SAM Chassis Access Cover Installation

54-294

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

Freightliner Service Bulletin

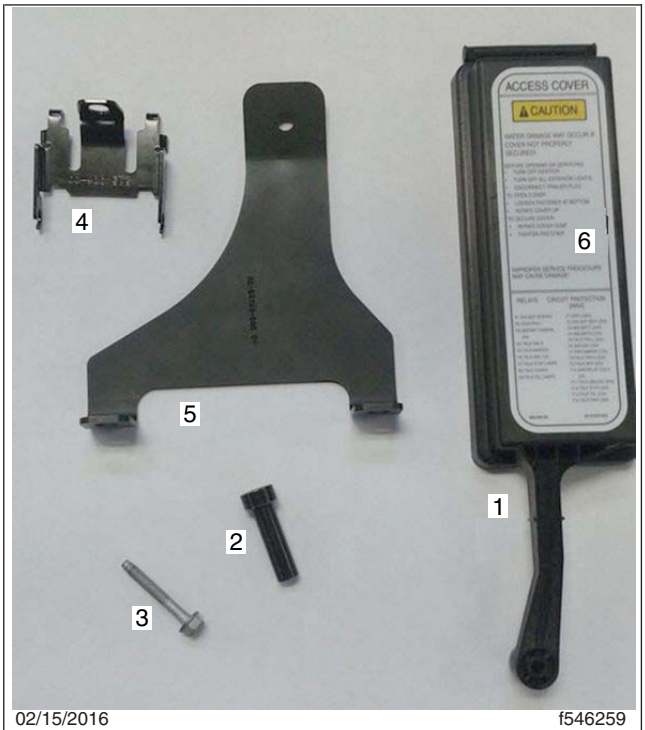
Description of Revisions: *This bulletin replaces the version dated September 2016. The related VMRS codes are added.*

General Information

Some SAM Chassis modules have experienced water intrusion due to the access cover not closing securely. Water intrusion can cause corrosion at the fuse and relay terminals, which can permanently damage the ECU. A new SAM Chassis access cover is available that provides better protection against water intrusion. Use the instructions in this bulletin to install the cover.

Parts

See **Fig. 1** and **Table 1** for SAM Chassis cover parts.



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1. Fuse Access Cover
2. Standoff
3. M6 Bolt
4. Hinge Bracket
5. Harness Routing Bracket
6. Caution Label

Fig. 1, SAM Chassis Cover Parts

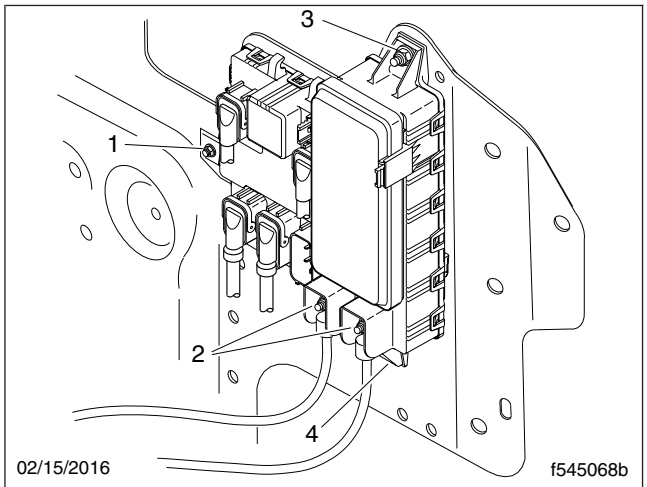
Parts		
Item	**Description**	**Part Number**
1	Fuse Access Cover	06-94814-000
2	Standoff	06-94814-002
3	M6 Bolt	06-94814-003

Parts		
Item	**Description**	**Part Number**
4	Hinge Bracket	06-94814-001
5	Harness Routing Bracket	06-94783-000
6	Caution Label (on item 1)	24-01872-000
7	Tie Strap (not shown)	23-14137-000

Table 1, Parts

SAM Chassis Access Cover Replacement

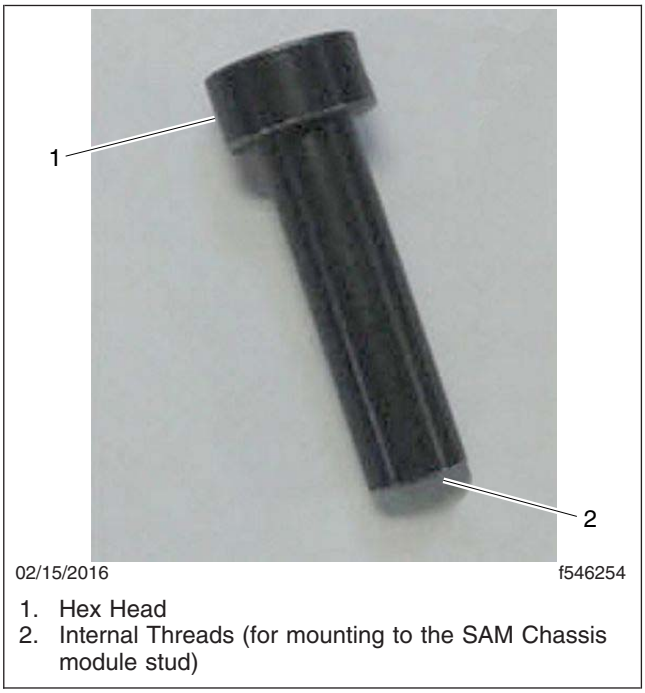
1. Park the vehicle on a level surface, shut down the engine, and apply the parking brakes. Chock the tires.
2. Disconnect the vehicle from battery power.
3. Open the hood.
4. Remove the old access cover from the SAM Chassis.
   - 4.1 Pull upwards on the tab at the top of the cover.
   - 4.2 Pull forward on the cover until it unlatches from the SAM Chassis.
5. There are three 1/2-inch (12.7-mm) nuts holding the SAM Chassis module to the frontwall mounting studs. See **Fig. 2**. Remove the top and bottom nuts only (ref. 3 and ref. 4). Do not remove the nut on the inboard side (ref. 1), or the nuts retaining the battery cables (ref. 2).



1. Inboard Mounting Nut
2. Battery Cable Mounting Nuts
3. Upper ½-inch (12.7-mm) Mounting Nut
4. Lower ½-inch (12.7-mm) Mounting Nut

Fig. 2, SAM Chassis, Located on the Frontwall

6. Install the standoff (**Fig. 3**) on the SAM Chassis module bottom mounting stud and tighten to 20 lbf·ft (27 N·m) using a 10 mm hex bit socket.



1. Hex Head
2. Internal Threads (for mounting to the SAM Chassis module stud)

Fig. 3, Standoff

NOTE: The nuts that hold the clutch reservoir for manual transmissions, or the nuts that hold the transmission control module for automated transmissions, can be used to mount the harness bracket to the frontwall.

7. Install the harness bracket to the frontwall, using two of the existing frontwall nuts. The harness should be oriented so that the bent portion of the harness bracket is mounted away (inboard) from the SAM Chassis. See **Fig. 4**.

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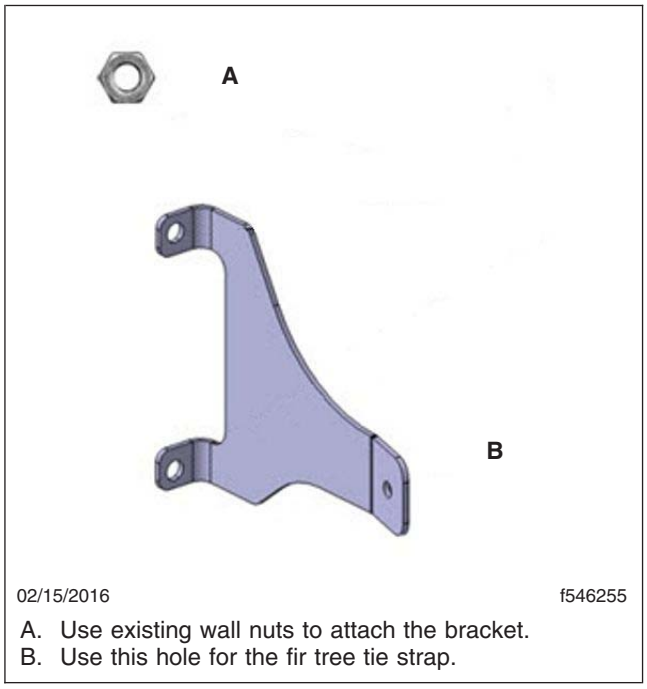

A. Use existing wall nuts to attach the bracket.
B. Use this hole for the fir tree tie strap.

Fig. 4, Harness Bracket

8. The wiring harness on the top of the SAM Chassis can be routed either to the left or the right of the SAM. Route the harness to the left using the new bracket, or route the harness to the right using the existing harness brackets.
    - If the wiring harness is routed near the top of the SAM Chassis it prevents the access cover from opening. In this case, the harness needs to be relocated to the right or left to gain access to the fuse panel.
    - If the wiring harness is routed near the bottom of the SAM Chassis it blocks the access cover from closing. In this case, the harness needs to be moved below the new access cover arm.
9. Attach the new access cover to the hinge bracket *before* attaching the assembly to the SAM Chassis. See **Fig. 5** and **Fig. 6**. Mounting the cover to the hinge bracket requires it to be rotated in such a way that the flat parts of the cover hinge pins can pass through the hinge bracket jaws. When properly attached, the hinge bracket can be rotated 90 degrees (relative to the cover). This allows the bolt hole to be positioned above the top of the cover, and oriented away from the front, allowing it to recess into the mounting foot on the SAM Chassis when the cover is installed.

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Fig. 5, Hinge Bracket Installation

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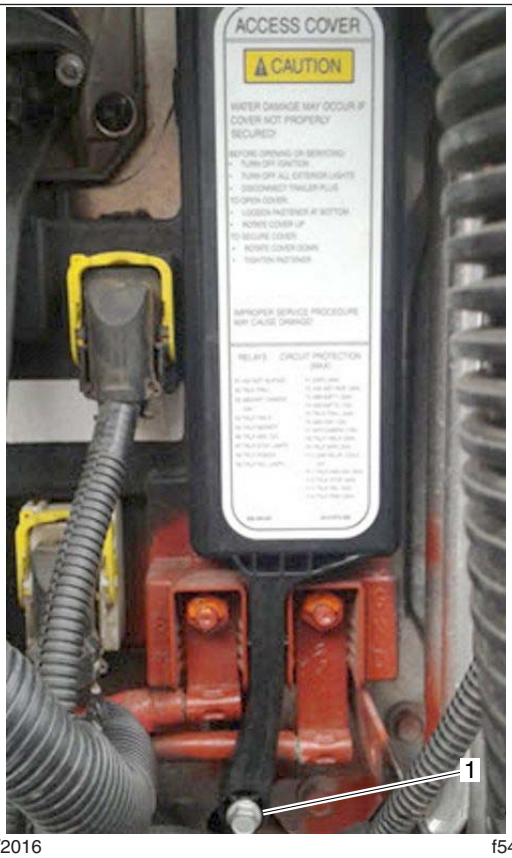
Fig. 6, Hinge Bracket Installed on the Cover

10. Install the hinge bracket with the cover on the SAM Chassis top stud, and tighten the nut to 15 lbf·ft (20 N·m) before trying to close the new access cover.
11. Close the new access cover over the relays and fuses. Verify that the new cover can freely open and close, and that it seals securely against the SAM Chassis in the down position.
12. Attach the bottom arm to the standoff using the M6 bolt. See **Fig. 7**.



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1. Bottom Arm Attached to the Standoff

Fig. 7, Bottom Arm Attached to the Standoff

13. Loosen the B+ and GND battery cable nuts at the SAM Chassis, then torque them to 15 lbf·ft (20 N·m).

IMPORTANT: The access cover should always be attached to the SAM Chassis module. Do not remove the top mounting nut to access the fuses.

NOTE: On some vehicle configurations, there is a bolt on the wiring harness bracket that might catch on the access cover. Either change the orientation of the bolt so that the nut is on the outside of the bracket, or make sure to move the cover away from the bolt by adjusting it slightly inward when closing the cover.

14. Connect the vehicle to battery power, and verify proper operation of the SAM Chassis.

Warranty

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**	**SRT Code**	**Description**	**Time: Hours**
SAM Chassis Cover	003-006-010	28	32K-6020A	SAM Chassis Cover, R/R	0.3

Table 2, OWL VMRS Codes and Labor Allowance

NOTE:

Component Code / VMRS = 003-006-010 COVER - MULTIPLEXER

Component Code / VMRS = 003-006-009 BRACKET - MULTIPLEXER