

A CUMMINS FIELD CAMPAIGN

Please Deliver To: Service Managers and Warranty Decision Makers

FROM: Cummins Global Warranty Administration Communications

Subject: B6.7 Engine Mounted Fuel Heater Safety Campaign

Number: C2507

Date: 24-Nov-2021

Expires: 01-Jan-2045 (U.S./Canada)
01-Jan-2045 (International)

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

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 heating within the fuel heater may create sufficient heat inside the fuel heater to cause plastic in the fuel heater to melt and potentially catch fire.

This Safety Campaign supersedes campaigns C2127, C2128, ATC2278, and C2302. If your engine is eligible for this campaign and has **not** completed C2302, the remedy described in this Safety Campaign **must** be performed on your engine.

Cummins has reported this issue to the U.S. National Highway Traffic Safety Administration (NHTSA), which has assigned it Recall Number 20E-018.

This Safety Campaign authorizes certified repair locations to replace the existing fuel heater with the new fuel heater 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 Remove the existing Fuel Heater and Install the new Fuel Heater in accordance with the applicable service procedure outlined within Attachment B.

MATERIAL DISPOSITION:

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

REIMBURSEMENTS:

Parts:

NOTE: All parts listed are OPTIONAL. This campaign requires **only** ONE kit part number to complete the repair. Claim **ONLY** the parts needed to complete the repair.

NOTE: Please refer to Attachment B for detailed instructions on identifying to the appropriate kit part number required to complete the repair.

The following parts are covered under this field action:

Part Number	Quantity	Description
571014300	1	KIT,HTR (OPTIONAL)
571014400	1	KIT,HTR (OPTIONAL)
571014500	1	KIT,HTR (OPTIONAL)
572725700	1	KIT,HTR (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
00-90F	Administrative time	
99-00B	REMOVE AND INSTALL - FUEL HEATER	

Travel:

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

Other Claimables:

Consumables are **not** covered under this field action.

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.

Account Code: 65
Pay Code: North America Distributor = X
Pay Code: North America Dealer = D
Pay Code: International Distributor = I
Pay Code: International Dealer = R
Failure Code: WFEHTF

Attachments

c2507_esn-list.xlsx;c2507_fuel_heater_service_instructions_attachment-b.pdf



Fuel Heater Campaign

Date: 11/12/2021

The purpose of this campaign is to replace the current fuel heater in the Stage 1 Fuel Filter head.

Verification

- Locate the Stage 1 fuel filter head on engine. The engine fuel heater is located on the top right side of the fuel filter head. See Figure 1 below.



Figure 1: Location of Fuel Filter Element on engine

1. Engine fuel heater
2. Cable tie
3. Electrical connector

Note: The connector (3) in Figure 1 above may differ slightly based on previous fuel heater campaign work under C2127, C2128, C2302, TRP2129 and/or ATC2278.

- Check to see that there is a working heater (1) in Figure 1 above installed on the unit. If the heater connector is cut (Figure 2) or if there is a plug in the fuel heater port (Figure 3) due a previous fuel heater campaign, then no further safety action is needed at this time. A



Fuel Heater Campaign

Date: 11/12/2021

commercial action is being developed to address units eligible for a new heater and will be released at a future date.



Figure 2: Fuel Heater Connector Cut



Figure 3: Fuel Filter Module with Plug

Parts Needed

Table 1: Associated Part Numbers

Part Description	Cummins Part Number
Kit with Heater and cap screws but no fuses	5727257
Kit with Heater, cap screw and fuse - Bus Application	5710143
Kit with Heater, cap screw and fuse - Durastar/Workstar Application	5710144
Kit with Heater, cap screw and fuse - MV/HV Application	5710145

Service Instructions

Follow the steps below to install the new heater. If a fuse is required, please reference Table 1 above to determine the appropriate scenario for fuse installation instructions depending on vehicle type and refer to the correct section below.

Heater Installation

1. Remove the cable tie that secures the wiring harness to engine fuel heater depicted in Figure 4 below.
2. Unlock harness connector by moving red tab to the right.
3. Unplug electrical connector from engine fuel heater.



Fuel Heater Campaign

Date: 11/12/2021



Figure 4: Removing Cable Tie and Disconnecting the Fuel Heater

4. Remove and discard two allen screws securing engine fuel heater to the fuel filter head with a 5mm hex drive. See Figure 5 below.
5. Pull the engine fuel heater straight out of the fuel filter head. Capture any fuel that may leak from the fuel filter.



Figure 5: Removal of Heating Element



Fuel Heater Campaign

Date: 11/12/2021

6. Clean face of engine fuel heater port with a lint free cloth and inspect for any sharp edges and/or contaminants (location 6) as indicated in Figure 6. Clean if needed.
7. Lubricate the o-ring on the fuel heater (location 7) supplied in the kit with clean diesel fuel and carefully install into the engine fuel heater port, making sure to properly align before installing.
8. Use the two allen screws supplied to secure the heater to the fuel filter head and tighten to 11N-m [6.6 ft-lb].

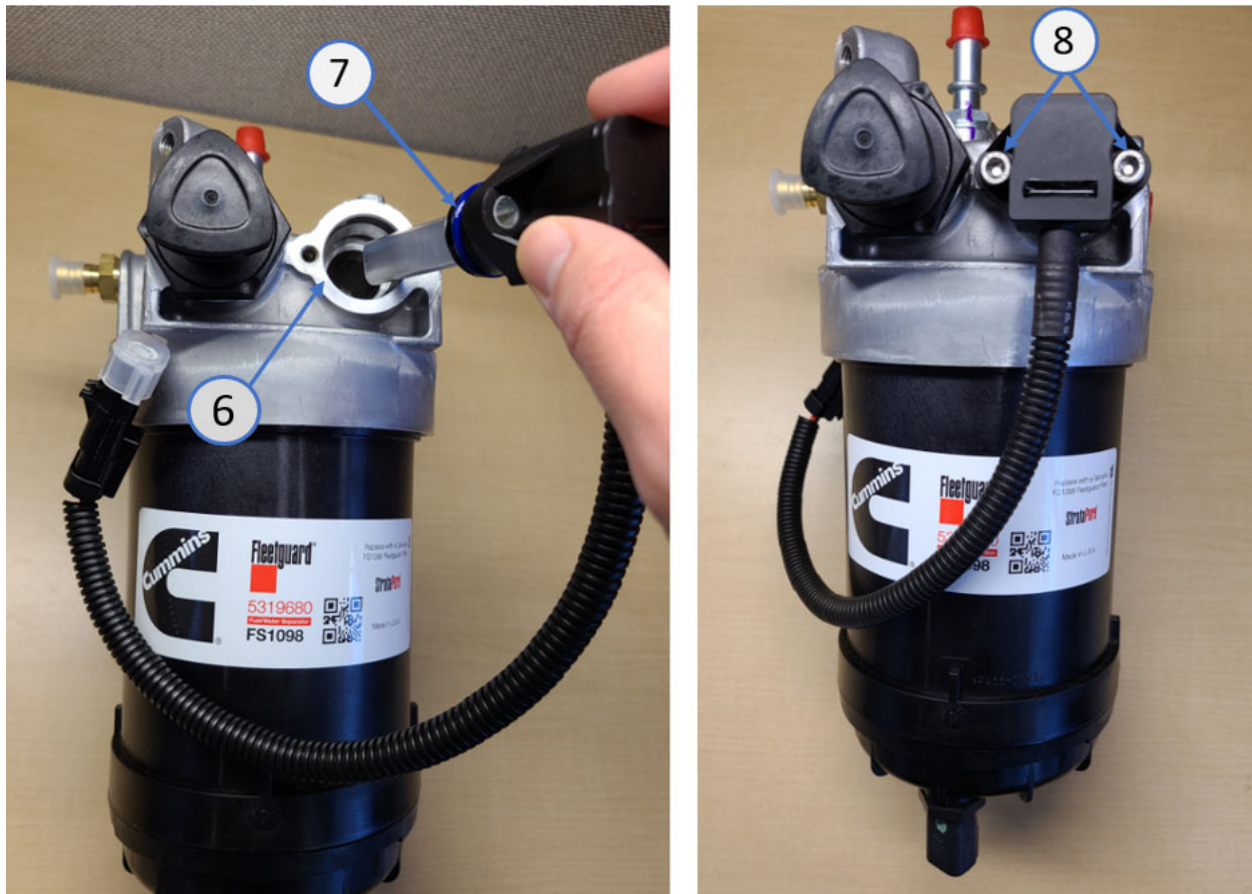


Figure 6: Installation of New Heating Element



Fuel Heater Campaign

Date: 11/12/2021

Fuse Installation

Navistar® CE Bus and 1300 FBC Fuse Installation

Disconnect the vehicle battery

1. Locate fuel heater fuse on dash panel. See Figure 7 below.
2. Remove fuse cap and install 30 amp Maxi Fuse provided in Kit Part Number 5710143. If a fuse is already installed in the cavity replace it with the fuse provided in the kit.
3. Reinstall fuse cap.

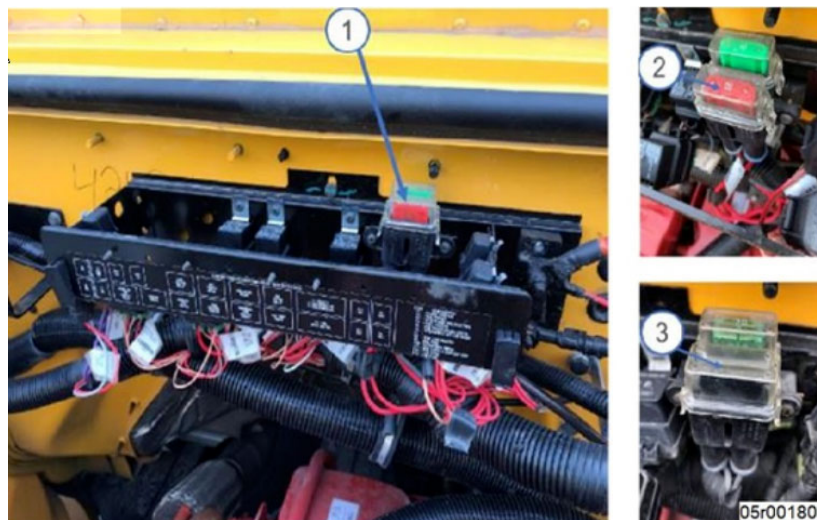


Figure 7: Location of Fuse on Dash Panel

Location of Fuse on Navistar® DuraStar (4300) / WorkStar (7300) / HC Commercial Bus Fuse Installation

Disconnect vehicle battery.

1. Remove Power Distribution Module (PDM) cover, located under the hood on the driver side.
2. Install 30 amp fuse provided in kit part number 5710144 in cavity 2C. If a fuse is already installed at the 2C cavity replace it with the fuse provided in the kit. See Figure 8 below.



Fuel Heater Campaign

Date: 11/12/2021

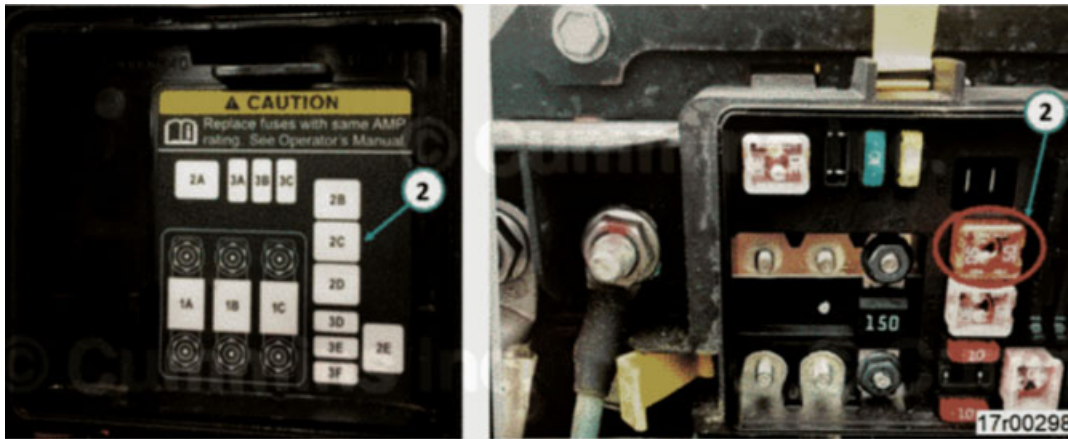
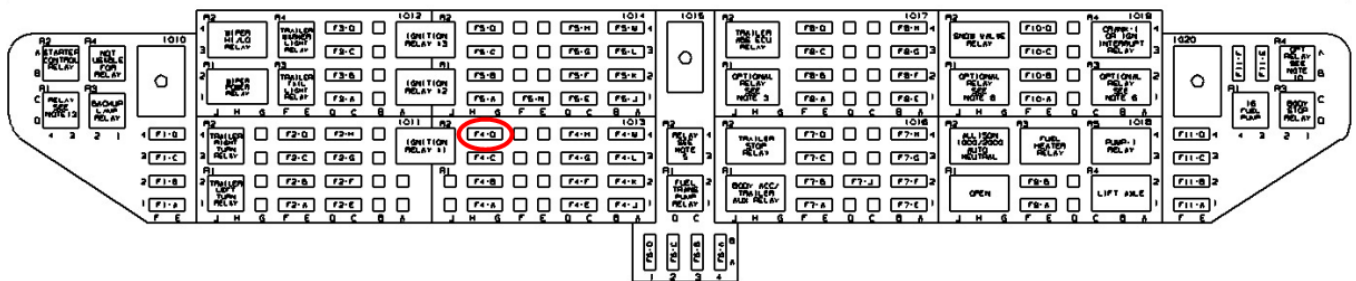


Figure 8: Location of Fuse on Navistar Durastar (4300) / WorkStar (7300) / HC Commercial Bus

3. Remove cover of fuse box, located on passenger side dashboard
4. Check to see if fuse in the cavity located at F4-D is present. See Figure 9 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.



LOCATION	AMP		STD/OPT	DESCRIPTION
F4-C	10	IGN	OPT	TRANSMISSION CONTROL UNIT
F4-D	10/5	IGN	OPT	ECU (BIG BORE) / FUEL HEATER (15B)

Figure 9: Location of Fuse on Navistar DuraStar (4300) / WorkStar (7300) / HC Commercial Bus

Navistar® MV and HV Truck / TC Commercial Bus Fuse

Disconnect vehicle battery

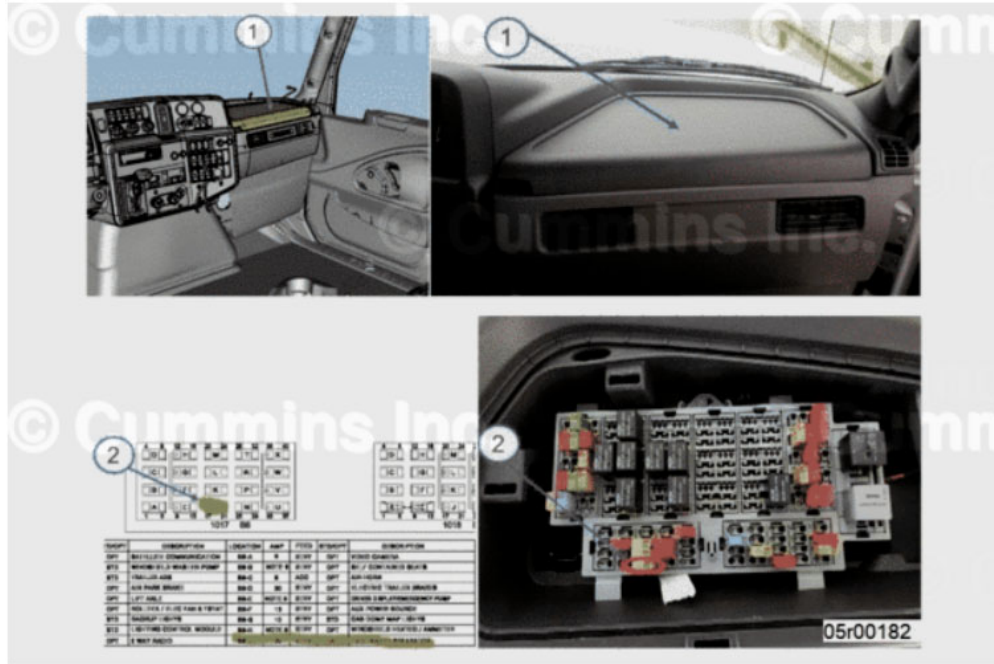
1. Remove cover of fuse box, located on passenger side dashboard. See Figure 10 below.
2. Install 20 amp fuse supplied in Kit Part Number 5710145 at the B8-J cavity.



Fuel Heater Campaign

Date: 11/12/2021

- 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 11 below.



LOCATION	AMP	FEED	STD/OPT	DESCRIPTION
B8-A	NOTE 13	BTRY	OPT	DRVCM/LIQ SPR/BDY BLDR/ INTELLIPARK BRAKE
B8-B	NOTE 4	BTRY	OPT	SELF CONTAINED SEATS/ INTELLIPARK BRAKE
B8-C	NOTE 19	ACC	OPT	AIR HORN/TMC RP1226
B8-D	NOTE 17	BTRY	OPT	EL TRLR BRK/LQ SPR/ESPAR
B8-E	NOTE 6	BTRY	OPT	DRIVER DISPLAY/EMERGENCY PUMP
B8-F	NOTE 14	BTRY	OPT	AUX PWR/OPT APO/USB/WRK LT
B8-G	10	BTRY	STD	CAB DOME MAP LIGHTS
B8-H	NOTE 7	BTRY	OPT	AMMETER/HDLT LED
B8-J	20	BTRY	OPT	FUEL WATER SEPARATOR

Figure 10: Location of 20A Fuse on Navistar MV/HV/TC



Fuel Heater Campaign

Date: 11/12/2021

ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY	FUNCTION	LOCATION
1	40B7472C2	CONNECTOR, BODY UNDERHOOD PDM	1	-	N/A
2	N/A	N/A	-	-	1A
3	3752321CJ	FUSE, 100 AMP BOLT IN MID1	1	CAB FEED	1B
4	3752321CJ	FUSE, 100 AMP BOLT IN MID1	1	CAB FEED	1C
5	N/A	N/A	-	-	2A
6	N/A	N/A	-	-	2B
7	40B6766CJ	FUSE, 30A, MAX1 COMPACT, GREEN	1	FUEL HEATER	2C ✓
8	40B6768CJ	FUSE, 40A, MAX1 COMPACT, ORANGE	1	HYD BRAKE	2D
9	40B6766CJ	FUSE, 30A, MAX1 COMPACT, GREEN	1	ECM	2E
10	3534211CJ	FUSE, 20 AMP MINI - YELLOW	1	DISCONNECT SWITCH	3A
11	3534213CJ	FUSE, 30 AMP MINI - GREEN	1	LINE AFT HEATERS	3B
12	3534211CJ	FUSE, 20 AMP MINI - YELLOW	1	IGN AFT RELAY	3C
13	3534209CJ	FUSE, 10 AMP MINI - RED	1	ALLISON TCM	3D
14	N/A	N/A	-	-	3E
15	3534209CJ	FUSE, 10 AMP MINI - RED	1	DEF PUMP	3F
16	40B6768CJ	FUSE, 40A, MAX1 COMPACT, ORANGE	1	SPARE	SPARE 1
17	40B6766CJ	FUSE, 30A, MAX1 COMPACT, GREEN	1	SPARE	SPARE 2
18	4093371CJ	NUT, HEX M5 X .8 ZNI	6	MISC	N/A

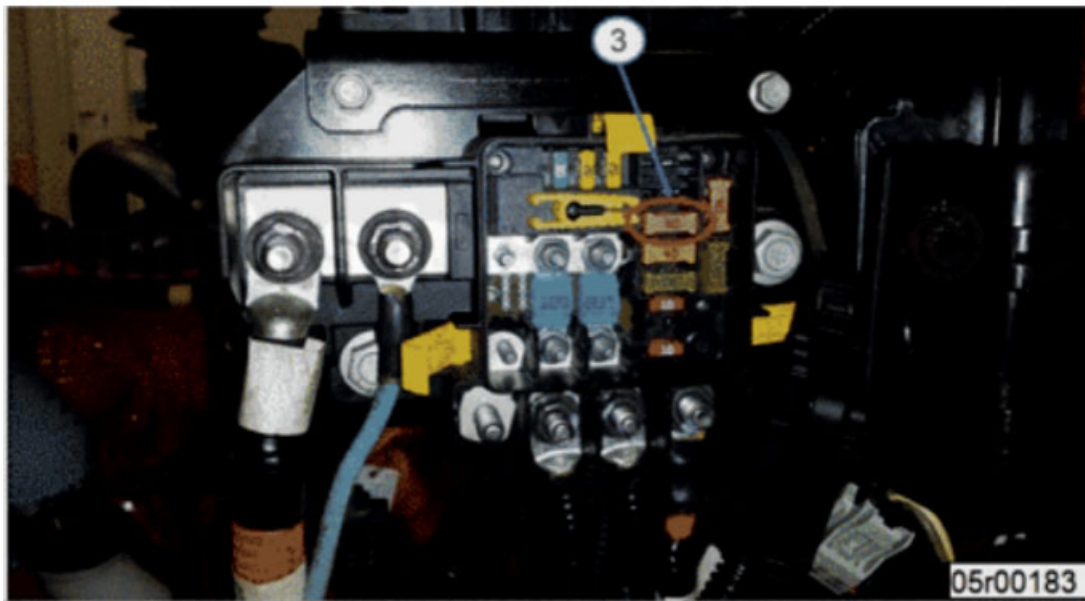
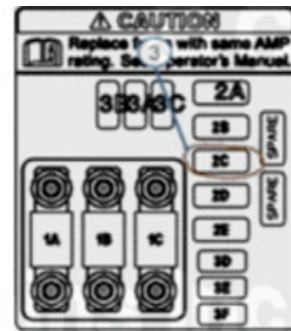


Figure 11: Location of 30A Fuse on Navistar MV/HV/TC

Reconnect engine fuel heater to the OEM harness

1. Please note that because this fuel heater does not have a thermostat the wires do not have a polarity requirement. As a result, there is no need for wire color alignment at the connector between the fuel heater harness and vehicle side wiring harness.
2. After the fuse or fuses have been installed connect the fuel heater OEM harness branch to the engine fuel heater as shown in Figure 12.
3. Secure the excess fuel heater jumper harness to the vehicle harness with a zip tie as shown below in Figure 13. Make sure there is no tension on the wires going into the Fuel Heater connector. **Ensure a clearance of at least 20 mm (3/4 in) to the low pressure fuel line. The harness shall not be secured to the fuel line.**



Fuel Heater Campaign

Date: 11/12/2021



Figure 12: Fuel Heater Harness Connection



Figure 13: Fuel Heater Harness Routing and Zip Tie Location