Subject: Qualcomm TrailerTRACS Wiring


General Information

Daimler Trucks North America LLC, on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF480A to modify the vehicles mentioned above.

On certain vehicles, communication can be intermittent between the TrailerTRACS transmitter and the Qualcomm unit.

More robust wiring will be installed to ensure reliable signal strength between the Qualcomm unit and the TrailerTRACS transmitter.

There are approximately 5,870 vehicles involved.

Additional Repairs

Dealers must complete all outstanding field service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Please contact Warranty Campaigns for consideration of additional charges prior to performing the repair.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR261).

Replacement Parts

Replacement parts are now available and can be obtained by ordering the kit number listed below from your facing Parts Distribution Center.

If our records show your dealership has ordered any vehicle(s) involved in campaign SF480A, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this campaign.

Table 1 - Replacement Parts for SF480

<table>
<thead>
<tr>
<th>Campaign Number</th>
<th>Kit Number</th>
<th>Part Description</th>
<th>Part Number</th>
<th>Qty. per Kit</th>
<th>Suggested Wholesale*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF480A</td>
<td>25-SF480-000</td>
<td>PLUG-2CAV MP630P2S</td>
<td>23-13142-229</td>
<td>1 ea</td>
<td>$15.93 US</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONN COV-BK, FUSE</td>
<td>PAC 12033731 B</td>
<td>1 ea</td>
<td>$16.24 CAN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FUSE - ATC 5AMP</td>
<td>BUS ATC5</td>
<td>1 ea</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TERM-FEM MP630P2S</td>
<td>PAC 12020156 L</td>
<td>4 ea</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TERM-FEM GT280S</td>
<td>PAC 15304719 L</td>
<td>2 ea</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>18 GAUGE CABLE,CXL</td>
<td>48-02493-182</td>
<td>20 feet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TERM WIRE CRIMP SOLDER</td>
<td>PHM 1 1861</td>
<td>1 ea</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GT TERMINAL SEAL-CABLE</td>
<td>23-12497-281</td>
<td>1 ea</td>
<td></td>
</tr>
</tbody>
</table>

* Please charge all U.S. and Canadian Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls. This pricing does not apply to Export Distributors.
Removed Parts

U. S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 2 - Labor Allowance

<table>
<thead>
<tr>
<th>Campaign Number</th>
<th>Procedure</th>
<th>Time Allowed (hours)</th>
<th>SRT Code</th>
<th>Damage Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF480A</td>
<td>Inspect and Rewire Qualcomm</td>
<td>0.8</td>
<td>996-0896A</td>
<td>000-Modify</td>
</tr>
<tr>
<td></td>
<td>TrailerTRACS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF480A</td>
<td>Inspect Qualcomm TrailerTRACS</td>
<td>0.3</td>
<td>996-0896B</td>
<td>000-Inspect</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the gray completion sticker provided in the field service kit (Form WAR261). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a field service kit is not required or there is no completion sticker in the kit, write the campaign number on a blank sticker and attach it to the base completion label.

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim type is Field Service.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (SF480A).
- In the Primary Failed Part Number field, enter 25-SF480-000.
- In the Parts field, enter the appropriate kit number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-0010A for 0.3 hours.
- For OWL, the VMRS Component Code is 051-008-008 and the Cause Code is A1 - Campaign.

This Field Service Campaign will terminate on May 31, 2014. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on AccessFreightliner.com.

IMPORTANT: ServicePro or OWL must be viewed prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed. Also, check for a completion sticker before beginning work.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign. U.S. and Canadian Dealers: All excess inventory to be returned to the PDC following the conclusion of the campaign must be returned in resaleable condition to the Memphis PDC within 90 days from the termination date. Please submit a PAR to request return to the Memphis PDC. (Canadian dealers should return the kits to their facing PDC.) Export Distributors: Excess inventory is not returnable.

U.S. and Canadian dealers, contact the Warranty Campaigns Department from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / Support / My Tickets and Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information. Export distributors submit a Web inquiry or contact your International Service Manager.
Daimler Trucks North America LLC, on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF480 to modify specific Freightliner Cascadia vehicles manufactured January 1, 2010, through January 14, 2013.

On certain vehicles, communication can be intermittent between the TrailerTRACS transmitter and the Qualcomm unit.

More robust wiring will be installed to ensure reliable signal strength between the Qualcomm unit and the TrailerTRACS transmitter.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at www.Daimler-TrucksNorthAmerica.com. The campaign will take approximately one hour and will be performed at no charge to you.

This Field Service Campaign will terminate on May 31, 2014. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer’s expense.

As stated in the terms of your express limited warranty, Daimler Trucks North America LLC will not pay for any damage caused by failure to properly maintain your vehicle. Daimler Trucks North America LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

IMPORTANT: When the campaign has been completed on your vehicle, please ensure that a completion sticker has been affixed to your vehicle referencing SF480.

Contact the Warranty Campaigns Department at (800) 547-0712, from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information.
Work Instructions

Subject: Qualcomm TrailerTRACS Wiring


Work Instructions

1. Check the base label (Form WAR259) for a completion sticker (Form WAR261) for campaign SF480A indicating this work has been done. The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, proceed with the next step.

2. Shut down the engine and apply the parking brakes. Chock the tires.

3. Access the driver-side wiring harness.

NOTE: There are three possible configurations.

- On vehicles equipped with a driver-side luggage compartment, the wiring harness cover is located on the inside front edge of the compartment. See Fig. 1. Open the compartment and remove all the stored items. Remove the fasteners from the harness cover, then remove the cover.

- On vehicles without a driver-side luggage compartment, the harness is under the side panel located beneath the lower bunk. Raise the bunk and remove the support panel. Remove the bolt that secures the side panel to the cab floor, then remove the side panel. See Fig. 2.

- On daycabs, the harness is located behind the back wall upholstery panel. Remove this panel.
4. Inspect circuit 45 to make sure that the wiring modification was not completed prior to this campaign. If the procedure was already performed, circuit 45 will be spliced with an 18-gauge wire and routed as shown in Fig. 5. If the procedure has already been done, clean a spot on the base label (Form WAR259). Attach a completion sticker (Form WAR261) for campaign SF480 to the base label. Otherwise, proceed with the next step.

5. Remove the tread plate, kick panel, and lower dash panel from the passenger side of the vehicle. See Fig. 3.

6. Assemble the harness from the parts provided in the kit. See Fig. 4
   6.1 Measure and cut enough 18-gauge wire to extend from the driver-side wall under the bunk to the passenger-side wall, and under the passenger-side kick panel to the Qualcomm ECU connector under the dash.
   6.2 Feed the wire through the fuse holder. Strip the wire, then crimp on the fuse holder terminal end.
   6.3 Cut a 4 to 6 inch (10 to 15 cm) strand of wire.
   6.4 Feed the short strand of wire through the fuse holder. Strip the wire on both ends, then crimp on the fuse holder terminal end.

7. Inside the cab, cut and strip the circuit 45 blue wire.

8. Splice the new wire into circuit 45. See Fig. 5.
   8.1 Slide a butt connector onto the the end of circuit 45 that leads to the SAM Chassis.
   8.2 Slide the new wire and the other end of circuit 45 into the opposite end of the butt connector.
   8.3 Crimp each end of the butt using a crimp tool to secure the wires. See Fig. 6.
   8.4 Pull test the wires by hand to ensure the crimp is mechanically solid.
   8.5 Heat the splice using a heat gun rated at 1,000°F (538°C) until the sleeve has completely shrunk against the wire and the solder inside the butt connector flows.
1. Fuse Holder Housing (23-13302-800)
2. Fuse, 5-Amp
3. Fuse Terminal (23-13213-460)
4. Fuse Holder (23-13142-229)
5. Butt Connector with Solder (phm 1 1861)
6. 18-Gauge GXL Wire
7. Terminal Seal (23-12497-281)
8. Terminal End for Wire 376C4 (23-13212-120)

Fig. 4, Wiring Modification Parts

9. Route the wire to the Qualcomm ECU.
   9.1 Route the wire underneath the bunk along the bunk support wall and underneath the floor mat.
   
   NOTE: On Sleepercabs with a driver side luggage compartment, the wire needs to be routed along the cab wall, underneath the harness cover.
   
   9.2 Route the wire behind the passenger side B-pillar panel and under the harness cover using fish tape or a wire guide. See Fig. 7.
   
   9.3 Strip the wire end and crimp on terminal 23-13212-120 with seal 23-12497-281.
A. Circuit 45 inserted into the butt connector with the new 18-gauge wire.

1. Circuit 45
2. Wire to Circuit 45 from the Fuse Holder
3. Wire to Qualcomm ECU
4. Fuse Holder

Fig. 5, Wire Re-Routed to Qualcomm ECU

10. Disconnect the 14- or 16-pin Qualcomm ECU connector. It is located on the passenger-side of the vehicle, behind the kick panel. See Fig. 8.

11. Remove wire 376C4 (orange) from the Qualcomm connector. Refer to module 330 for terminal details.

12. Insert the new wire into the Qualcomm connector in the same cavity where wire 376C4 was connected. See Fig. 9.

13. Tape down the new wire along the inner bunk support, along the cab wall and the passenger-side door frame. See Fig. 10.

14. Install the kick panel, tread plate, and lower dash panel on the passenger-side of the vehicle.

15. Install the harness cover on the driver side of the vehicle.

16. On daycabs, install the back wall upholstery panel.

17. Clean a spot on the base label (Form WAR259). Attach a completion sticker (Form WAR260) for campaign SF480 to the base label.
Fig. 7, Passenger-Side Wire Routing (tread plate removed)
Fig. 8, Qualcomm Connector

1. Qualcomm Connector
2. Cab Wall

Fig. 9, Qualcomm Connector Wire Location

1. New 18-Gauge Wire

Fig. 10, Wire Routing Under Bunk (auxiliary heater installation shown)

1. Bunk
2. Electrical Tape
3. 18-Gauge Wire
4. Floor Insulation
5. Floor Mat
6. Auxiliary Heater