Subject: FCCC MT45G/55G Fuel Pump and Starter Relays

Models Affected: Specific Freightliner Custom Chassis MT45G/55G chassis manufactured February 15, 2010, through March 31, 2014, with certain starter or fuel pump relays.

General Information

Daimler Trucks North America LLC, on behalf of its wholly owned subsidiary, Freightliner Custom Chassis Corporation, is initiating Field Service Campaign SF502A to modify the vehicles mentioned above.

Certain fuel pump and starter relays are experiencing less than desired life.

To resolve the problem, larger, more robust relays will be installed.

There are approximately 11,399 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 SF502A, 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 SF502

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit
SF502A	25-SF502-000	PLUG-4CAV,HDSCS,AI 2-1418390-1	23-13149-404	1 ea
		SEAL-CAV PLUG,1.5S,2.5S,JPTAS	AI 828922 1	6 ea
		CLAMP-CABLE TIE,1-3/4X8	23-09796-309	4 ea
		NUT-HEX,FLG,1/4-20,LOCK,ZN/AL	23-13861-104	1 ea
		HARN-RLY JMPR	A06-92991-000	1 ea
		RELAY	66-01377-000	1 ea

Table 1

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

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
SF502A	Inspect Relays	0.1	996-0937A	06-Inspect
	Inspect Relays, Replace One Relay	0.4	996-0937B	12-Repair Recall/Campaign
	Inspect Relays, Replace Two Relays	0.6	996-0937C	12-Repair Recall/Campaign

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 Campaign**.
- In the Campaign field, enter the campaign number and appropriate group **(SF502A).**
- In the Primary Failed Part field, enter **25-SF502-000**.
- In the Parts section, enter the appropriate kit number(s) as shown in the Replacement Parts Table.
- In the Labor section, enter the appropriate SRT from the Labor Allowance Table. Administrative time will be included automatically as SRT 939-6010A for 0.3 hours.
- The VMRS Component Code is **037-001-003** and the Cause Code is **A1 - Campaign**.

This Field Service Campaign will **terminate on March 31, 2016.** Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on AccessFreightliner.com.

IMPORTANT: 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.

For questions, 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.

Field Service Campaign

Daimler Trucks North America LLC

March 2015
SF502A

Copy of Notice to Owners

Subject: FCCC MT45G/55G Fuel Pump and Starter Relays

Daimler Trucks North America LLC, on behalf of its wholly owned subsidiary, Freightliner Custom Chassis Corporation, is initiating Field Service Campaign SF502A to modify specific Freightliner Custom Chassis MT45G/55G chassis manufactured February 15, 2010, through March 31, 2014, with certain starter or fuel pump relays.

Certain fuel pump and starter relays are experiencing less than desired life.

To resolve the problem, larger, more robust relays will be installed.

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 / Contact Us / Find a Dealer. The campaign will take approximately one hour and will be performed at no charge to you.

This Field Service Campaign will **terminate on March 31, 2016**. 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.

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.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: FCCC MT45G/55G Fuel Pump and Starter Relays

Models Affected: Specific Freightliner Custom Chassis MT45G/55G chassis manufactured February 15, 2010, through March 31, 2014, with certain starter or fuel pump relays.

Starter and Fuel Pump Relay Inspection

1. Inspect the base label (Form WAR259) for a campaign completion sticker for SF502 (Form WAR261), indicating that the work has been completed. If no sticker is present, check for new relay(s). If there is a completion sticker or new relay(s), no work is needed. If no sticker or new relay(s) is present, proceed with the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Locate the power distribution module (PDM) shown in **Fig. 1** and remove it from the mounting bracket. Remove the PDM cover. See **Fig. 2**.
4. Inspect to see if the starter and fuel pump relays have been replaced.
    - if yes, place the PDM cover on the PDM, install the PDM to the mounting bracket, then go to the last step in these work instructions.
    - If the starter relay needs replacing, proceed to Starter Relay Replacement on page 5.
    - If the fuel pump relay needs replacing, proceed to Fuel Pump Relay Replacement on page 8.

08/28/2014 f470645

1. Power Distribution Module

Fig. 1, Power Distribution Module Location

08/28/2014 f470646

A. Fuel Pump Relay B. Starter Relay

Fig. 2, Removing the Relay

Starter Relay Replacement

IMPORTANT: The recommended pin removal tool is manufactured by Tyco and shown in **Fig. 3**. Alternative generic tools are shown in **Fig. 4** and **Fig. 5**.

If an alternative extraction tool is used, position one tool on each side of the terminal to disengage the terminal lock, then gently pull on the circuit to remove it from the cavity. See **Fig. 6**. If excessive force is required, the locks are not released. Reposition the tools and try again.

Fig. 3, Tyco Pin Removal Tool

Fig. 4, Delphi Extraction Tool

Fig. 5, Generic Extraction Tool

1. Using the pin removal tool, carefully remove the four wires from the PDM, as shown in **Fig. 7**. Install the wires in the new connector, shown in **Fig. 8**, in the following order.
   - 1.1 Remove circuit GND from cavity D10 and place it in new connector pin 1.
   - 1.2 Remove circuit 15G from cavity E9 and place it in new connector cavity 2.
   - 1.3 Remove circuit 15B from cavity D9 and place it in new connector cavity 3.
   - 1.4 Remove circuit 15C from cavity E10 and place it in new connector cavity 4.
   - 1.5 Make certain each circuit is properly seated in the new connector.

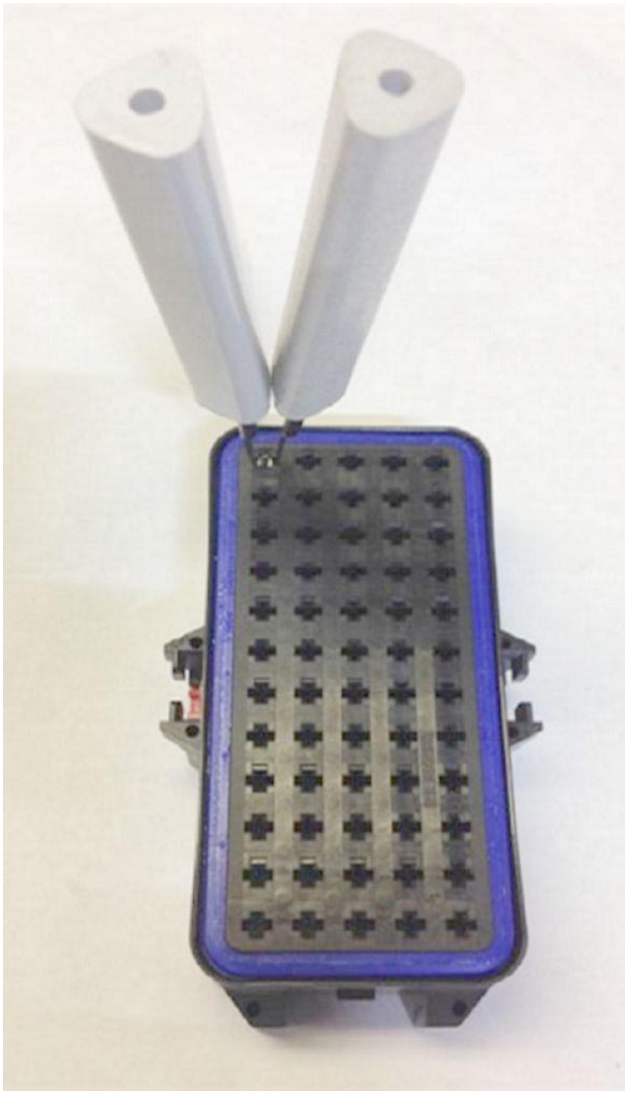

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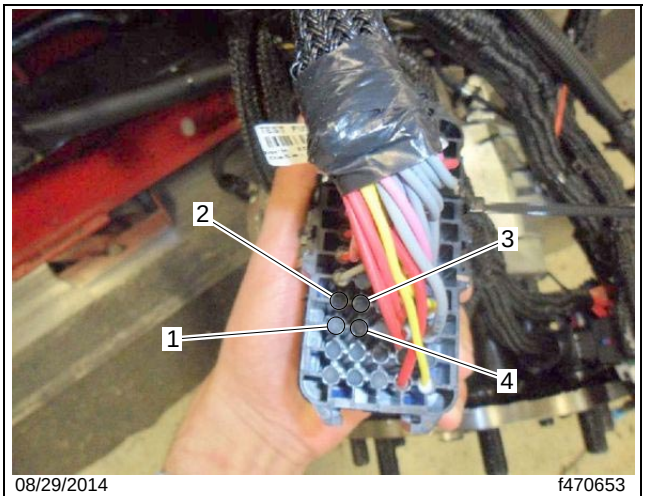
Fig. 6, Positioning the Alternative Extraction Tools



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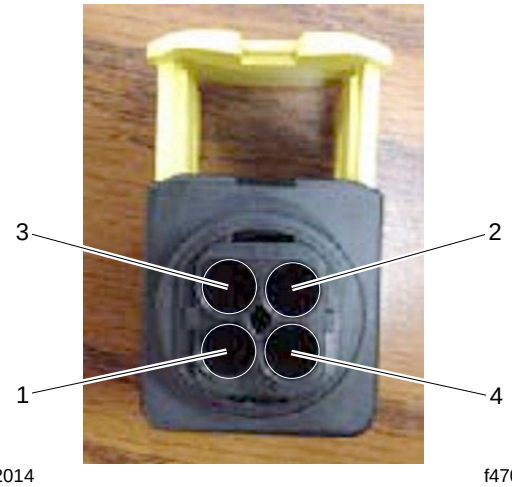
1. Cavity E10 (circuit 15C)
2. Cavity E9 (circuit 15G)
3. Cavity D9 (circuit 15B)
4. Cavity D10 (GND)

Fig. 7, Old Starter Relay Wire Cavity Locations



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1. Cavity 1 (GND)
2. Cavity 2 (circuit 15G)
3. Cavity 3 (15B)
4. Cavity 4 (15C)

Fig. 8, New Connector (wire insertion side shown)

2. Insert plugs in the empty PDM pin cavities. See **Fig. 9**.
3. Connect the new relay to the jumper harness. See **Fig. 10**.

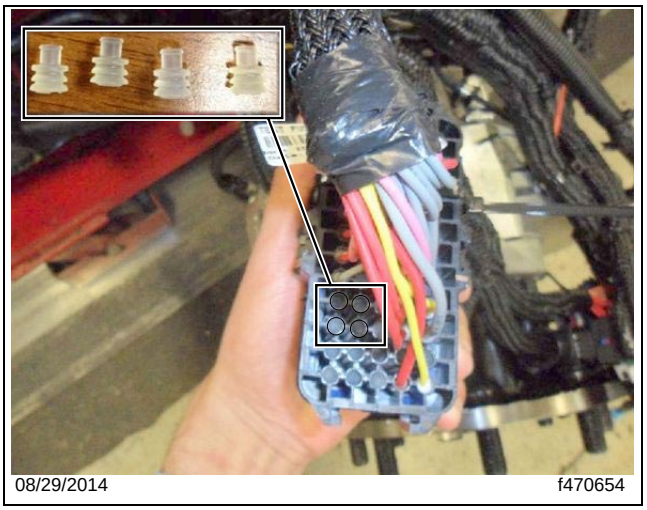
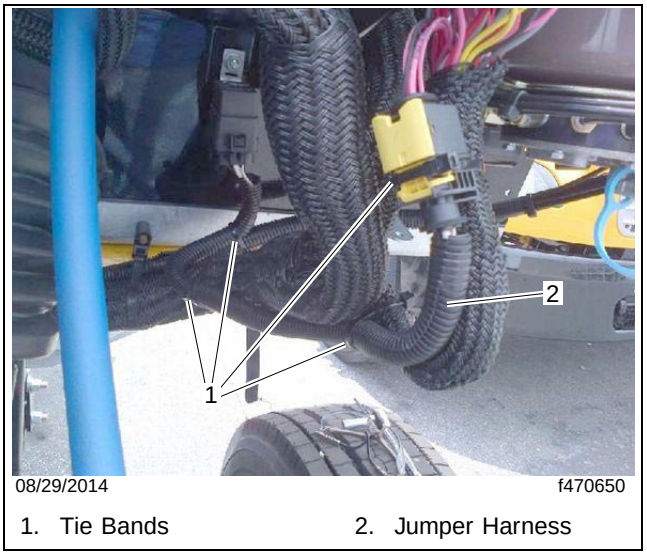


Fig. 9, Inserting Plugs

Fig. 10, Jumper Harness

4. Route the jumper harness along the main bundle and use tie bands to secure it. See **Fig. 11**
5. Using the slot in the connector, attach the connector to the bundle as shown in **Fig. 12**



1. Tie Bands
2. Jumper Harness

Fig. 11, Routing the Jumper Harness

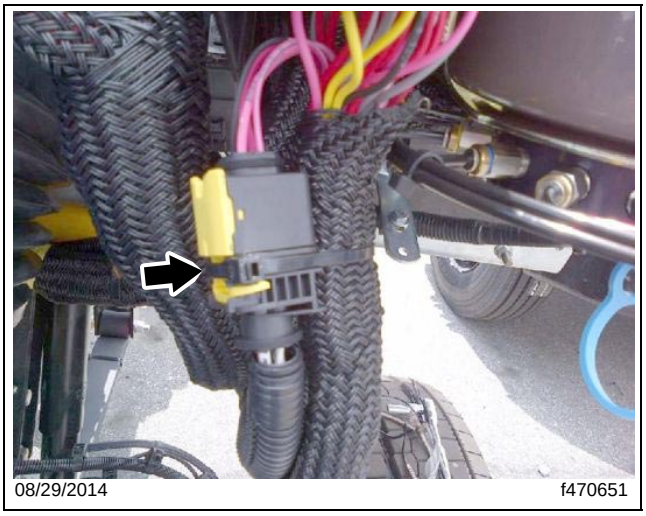
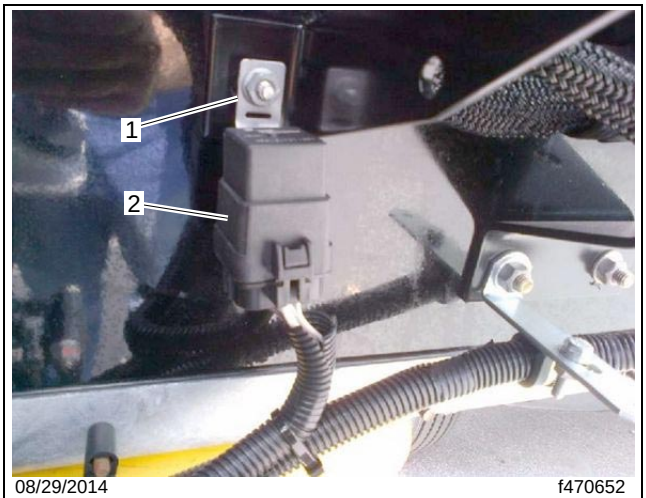


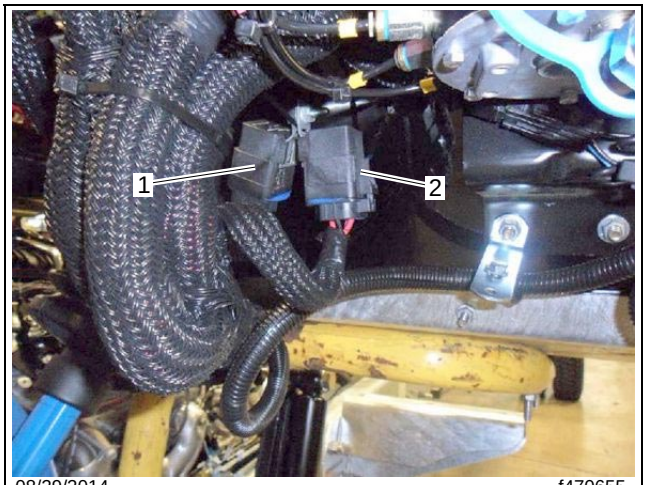
Fig. 12, Attaching the Connector

6. Using the 1/4-inch flange nut, mount the relay on the protruding bolt of the PDM mounting bracket as shown **Fig. 13**. If another relay is already mounted, mount the starter relay as shown in **Fig. 14**.



1. Mounting Bolt 2. Relay

Fig. 13, Mounting the Relay on the PDM Bolt



1. Relay 1 2. Relay 2

Fig. 14, Mounting the Relay, Alternate Method

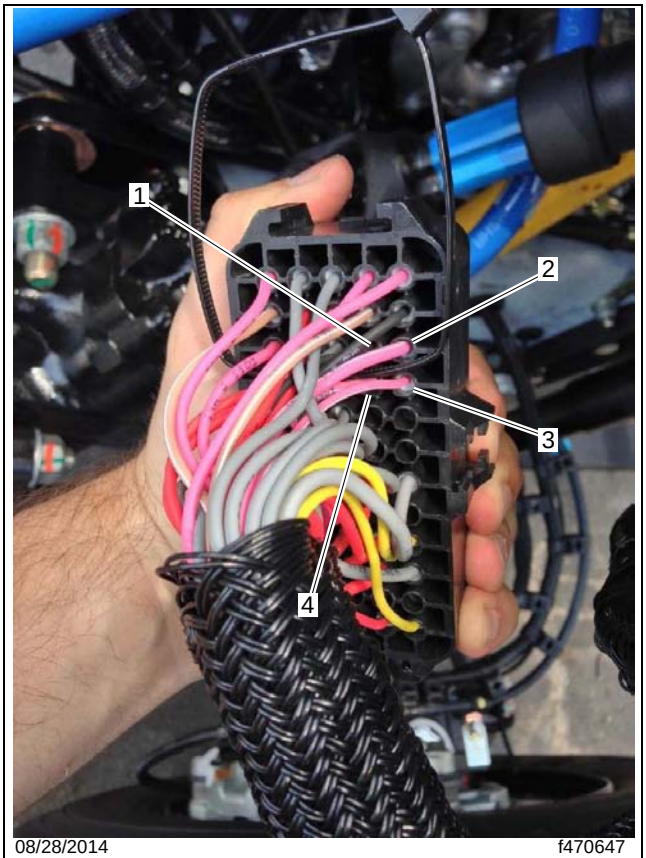
7. Replace the PDM cover on the PDM, then install the PDM to the mounting bracket.
8. If the fuel pump relay needs to be replaced, go to "Fuel Pump Relay Replacement" (below). If not, proceed to the next step.
9. Clean a spot on the base label (Form WAR259) and attach a completion sticker (Form WAR261) to indicate the work has been completed.

Fuel Pump Relay Replacement

IMPORTANT: The recommended pin removal tool is manufactured by Tyco and shown in **Fig. 3**. Alternative generic tools are shown in **Fig. 4** and **Fig. 5**. See page 5.

If an alternative extraction tool is used, position one tool on each side of the terminal to disengage the terminal lock, then gently pull on the circuit to remove it from the cavity. See **Fig. 6**. on page 6. If excessive force is required, the locks are not released. Reposition the tools and try again.

1. Using the pin removal tool, carefully remove the four wires from the PDM, as shown in **Fig. 15**. Install the wires in the new connector, shown in **Fig. 16**, in the following order.
   - 1.1 Remove circuit 246 from cavity A4 and place it in new connector cavity 1.
   - 1.2 Remove circuit GND from cavity B3 and place it in new connector cavity 2.
   - 1.3 Remove circuit 246B from cavity B4 and place it in new connector cavity 4.
   - 1.4 Remove circuit 246A from cavity A3 and place it in new connector cavity 3.
   - 1.5 Make certain each circuit is properly seated in the new connector.



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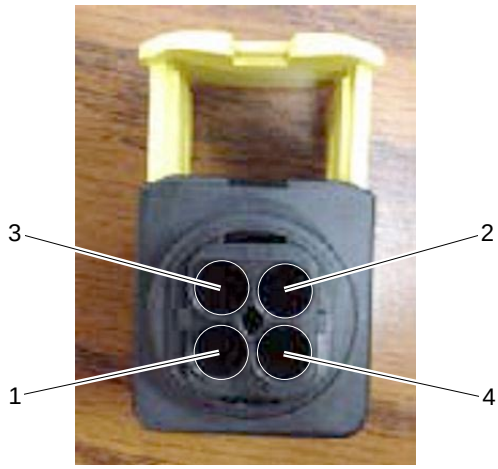
1. Cavity B3 (GND)
2. Cavity A3 (circuit 246A)
3. Cavity A4 (circuit 246)
4. Cavity B4 (circuit 246B)

Fig. 15, Old Fuel Pump Wire Cavity Locations



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1. Cavity 1 (246)
2. Cavity 2 (GND)
3. Cavity 3 (246A)
4. Cavity 4 (246B)

Fig. 16, New Connector (wire insertion side shown)

2. Insert plugs in the empty PDM pin cavities. See **Fig. 9** on page 7 for an example.
3. Connect the new relay to the jumper harness. See **Fig. 10** on page 7.
4. Route the jumper harness along the main bundle and use tie bands to secure it. See **Fig. 11** on page 7.
5. Using the slot in the connector, attach the connector to the bundle as shown in **Fig. 12** on page 7.
6. Using the 1/4-inch flange nut, mount the relay on the protruding bolt of the PDM mounting bracket as shown in **Fig. 13** on page 8. If another relay is already mounted, mount the starter relay as shown in **Fig. 14** on page 8.
7. Replace the PDM cover on the PDM, then install the PDM to the mounting bracket.
8. Clean a spot on the base label (Form WAR259) and attach a completion sticker (Form WAR261) to indicate the work has been completed.