

**** SOLUTION ****

Title Mack Chassis - Equipped With An Automated Manual Transmission **Model D or F** (mDrive, AMT-D, AMT-F) - Transmission Oil Leakage From Transmission Input Shaft Seal Or Output Shaft Seal - **US10 And Newer Emissions, Common Model Years 2010 And Newer**

Mack Models

Mack Model AN - Anthem , CHU - Pinnacle, Axle back , CXU - Pinnacle, Axle front , GU - Granite , TD - Titan

Emission Standard

Emission Standard US10 , US10+OBD13 , US14+OBD13 , US14+OBD15 , US14+OBD16 , US17+OBD16 , US17+OBD18

Engine family

Engine family MP7 , MP8 , MP10

Transmission

Transmission AMT-F , AMT-D , AMT-F

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Cause Accumulation of debris in the left side vent ports of the transmission main case (corrosion, road salt, dirt, etc) may result in oil leaks present at the transmission input and output shaft seals.

The vent ports allow air exhausted from the shift solenoids and pistons to exit the main case. It also allows for equalization of internal and external pressures, as heat generated from operation will cause pressure in the case to increase. **For the AMT-F this is the only vent for the TECU and gearcase.**

Blockage of these ports allows pressure to build to a point that it forces oil past the input and output shaft seals. In extreme cases, the pressure buildup can be high enough that operation can be affected. Excessive internal pressure caused by blocked vents may result in slow or sluggish gear shifts.

Solution**When diagnosing and repairing a shaft seal leak:**

1. Check the vent ports on the upper left side of the the main gearbox housing for any sort of blockage or obstruction.



Clogged vent ports

2. Clean out any debris that is observed during the inspection.
3. Check the transmission oil level in the gearbox.
 - **If the lube level is excessively low:** Proceed to the next section.
 - **If the lube level is at an acceptable level:** Fill the transmission oil to the correct level and check operation.

For excessively low transmission oil levels, or customer report of noise from the transmission:

1. The transmission will need to be inspected for internal damage. Removal may be required for proper inspection.

NA_Sister solutions [K11907301](#)

Solution visibility [Dealer distribution](#)

Function(s)/component(s) affected

Function affected Input Shaft , Output Shaft , Lubrication

Function Group

Function Group 43 gearbox

Customer effect

Main customer effect fluid

Noise whine

Fluid problem leak , level incorrect

Fluid implicated Transmission Oil

Visual appearance leaking

Conditions

Vehicle operating mode when driving

Frequency of occurrence of problem random

Location of problem underneath cab

Administration

Author RU4469V

Dealer ID RU4469V

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