

<b>Reference</b>	SSM74037
<b>Models</b>	Discovery / L462 Range Rover / L405 Range Rover Sport / L494 Range Rover Velar / L560
<b>Title</b>	ZF Transmission - 8HP suspected sump pan oil leak
<b>Category</b>	Driveline
<b>Last modified</b>	21-Sep-2018 00:00:00
<b>Symptom</b>	501000 Automatic Transmission Concerns

**Content****Issue:**

A customer may report an oil leak under the vehicle from the transmission suspected to be the sump pan. Engineering would like to investigate the root cause as to these concerns

To ensure correct diagnosis and repair please carry out the following steps:

**Action**

1. Raise vehicle on ramp
2. Using a suitable degreaser, thoroughly degrease the suspected component all the way around as well as, approximately, 25-50mm (1-2 inches) above the suspected leak
3. Using an air gun ensure all traces of oil are removed from the bolts/thread attached to the sump pan.
4. Using a suitable leak detector spray, thoroughly coat the suspected component as well as, approximately, 25-50mm (1-2 inches) above the suspected leak, LR112798 or C2C42090
5. Allow to sit for a couple minutes to ensure all oil has been cleaned off
6. Take a clear, in focus photo of the spray on the suspected area before proceeding.
7. Reassemble vehicle and complete a suitable road test and make sure that the engine gets to normal operating temperature
8. Return the vehicle to workshop and raise on ramp
9. Inspect the suspected component for fluid leaks, the detector spray should leave a trace from the leak area
10. Identify leaking position:
  - If a leaking point has been identified on the sump pan, take a clear, in focus photo of the leaking position. Proceed to 10.
  - If a leaking point has not been identified, proceed to 11
11. At the customer's convenience, raise a TA attaching photos of the sump pan requesting a visit from ZF engineering. The TA will advise whether to proceed with repair or whether a ZF engineer will visit the site.
12. If a leaking position has not been identified, check the following areas:
  - Check Technical Bulletins reference Automatic Transmission leaks
  - Transmission output shaft seal
  - Transmission oil cooler pipes not secured correctly
  - Transmission electrical plug
13. If a sump pan replacement is required, record the breakaway torques for the sump pan bolts (as detailed in attachment) and raise an EPQR attaching photos of leak and breakaway torque attachment.

Technicians - Please rate this SSM and provide comments so that future communications can be improved.

1 = Poor – Basic information provided – The SSM does not help me resolve the customer concern.

3 = Average – Adequate information provided – The SSM partially helps me resolve the customer concern.

5 = Excellent – All required information provided to resolve the customer concern.