Preview Solution CBR-731-7

Automated Manual Transmission (AMT) Model D or F (mDrive and I-Shift, 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

Published 16 September 2024

Valid for all models equipped with an AMT, models years 2010 to current

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 gear case.

Diagnosing and Repairing a Shaft Seal Leak:

1. **Inspect Vent Ports for Blockages**
    - Begin by checking the vent ports located on the upper left side of the main gearbox housing for any blockages or obstructions. Due to the location, it can be difficult to see the vents, so using an inspection mirror and a flashlight is recommended.

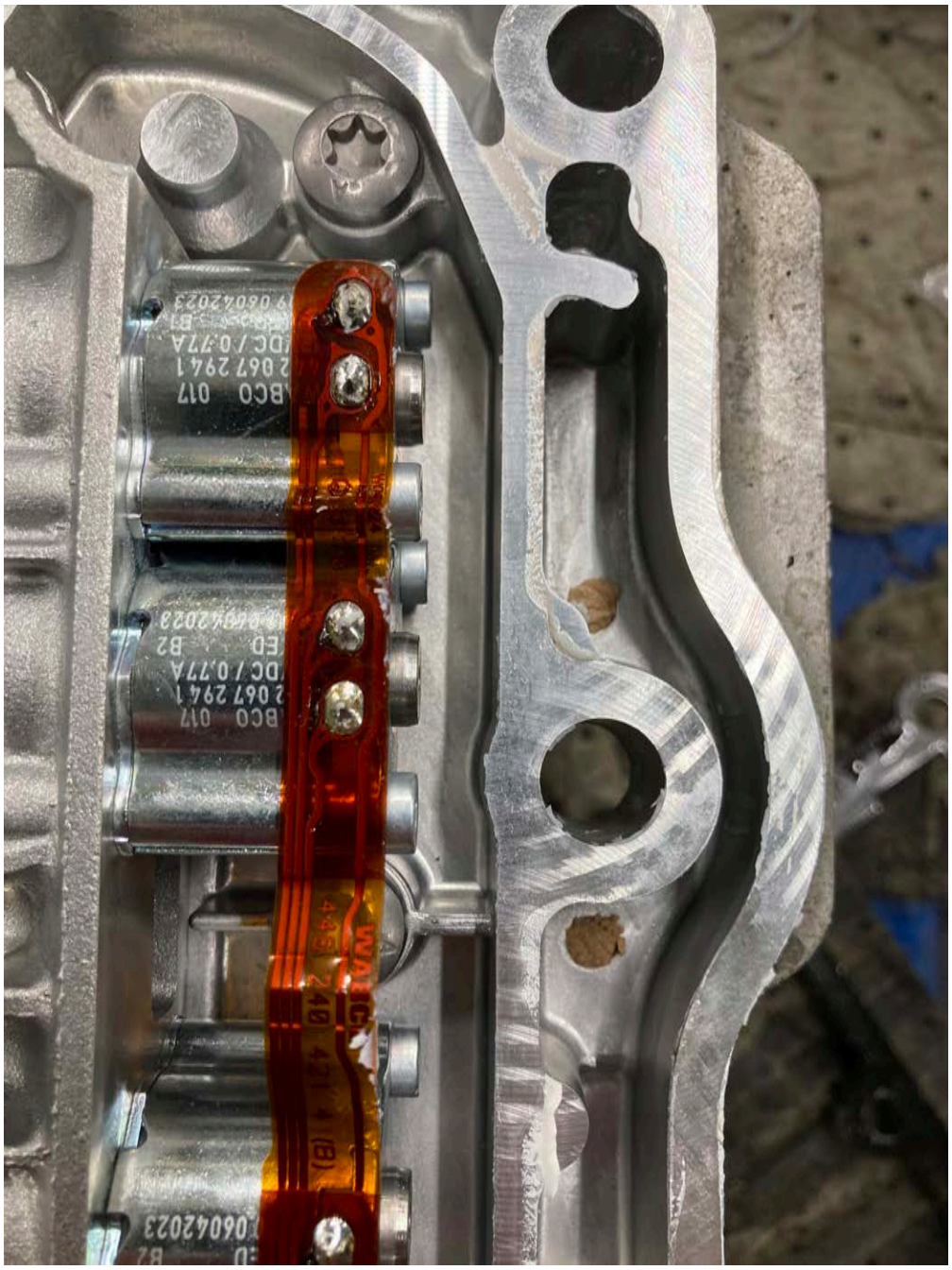
NOTE: If the rear seal is pushed back against the output yoke or is leaking, and the vents are clear, inspect for potential bug nests in the open holes on the gearbox. If a nest is found, it may indicate a larger blockage inside the case that cannot be seen.

Live UI

Live UI

Live UI

Live UI



2. **Clean the Vent Ports**
   - If any debris, such as road salt or dirt, is found in the ports, use a small screwdriver or similar tool to break up and remove the deposits.
   - Next, remove the upper oil fill plug on the right side of the gearbox. Wrap a clean rag around an air nozzle, and while wearing proper eye protection, blow air into the case. The goal is to create enough pressure to force the debris out through the vent ports on the left side.

Live UI

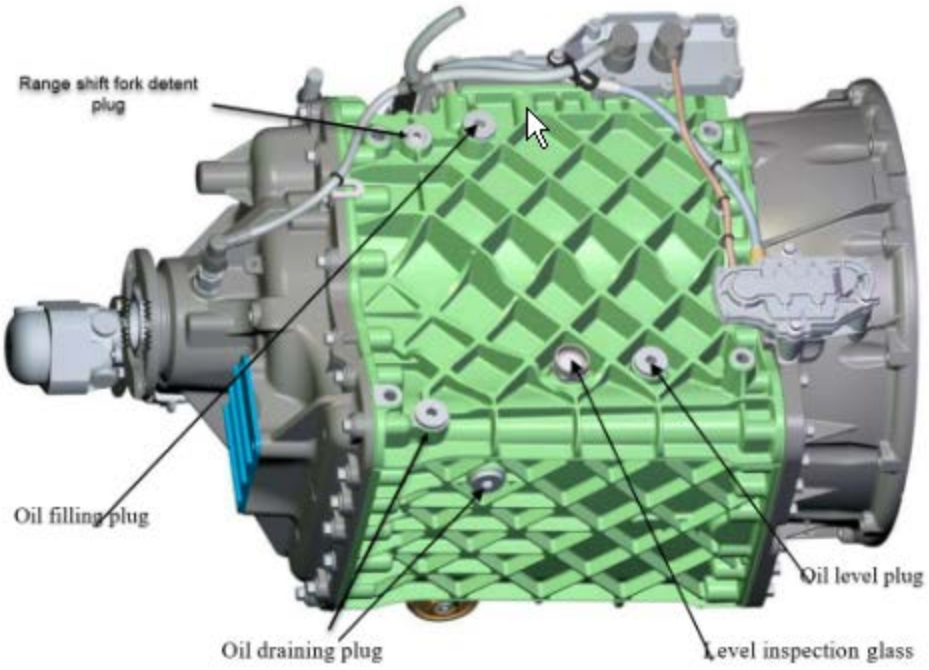


Figure 29. Position of oil plugs and level inspection glass

3. **Check Transmission Oil Level**
   - After inspecting the vents, check the transmission oil level in the gearbox.
     - **If the oil level is acceptable**, fill the transmission oil to the correct level and check the system's operation.
     - **If the oil level is excessively low**, or if the customer reports noise from the transmission, the gearbox should be inspected for internal damage. In this case, removing the transmission may be necessary for a thorough inspection.

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