IMPORTANT CAMPAIGN INFORMATION

ATTENTION: Dealer Principal, Warranty Manager, Service Manager, Parts Manager
Thomas Built Bus Dealers – U.S. and Canada
Export Distributors
Direct Warranty Customers U.S. and Canada

Daimler Trucks North America LLC

WARRANTY CAMPAIGNS DEPARTMENT
P.O. Box 4090 800-547-0712
Portland, Oregon 97208-4090 FAX 503-745-9009

If you have questions about this Letter, please submit your inquiry on the Web using the **WSC Link on DTNAConnect**

REF #: ICI17-019
Effective: 08/03/2017
Release: 08/09/2017

SUBJECT: TBB Maintenance Guidelines for Electrical Power Distribution Centers

This letter is to inform you of a mailing to Thomas Built Buses customers emphasizing the proper care and maintenance of electrical systems on buses. The mailing started approximately 8/3/17.

A copy follows for your reference.

This notice is for your information only. There is no specific action for customers or Thomas dealers to take.

If you have questions or need further information, contact the Warranty Campaigns Department by submitting an inquiry through www.AccessFreightliner.com / Support / My Tickets and Submit an Inquiry from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday.

The information contained in this letter supercedes and supplements any related policies and procedures in any previously released bulletins, the Warranty Manual, and/or previously released letters. Failure to read or distribute this letter will not exempt addressees from compliance with the information contained herein.

Thomas Built Buses LLC

May 17, 2017

Subject: Electrical Cabinet Maintenance Practices

Thomas Built Bus (TBB) would like to emphasize some important information regarding maintenance practices around the electrical cabinet installed on MVP-ER, ER/HD, HDX & FS-65 model vehicles.

Please review the enclosed maintenance guidelines addressing the need for inspection and maintaining the electrical cabinet.

We hope you find this maintenance guideline helpful.

WARRANTY CAMPAIGNS DEPARTMENT
Enclosure

Maintenance Guidelines

Daimler Trucks North America LLC

Thomas Built Buses
Date: May 2017

Subject: Maintenance Guidelines for Electrical Power Distribution Center (PC Board Configuration)

Models Affected:
MVP-ER, HDX, ER, MVP-EF, FS65

General Information

Thomas Built Buses emphasizes proper care and maintenance of all electrical systems. Inspect and maintain printed circuit boards and other electrical components located in the front left exterior electrical side panel on a **bi-annual frequency**.

Failure to follow the guidelines may increase the potential of Electrical Power Distribution Center failure. Printed circuit boards and other electrical components exposed to water should be thoroughly inspected for corrosion and water intrusion. If boards or components show signs of continued water exposure or corrosion, the leak source must be stopped and the boards and other affected components replaced immediately.

⚠ WARNING

Do not power wash or steam clean the door of Electrical Power Distribution Center. Power washing/ steam cleaning near the Electrical Power Distribution Center may permanently damage components which could result in fire, personal injury, or property damage. The driver's window must remain closed at any time there is water exposure. Do not place any liquid container above, on, or inside switch cabinet.

Figure 1: Overview example of exterior electrical cabinet door and driver's window

General Practices

1. Do not expose PC boards or other electrical components to water or moisture. Take the following actions to prevent water exposure:

   a) Check the exterior panel door and gasket for proper closure and sealing. The gasket should be evenly installed around the door perimeter and the door should align with the panel opening. Check for broken door gasket. The door should close and latch fully. Adjust latch and pull to ensure a tight closure. Do not loosen latch to enable ease of access.

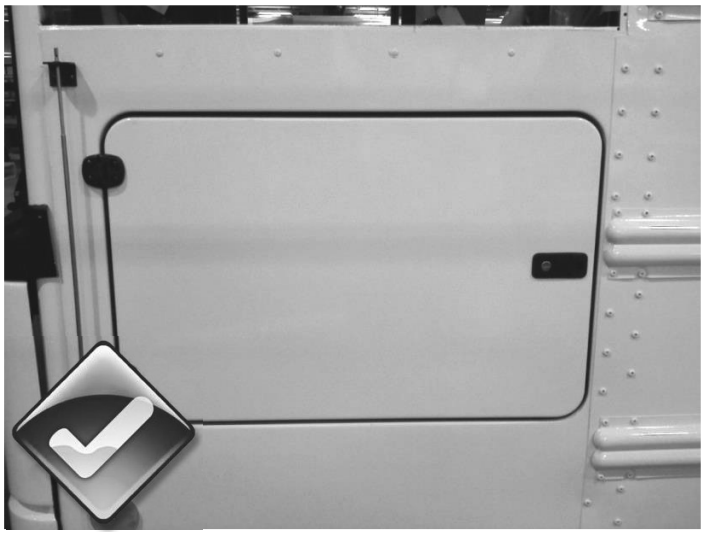


Figure 2: Acceptable - Door is parallel with panel opening. Latch draws gasket tight against body panel.

Figure 3: Unacceptable - Door is bent and does not close fully.

b) Ensure **Product Service Bulletin B Index 5 #19, *Protective Cover for PC Boards***, has been completed on your vehicle. Note: OEM supplied covers may be white or black

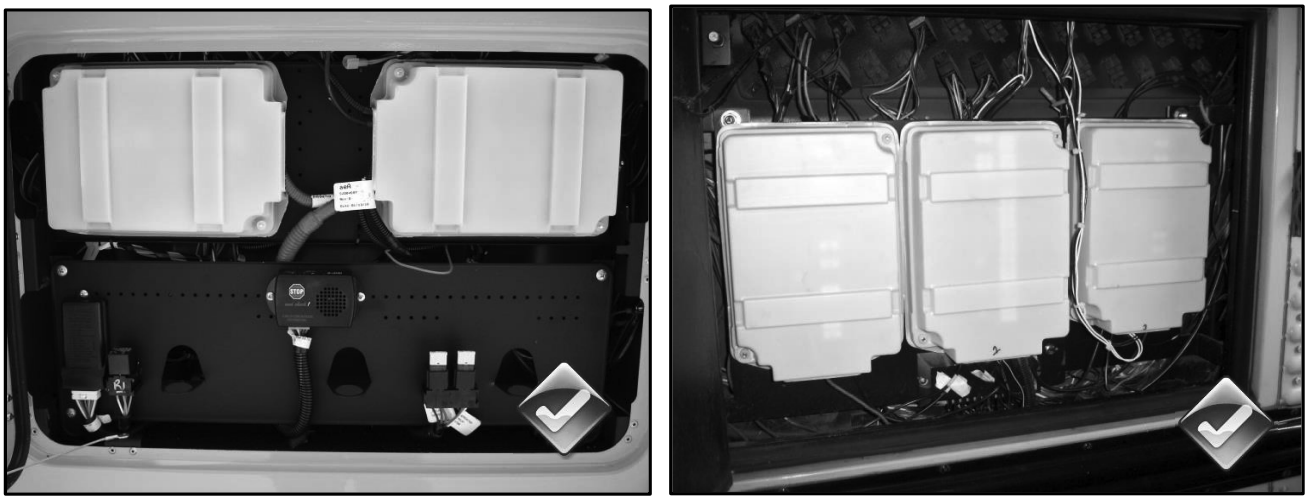


Figure 4: Acceptable - Proper installation of covers

c) Ensure PC board covers do not have cracks or other damage.

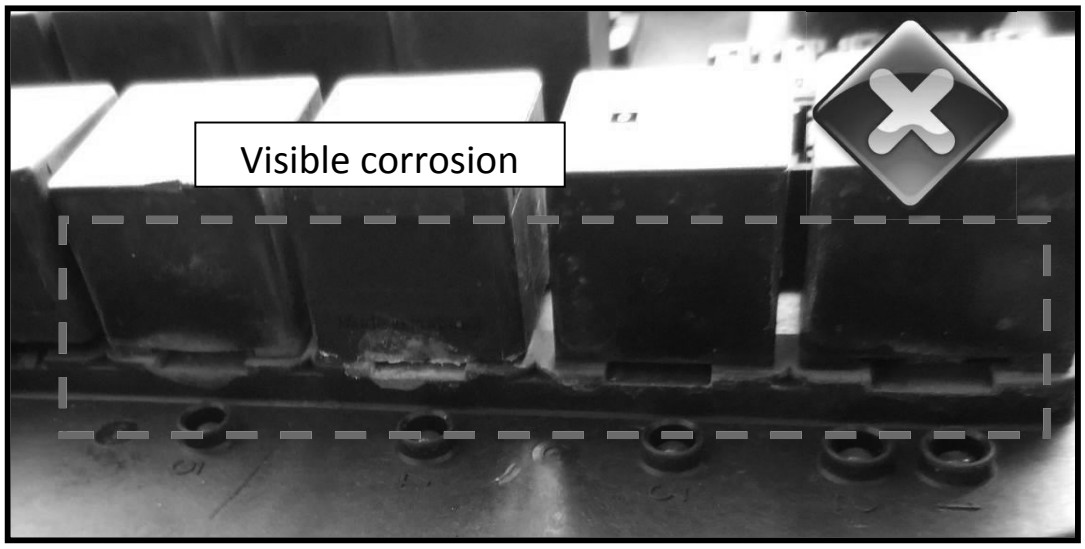
Figure 5: Unacceptable - Cracked PC board cover may result in water intrusion

d) Inspect the electrical door seal, PC boards and other electrical components to ensure they are dry and in full working condition.

e) Inspect driver's window. Make sure that felt seal is sealing properly. Clean drain troughs, to ensure adequate drainage. Reapply new caulk if cracked or degraded.

Figure 6 and 7: Unacceptable - Cracked and dry old caulk and drain holes needing repairing

f) Inspect PC boards and internal components at the inspection interval for signs of water exposure. Water draining from the bottom of the electrical panel door after a rain or bus wash may indicate water intrusion. Water intrusion into the electrical cabinet can cause corrosion on the electrical devices. All electrical devices showing signs of corrosion must be replaced.



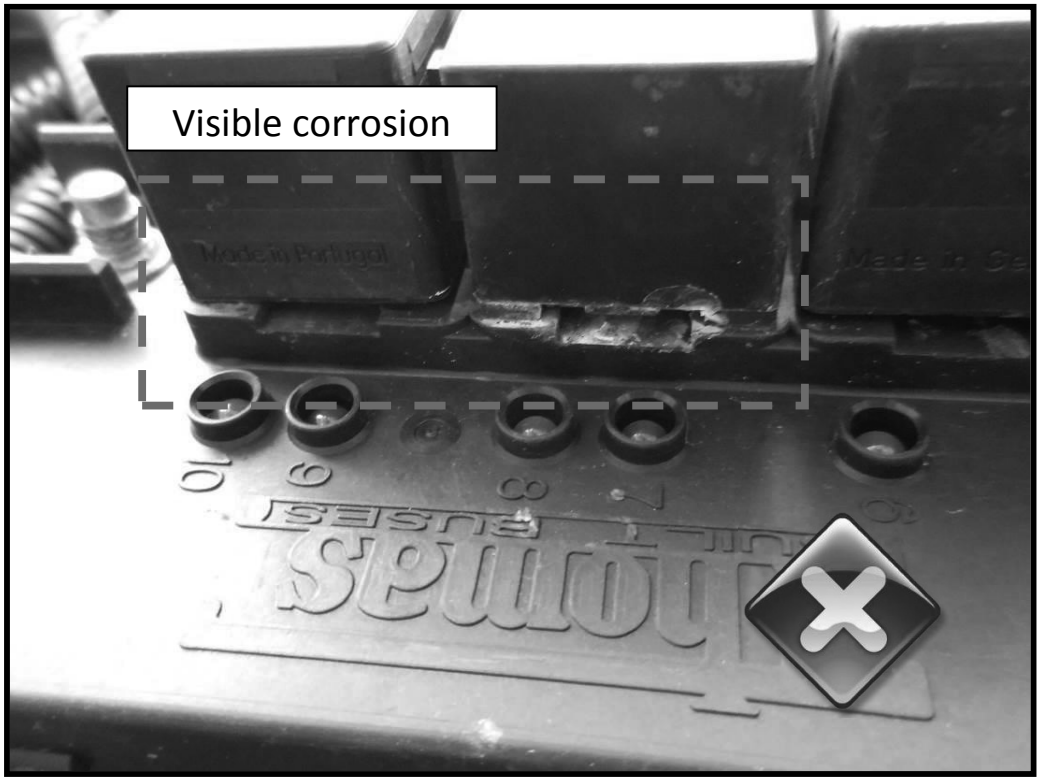


Figure: 8, 9 and 10: Unacceptable - Examples of corrosion that need to be addressed with new components.

g) When a power distribution board is replaced the addition of DTNA recommended dielectric grease must be added to the wire hardness sockets, relay sockets, and fuse slots. Reference DTNA Engineering Standard 48-02439 for approved dielectric greases.

h) The ring terminal electrical cables connected to the power distribution board power studs must be secured with nylon locknuts torqued to 65in-lbs (+/- 2in-lbs).

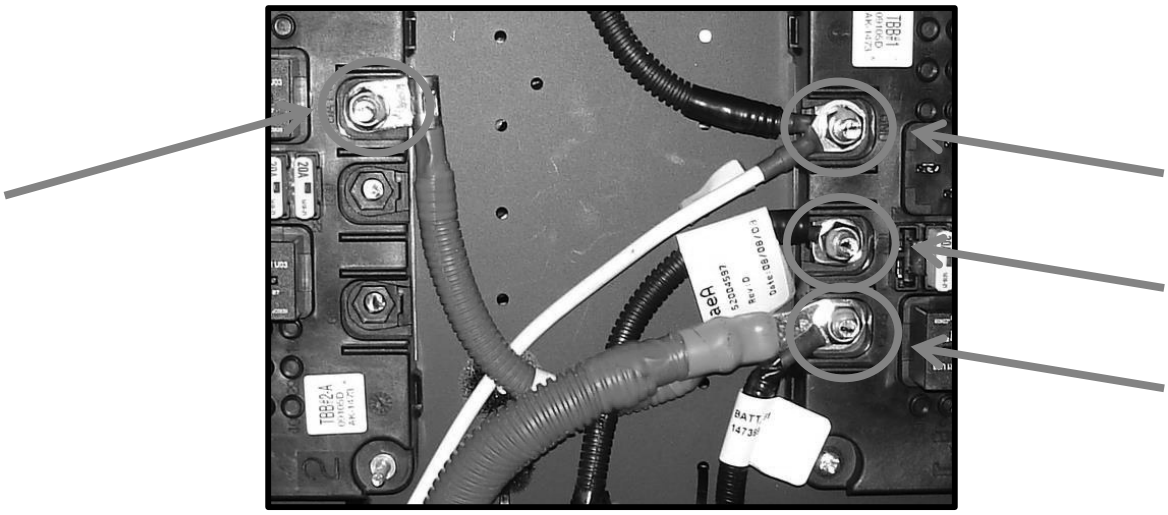


Figure: 11: Acceptable – OEM power studs.

2. The fuses or manual circuit breakers rating, installed into the power distribution boards, must match the rating specified by the supplied label located on the external side electrical cabinet door or service manual.

   Fuse and manual breaker ratings **MUST NOT** exceed the specified design rating.

⚠ WARNING

Do not replace any fuse or manual reset breaker with an auto reset breaker of any type. The use of auto reset breakers can permanently damage components which could result in fire, personal injury, or property damage.

Figure: 12: Acceptable - Example of Fusing labeling on inside of Electrical Panel Door.

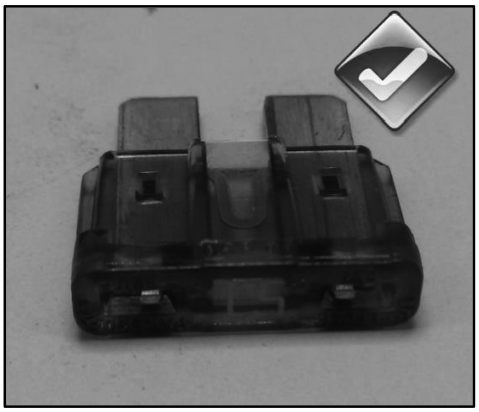


Figure 13: Acceptable - Example of Standard

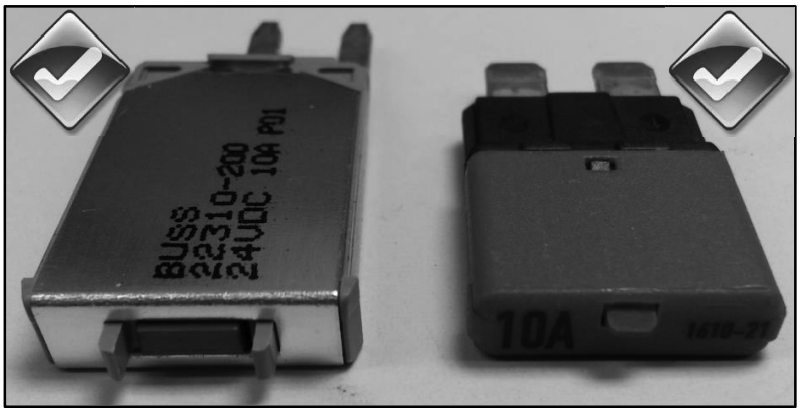


Figure 14: Acceptable - Examples of Manual Reset Breakers

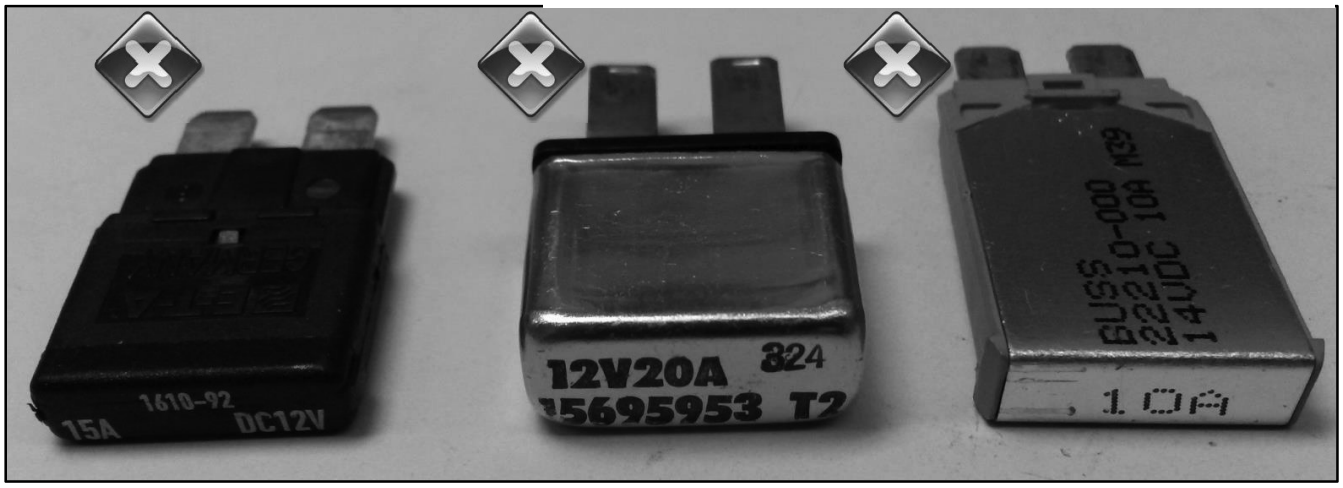


Figure 15: Unacceptable - Examples of Auto Reset Breakers

Vehicle Owner Information

1. Ensure all applicable recalls have been completed for your vehicle. Perform all applicable Vehicle Owner Notifications (VON's), Field Service Campaigns (FSC's), Safety Awareness Bulletins (SAB's), and Product Service Bulletins (PSB's) that affect the vehicle. See www.thomasbusonline.com for details or call your local dealer.

Non-OEM Electrical Add-On Devices

1. Do not obtain power, ignition, and ground from the electrical distribution board lug terminals. Do not modify or source power from the electrical power distribution center for any reason including aftermarket add-ons that include but are not limited to: CB radios, Surveillance systems, Power inverters, and any other Non-OEM electrical devices.

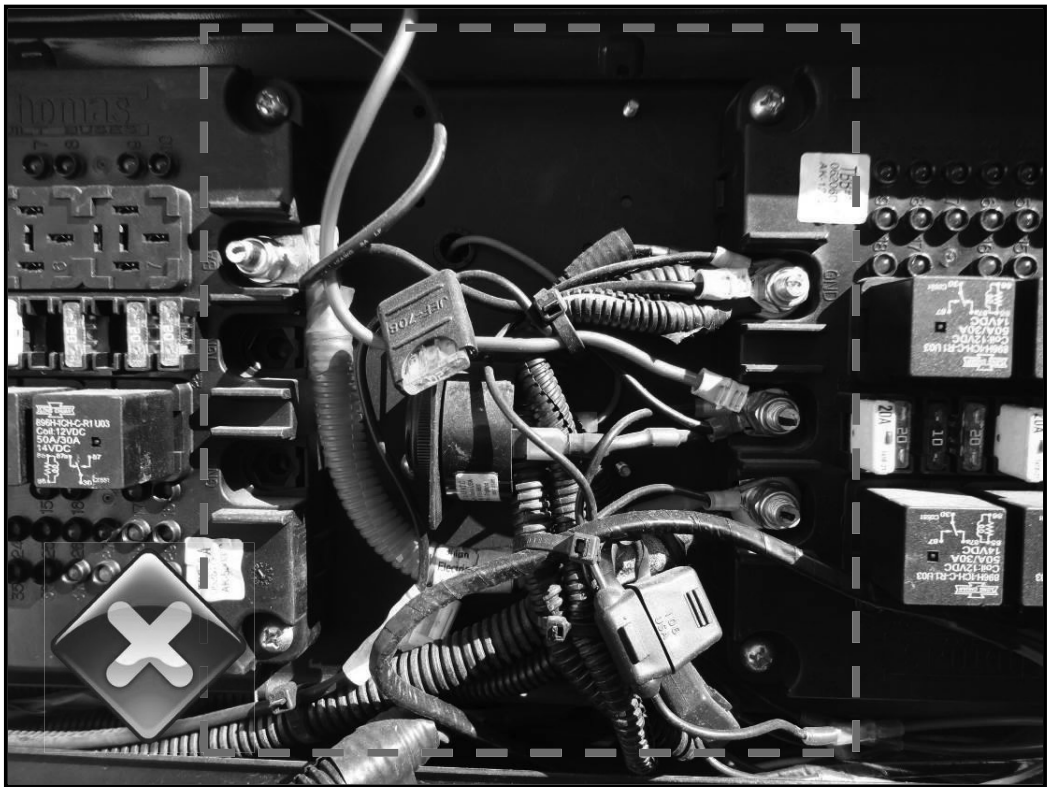


Figure: 16: Unacceptable - An example of add-on connections attached to the power, ignition, and ground studs.

Figure: 17: Unacceptable - Add-on connections attached to the power, ignition, and ground studs.

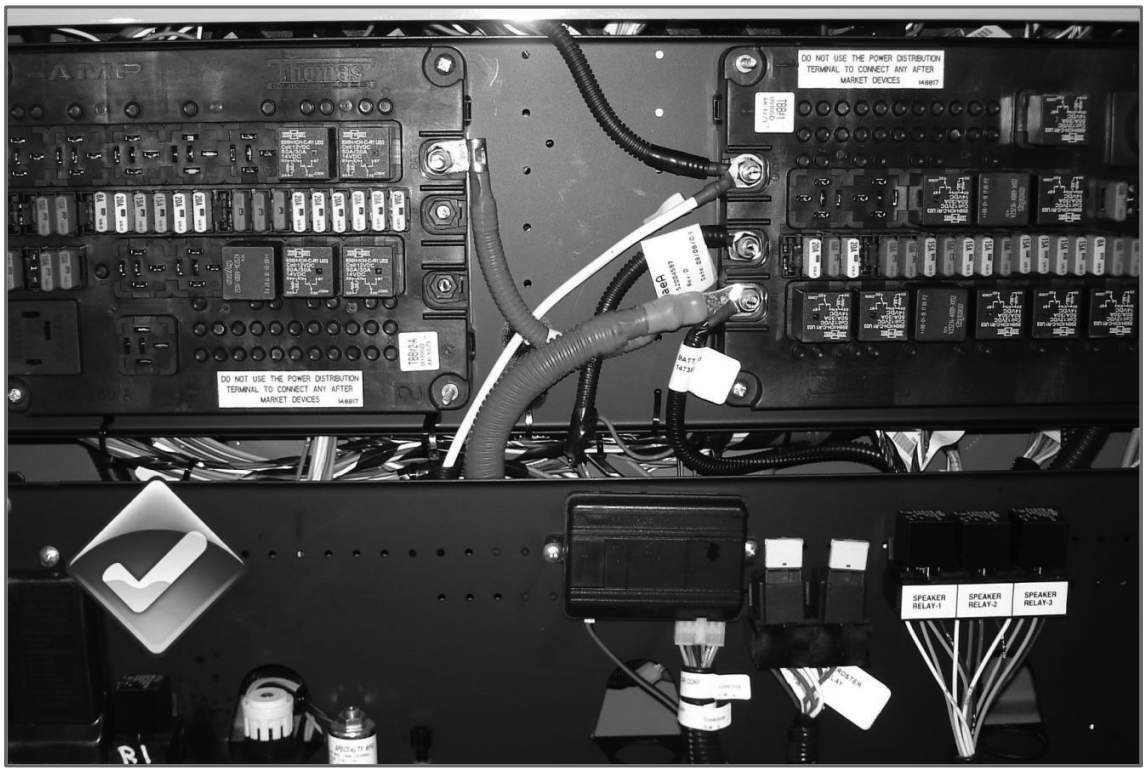


Figure: 18: Acceptable - Example of proper OEM electrical connections without Add-on connections.

2. Do not splice into any vehicle harness wires to obtain electrical signals or power unless instructed by Thomas Built Bus documentation. Methods include but not limited to: scotch locks, stripping off of wire sheath, butt-splicing, etc.

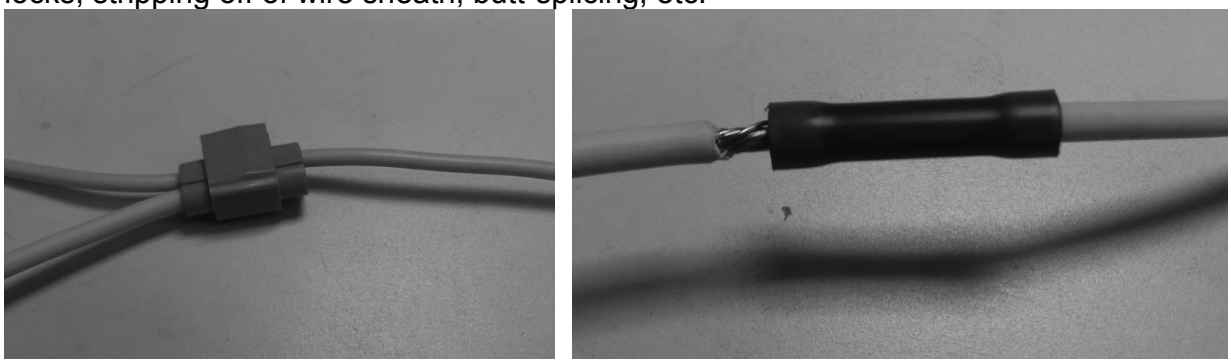


Figure: 19: Example of a scotch lock and butt splice.

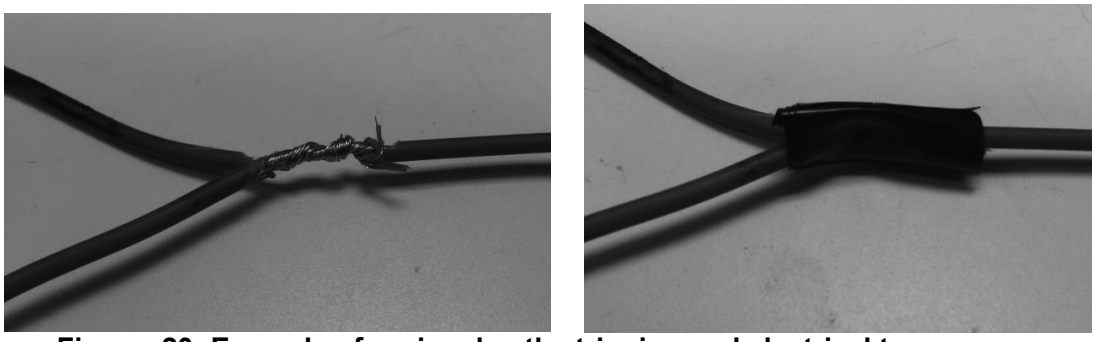


Figure: 20: Example of a wire sheath stripping and electrical tape.

3. Do not plug wires or terminals into the electrical distribution board sockets or slots.

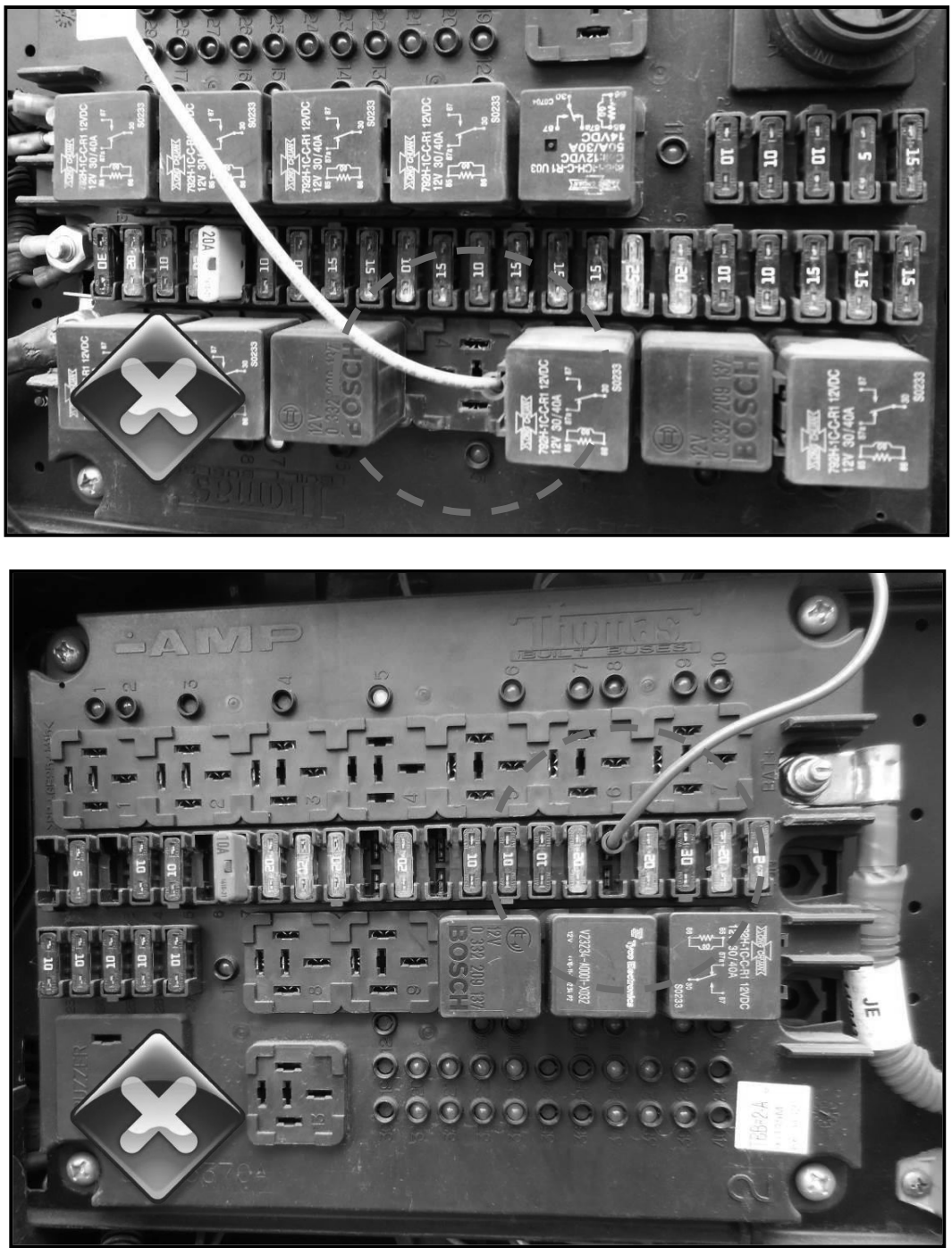


Figure: 21: Unacceptable - Add-on connections improperly sourcing power from fuse and relay sockets.

Thomas Built Buses
Date: May 2017

This document supersedes any previously published Safety Awareness Bulletins, and Service Solutions concerning the Electrical Distribution Center. All previous recall notices are in conjunction with this document. If there are any questions or concerns please contact your local Thomas Built Buses Dealer. A dealer locator is available on our website: www.thomasbus.com.