DTB

Date:	January 11, 2006
Order No.:	P-B-27.60/61b
Supersedes:	P-B-27.60/61a dated Nov. 18, 2005
Group:	27

Revision: *Model 221 Added / Warranty Information Updated*

SUBJECT: **Model 171.454/456/473**

Model 203.052/054/056

Model 209.356/375/456/475

Model 211.056/070/256

Model 215.375

Model 219.375

Model 220.170/175

Model 221.171

Model 230.475

Equipped with 7G-Tronic Transmission (NAG2)

Rough Shift Quality

If you receive customer reports in the above model vehicles of rough 1-2, 3-2 and 2-1 gearshifts, this may be due to the specific gear not being fully adapted or there could be a mechanical cause as well. To resolve, perform the following diagnostics.

1. Reproduce the condition and identify the affected shifts using Star Diagnosis.
2. Check Star Diagnosis for software updates of the engine and transmission control units.
3. Print out the adaptation data from SDS and inspect (Figure 1).

[i] **Note:** The adaptation menu can be found by following STAR Diagnosis: Control Units → Drive → ETC 7GTronic → Adaptation → Display and reset of Adaptation data → select upshift or downshift and select the specific shift with the concern. Print the values by allowing all of the data to load and then pressing F11. Select "printout of test step" and press print. <u>DO NOT RESET THE ADAPTATION DATA.</u>

4. If the B1 filling time cycles are between -15 to -20, go directly to Step 9.
5. If the filling time cycles are +/- 20 on any of the other shift members, contact EDAC per DTB P-B-27.00/38c dated September 23, 2005.

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6. If the adaptation values are within the specified range, check the transmission oil level and correct if necessary according to WIS document AR27.00-P-0100W.
7. Perform shift adaptations to the affected shift member until the adaptation values stabilize.
8. Print the adaptation values for the shift members which required adaptation.

[i] **Note:** The adaptation menu can be found by following STAR Diagnosis: Control Units → Drive → ETC 7GTronic → Adaptation → Display and reset of Adaptation data → select upshift or downshift and select the specific shift with the concern. Print the values by allowing all of the data to load and then pressing F11. Select "printout of test step" and press print. <u>DO NOT RESET THE ADAPTATION DATA.</u>

9. If the filling time cycles of the B1 shift member are found to be in the -15 to -20 range, the cause may be an incorrectly installed circlip on the B1 return spring. In this case, contact EDAC per DTB P-B-27.00/38c dated September 23, 2005 to receive authorization to remove the transmission from the vehicle and proceed with the repair of the B1 shift member as outlined in WIS AR27.50-P-0870W.

Diagnosis Assistance System					Copyright 1999 DaimlerChrysler	
VIN	WDB1714561A123456		Model series/model designation	171.456		
Order number			License plate			

Adaptation values of shift 1 - 2:	Lower limit value:	Upper limit value:	Actual value 60°C	Actual value 90°C	Actual value 110°C
Fill time of brake B1 [cycles]	-20	20	25	25.5	26
Brake filling pressure B1 [mbar]:	-2000	2000	800	820	960

Filename: C:\Programme\Developer\Das\bin\..\trees\pkw\getriebe\egs2\menues\mnad_csd.s
Cell co-ordinate: 11 , 5

Figure 1   P-B-27.60/61

Parts Information

Qty.	Part Name	Part Number
1	Circlip (snap ring)	A220 994 03 40

[i] **Note:** The following allowable labor operations should be used when submitting a warranty claim for this repair.

In Case of Warranty

Operation: Road test, perform (00-9151)
Short test, perform (54-1011)
Oil level – auto. trans. (after leak test), check/correct vehicle w/ 722.9 trans. (27-1256)
Shift adaptation (specify affected shift member), perform (27-0000)
Automatic transmission (vehicle with 722.9 trans.), R&R (27-2029)
A/Tran (722.6/722.9) K1/K2/K3/B1/B2/B3/Frewhl, D&A/replace pars as required
(transmission removed) (27-9999)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
27012 45 / 27016 45 / 27017 45	00 9151	0.3 hrs.	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1
	54 1011	0.3 hrs.	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1
	27 1256	0.5 hrs.	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1
	27 0000	0.3 hrs. *	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1
NOTE: Only after obtaining EDAC Authorization may the following Damage Code and Operation Codes be used.			
27292 D1	00 9151	0.3 hrs.	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1
	54 1011	0.3 hrs.	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1
	27 2029	4.0 hrs.	Y1
		4.1 hrs.	T7, U6
		4.2 hrs.	T2
		4.6 hrs.	S2, S5, S7, S8
		4.8 hrs.	AA, X1, X3
		5.2 hrs.	Q6, Q7, Q9
		5.3 hrs.	M1, M2
		5.4 hrs.	N1
		5.5 hrs.	X2
		6.2 hrs.	R1
	27 9999	3.3 hrs.	AA, M1, M2, N1, Q6, Q7, Q9, R1, S2, S5, S7, S8, T2, T7, U6, X1, X2, X3, Y1

* - Maximum allowed time with a separate time punch.