
Automatic transmission oil loss in area of electrical connection and oil pan gasket

Topic number	LI27.00-N-048696
Version	1
Design group	27.00 General
Date	01-22-2010
Validity	Transmission 722.6
Reason for change	

Complaint:

Automatic transmission oil loss in the area of the electrical connection and oil pan gasket and/or in the wiring harness. Different remedial action is necessary based on the type of complaint (a or b).

- a) Transmission oil loss in area of pilot bushing, oil pan
- b) There is transmission oil in the wiring harness.

Cause:

The following causes may apply and require different repair methods:

- a) Due to insufficient sealing of the large O-ring of the pilot bushing outwards, transmission oil has distributed itself in the area of the plug/oil pan gasket.
- b) Due to insufficient sealing of the small O-ring of the pilot bushing, there is transmission oil in the wiring harness.

Remedy:

Carry out remedies according to the complaint:

- a) Clean the transmission in the affected area, spray with leak detector spray and perform road test. If no oil escape can be detected after the road test or can only be detected in the area of the pilot bushing, only replace the pilot bushing. Use damage code 27270 04.

- b) !!!!Procedure modified !!!!

Replace pilot bushing with seal rings.

The conductor plate is not the cause of leakage complaints at the pilot bushing and must not be replaced on these grounds.

Allow the wiring harness to drip and blow out the plugs at the transmission end and control unit end with compressed air. In addition the control unit contacts must be blown dry.

The contacts can then be sprayed lightly with commercially available contact spray. Use damage code 27270 04.

Notes:

In the course of the production and inspection processes, the pilot bushing is coated with oil. Because of this, oil from manufacture can therefore enter the pilot bushing and form a small puddle (see attachment). However, a larger quantity of oil should not flow out of the pilot bushing when the pilot bushing (at the wiring harness end) is pulled. If this is the case, the pilot bushing must be replaced.

When connecting the wiring harness to the transmission, make sure that the wiring harness is routed free of tension. No tensile forces may be transferred to the plug by the wiring harness. Increase outer cable length if necessary (no

reason to replace a wiring harness). The pictures in the attachment show examples of bad (Figure 2) and good (Figure 1) routing.

The pilot bushing may only be disassembled/assembled at transmission oil temperatures below 50 °C in order to avoid damaging the electrical set/conductor plate.

Attachments	
File	Designation
Führungsbuchse_Olmenge ok.pdf	Pilot bushing is OK
1.jpg	Example of tension-free, good line routing
2.jpg	Example of poor line routing which leads to an effect of forces on the plug

Symptoms
Power transmission / Automatic transmission / Automatic transmission - function / General
Power transmission / Automatic transmission / Automatic transmission, leaks / Leaks

Parts					
Part number	Designation	Quantity	Note	EPC net	Non-EPC
A0009890359	Leak detector spray	1	Only when required / Suffcient for 10 cars, submit as qty. 0.1 on warranty claim	X	
A2035400253	Pilot bushing	1		X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
			27023 04	

WIS-References			
Document number	Title	Note	Allocation
AR27.00-S-0101S	Inspect ATF level in automatic transmission, add ATF if necessary	Model 639	Remedy
AR27.00-S-0200-01S	Drain transmission oil from torque converter and transmission	Model 639	Remedy
AR27.10-S-0500-01SV	Disconnect/connect plug	Model 639	Remedy
AR27.19-D-4980A	Remove/install pilot bushing of electrohydraulic controller unit	Model 901-905	Remedy
AR27.00-D-0101A	Inspect ATF level in automatic transmission, add ATF if necessary	Model 901-905	Remedy

AR27.19-D-4980B	Remove/install pilot bushing of electrohydraulic controller unit	Model 906	Remedy
AR27.00-D-0100H	Inspect ATF level in automatic transmission, add ATF if necessary	Model 906	Remedy