SUBJECT: Transmission Harness Damage Due to Contact with Windshield Wiper Linkage and/or Unsecured Transmission Control Module (TCM)

MODELS AFFECTED: 3000 and 4000 Series Product Family Transmissions in Peterbilt Trucks

Description of Complaint:

Customers have complained of various intermittent transmission Diagnostic Trouble Codes (DTCs) that are not easily duplicated in Peterbilt trucks. Some may associate the DTCs with rainy or wet weather conditions. This has been confirmed in Peterbilt model 365, 367, and 384 model trucks, but it may not be limited to these models.

Cause:

There are two potential causes for this issue:

1. Some Peterbilt trucks have been built with the transmission wiring harness routed too closely to the windshield wiper linkage. When the windshield wipers are turned on, the linkage may contact the wires in the harness and rub through the insulation. This may cause intermittent shorts either to ground (when contact with wiper linkage occurs) or between multiple circuits. The wiper linkage contact can occur on the driver's or passenger's side, or both. Refer to Figure 1, Figure 2, and Figure 3.

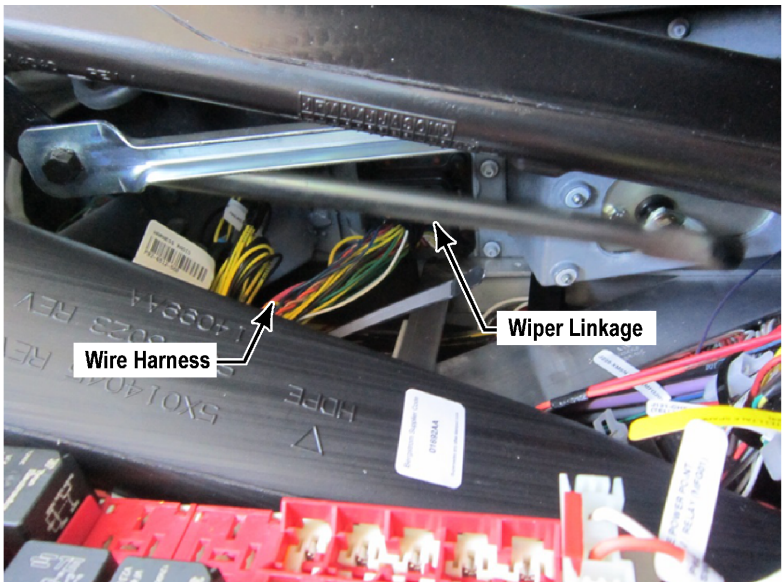

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Figure 1. TCM Wiring Harness and Windshield Wiper Linkage

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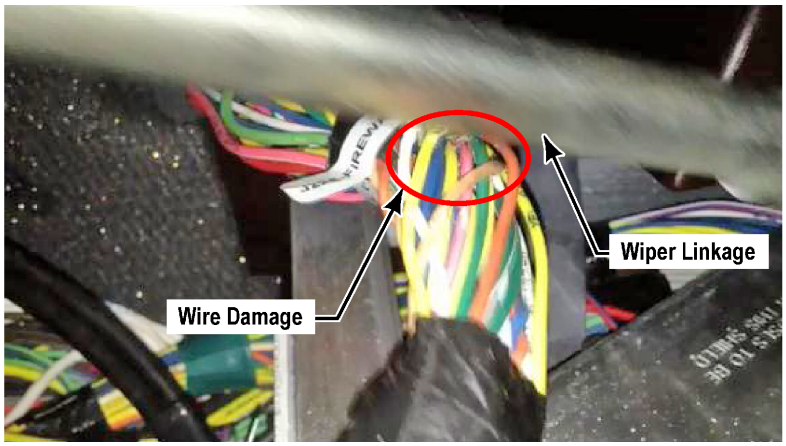

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Figure 2. Driver Side Harness

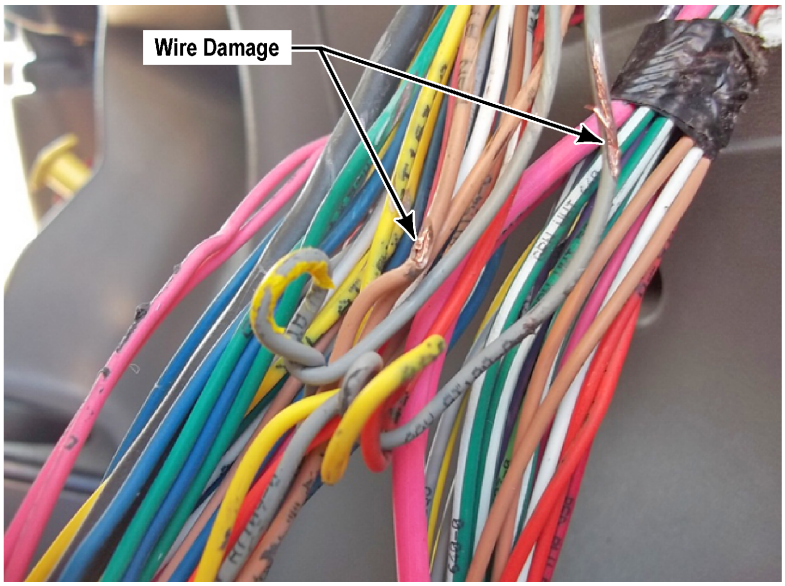

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Figure 3. Passenger Side Harness (Wiper Linkage Not Shown)

2. Some Peterbilt trucks that have a shift selector mounted on the dash “A-panel” and dual air cleaners may have a TCM that is not securely mounted in the dash. This may cause the TCM to move freely while driving. As a result, the wires entering the TCM connector can rub against metal dash supports. This can eventually lead to shorts to ground or between multiple circuits. Refer to Figure 4.

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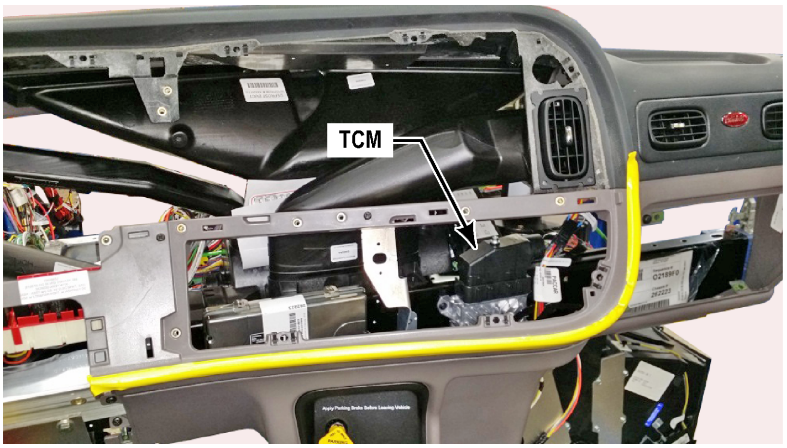

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Figure 4. Disassembled Dash Board

Symptoms:

Trucks can log various and/or multiple intermittent DTCs. Most DTCs relate to “solenoid control circuit high” or “solenoid control circuit low” issues.

Service Channel Procedure:

If this issue is discovered while performing customer maintenance or repair, please inform the customer that he or she should schedule an appointment with a Peterbilt dealer to address the issue.

NOTE: This issue is the responsibility of the OEM, and as such will not be repaired under Allison Transmission product warranty.

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