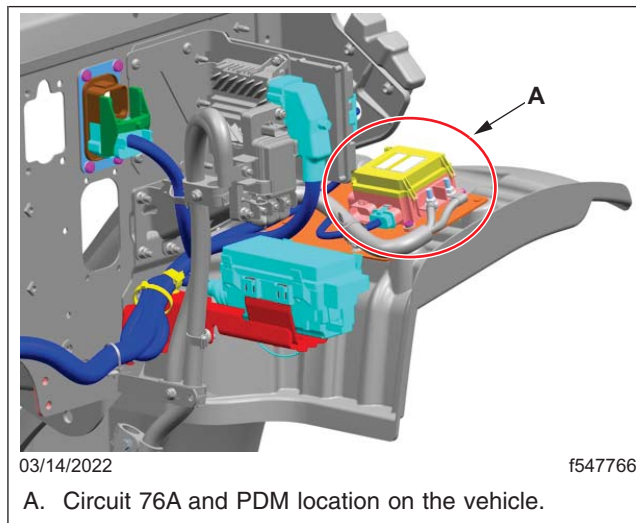


Fig. 2, PDM Location

4. Locate a spare fuse/pin location in the underhood PDM.
 - 4.1 In PartsPro, locate the underhood PDM part number in module 285. See **Fig. 3**.

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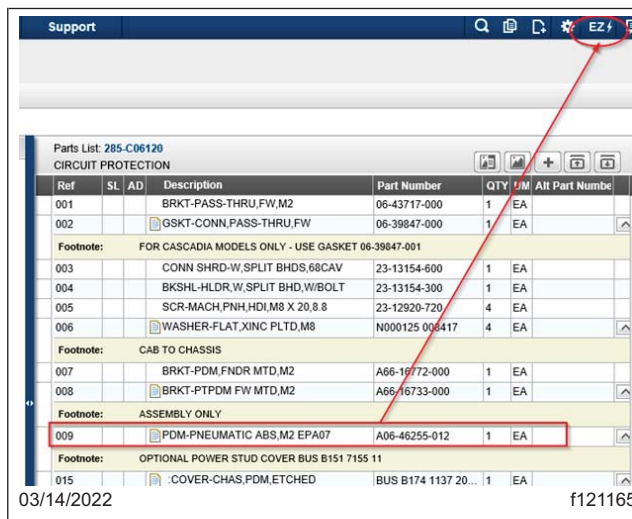


Fig. 3, PartsPro Module 285

- 4.2 Highlight the PDM line item and click the EZWiring™ button in PartsPro to open the PDM drawing as shown in Fig. 4.
- 4.3 In the PDM drawing, locate the PDM label applicable to the PDM part number (sheets 2 to 6). Note the locations of the spare fuses. See Fig. 4 for an example using A06-46255-012.

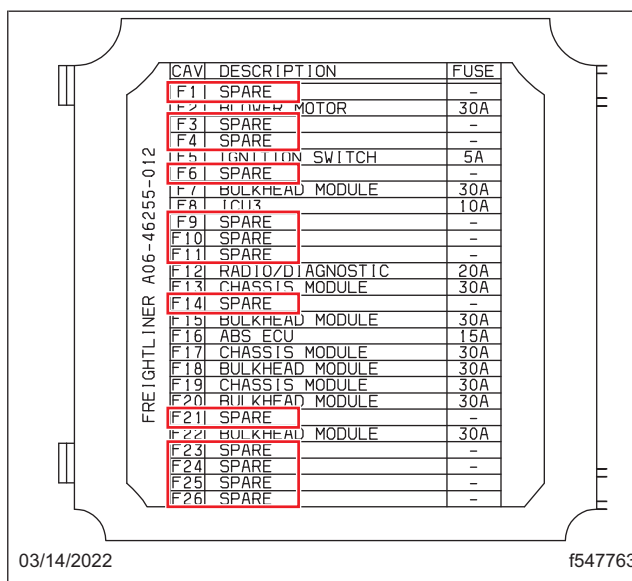


Fig. 4, Example Fuse Location Diagram

- 4.4 See wiring diagram G06-86567-000. Trace out the spare fuses identified in Fig. 4 to the corresponding PDM connector and pin locations. It is only necessary to identify one open location, ideally in a connector (usually the black one) closest to the loose 76A wire, to avoid having to extend it to reach another connector. An example is shown in Fig. 5.

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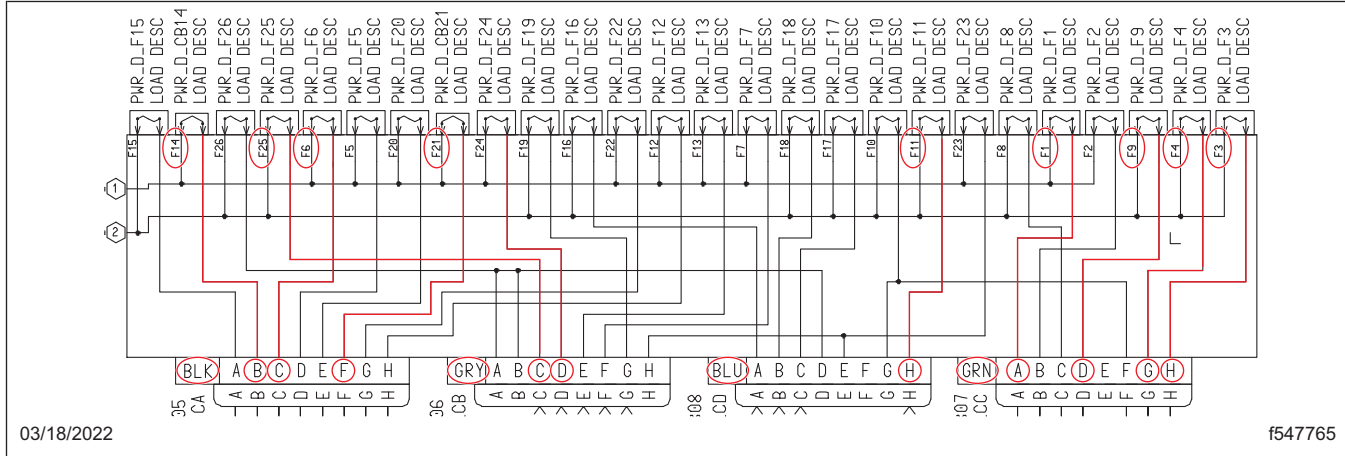


Fig. 5, Tracing Spare Fuses

NOTE: Avoid spare fuses that supply more than one pin.

4.5 As in step 4.4, check for open fuse/pin locations in the connector closest to the loose 76A wire first (usually the black one). In the above example, the following spare fuse/pin combinations are available:

- Black connector: F14 (pin B), F6 (pin C), F21 (pin F)
- Gray connector: F25 (pin C), F24 (pin D)
- Blue connector: F11 (pin H)
- Green connector: F1 (pin A), F9 (pin D), F4 (pin G), F3 (pin H)

NOTE: In the example above, spare fuses feeding multiple pins were excluded. These should be avoided for terminating circuit 76A.

NOTE: It is not necessary to identify and inspect every spare fuse/pin combination. Stop once an available spare fuse/pin combination is identified.

For each spare fuse/pin combination identified, physically check that a fuse is not already installed in the fuse location and that a wire is not already installed in the pin location associated with that spare fuse. If a fuse is present and a wire is already terminated in the associated pin, go to the next possible spare fuse/pin combination.

Was an open fuse/pin location identified?

YES → Go to step 5.

NO → Go to step 6.

5. Install circuit 76A and a spare fuse.

- 5.1 Insert the loose circuit 76A wire into the open fuse/pin location identified in step 4. If necessary, lengthen the wire following the procedures described in **Section 54.01** of the vehicle workshop manual.
- 5.2 Install a 15A fuse in the spare fuse location identified in step 4.
- 5.3 Go to step 7.

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6. If no spare fuse/pin locations were identified, an inline fuse must be installed onto the loose 76A circuit. Terminate the other side of the fuse to one of the underhood PDM power lugs using a ring terminal. Make sure the inline fuse is 15A. Follow the wiring procedures in **Section 54.01** of the applicable vehicle workshop manual. Go to step 7.
7. Tape and secure the wire as necessary.
8. Verify operation of the heated mirrors.

Warranty

This procedure is warrantable only if the described condition exists and the repair is performed 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 2** for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #* field.

OWL VMRS Codes and Labor Allowance						
Primary Failed Part	Component Code	Cause Code	Correction Code	SRT Code	Description	Time: Hours
A66-28959-000, or A66-28959-001	002-010-056	77	19	74E-5000A	Wiring, Mirror Heat, Circuit 76A, Install (SB54-355)	0.6

Table 2, OWL VMRS Codes and Labor Allowance