A CUMMINS FIELD CAMPAIGN

Date: 27-Jan-2022

Please Deliver To: Service Managers and Warranty Decision Makers

FROM: Cummins Global Warranty Administration Communications

Subject: B6.7 Engine Mounted Fuel Heater Commercial Campaign for Truck

Number: C2547

Expires: 15-Jul-2023 (U.S./Canada) 15-Jul-2023 (International)

Attention: U.S. / Canadian Distr./Branches and Div. Offices (Automotive)

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

DESCRIPTION:

This In-Shop Campaign is being launched to install a new Fuel Heater on certain B6.7 engines. This In-Shop Campaign does **not** reimburse for any SRTs except those that are listed. It is recommended, but **not** required, that this Field Action be performed as part of another Cummins warrantable repair event to allow reimbursement for charges such as travel, troubleshooting, or access issues that are outside the scope of this document.

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 Install a new fuel heater in accordance with the applicable service procedure outlined in 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. Please refer to Attachment B for detailed service instructions located to identify and order the appropriate kit part number.

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)

Time

Labor using applicable Access Code and Time:

SRT Code	Description
00-90X	Administrative time
99-00B	REMOVE AND INSTALL - FUEL HEATER (QTY 1)

Travel:

Travel is **not** covered under this field action. Towing is **not** 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 **RAPID**SERVE[™] Web (rsw.cummins.com). For information regarding **RAPID**SERVE[™] Web, please reference the "Warranty" tab in QuickServe® Online. If there are additional questions, please contact your local Cummins Distributor.

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

Attachments

 $c2547_esn-list.xlsxc2547_fuel_heater_service_instructions_attachment-b.pdf$



Date: 12/8/2021

The purpose of this campaign is to replace the current fuel heater with cut connector or fuel heater plug in the Stage 1 Fuel Filter head with a new fuel heater.

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. Based on previous field action (C2127, C2128, C2302, TRP2129 and/or ATC2278) the fuel heater connector may have been cut as in Figure 1 or the original fuel heater may have been removed and a plug installed in its place as shown in Figure 2. The instructions in this document will apply for either condition. If a working fuel heater is present refer to C2507 instead.



Figure 1: Fuel Heater Connector Cut



Figure 2: 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 screws, fuse, and sticker - Bus Application	5710143
Kit with heater, cap screws, fuses, and sticker - Durastar/Workstar Application	5710144
Kit with Heater, cap screws, fuses, and sticker - 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.



Date: 12/8/2021

Heater Installation

- 1. Remove and discard two allen screws securing engine fuel heater with cut connector or plug to the fuel filter head with a 5mm hex drive.
- 2. Pull the engine fuel heater with cut connector or plug straight out of the fuel filter head. Capture any fuel that may leak from the fuel filter. See Figure 3 below.



Figure 3: Removal of Heating Element

- 3. Clean face of engine fuel heater port with a lint free cloth and inspect for any sharp edges and/or contaminants (location 6) as indcated in Figure 4. Clean if needed.
- 4. 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.
- 5. Use the two allen screws supplied to secure the heater to the fuel filter head and tighten to 11N-m [6.6 ft-lb].



Date: 12/8/2021

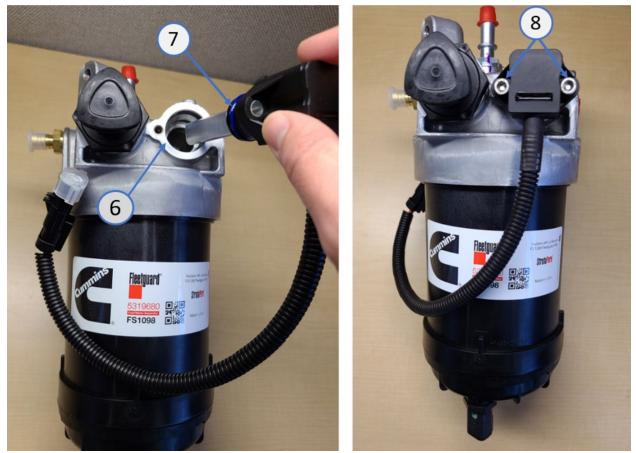


Figure 4: Installation of New Heating Element

Fuse Installation

Navistar[®] CE Bus and 1300 FBC Fuse Installation

Kit contents: Stickheater, cap screws, 30 A fuse (green), replacement fuse sitcker

Disconnect the vehicle battery

- 1. Locate fuel heater fuse on dash panel. See Figure 5 below.
- 2. Remove fuse cap and install 30 amp Maxi Fuse provided in Kit Part Number 5710143 into the F4 cavity. If a fuse is already installed in the cavity replace it with the fuse provided in the kit.
- 3. Reinstall fuse cap.
- 4. Please place the fuse sticker provided in the kit in the appropriate spot to update the unit for future service, reference Figure 6.



Date: 12/8/2021

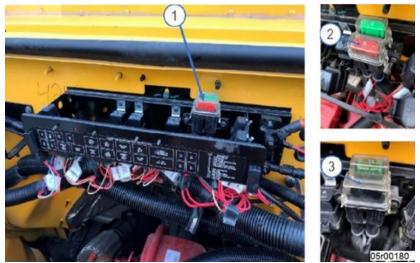


Figure 5: Location of Fuse on Dash Panel



Figure 6: CE Bus 30A fuse sticker location with new sticker placed

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

Kit contents: Stick heater, cap screws, 30 A fuse (pink), 20 A fuse (yellow), updated service manual fuse sticker

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 7 below.

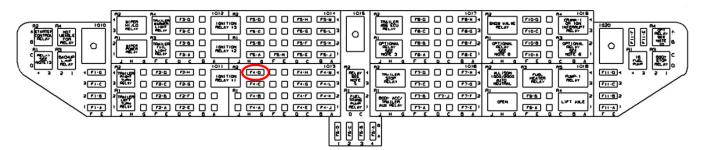


Date: 12/8/2021



Figure 7: 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 8 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.
- 5. Please place the sticker provided in the kit into the service manual to update the fuse size for future service.



LOCATION	AMP	STD/OPT		DESCR1PT1ON
F4-C	10 1GN		OPT	TRANSMISSION CONTROL UNIT
F4-D	10 <mark>/5</mark>	1 GN	OPT	ECU (BIG BORE) / FUEL HEATER (ISB)

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



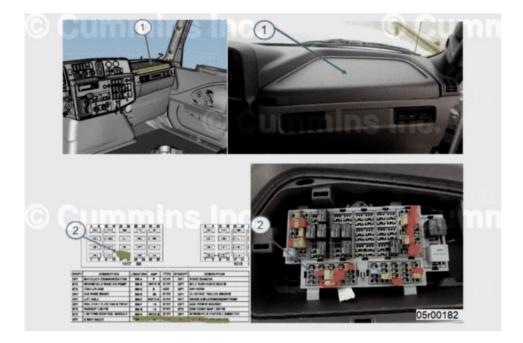
Date: 12/8/2021

Navistar® MV and HV Truck / TC Commercial Bus Fuse

Kit contents: Stick heater, cap screws, 30 A fuse (green), 20 A fuse (yellow), updated service manual fuse sticker

Disconnect vehicle battery

- 1. Remove cover of fuse box, located on passenger side dashboard. See Figure 9 below.
- 2. Install 20 amp fuse supplied in Kit Part Number 5710145 at the B8-J cavity.
- 3. 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 10 below.
- 4. Please place the sticker provided in the kit into the service manual to update the fuse size for future service.



LOCATION	AMP	FEED	STD/OPT	DESCRIPTION
B8-A	NOTE 13	BTRY	OPT	DRVCM/LIQ SPR/BDY BLDR/ INTELLIPARK BRAKE
B8-B	NOTE 4	DTE 4 BTRY OPT SELF CONTAINED SEATS/ INTELLIPARK BRAKE		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	10 BTRY S		CAB DOME MAP LIGHTS
B8-H	NOTE 7	BTRY	OPT	AMMETER/HDLT LED
B8-J	20	BTRY	OPT	FUEL WATER SEPARATOR

Figure 9: Location of 20A Fuse on Navistar MV/HV/TC



Date: 12/8/2021

1 TEM NUMBER	PART NUMBER	DESCRIPTION	OTY	FUNCTION	LOCATION	A CAUTION
1	408747202	CONNECTOR, BODY UNDERHOOD PDM	1	-	N/A	Replace With same
2	N/A	N/A	1.1	-	1.4	Lattill rating. Se persion's Me
3	375232101	FUSE, 100 AMP BOLT IN MIDI	1	CAB FEED	18	
4	375232101	FUSE, 100 AMP BOLT IN MIDI	1	CAB FEED	1C	atta tan ZA
5	N/A	N/A			24	
6	N/A	N/A			28	
7	4086766C1	FUSE, 30A, MAXI COMPACT, GREEN	1	FUEL HEATER	SC ~	
8	4086768C1	FUSE, 40A, MAXI COMPACT, ORANGE	1	HYD BRAKE	20	
9	4086766CJ	FUSE, 30A, MAXI COMPACT, GREEN	1	ECM	2E	
10	353421101	FUSE, 20 AMP MINI - YELLOW	1	DISCONNECT SWITCH	3.4	
11	353421301	FUSE, 30 AMP MINI - GREEN	1	LINE AFT HEATERS	38	
12	353421101	FUSE, 20 AMP MINI - YELLOW	1	IGN AFT RELAY	30	
13	3534209C1	FUSE, 10 AMP MIN1 - RED	1	ALLISON TCM	3D	W 8 8
14	N/A	N/A		-	3E	
15	3534209C1	FUSE, 10 AMP MINI - RED	1	DEF PUMP	ЗF	
16	4086768CJ	FUSE, 40A, MAXI COMPACT, ORANSE	1	SPARE	SPARE 1	
17	4086766C1	FUSE, 30A, MAXI COMPACT, GREEN	1	SPARE	SPARE 2	
18	4093371C1	NUT, HEX M5 X .B ZNI	6	MISC	N/A	

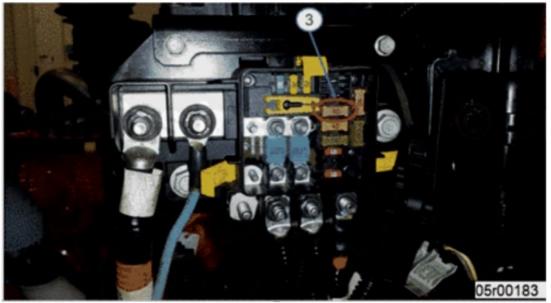


Figure 10: Location of 30A Fuse on Navistar MV/HV/TC

Reconnect engine fuel heater to the OEM harness

- 1. Please note that because this fuel heater does not have a thermostat there is no polarity requirement of the harness wires. 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 11. Note: Discard any electrical plug in the female end of the wiring harness that may have been installed during a previous field action (C2302). Any zip ties installed in previous field action (C2302) securing the fuel heater harness to engine wiring harness can also be discarded as needed to result in the harness routing shown in the Figures 11 and 12 below.
- 3. Secure the excess fuel heater jumper harness to the vehicle harness with a zip tie as shown below in Figure 12. Make sure there is no tension on the wires going into the Fuel Heater connector. **Ensure**



Date: 12/8/2021

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.



Figure 11: Fuel Heater Harness Connection

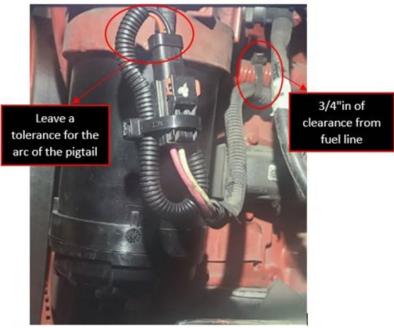


Figure 12: Fuel Heater Harness Routing and Zip Tie Location