

# SAFETY RECALL

CONVENTIONAL BATTERY TERMINAL EXTENSION

**CAMPAIGN NO: AAHTO** 

DATE: 5-5-2020

REFERENCE: HMM-200429-N1

**SUBJECT VEHICLES**: Certain 2020MY-2021MY Conventional trucks equipped with a J08 engine

Note: Refer to the appropriate Vehicle Identification Number in the warranty system to determine vehicle eligibility.

#### **OVERVIEW:**

The length of the ground cable that connects the negative battery terminal to the frame may be insufficient and may break due to fatigue caused by bending stress generated on the cable terminal. An extension bracket shall be added to the battery negative terminal. In addition, the battery ground cable will be inspected and replaced if damage is found.

**NEW VEHICLES IN DEALERSHIP INVENTORY** As required by Federal law (49 Code of Federal Regulations §577.13), dealerships are not to deliver any new vehicles in their inventory that are involved in a Safety Recall unless the vehicle has been remedied. Refer to the appropriate Vehicle Identification Number (VIN) list to determine vehicle eligibility.



#### **BEFORE YOU BEGIN:**

- Read and understand all instructions and procedures before you begin the work.
- Read and follow all NOTICES and WARNINGS 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 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 to protect your eyes.
- Place wheel chocks in front of and behind all the wheels to prevent the vehicle from moving.

#### PARTS:

Part Number	Part Description	Quantity
SZ17809001	Nut, Flange	1
SZ98055014	Terminal, Battery	1

#### IF REQUIRED:

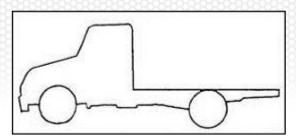
Part Number	Part Description	Quantity
82124EW140	Wire, Engine No. 4	1

**Note**: If you have any questions or need further assistance, please contact techassist@hino.com.



#### **VEHICLE PREPARATION:**

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



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



3. Apply the parking brake.







4. Chock all of the wheels.



## **Repair Procedure:**

This Procedure Applies to Both 2020 Model Year and 2021 Model Year Vehicles, with Certain Differences, as Indicated.

### Both 2020 and 2021 Model Year Vehicles

1. Remove the battery cover.





### Both 2020 and 2021 Model Year Vehicles

**2.** Inspect the negative battery terminal on the inner most battery for the presence of a terminal extension. If a terminal extension is present as shown in the photograph below, no repair is necessary, proceed to Final Inspection.

If a terminal extension is not present, continue to step 3.



### Both 2020 and 2021 Model Year Vehicles

**3.** Remove the nut securing the battery ground cable and smaller chassis harness ground to the inner most battery. Clean the battery terminal.





## 2020 Model Year Vehicles Only

**4.** Remove the nut securing the cab ground terminal to the frame rail at the battery ground cable connection. Retain the nut for reinstallation.



### Both 2020 and 2021 Model Year Vehicles

**5.** Remove the bolt securing the battery ground cable to the frame rail. Retain the bolt for reinstallation. Remove the battery ground cable.

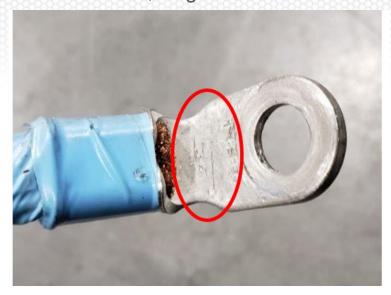
**NOTICE:** 2021 model year vehicles will use this bolt to secure both the **battery** ground cable as well as the **body** ground connection. See Step 10.





#### Both 2020 and 2021 Model Year Vehicles

**6.** Clean the battery ground cable. Inspect both terminal ends of the battery ground cable for cracking in the area circled in the photograph below. If cracking is found, discard and replace using a new 82124-EW140 Wire, Engine No. 4. Proceed to step **7**.



#### Both 2020 and 2021 Model Year Vehicles

**7.** Install the SZ980-55014 battery terminal extension to the negative battery terminal as shown using the nut removed in step **3**. The bridge cable between the batteries is installed above the terminal extension. Tighten the nut to the specified torque.

Specified Torque: 97 lb-in (8 lb-ft / 11Nm)





### Both 2020 and 2021 Model Year Vehicles

**8.** Attach both the battery ground cable as well as the smaller chassis harness ground cable to the battery terminal extension as shown. Install the new SZ178-09001 nut and tighten to the specified torque.

Specified Torque: 97 lb-in (8 lb-ft / 11Nm)

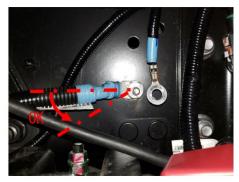


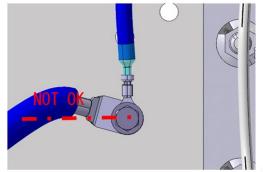
## 2020 Model Year Vehicles Only

**9**. For 2021 Model Year Vehicles, Go ahead to Step 10. Attach the battery ground cable to the frame rail using the bolt removed in step 5.

It is very important that the battery ground cable is positioned close to horizontal, and no more than 30 degrees downward from the horizontal position. Do not allow the cable to angle upwards when tightening. Tighten the bolt to the specified torque. See the photograph below, at left, which shows the battery ground cable positioned horizontally. See the illustration, at right, shows the battery cable positioned incorrectly, above the horizontal.

**Specified Torque:** 38 lb-ft (51.5Nm)





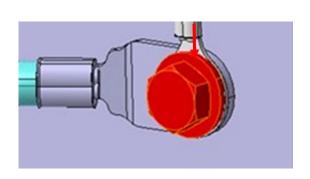


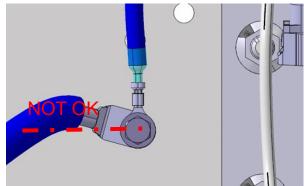
### 2021 Model Year Vehicles Only

**10.** For **2020** Model Year Vehicles, Go back to Step **9.** Attach the battery ground cable along with the smaller cab harness ground to the frame rail using the bolt removed in step **5**.

It is very important that the battery ground cable is positioned close to horizontal, and no more than 30 degrees downward from the horizontal position. Do not allow the cable to angle upwards when tightening. Tighten the bolt to the specified torque. See the illustrations below. The first illustration, at let, shows the battery ground cable positioned horizontally. The second illustration, at right, shows the battery cable positioned incorrectly, above the horizontal. Remember, on 2021 Model Year Vehicles this bolt is used to secure both the battery ground cable connection as well as the body ground cable connection

**Specified Torque:** 38 lb-ft (51.5Nm)



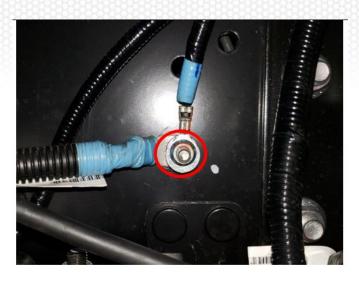




## **2020 Model Year Vehicles Only**

11. Attach the cab ground terminal to the frame rail using the nut removed in step 4.

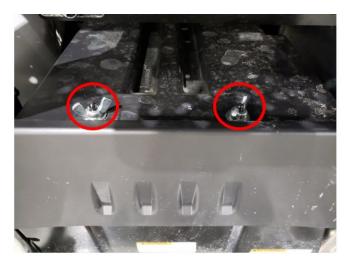
Specified Torque: 16 lb-ft (22Nm)



## Both 2020 and 2021 Model Year Vehicles

**12.** Reinstall the battery box cover and tighten the wing nuts to the specified torque.

**Specified Torque:** 10 lb-ft (13Nm)





#### FINAL INSPECTION:

To complete this safety recall, review and confirm the following:

- All the bolts and nuts are tightened with proper torque
- The battery terminal extension is installed, if required
- The negative battery cable has been replaced if necessary
- The negative battery cable is properly aligned close to the horizontal

#### **CLAIM APPLICATION**

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

## **Battery Cable Negative Terminal Extension Installation:**

a) Campaign No: AAHT0

b) Labor charge: 0.2 hr. - Inspection only

0.5 hr. - Battery ground cable inspection and

extension installation

c) Warranty code: 82142

d) Trouble code: 98

e) Operation code: 82150AOT

f) Original failed part: 9999999999

