

DTC P0741 – Torque Converter Clutch Does Not Lock Up – Missing O-ring

 MODEL 2000 MY-ON
S-TYPE

VIN L00600-L12500

Issue:

Some 2000 MY S-TYPE vehicles may experience a MIL illumination with diagnostic trouble code (DTC) P0741 stored in the PCM. This condition is most likely to result from the omission of an oil seal on the transmission stator shaft during assembly of the unit.

The function of the oil seal is to complete a hydraulic circuit intended to allow transmission fluid under pressure to actuate the lock-up clutch under certain conditions. Omission of the seal allows fluid to by-pass the intended circuit. This fluid then recirculates in the torque converter without actuating the lock-up clutch. The condition will be confirmed by the presence of DTC P0741.

The concern may be overcome by installing a seal at the correct location.

Action:

On a 2000 MY S-TYPE vehicle, with the MIL illuminated and DTC P0741 stored, proceed as follows:

1. Remove the automatic transmission unit from the vehicle. Refer to JTIS 8 section 307-01 (SRO 44.20.01) for full details.
2. Remove the torque converter.

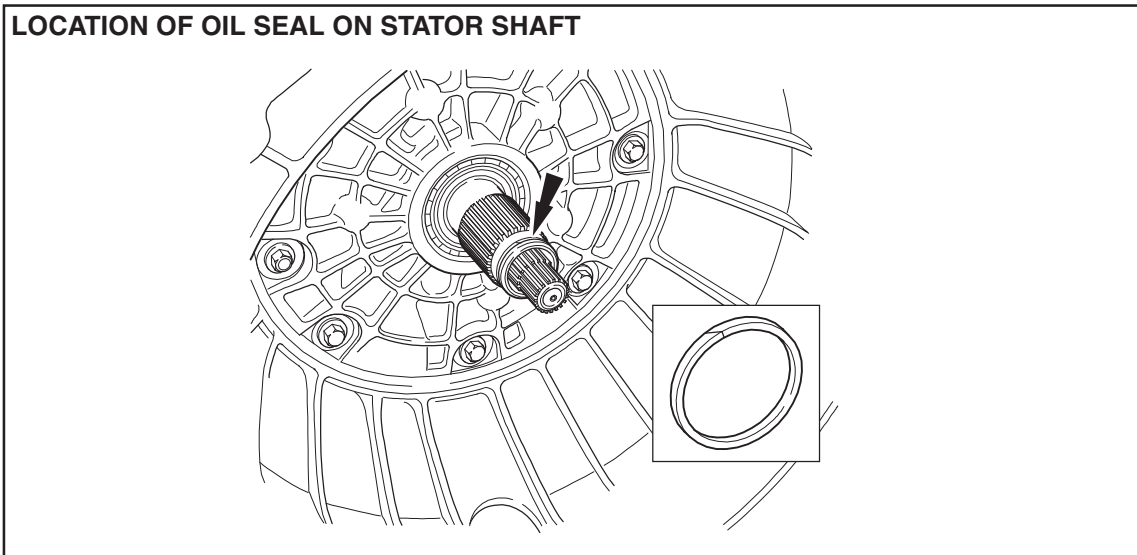
LOCATION OF OIL SEAL ON STATOR SHAFT


ILLUSTRATION 1

3. Inspect the stator shaft and determine if the seal is damaged or if no seal is present at the location shown in illustration 1.

4. If no seal is present, install a seal into the groove as illustrated and continue with step 5. If a seal is present and is undamaged contact the Technical Hotline at 1-800-JAG-DLRS for repair guidance.
5. Reinstall the torque converter.
6. Reinstall the automatic transmission.
7. Switch on the PDU. Select "Diagnostics". Enter VIN and other vehicle details, i.e.: L#####.
8. Select "Toolbox". From the "Toolbox" menu select "Powertrain".
9. Connect MPA and download cable to PDU and Base station. Allow the PDU to load. Select "Datalogger" from the menu. Disconnect the PDU from the base station and transfer it to the vehicle.
10. Connect the PDU to the data link connector.
11. With the J-Gate lever in the Park position - 'P', select "Enter" to start the "Datalogger".
12. Select "TOT2" - Transmission Oil Temperature feature from the menu.
13. The reading tolerance is from 80° F to 120° F, (**ideal temperature is 100° F**). If the value is greater than 120° F the vehicle **MUST** be left to cool down. If the value is less than 80° F then the vehicle must be driven slowly checking that the transmission oil temperature reading is within the range specified. The target temperature when putting the vehicle on the lift is 90° F.
14. Start the engine and verify that the transmission oil temperature is still within tolerance.
15. With the engine running and parking brake on move the J-Gate shifter through P-R-N-D-4-3-2 and back to P ensuring that Reverse and Drive have been engaged on both occasions.
16. Engage Park and keep engine running. Immediately raise the lift (engine still running) and perform fluid level check.
17. **Remove the hexagonal fill plug on the extension housing** and remove the fluid level plug. The level plug is located within the hexagonal drain plug on the underside of the transmission oil pan (Illustration 1).

Note: The fill plug must also be removed to ensure an accurate reading.

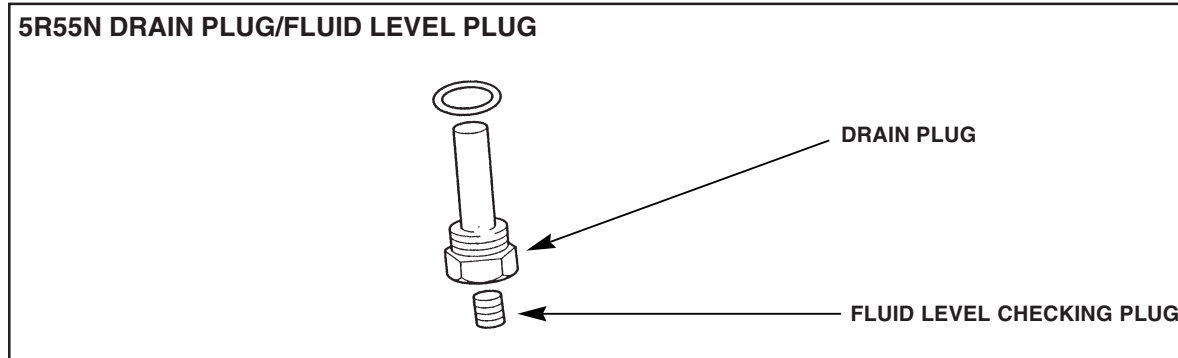


ILLUSTRATION 1

18. Hold the hexagon of the oil drain plug to prevent it turning, using a 7/8" or 22mm ring or open ended wrench, while removing the oil level plug using a 3/16" AF Hexagon (Allen) drive bit.
19. The transmission may be either under-filled or over-filled from the nominal condition.

Underfilled: If a few drips are all that comes out then the transmission is **underfilled** - add oil via the fluid fill plug on the extension housing. Use proper automatic transmission oil as listed above, adding no more than 250 ml at a time until the fluid drains out of the fluid level plug in a continuous stream - **replace the fluid level plug as soon as the stream starts to break up into drips.**

Overfilled/Slightly overfilled: Fluid should drain out in a continuous red stream - **replace fluid level plug as soon as stream starts to break up into drips.** If more than 250 ml drains off then go to the extremely overfilled procedure.

Extremely overfilled: The fluid stream will appear almost pink rather than deep red as it drains and more than 250 ml of oil will be collected in the container. When all of the excess oil has drained out replace the fluid level plug and switch off the engine for 30 minutes. By this time the fluid in the container should be a deep red color. If it is not, wait for another 30 minutes. Restart the engine then remove the fluid level plug. Add oil via the fluid fill plug on the extension housing. Adding no more than 250 ml at a time until the fluid drains in a continuous stream - replace the fluid level plug as soon as the stream starts to break up into drips.

20. Replace fluid fill plug and torque both the fluid fill and the fluid level plugs to specification listed on page 1.
21. Switch off engine.
22. Clean sump pan thoroughly.
23. Check for any DTCs (particularly DTC P0741) and delete them.

Note: Anytime an automatic transmission is removed from a S-TYPE vehicle, check that this seal is in place before reinstalling the transmission in the vehicle. If a seal is present and is undamaged contact the Technical Hotline at 1-800-JAG-DLRS for repair guidance.

Parts Information:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Seal	XR8 5601	1
Automatic Transmission Oil - 1 liter	JLM 21044	As required

Warranty Information:

<u>FAULT CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
FB HB 39	44.91.22	Remove transmission, install oil seal, reinstall transmission. Connect PDU, adjust transmission fluid level. Check and delete DTCs.	3.95 hrs.