

General Information

The main power distribution module (PDM) is mounted under the hood on the left-hand front fender and distributes battery power to the vehicle control modules, including the Bulkhead Module, Chassis Module, Expansion Modules and vehicle ECUs. The main PDM contains the fuses required to protect the power feed circuits to these modules. While the main PDM provides power to them, the modules themselves control power flow and circuit protection to the various components of the vehicle electrical systems. Because of this, traditional PDM devices such as relays and circuit breakers are no longer necessary on the main PDM.

The cab PDM is located in the switch panel cavity at the driver's left elbow and powers the Switch Hub Module, as well as circuits inside the vehicle, such as heaters, doors, fans, lights, and other interior accessories.

**Main Power Distribution Module (PDM)
Replacement****Replacement**

1. Disconnect the negative leads from the batteries.

NOTE: The main power distribution module (PDM) is mounted in the engine compartment on the left front quarter fender. See [Fig. 1](#).

2. Disconnect the battery power electrical ring connectors from the power studs by removing the two nuts and removing the cables. See [Fig. 2](#) and [Fig. 3](#).

7. Place the battery power electrical ring connectors on the battery power studs and secure the connectors with nuts and washers.
8. Connect the batteries.
9. Verify correct operation of the electrical components.

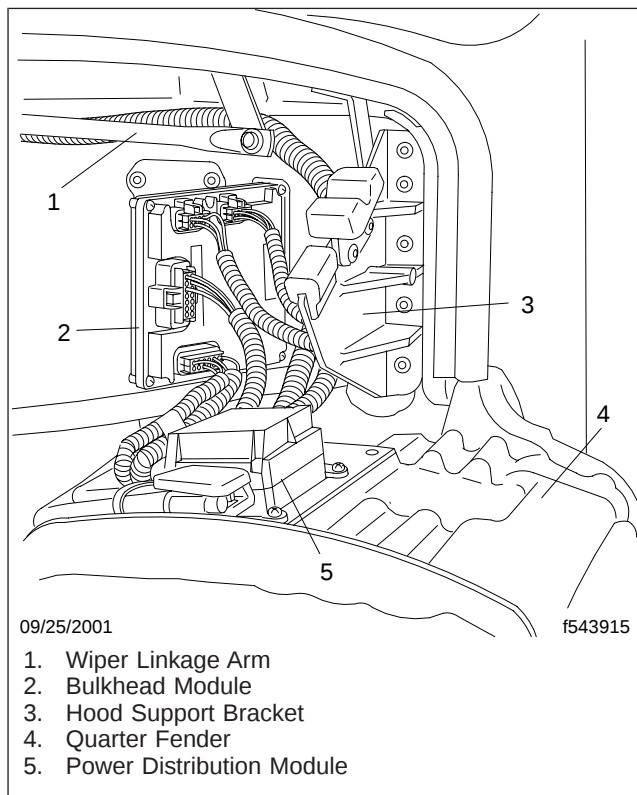


Fig. 1, Main Power Distribution Module Location

3. Remove the four harness connectors (green, blue, gray, and black) from the PDM.
4. Remove the four Torx capscrews and remove the PDM.
5. Properly orient the PDM and tighten the four Torx capscrews.
6. Plug in the four electrical harness connectors (green, blue, gray, and black) to the PDM.

Main Power Distribution Module (PDM) Replacement

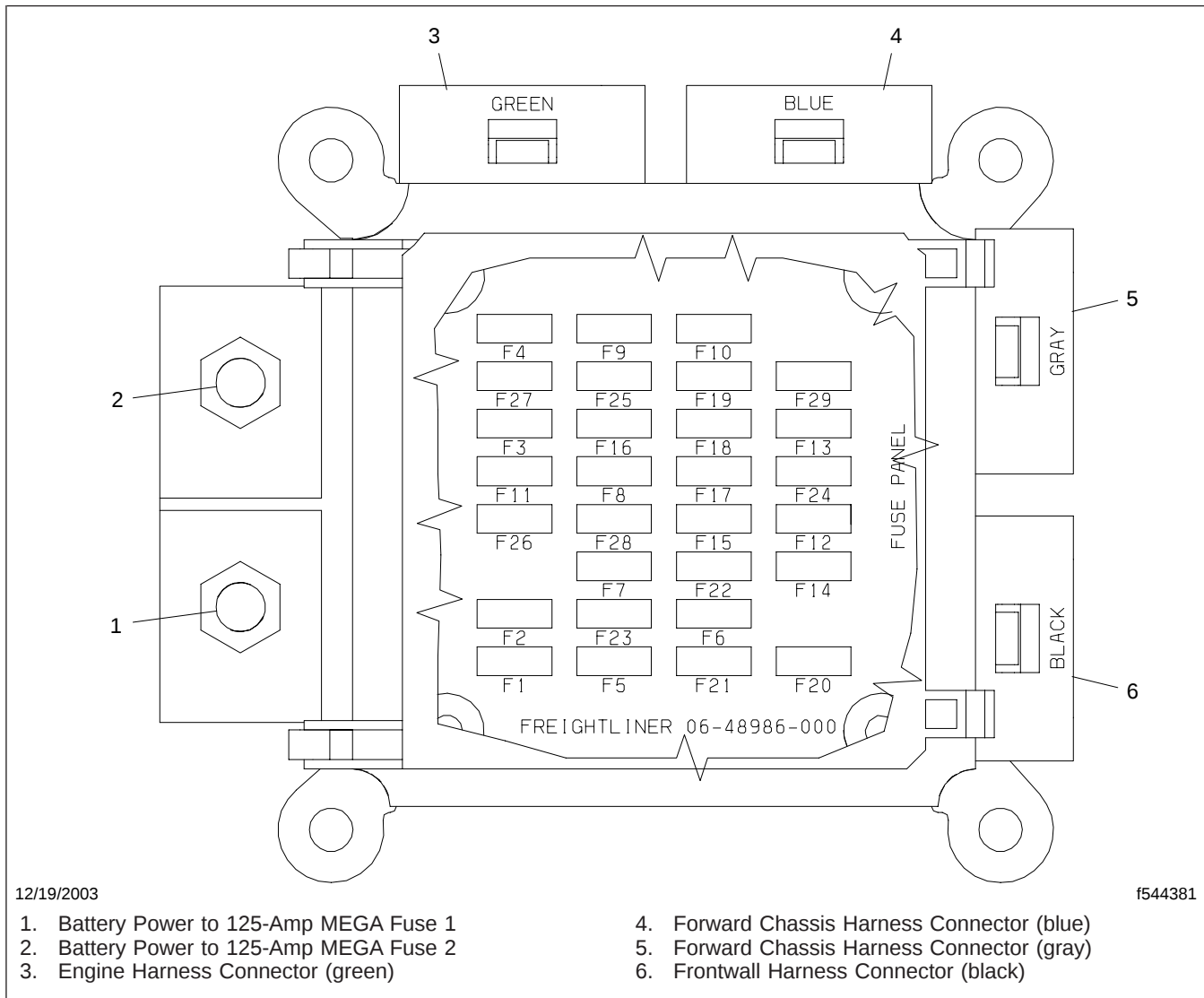


Fig. 2, Main PDM Fuse Panel Layout for Chassis Built Through December 31, 2006 (top view)

Main Power Distribution Module (PDM) Replacement

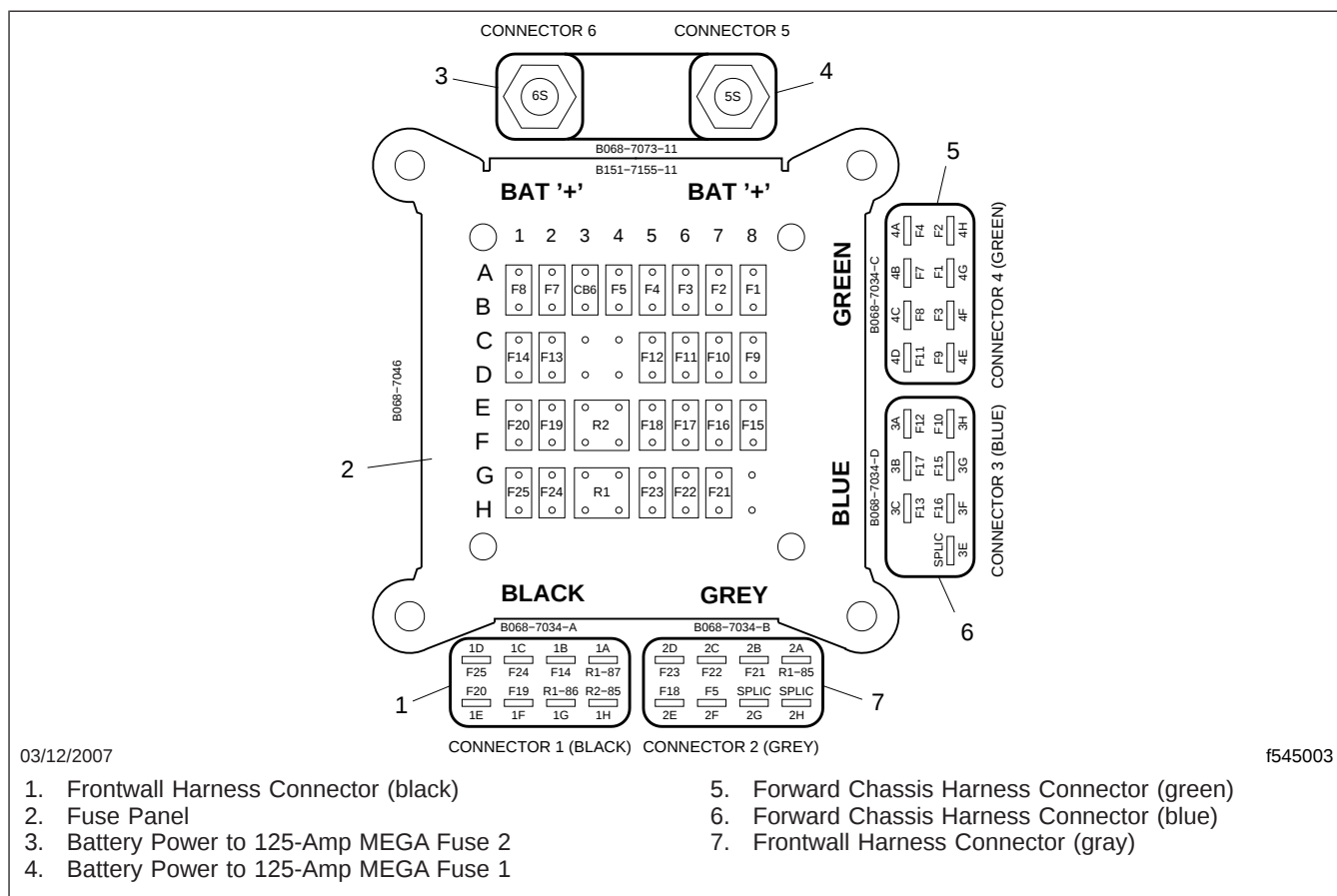


Fig. 3, Main PDM Fuse Panel Layout for Chassis Built from January 1, 2007 (top view)

Cab Power Distribution Module (PDM) Replacement

Removal

1. Disconnect the negative leads from the batteries.

NOTE: The cab power distribution module (PDM) is mounted underneath the switch panel against the left-hand body wall below the driver's window.

2. Remove the driver's switch panel by removing the capscrew at each of its four corners, then remove the cover panel aft of the switch panel by removing the two capscrews that attach it. See **Fig. 1**.
3. Disconnect the positive and negative battery cables from the PDM. See **Fig. 2**.
4. Unplug all electrical harnesses from the PDM. There may be up to 8 color-coded harnesses.
5. Remove the four Torx capscrews that secure the PDM, one at each corner, and remove the PDM. See **Fig. 3**.

2. Plug in all electrical harness connectors, each to its color-coded mate. Moving around the PDM clockwise from the top right corner, the connectors are colored orange, black, red, gray, brown, green, yellow, and blue. See **Fig. 2**.
3. Connect the positive and negative battery cables to the PDM.
4. Install the driver's switch panel and the cover panel aft of the switch panel.
5. Connect the batteries.
6. Verify correct operation of the electrical components.

Installation

1. Properly orient the PDM and secure it with the four Torx capscrews.

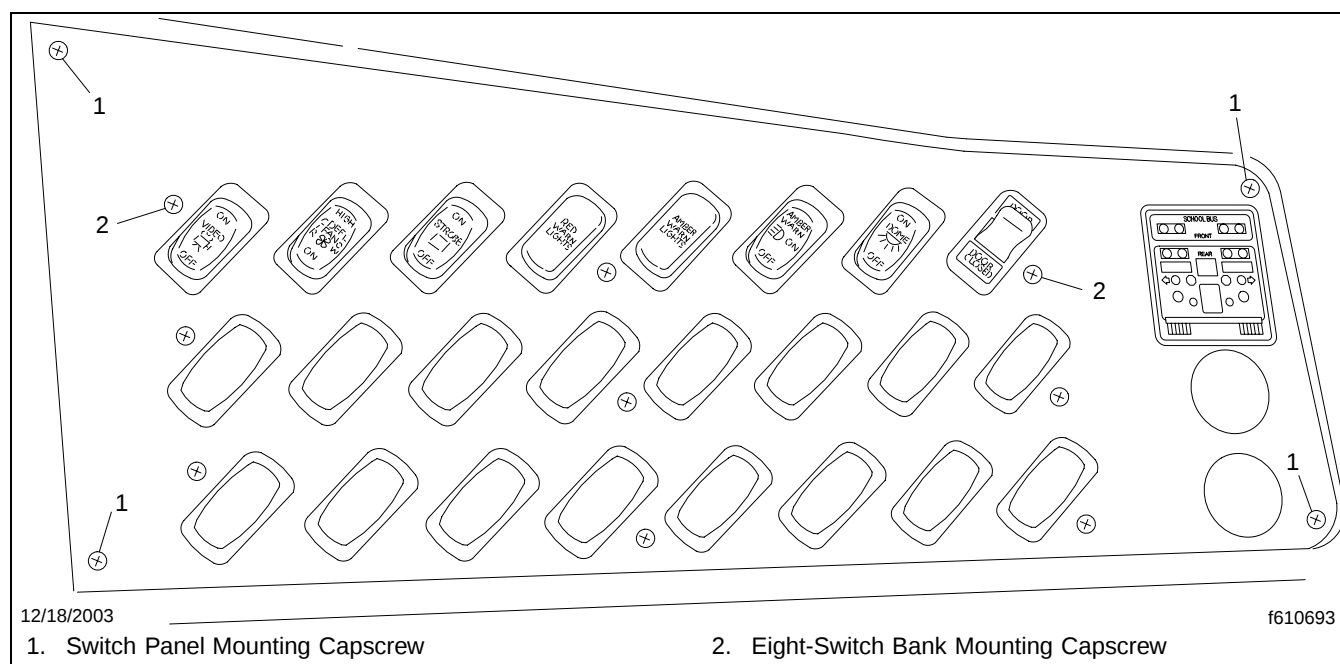


Fig. 1, Driver's Switch Panel

Cab Power Distribution Module (PDM) Replacement

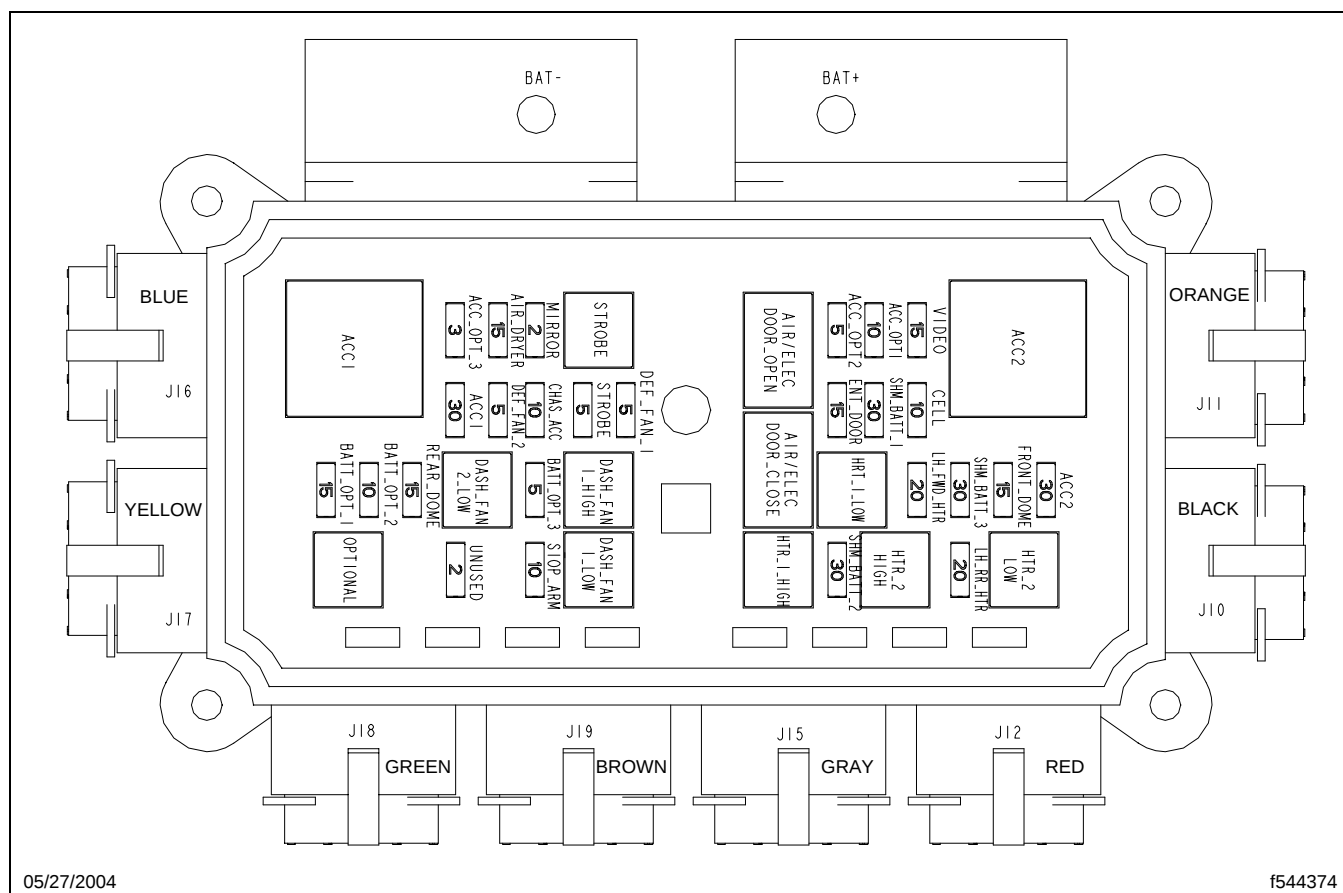


Fig. 2, Cab PDM Fuse Layout (top view)

Cab Power Distribution Module (PDM) Replacement

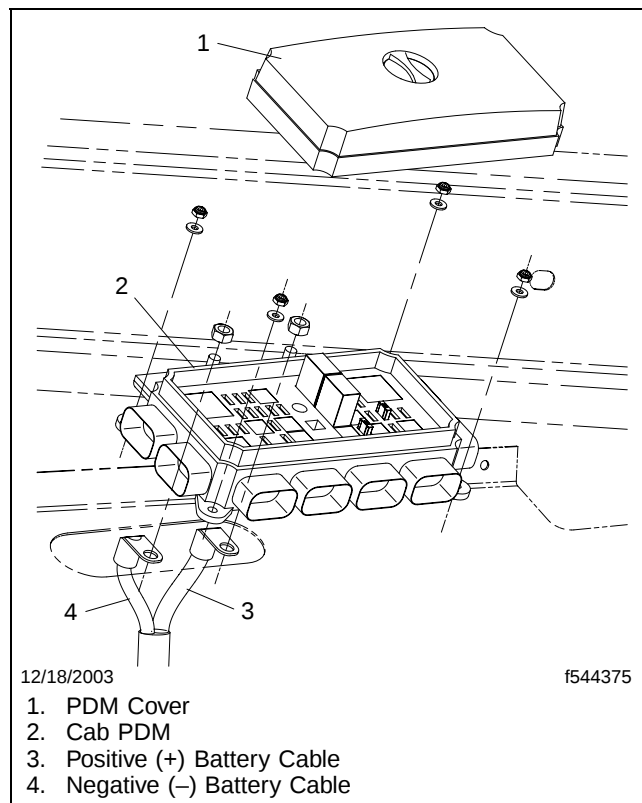


Fig. 3, Cab PDM Installation

Main PDM Specifications

The following tables list Main Power Distribution Module (PDM) fuse information.

See [Table 1](#) for Main PDM fuse information for vehicles with a Mercedes-Benz engine and pneumatic ABS.

See [Table 2](#) for Main PDM fuse information for vehicles with a Caterpillar engine and pneumatic ABS.

See [Table 3](#) for Main PDM fuse information for vehicles with a Mercedes-Benz engine and hydraulic ABS.

See [Table 4](#) for Main PDM fuse information for vehicles with a Caterpillar engine and hydraulic ABS.

See [Table 5](#) for Main PDM fuse information for vehicles with a Mercedes-Benz engine built from January 1, 2007.

See [Fig. 1](#) for a top view of the Main PDM fuse panel layout and its connections.

Main PDM Fuse Information for Mercedes-Benz Engine with Pneumatic ABS		
Cavity	Description	Fuse
F1	VCU	10A
F2	Blower Motor	30A
F3	Engine ECU	20A
F4	Rear Wall Heater Relay Lo/Hi	30A
F5	Ignition Switch	10A
F6	Spare	—
F7	Stepwell Heater Relay Lo/Hi	30A
F8	ICU3-M2	10A
F9	Transmission ECU	10A
F10	Expansion Module 1	30A
F11	Expansion Module 1	30A
F12	Radio/Diagnostic	20A
F13	Expansion Module 1	30A
F14	Expansion Module 2	30A
F15	Bulkhead Module (BHM)	30A
F16	ABS ECU	15A
F17	Chassis Module (CHM)	30A
F18	Bulkhead Module (BHM)	30A
F19	Chassis Module (CHM)	30A
F20	Bulkhead Module (BHM)	30A
F21	Expansion Module 2	30A
F22	Bulkhead Module (BHM)	30A
F23	Expansion Module 2	30A
F24	Spare	—
F25	Adjustable Pedals	10A
F26	Chassis Module (CHM)	30A
F27	Coolant Heater/Booster Pump	30A
F28	Bulkhead Module (BHM)	30A
F29	Crossing Arm Supply	10A

Table 1, Main PDM Fuse Information for Mercedes-Benz Engine with Pneumatic ABS

Specifications

Main PDM Fuse Information for Caterpillar Engine with Pneumatic ABS		
Cavity	Description	Fuse
F1	Rear Wall Heater Relay Lo/Hi	30A
F2	Blower Motor	30A
F3	Engine ECU	20A
F4	Engine ECU	20A
F5	Ignition Switch	10A
F6	Spare	—
F7	Stepwell Heater Relay Lo/Hi	30A
F8	ICU3-M2	10A
F9	Transmission ECU	10A
F10	Expansion Module 1	30A
F11	Expansion Module 1	30A
F12	Radio/Diagnostic	20A
F13	Expansion Module 1	30A
F14	Expansion Module 2	30A
F15	Bulkhead Module (BHM)	30A
F16	ABS ECU	15A
F17	Chassis Module (CHM)	30A
F18	Bulkhead Module (BHM)	30A
F19	Chassis Module (CHM)	30A
F20	Bulkhead Module (BHM)	30A
F21	Expansion Module 2	30A
F22	Bulkhead Module (BHM)	30A
F23	Expansion Module 2	30A
F24	Spare	—
F25	Adjustable Pedals	10A
F26	Chassis Module (CHM)	30A
F27	Coolant Heater/Booster Pump	30A
F28	Bulkhead Module (BHM)	30A
F29	Crossing Arm Supply	10A

Table 2, Main PDM Fuse Information for Caterpillar Engine with Pneumatic ABS

Main PDM Fuse Information for Mercedes-Benz Engine with Hydraulic ABS		
Cavity	Description	Fuse
F1	VCU	10A
F2	Blower Motor	30A
F3	Engine ECU	20A
F4	Rear Wall Heater Relay Lo/Hi	30A
F5	Ignition Switch	10A
F6	Hydromax Relay	30A
F7	Stepwell Heater Relay Lo/Hi	30A
F8	ICU3-M2	10A
F9	Transmission ECU	10A
F10	Expansion Module 1	30A
F11	Expansion Module 1	30A
F12	Radio/Diagnostic	20A
F13	Expansion Module 1	30A
F14	Expansion Module 2	30A
F15	Bulkhead Module (BHM)	30A
F16	ABS ECU	15A
F17	Chassis Module (CHM)	30A
F18	Bulkhead Module (BHM)	30A
F19	Chassis Module (CHM)	30A
F20	Bulkhead Module (BHM)	30A
F21	Expansion Module 2	30A
F22	Bulkhead Module (BHM)	30A
F23	Expansion Module 2	30A
F24	Hydraulic Pump and Relay	25A
F25	Adjustable Pedals	10A
F26	Chassis Module (CHM)	30A
F27	Coolant Heater/Booster Pump	30A
F28	Bulkhead Module (BHM)	30A
F29	Crossing Arm Supply	10A

Table 3, Main PDM Fuse Information for Mercedes-Benz Engine with Hydraulic ABS

Main PDM Fuse Information for Caterpillar Engine with Hydraulic ABS		
Cavity	Description	Fuse
F1	Rear Wall Heater Relay Lo/Hi	30A
F2	Blower Motor	30A
F3	Engine ECU	20A
F4	Engine ECU	20A
F5	Ignition Switch	10A
F6	Hydromax Relay	30A
F7	Stepwell Heater Relay Lo/Hi	30A
F8	ICU3-M2	10A
F9	Transmission ECU	10A
F10	Expansion Module 1	30A
F11	Expansion Module 1	30A
F12	Radio/Diagnostic	20A
F13	Expansion Module 1	30A
F14	Expansion Module 2	30A
F15	Bulkhead Module (BHM)	30A
F16	ABS ECU	15A
F17	Chassis Module (CHM)	30A
F18	Bulkhead Module (BHM)	30A
F19	Chassis Module (CHM)	30A
F20	Bulkhead Module (BHM)	30A
F21	Expansion Module 2	30A
F22	Bulkhead Module (BHM)	30A
F23	Expansion Module 2	30A
F24	Hydraulic Pump and Relay	25A
F25	Adjustable Pedals	10A
F26	Chassis Module (CHM)	30A
F27	Coolant Heater/Booster Pump	30A
F28	Bulkhead Module (BHM)	30A
F29	Crossing Arm Supply	10A

Table 4, Main PDM Fuse Information for Caterpillar Engine with Hydraulic ABS

Main PDM Fuse Information for a Mercedes-Benz Engine (for chassis built from January 1, 2007)		
Cavity	Description	Fuse
F1	Spare	—
F2	Spare	—
F3	Chassis Module (CHM)	30A
F4	Chassis Module (CHM)	30A
F5	Ignition Switch	10A
F6	Spare	—
F7	Bulkhead Module (BHM)	30A
F8	Bulkhead Module (BHM)	30A
F9	Spare	—
F10	Chassis Module (CHM)	30A
F11	ABS ECU	15A
F12	Coolant Heater	20A
F13	Spare	—
F14	Adjustable Pedals	10A
F15	Spare	—
F16	Spare	—
F17	Spare	—
F18	Spare	—
F19	Bulkhead Module (BHM)	30A
F20	Radio/Diagnostic	20A
F21	External Door Control	2A
F22	Hydromax	30A
F23	ICU3	10A
F24	Bulkhead Module (BHM)	30A
F25	Bulkhead Module (BHM)	30A
F26	Spare	—

Table 5, Main PDM Fuse Information for a Mercedes-Benz Engine (for chassis built from January 1, 2007)

Cab PDM Specifications

See [Fig. 2](#) for cab PDM fuse and relay information.

Specifications

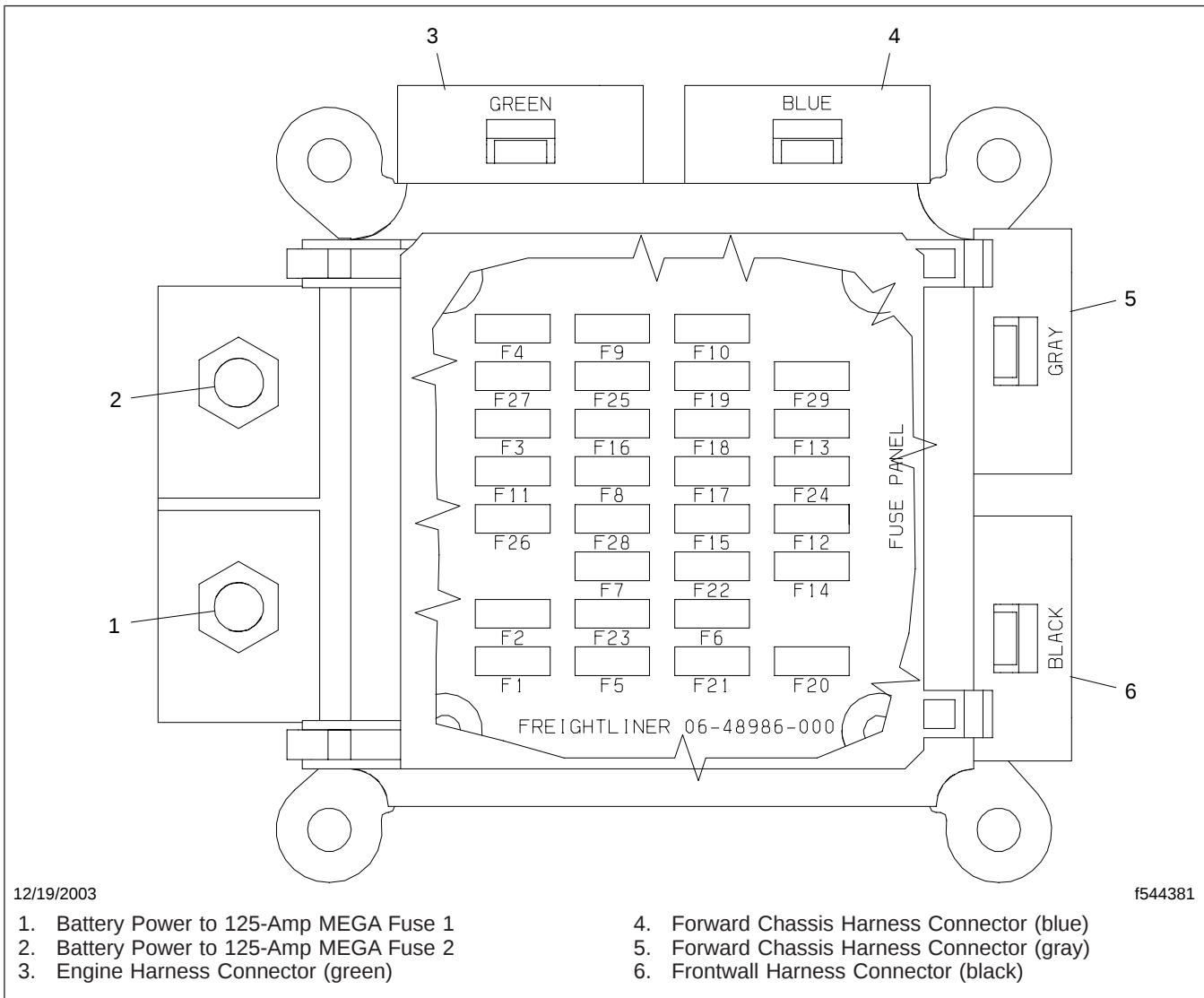


Fig. 1, Main PDM Fuse Panel Layout (top view)



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Fig. 2, Cab PDM Fuse Panel Layout (top view)