



Warranty Field Campaign

Campaign Number: c2127	Revision: C	Released Date: 09-Sep-2019
B6.7 CM2350 B121B Fuel Heater Safety Campaign		Expiration Date (U.S. and Canada): 15-Jan-2040
		Expiration Date (International): 15-Jan-2040

Attention

- Worldwide distr./ branches and Div./Reg Offices
- U.S. / Canadian Distr./Branches and Div. Offices
- U.S. / Canadian Dealers (Automotive)

This is to revise and replace C2127 -B, dated 23-Aug-2019. This revision is to:

- 1. Update the ESN list, and**
- 2. update Attachment B.**

If additional information is required, please contact your Cummins Warranty Operations Group Leader.

Description

This Safety Campaign is being issued to address a product issue where under certain conditions, internal electrical arcing within the fuel heater, due to metallic debris in the fuel that may accumulate in the heater over time, may create sufficient heat inside the fuel heater to cause plastic in the fuel heater to melt and potentially catch fire.

Cummins has reported this issue to the U.S. National Highway Traffic Safety Administration (NHTSA), which has assigned it Recall Number 19E020.

This Safety Campaign authorizes certified repair locations to change the fuel heater wiring harness polarity by switching wiring terminal locations within the fuel heater connector, to install a new fuel heater, and to replace or install a new fuse in the fuel heater circuit on certain B6.7 CM2350 B121B units.

Action

In order to qualify for repair under this field action, an engine:

1. Will be covered Regardless of coverage status, and
2. **must** show as OPEN on QuickServe® Online for this field action.

Note : The ESN list is attached for reference.

After verifying that the engine meets the above requirements, perform the following actions:

1. Complete all of the repair instructions included within Attachment B.
2. Verify the current status of the fuel heater supply circuit wire locations within the fuel heater connector. If there is a white dot on the fuel heater connector and/or the wiring polarity has already been reversed, no further action needs to be taken. Please refer to Attachment B for further instruction on verification of the correct terminal locations within the connector that indicate a correctly wired fuel heater circuit.
3. Remove the fuel heater or fuel heater plug currently installed in the fuel filter module. Install the new fuel heater included within the fuel heater kit necessary for the appropriate application the engine is installed. Please refer to Attachment B for further instruction on fuel heater or plug removal and fuel heater installation.
4. Confirm the correct wiring harness polarity. Please refer to Attachment B for further instruction on verification of the correct terminal locations within the connector that indicate a correctly wired fuel heater circuit.
5. Install the new fuse included in the fuel heater kit necessary for the appropriate application the engine is installed. Please refer to Attachment B for further instruction on fuse location and installation within the appropriate application.
6. Reconnect the engine fuel heater wiring harness connector to the fuel heater and mark the connector to confirm that the fix has been completed. Place the sticker included within the kit into the fuse box and place the insert included within the kit into the owner's manual. Please refer to Attachment B for further instructions on how to make the proper indication on the connector that the fix has been completed and where to place the appropriate sticker and manual insert.

Material Disposition

Materials removed as a result of this field action **must** be scrapped.

Reimbursements

Parts

Note : Refer to Attachment B for application specific information on the proper fuel heater kit part numbers to order.

The following parts are covered under this field action:

Part Number	Quantity	Description
557928500	1	KIT,FUEL HEATER (OPTIONAL)
557928600	1	KIT,FUEL HEATER (OPTIONAL)
557928700	1	KIT,FUEL HEATER (OPTIONAL)

Note : SRTs to gain access that are required to complete the repair, that are sufficiently explained in the claim narrative, may also be claimed on this action.

Labor Using Applicable Access Code and Time

SRT Code	Description	Time (hrs)
00-400	Steam Clean - Single Component Repair	
00-90X	Administrative time	
19-0PB	Wire Connector - Replace, Each Connector (EPA 2017)	
99-902	FUSE INSTALLATION, FUEL HEATER REMOVE AND INSTALL, AND MANUAL UPDATES - (QTY - 3)	

Travel

Travel is covered under this field action. Towing is covered under this field action.

Other Claimables

Consumables are covered under this field action.

Note : Please consolidate all consumables and claim them as one item in Other Claimables titled "CAMPAIGN SUPPLIES".

Claim Instructions

For Cummins Dealers, claims for this Field Campaign **must** be filed via **RAPIDSERVE™** Web (rsw.cummins.com). For information regarding **RAPIDSERVE™** Web, please reference the "Warranty" tab in QuickServe® Online. If there are additional questions, please contact your local Cummins Distributor.


Claim Codes	
Description	Code
Account Code:	65
Pay Code:	Distributor = X
Pay Code:	Dealer = D
Pay Code:	International = I
Failure Code:	WFEHTB

Attachments



Click here to see c2127_esn-list-a.xls



(/service/english/attachments/c2127_esn-list-a.xls)  Click here to see c2127_fuel_heater_service_instructions_attach-b.pdf

(/service/english/attachments/c2127_fuel_heater_service_instructions_attach-b.pdf)

Engine Family	Fuel System
ISBe4 (6 Cylinder) QSB6.7 ISB ISDe, ISD4.5, ISD6.7 ISBe, ISB4.5, ISB6.7	
Design Application	Market Application
Automotive	All

Last Modified: 09-Sep-2019



Fuel Heater Campaign

Date: 9/4/2019

Root Cause:

- Under certain conditions, internal electrical arcing within the fuel heater, due to metallic debris in the fuel that may accumulate in the heater over time, may create sufficient heat inside the fuel heater to cause plastic in the fuel heater to melt.

Verification/Confirmation

- Verify engine has Cummins supplied priming pump fuel filter head installed.
 - Option FS90301
 - Option FS90453
- Locate Stage 1 fuel filter head on engine. The engine fuel heater and harness connection is located on the top right side of the fuel filter head. The unit may have either a heater or plug installed.
- Ensure the fuel heater connector and fuel heater have no white paint marks. See Figure 1 below.
- Make sure the OEM harness wires are installed with the white wire on the right (terminal 2) and the red wire on the left (terminal 1) using the orientation shown in Figure 1 below.

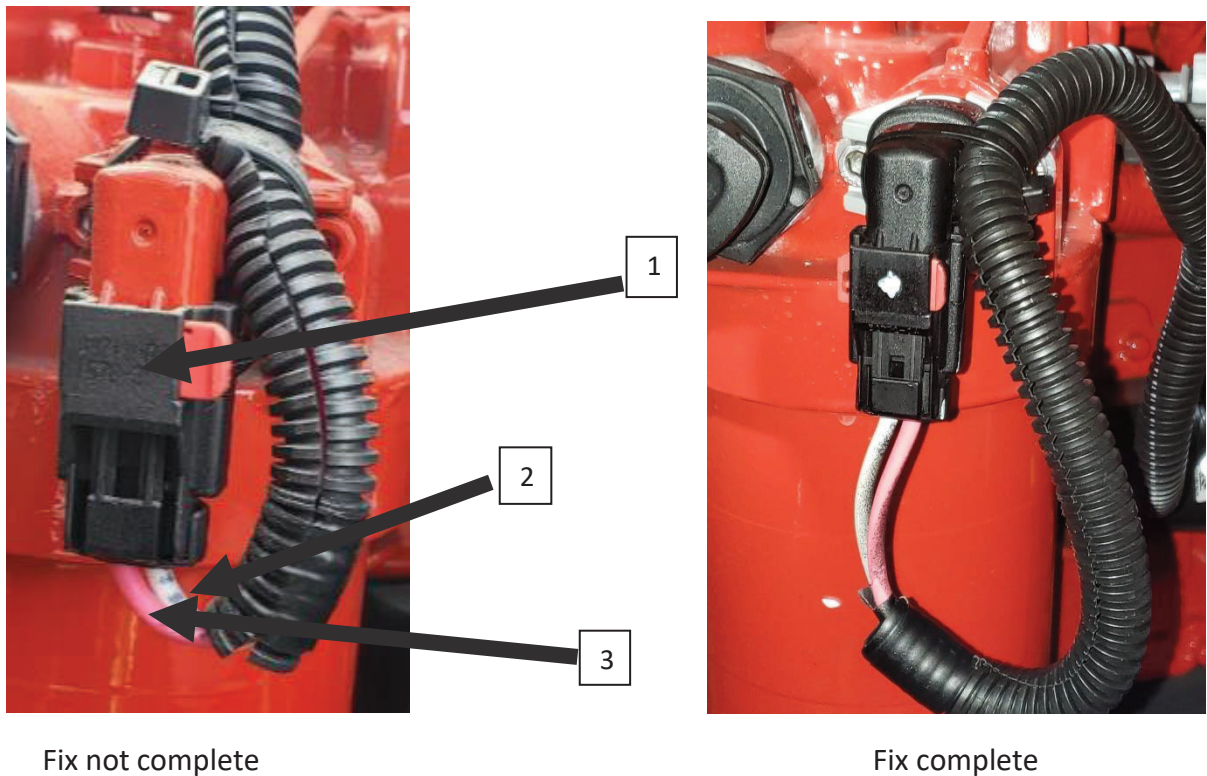


Figure 1

1. No white paint mark on the connector
2. White wire is on the right (terminal 2)
3. Red wire is on the left (terminal 1)

Resolution

Install parts in Kit and swap the fuel heater connector wires if required. See Service Instructions below.

Service Instructions

Use correct Kit by referring to Column H in the ESN List.

Install Fuel Heater provided in Kit

1. Unlock connector by moving red tab to the right and disconnect from engine fuel heater if plug has not already been installed.
2. Remove and discard two allen screws securing engine fuel heater, or plug, to the fuel filter head with a 5mm hex driver. See Figure 2 below.
3. Pull the engine fuel heater, or plug, straight out of the fuel filter head and discard. Capture any fuel that may leak from the fuel filter, or plug. See Figure 3 below.



Figure 2



Figure 3

4. Clean face of engine fuel heater port with a lint free cloth and inspect for any sharp edges and/or contaminants. Clean if needed.
5. Lubricate the O-ring on the new fuel heater supplied in kit with clean diesel fuel and carefully install into the engine fuel heater port, making sure to properly align before installing.
6. Use the two allen screws supplied to secure the fuel heater to the fuel filter head and tighten to 11 N-m [6.6 ft-lb].

Swap the heater wiring polarity if required.

1. Disconnect vehicle battery.
2. Pull plastic guide piece from connector with needle nose pliers. See Figure 4 below.

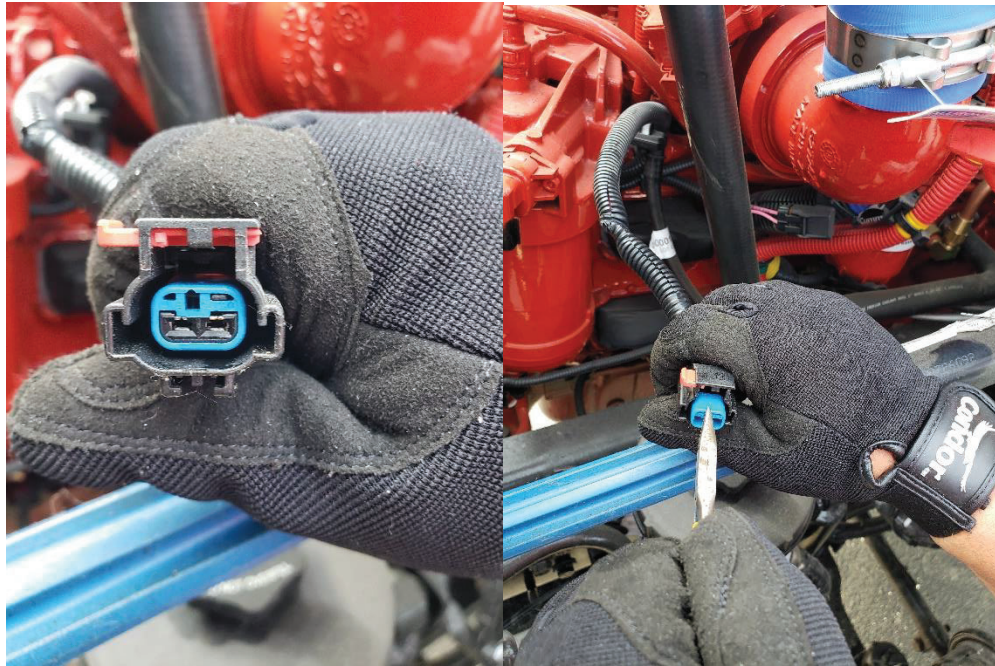


Figure 4

3. Use PN4918921 Terminal Removal Tool to remove wires from connector. See Figure 5 below.

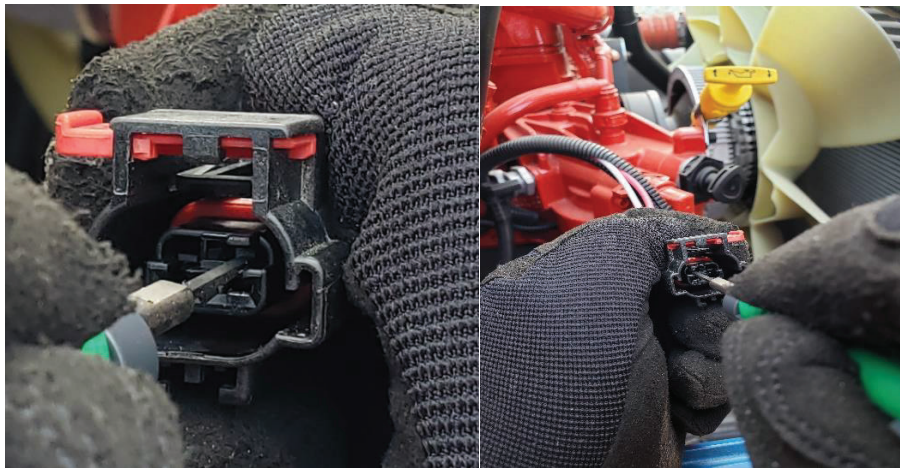


Figure 5

4. Swap the wire positions so that the white wire is in the number 1 terminal and the red wire is in the number 2 terminal. Please use orientation shown in the figures below.



Figure 6: Number 1 Terminal Marking



Figure 7: Number 2 Terminal Marking



Figure 8, Not OK

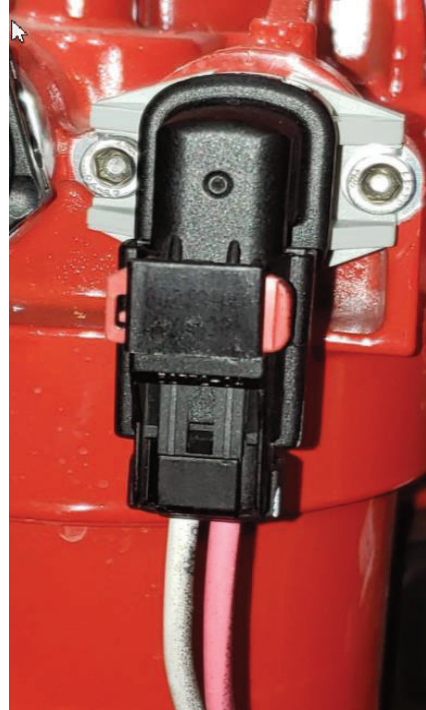


Figure 9, OK

5. Insert the wire back into the back of the connector in the same orientation that it was removed
6. When correctly installed, you will hear the wire click and lock into the connector
7. Lightly tug on the wires to ensure they are secure
8. Ensure connector seal on the back of the connector is in place after wires are re-installed
9. Once both wires are connected back in, re-install plastic guide piece

Install Fuse

Application	Corresponding Kit Part Number	Configuration
Navistar® CE Bus and 1300	Column H in the ESN List	Configuration 1
Navistar® MV, HV and TC Commercial Bus some DuraStar (4300) / WorkStar (7300)	Column H in the ESN List	Configuration 2
Navistar DuraStar (4300) / WorkStar (7300) / HC Commercial Bus	Column H in the ESN List	Configuration 3

Table 1

Configuration 1. Navistar® CE Bus and 1300 Fuse Instructions

1. Disconnect vehicle battery.
2. Locate fuel heater fuse location on dash panel. See Figure 10 below.
3. Remove fuse cap and install 30amp Maxi Fuse provided in Kit Part Number 5579285. If a fuse is already installed in the cavity replace it with the fuse provided in the kit.
4. Reinstall fuse cap.

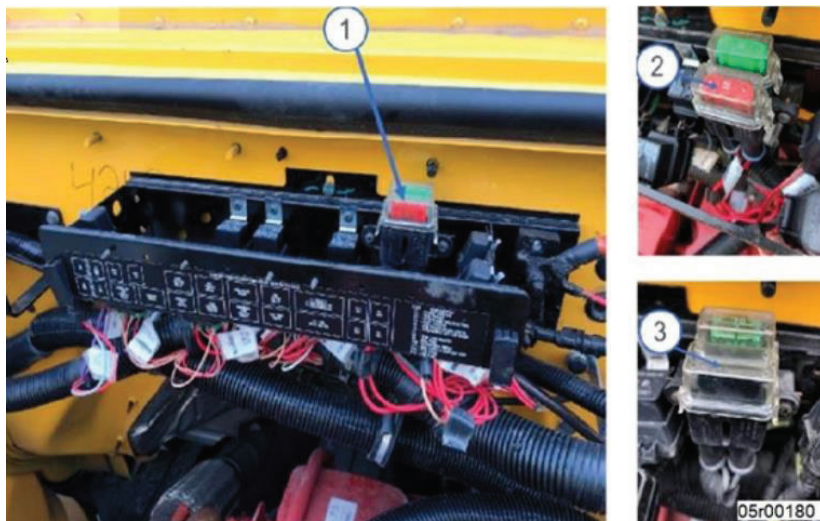


Figure 10

Configuration 2. Navistar® MV / HV / TC Commercial Bus Fuse and some DuraStar (4300) / WorkStar (7300) HC Bus Fuse Instructions

1. Disconnect vehicle battery
2. Remove cover of fuse box, located on passenger side dashboard. See Figure 11 below.
3. If it is a DuraStar/WorkStar/HC Bus, check to see if a 5 amp fuse is present in cavity F4-D. See Figure 14 below.
 - a) If there is a 5 amp fuse in cavity F4-D, leave the fuse and DO NOT replace with the 20 amp fuse provided in the kit.
 - b) If there is not a fuse in cavity F4-D, source Navistar Part Number 3534208C1 and install the 5 amp fuse in cavity F4-D.
 - c) If applicable, discard 20 amp fuse that came with the kit. (For DuraStar/WorkStar/HC Bus only)
4. If the unit is a MV/HV or TC Commercial bus, install 20-amp fuse supplied in Kit Part Number 5579287 at the B8-J cavity 17-21.
5. For all units of configuration 2, based on kit purchased, install 30-amp fuse located at 2C cavity. If a fuse is already installed at the 2C cavity replace it with the fuse provided in the kit. See Figure 12 below.

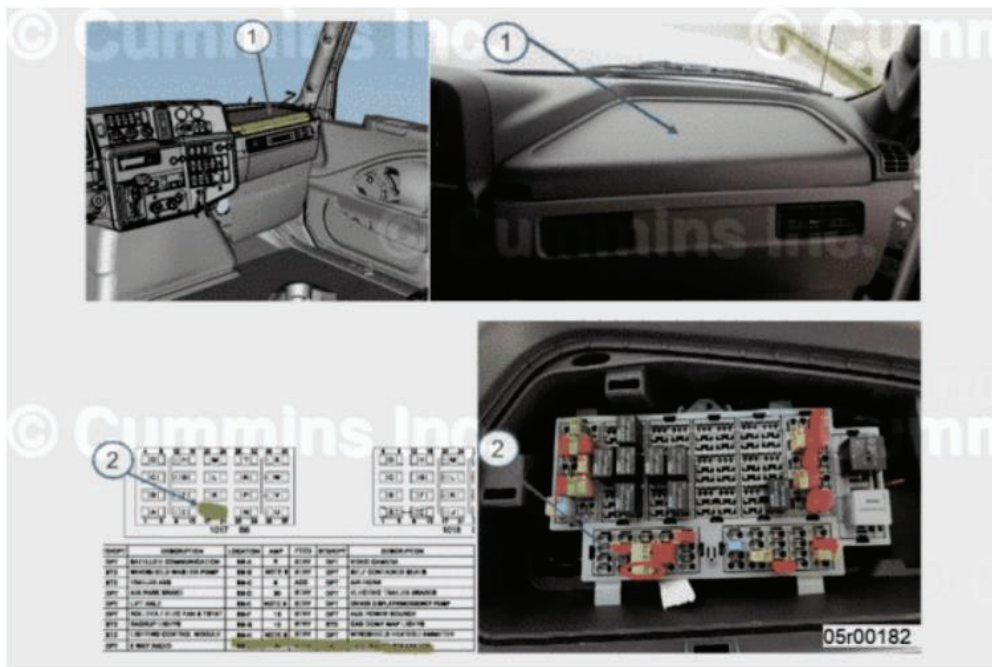


Figure 11, Location of 20A Fuse on Navistar MV/HV/TC

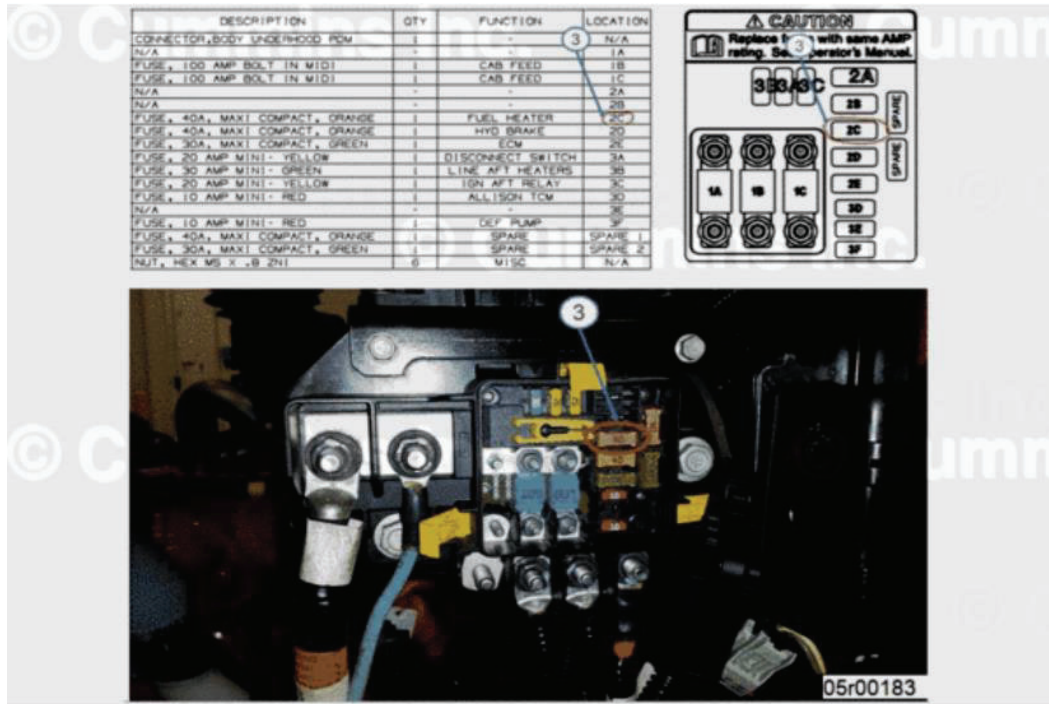


Figure 12, Location of 40A Fuse on Navistar MV/HV/TC and some DuraStar / WorkStar / HC Commercial Bus

Configuration 3. Location of Fuse on some Navistar® DuraStar (4300) / WorkStar (7300) / HC Commercial Bus Fuse Instructions

1. Disconnect vehicle battery.
2. Remove Power Distribution Module (PDM) cover, located under the hood on the driver side.
3. Install 30-amp fuse provided in kit part number 5579286 in cavity 2C. If a fuse is already installed at the 2C cavity replace it with the fuse provided in the kit. See Figure 13 below.



Figure 13, Location of fuse on some Navistar DuraStar (4300) / WorkStar (7300) / HC Commercial Bus

4. Remove cover of fuse box, located on passenger side dashboard,
5. Check to see if fuse in the cavity located at F4-D is present. See Figure 14 below.
 - a. If there is a 5 amp fuse in cavity F4-D, leave the fuse and DO NOT replace with the 20 amp fuse provided in the kit.
 - b. If there is not a fuse in cavity F4-D, source Navistar Part Number 3534208C1 and install the 5 amp fuse in cavity F4-D.
 - c. If applicable, discard 20 amp fuse that came with the kit. (For DuraStar/WorkStar/HC Bus only)

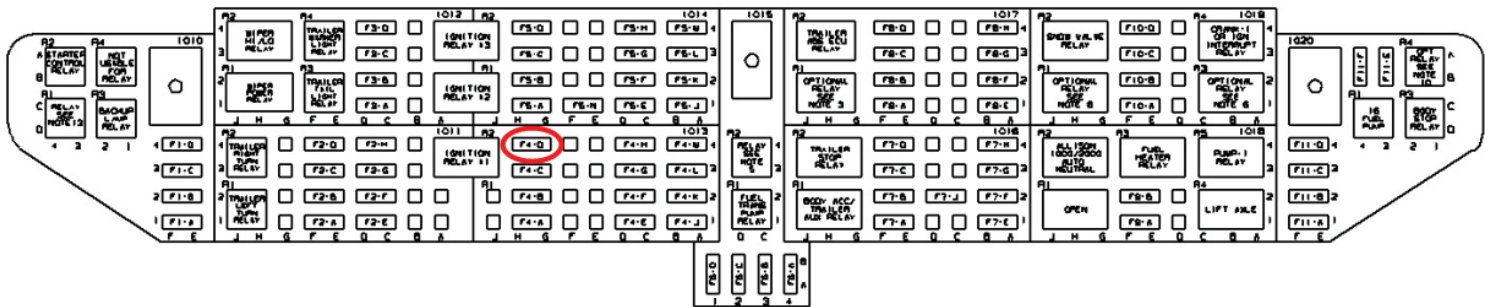


Figure 14, Location of 5 amp in dash fuse on all Navistar DuraStar (4300) / WorkStar (7300) / HC Commercial Bus

Reconnect engine fuel heater and mark that the fix has been completed

1. After the fuse or fuses have been installed, connect the fuel heater OEM harness branch to the engine fuel heater.
2. Zip tie the excess harness to the heater as seen below in figure 15. Make sure there is no tension on the wires going into the connector.



Figure 15

3. Mark that the fix has been completed by placing a white paint mark on the connector of the engine fuel heater. See Figure 16 below.



Figure 16

4. For CE Bus applications please place the fuse sticker provided in the kit in the appropriate spot to update the unit for future service
5. For DuraStar/WorkStar and MV/HV applications please place the provided manual sticker into the manual to update the fuse size for future service.

Service Parts Availability

There are 3 different kits to accommodate the 3-different fuse types Service parts are available. See Table below for part numbers.

Part Description	New Part Number
Kit 1 for Navistar® CE Bus and 1300	5579285
Kit 2 for Navistar® DuraStar (4300) / WorkStar (7300) / HC Commercial Bus	5579286
Kit 3 for Navistar® MV, HV and TC Commercial Bus, and some Navistar® DuraStar (4300) / WorkStar (7300) / HC Commercial Bus	5579287