

Group:	99-Miscellaneous
Number:	A-15-008
Issue Date:	01-22-2014

ACCESSORY INSTRUCTIONS

2011MY-14MY DPR (Diesel Particulate Reduction) Burner Fuel Filter Heater

OVERVIEW

A subject vehicle may experience DPR (Diesel Particulate Reduction) system related issues in extreme cold weather conditions. If a good fuel quality is being used and persistent fuel gelling has been confirmed to be the cause of the cold weather issue, a fuel heater for the burner system is available to address this condition.

NOTE: This procedure is provided as technical information and is not an authorization for a warranty repair.

SUBJECT VEHICLES

2011MY – 2014MY Hino Conventional NE8J, NJ8J and NV8J trucks

BEFORE YOU BEGIN:

- Read and understand all instructions and procedures before you begin the work.
 - Read and follow all WARNINGS and NOTICES set forth in this publication. These alerts help to avoid damage to components, serious personal injury, or both.
 - Park the vehicle on a flat, level and solid surface.
 - Place the gear shift lever in "Neutral" or "Park".
 - Apply the parking brake firmly and confirm parking brake activation.
 - Turn off the engine and remove the key from the ignition switch.
 - Always wear safety glasses or goggles to protect your eyes.
- Place wheel chocks in front of and behind all the wheels to prevent the vehicle from moving.

PARTS:

PART NUMBER	DESCRIPTION	QUANTITY
04004-092E0	BURNER FUEL HEATER KIT	1
23910-E0020	HEATER ASSEMBLY	1
87129-E0020	FILTER INSERT	1
15517-E0060	HEATER O-RING	1
23300-E0340	FUEL FILTER	1

KIT CONTENTS:

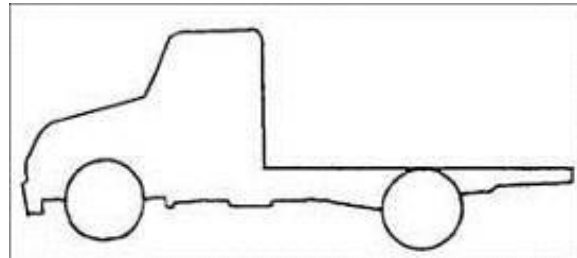
KIT PART NUMBER: 04004-092E0		
PART NUMBER	DESCRIPTION	QUANTITY
82213-E0040	WIRE HARNESS, HEATER	1
28300-E0020	RELAY	1
82715-E3050	BRACKET, WIRE HARNESS	1
SH562-10825	BOLT, M10	2
SH562-31030	BOLT, M8	2

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SL151-01011	NUT, M10	2
SL151-00809	NUT, M8	2
S4783-71230	CABLE TIE	15

VEHICLE PREPARATION:

1. Park the vehicle on a flat level and solid surface.



2. Confirm the engine is stopped, the ignition switch in the off (LOCK) position and the key is removed.



3. Apply the parking brake.



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4. Chock all of the wheels.



INSTALLATION PROCEDURE

NOTICE: Installation of a burner filter heater for 2011-2013MY vehicles equipped with a fuel cooler will require somewhat different procedure than 2011-2013MY and 2014MY vehicles not equipped with a fuel cooler. The 2011-2013MY vehicles equipped with a fuel cooler have a fuel line bracket, shown in the photo below step 2, which will interfere with mounting the relay box, shown in the photos below step 5. Other steps in this installation procedure may also be slightly different in 2011-2013MY and 2014MY vehicles.

1. Remove the battery box cover and disconnect the negative battery cable. The photographs below show the differences in battery box configuration between 2011-2013MY and 2014MY vehicles.

WARNING: Do not reconnect the negative battery cable until this procedure is completed. Doing so may result in damage to components, serious personal injury, or both.

2011-2013MY



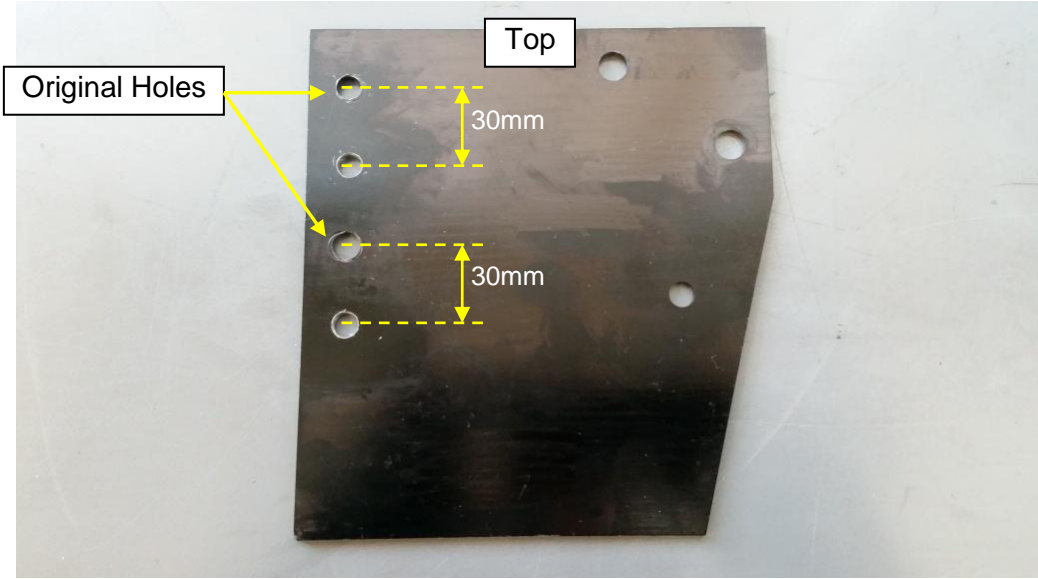
2014MY



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2. For 2011-2013MY vehicles equipped with a fuel cooler, it will be necessary to drill two new mounting holes in the wire harness bracket, shown in the photograph below, 30mm down from the existing holes, on the straight side of the bracket. No new holes should be drilled anywhere else on the bracket. The photograph below shows the location of the new holes to be drilled. Use an 11/32 inch drill bit for this operation.



3. Install the wire harness bracket on the rear passenger side of the #3 crossmember. Use the M10 nuts and bolts to secure. If the vehicle is equipped with a fuel cooler and has a fuel line bracket in this location, remove and retain the existing nuts and bolts. Place the new bracket underneath the fuel line bracket. Reuse the original nuts and bolts. Tighten the nuts and bolts to the specified torque. Refer to the photographs below for reference.

Specified Torque: 38 lb-ft (51.5 Nm)

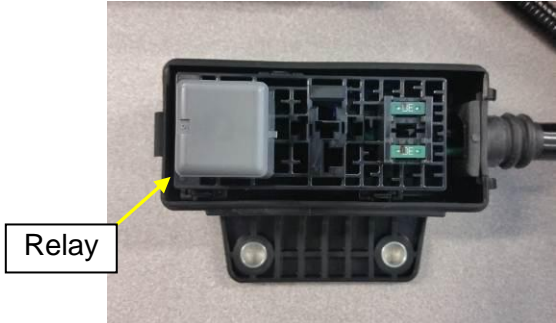


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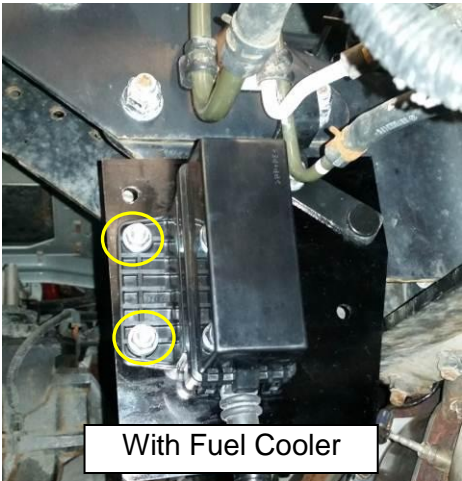
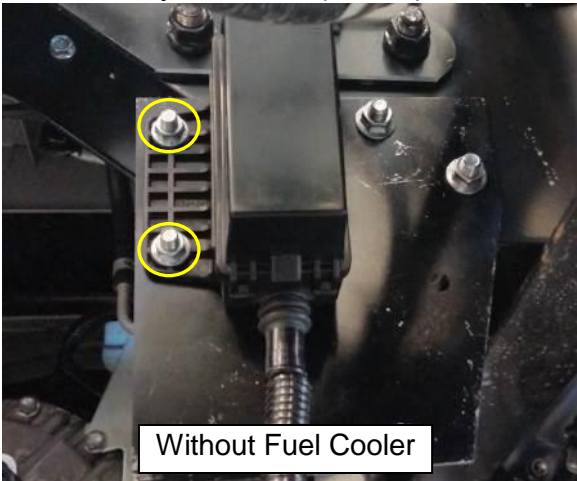


4. Remove the cover from the new wiring harness relay block and install the relay in the new wiring harness relay block. Replace the cover and ensure it is securely fastened.



5. Attach the wiring harness relay block to the wire harness bracket using the M8 nuts and bolts to secure. Tighten the nuts and bolts to the specified torque. Note the different mounting locations of the relay block in the photos below. The photo at the left shows the mounting location for vehicles not equipped with the fuel cooler line bracket. The photo at the right shows the mounting location for vehicles equipped with the fuel cooler line bracket.

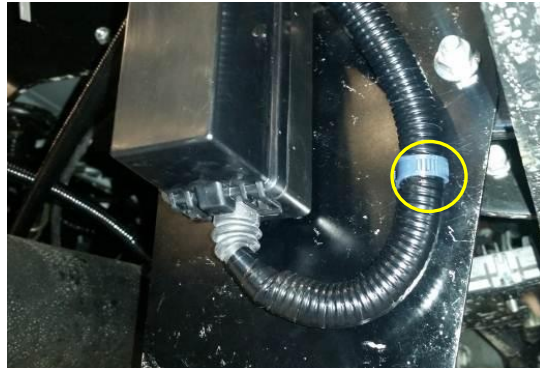
Specified Torque: 16 lb-ft (22 Nm)



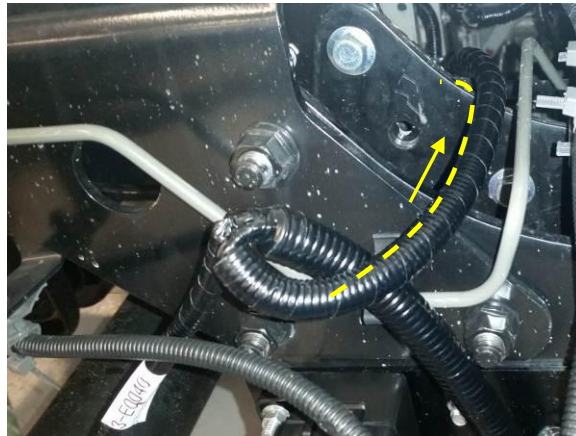
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6. Insert the clip on the wire harness into the hole on the bracket. Ensure the clip is locked in place.



7. Feed the end of the wiring harness that contains the battery and heater element connectors over the #3 crossmember towards the front of the vehicle. See the highlighted portion (yellow dashes) in the photograph to the right.



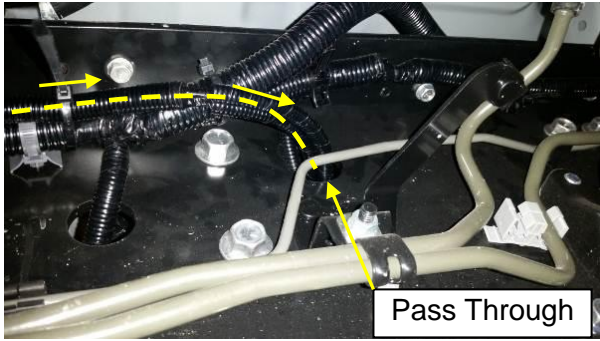
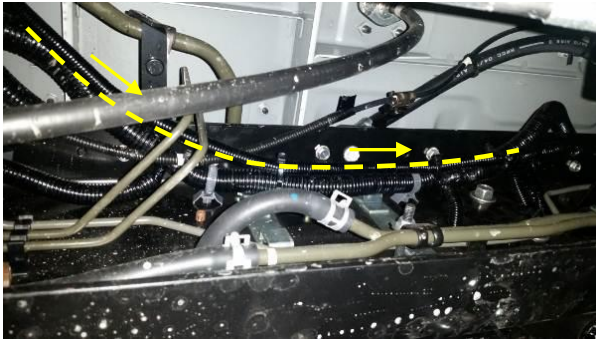
8. There are three white tape markings around the wiring harness that will line up with the #3 crossmember harness mounts on the main harness running under the rear end of the cab. Secure the harness with cable ties at each of these three locations marked with white tape markings.



9. Continue to follow the wiring harness toward the battery box along the inside of the driver side frame rail. Feed the wires into the pass through hole in the frame rail and then into the battery box. Attach the wires to the harness using cable ties at the harness mount locations. Refer to the photographs below for reference.

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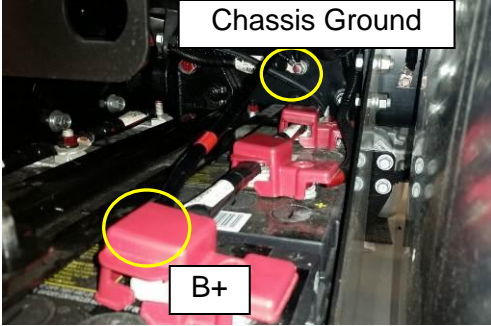
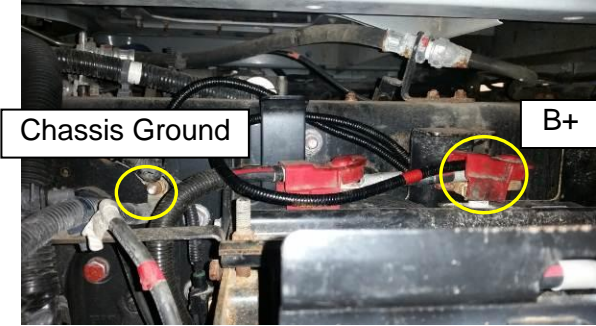


10. The battery boxes for 2011-2013MY and the 2014MY are different. See the photos below. Inside the battery box, connect the positive lead (red marking) to the positive battery terminal. Connect the negative lead to the chassis ground point on the frame rail. Do not reconnect the negative battery cable at this time.

WARNING: Do not reconnect the negative battery cable until this procedure is completed. Doing so may result in damage to components, serious personal injury, or both.

2011-2013MY

2014MY



11. Locate the extra power supply connection inside the passenger side frame rail behind the cab. Route the remainder of the harness from the relay box to this location and secure using cable ties. Connect the harness to the extra power supply connector.

NOTICE: On 2011-2013MY vehicles, this wire is blue with a red stripe. Do not use the white wire. If the white wire is used, the heater will not function correctly.

2011-2013MY

2014MY



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12. Bundle the unused extra power supply connections on the heater wiring harness and secure to the frame rail wiring harness using cable ties.



13. Remove the black rubber filter shield and drain the fuel from the burner filter assembly into an appropriate container.



14. Remove the filter element from the burner filter mount.



15. Remove the clear plastic filter cap from the old filter element and retain the clear plastic cap. Discard the old fuel filter element and larger rubber seal.



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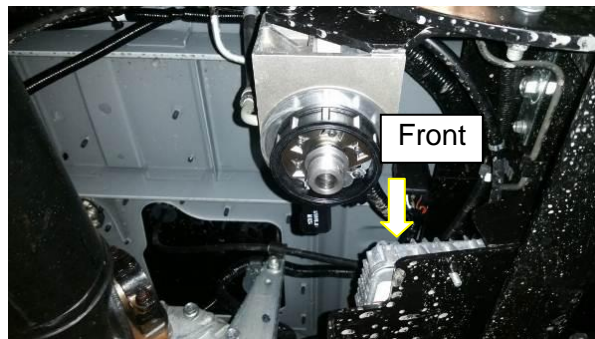
16. Remove and discard the filter insert from the filter housing.

NOTICE: ½ inch hex is used on original filter insert.



17. Install the new filter insert, heater, and heater O-ring. Apply the included Loctite 242 to the small end of the insert that threads into the filter mount. Ensure the heater connector faces toward the front of the vehicle. Alignment tabs inside the heater will prevent proper sealing if it is aligned incorrectly. Tighten the insert to the specified torque.

Specified Torque: 3.3 lb-ft (4.5 Nm)



18. Route the wiring harness over the filter housing and connect to the heater element. Secure the harness using cable ties if necessary.



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19. Install the clear plastic filter cap on the new fuel filter element using the new seal. Lightly lubricate the seal with fuel before installing. Rotate the cap $\frac{1}{4}$ to $\frac{1}{2}$ turn after seal contact.



20. Fill the new fuel filter element with clean fuel and install on the filter housing. Ensure the smaller 30mm seal included with the filter is in place on the threaded insert before the filter is installed. Tighten the filter $\frac{3}{4}$ of a turn after seal contact. Reinstall the rubber filter shield.



21. Connect the negative battery cable and reinstall the battery box cover. Confirm that there are no fuel leaks at the burner filter assembly.

Proceed to "Final Inspection Procedure."

2011-2013MY



2014MY



FINAL INSPECTION PROCEDURE

- To complete this procedure, review and confirm the following:
 - The wiring harness is properly secured and is not interfering with any components on the vehicle.
 - The filter and heater assembly have been carefully checked for fuel leaks.
 - No warning lamps are illuminated on the instrument cluster. Diagnose any faults following the Trouble Shooting Workshop Manual procedures.

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CLAIM APPLICATION

** Reimbursable in accordance within the terms and policies of the Hino Truck limited warranties.*

- a) Labor Charge:
 - Without Fuel Cooler: 1.2 Hours
 - With Fuel Cooler: 1.5 Hours
- b) Warranty Code: 11572
- c) Trouble Code: 40
- d) Operation Code: 11550AOT
- e) Part Number: 9999999999