



TECHNICAL SERVICE BULLETIN

**CAB-OVER ENGINE (COE) STARTER MOTOR
“M” TERMINAL NUT CORROSION**

**BULLETIN NO: SB-18-007
DATE: 3-13-2018
REFERENCE: HMM-180131-F1**

SUBJECT VEHICLES: 13MY-17MY Cab-Over Engine (COE)
Trucks equipped with a J05 engine

OVERVIEW:

The subject vehicle may experience a concern where the starter motor fails to engage due to corrosion that has developed between the starter motor “M” terminal nut and lock washer. Prior to starter motor replacement, it is recommended to first remove the starter motor “M” terminal nut and washer, clean the corrosion and then replace the starter motor “M” terminal nut and washer using an updated nut and washer, as outlined below.

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.

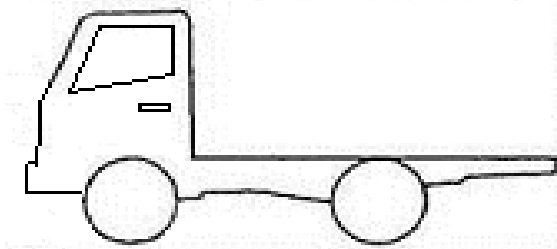


PARTS:

PART NUMBER	PART DESCRIPTION	QUANTITY
28226EV240	Starter Motor Nut and Washer Kit	1

VEHICLE PREPARATION:

1. Park the vehicle on a 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.

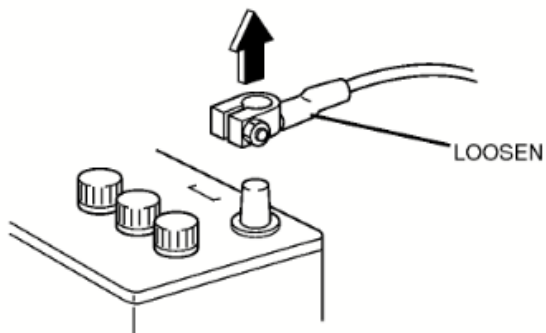


4. Chock all the wheels.



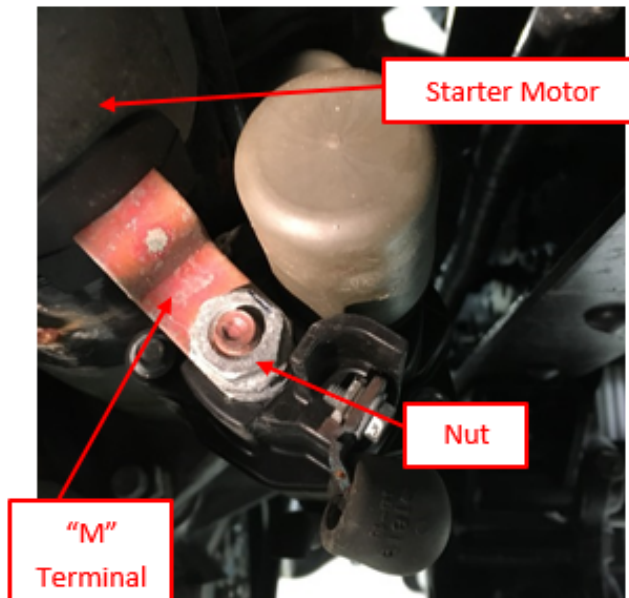
Repair Procedure:

1. Disconnect the negative battery terminal.



2. From below the driver's side of the vehicle, remove the 17mm "M" terminal starter motor nut. Discard the nut.

NOTICE: The starter motor nut has an integrated washer. If the washer has separated from the nut, ensure that both the nut and washer are removed and discarded.

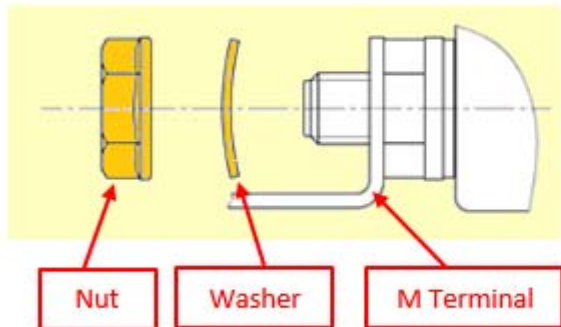


3. Use a wire brush to clean the stud and "M" terminal surface where the nut contacts the terminal.

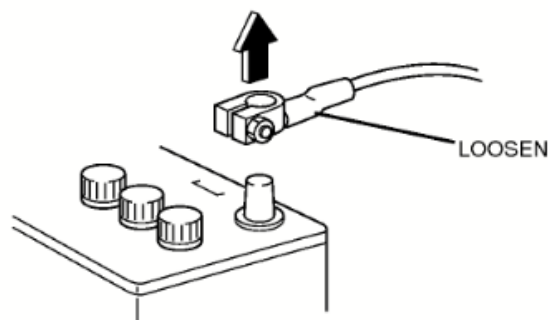


4. Install a new “M” terminal conical washer and nut onto the starter motor. Make certain the concave side of the washer is against the terminal. Tighten the nut to the specified torque.

Specified Torque: 13 lb-ft (18 Nm)



5. Connect the negative battery terminal. Attempt to start the engine using the starter motor. If the starter motor engages normally and cranks the engine over, proceed to the final inspection procedure, below. If the starter motor fails to engage and crank the engine over, starter motor replacement may be required.



FINAL INSPECTION

1. To complete this TSB review and confirm the following:

- Both the “M” terminal nut and washer have been installed.
- The “M” terminal nut was tightened to its specified torque.
- The starter motor engages normally and is able to crank the engine over.

Note: This technical service bulletin is provided as technical information and is not authorization for a warrantable repair.

CLAIM APPLICATION

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

Starter Nut Replacement:

Labor charge: 0.5 hour

Warranty code: 81210

Trouble code: 60

Operation code: 81250AOT

Original failed part: 9999999999

