Friction power of torque converter lockup clutch is too high (FC 2783) or actuation of torque converter lockup clutch not possible (FC 0741)

Topic number	LI27.20-P-055758
Version	10
Design group	27.20 Torque converter
Date	04-07-2015
Validity	Vehicles with TRANSMISSION 722.9 (7G-TRONIC PLUS) from production months 04/2011 to 12/2013
Reason for change	Added Fault codes to validity
Reason for block	

Complaint:

FC 2783 (Friction power of torque converter lockup clutch is too high) or FC 0741 (Actuation of torque converter lockup clutch not possible) stored in transmission control unit. One possible additional customer complaint could be "poor acceleration" e.g. due to engine intervention.
This can affect all 722.9 transmissions (7G-TRONIC PLUS) from the production months 04/2011 to 12/2013. The two fault codes can also occur in combination with rpm sensor faults (see also the relevant GI or LI). The rpm sensor fault is not connected with this complaint.

Cause:

Cause for TRANSMISSION 722.9 from ID 03.318.709 to ID 03.979.899 or from ID 07.019.944 to ID 07.247.699
Increased wear of torque converter bearing bushing. The cause of this may be a rough microsurface of the journal at the transmission end.
Cause for TRANSMISSION 722.9 from ID 03.979.899 to ID 03.999.999, from ID 05.000.001 to ID 05.392.283, from ID 07.247.699 to 07.716.823 or from ID 10.000.001 to 10.083.989
Possible slight internal leakage at sealing ring between transmission input shaft and torque converter lockup clutch.

Remedy:

Remedy for vehicles with ENGINE 271
Update transmission software. Erase the fault codes in the VGS and reset the lifecycle data of the torque converter (see below for instructions).
If no newer transmission software is available, proceed as described under "Remedy for vehicles without ENGINE 271".
Remedy for vehicles without ENGINE 271
Disassemble the transmission and the torque converter and then sand the transmission input shaft with a 15 µm microfinishing film as described in the attached instructions (use the finishing film/strip 1x only). The finishing film/polishing strip can be ordered as a consumable from the GLC.
The torque converter must also be replaced here (please order as per EPC).
Observe the following (the flex plate must be installed):
1.) Clean torque converter mount in crankshaft using brake cleaner.
2.) Remove fretting rust from torque converter mount in crankshaft using suitable emery cloth (grain size: 120).
3.) Again clean torque converter mount in crankshaft using brake cleaner (compressed air if necessary).
4.) Grease mounting pin of torque converter with multi-purpose paste before installation.
Additional note (valid for all repair methods described here which instruct replacement of the torque converter)
After replacing the torque converter, the lifecycle data of the torque converter must be reset as follows:

Access via XENTRY: VGS - Fully integrated transmission control (Y3/8n4) -> Teach-in processes -> Reset of adaptation values -> Torque converter -> Confirm torque converter replacement with Yes -> Confirm reset of adaptation data with Yes

Access via DAS: Electronic transmission control (722.9 7G-TRONIC) -> Transmission adaptation -> Reset of adaptation data (torque converter lockup clutch) -> Confirm torque converter replacement with Yes -> Confirm reset of adaptation data with Yes

If vehicles with TRANSMISSION 722.9 and ID after 05.392.283, after 07.716.823 or after 10.083.989 are reported with this complaint, please create a TIPS case.

Attachments

File	Description
Working instruction finishing the turbine shaft_en..pdf	Working instruction finishing turbine shaft
Beispielbilder_example pictures.pdf	Beispielbilder "Passungsrost innerhalb der Drehmomentwandler-Aufnahme der Kurbelwelle" Example pictures "Fretting corrosion within the torque converter seat of the crankshaft"

Symptoms

Power transmission / Automatic transmission / Automatic transmission - function / General
Power transmission / Automatic transmission / Automatic transmission - function / Poor start-off performance
Power transmission / Automatic transmission / Automatic transmission - function / Shifts
Power generation / Engine management / Engine performance / No/poor output
Power generation / Engine management / Engine performance / Poor acceleration
Power transmission / Automatic transmission / Automatic transmission - function / Poor shift quality

Control unit/fault code

Control unit	Fault code	Fault text
VGS - Fully integrated transmission control (Y3/8n4) (VGS4NAG2) (C (205),GLK (204),S (222),C (204),M/GLE (166),GL/GLS (166),E (212), SL (231),CLS (218),S (217),E (207),G (463))	P074100	The wet clutch/torque converter lockup clutch does not close. _
VGS - Fully integrated transmission control (Y3/8n4) (VGS4NAG2) (C (205),GLK (204),S (222),C (204),M/GLE (166),GL/GLS (166),E (212), SL (231),CLS (218),S (217),E (207),G (463))	P278300	The friction power of the torque converter lockup clutch is too high.

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 000 986 92 74			15 µm microfinishing film/polish	1	Packing unit corresponds to 1.5 m (pack contains 5 strips of 0.30 m) -> Use strips once only	X

A 000 989 80 51	12		Multi-purpose paste	1	Pack contains 100g	X

Work units				
Op. no.	Operation text	Time	Damage code	Note
			27161 04	For use on TRANSMISSION 722.9 from ID 03.318.709 to ID 03.979.899 or from ID 07.019. 944 to ID 07.247. 699
			27287 **	For use on TRANSMISSION 722. 9 with ID higher than 03.979.899 or 07.247.699

Validity		
Vehicle	Engine	Transmission
*	*	722.966
*	*	722.903
*	*	722.969
*	*	722.993
*	*	722.909
*	*	722.950
*	*	722.995
*	*	722.905
*	*	722.967
*	*	722.907
*	*	722.961
*	*	722.971
*	*	722.908
*	*	722.968
*	*	722.999
*	*	722.931
*	*	722.998
*	*	722.902
*	*	722.962
*	*	722.930
*	*	722.901
*	*	722.996
*	*	722.965
*	*	722.997
*	*	722.963
*	*	722.932
*	*	722.906

*	*	722.964
*	*	722.960
*	*	722.904