



**DTB**

Date: March 6, 2008  
 Order No.: P-B-27.55/50g  
 Supersedes: P-B-27.55/50f dated March 24, 2006  
 Group: 27

**Revision History**

Revision	Date	Purpose
g	3/6/08	Note Pertaining to Warranty Information Added to Page 4
f	3/24/06	“Perform Repair Based on Test Result” – Procedure Updated / Warranty Info. Updated
e	3/6/06	“Perform Repair Based on Test Result” – Procedure Updated
d	8/29/05	Warranty Information Updated
c	8/18/05	“Perform Repair Based on Test Result” – Step 2 Revised / Warranty Info. Updated
b	4/6/05	Addition of Note After Step 3 Pertaining to AMG Model Vehicles
a	2/17/05	Additional Applicable Models, Parts and Warranty Information Updated
-	01/27/05	Initial issue

**SUBJECT: Model 203.040/061/064/065/081/084/261/264/281/284/740/747/764  
 Model 209.365/375/376/465/475  
 Model 211.065/070/076/083/265/283  
 Up to Production Date 09/2003  
 Harsh Engagement Possibly Followed by Droning/Buzzing Noises During Light  
 Acceleration Between Engine Speed of 1200 – 2500 RPM**

If you receive customer reports in the above model vehicles of humming/buzzing noises or noticeable harsh engagement during gentle acceleration between engine speed of 1200 – 2500 rpm; this may be caused by incomplete adaptation of the torque converter, the transmission (EGS) ECU software or glycol contamination of the automatic transmission fluid. Follow the below repair procedures to resolve.

**i Note:** The condition is not intermittent and can be reproduced at all times.

**i Note:** The Glycol test must be performed only if:

- a. the vehicle was produced before 09/2003,
- b. the radiator is manufactured by “Valeo”, refer to Figure 1 for identification,
- c. old crimping method used to assemble the radiator end tanks resembles Figure 2.



Figure 1

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This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records.



Figure 2  
Old Crimping Method



Figure 3  
New Crimping Method



**Caution!** It is mandatory to follow the process steps in sequence.

1. Clear all adaption values.
2. Verify if condition is still present
3. If condition is still present after clearing all EGS ECU adaption values, perform glycol test.



**Note:** Steps 4 and 5 do NOT apply to AMG Vehicles (203.065, 209.376 and 211.076).

4. If condition is no longer present after clearing all EGS ECU adaption values, replace the EGS ECU with updated software with part number listed in the parts information table.
5. If condition reappears after EGS ECU software updates, perform glycol test.

### Instructions for Glycol Test



**Caution!** Ensure that safety glasses and rubber gloves are worn when performing glycol test. This test should be performed in a clean and well ventilated area away from organic materials (rags, cardboard, oils and other chemicals). Refer to the Material Safety Data Sheets (MSDs) for additional safety measures.

1. Fill 0.5 ml of ATF with the pipette in the small glass container (Figure 4, 1).
2. Fill with distilled water to 5 ml (Figure 4, 2).
3. Add 1 drop of "Tenside" (Figure 4, 3).
4. Add 1 micro spoon of "Periodic acid" and rock the small glass container (Figure 4, 4).
5. Allow to stand for 5 minutes (Figure 4, 5).



**Note:** It is essential to comply with the specified standing time in step 5; otherwise the measured value result may be distorted.

6. Add 10 drops of "Natronlauge" or Caustic Soda Solution (Figure 4, 6).
7. Allow to stand for 3 minutes (Figure 4, 7).



**Note:** It is essential to comply with the specified standing time in step 7; otherwise the measured value result maybe distorted.

8. The sample is now divided into 2 layers; an upper and a lower layer. Immerse the syringe so that the end tip is into the lower layer of the sample and take up approximately 4 ml. of the lower layer using the syringe (Figure 4, 8).
9. Pour the fluid taken up through the filter into a clean small glass container (Figure 4, 9).
10. Immerse test sticks into the filtered solution for approximately 2 seconds, shake the stick and wait for a reaction time of one minute (Figure 4. 10).
11. Compare the color of the test sticks with the color chart on the test stick tube (Figure 4, 11).

**i** **Note:** The colors of the color chart tube correspond to the amount of glycol contamination of the ATF. After completion of the test, the liquid in the two glass containers should be handled as a hazardous waste. Store in a sealed container and dispose of in accordance with all Federal, state and local hazardous waste regulations.

**Perform repair based on the test result:**

1. Up to 100 mg/liter of glycol contamination do not perform any repair (considered normal due to condensed water and not a leak).
2. As of 100 mg/liter of glycol contamination, replace radiator. Clean and flush the transmission with the torque converter and transmission oil cooler lines. Refer to WIS Document AR27.55-P-0100A.
3. If the condition is still reproducible after the flush routine, replace the torque converter.

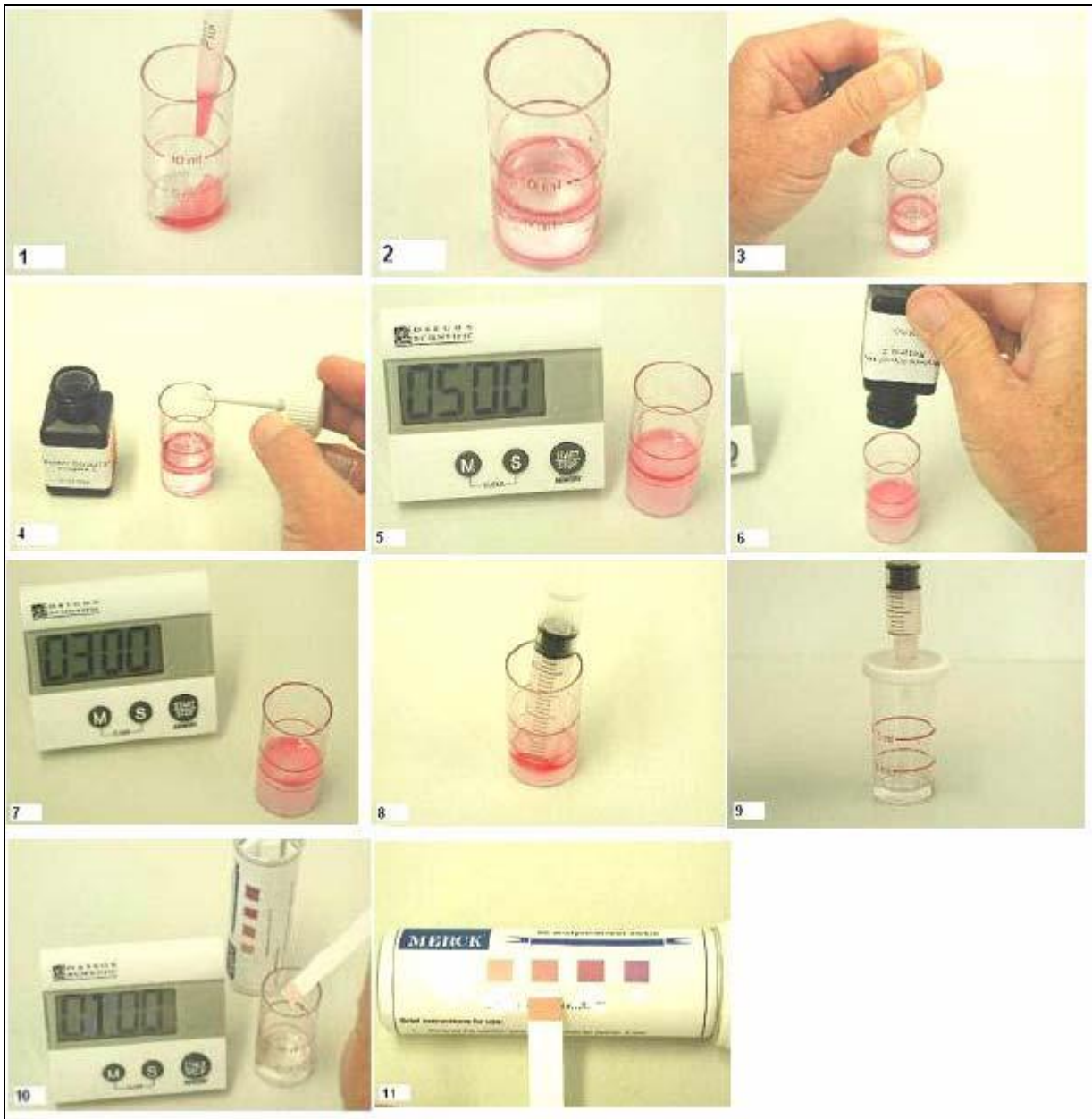


Figure 4

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## Parts Information

Qty.	Part Name	Part Number
1	Glycol Test Kit Part #1	A000 989 00 09 15 <sup>1</sup>
1	Glycol Test Kit Part #2	A000 989 00 14 <sup>1</sup>
1	ATF Sample Container	W000 589 49 98 00 <sup>2</sup>
1	EGS ECU (211 MY 2003) <sup>3</sup>	A034 545 41 32
1	EGS ECU (211 MY 2004) <sup>3</sup>	A034 545 44 32
1	EGS ECU (209 MY 2004) <sup>3</sup>	A034 545 42 32
1	EGS ECU (203 MY 2004) <sup>3</sup>	A035 545 30 32

<sup>1</sup> – Sufficient for 30 vehicles, Submit as Local Purchase – GLC01594, Qty 1, handling is included

<sup>2</sup> – The special tool, W000 589 49 98 00, will be stocked in the PDC and can be ordered at the descretion of the dealer. It is not an automatically released item.

<sup>3</sup> – Does not apply to AMG Vehicles (203.065, 209.376 and 211.076), verify part no. is EPC before ordering.

**i** **Note:** This repair is only valid for the models listed above up to a production date of 09/2003. Also, operation “Glycol test, perform (00-9151)” is not valid on any repairs outside of this document. Failure to comply will result in actions up to and including claim debits.

**i** **Note:** The following allowable labor operations should be used when submitting a warranty claim for this repair. This information has been generated on March 24, 2006. Please refer to Netstar → Star TekInfo → Star Time for the most current labor time allowance.

### In Case of Warranty

**Operation:** Short test, perform (54-1011)  
**If necessary:** Control unit....code (after test), perform (54-0992)  
 Road test, perform (00-9151)  
 Control module – for electronic transmission (722.6), replace (27-2351)  
 Glycol test, perform (02-4609)  
 Radiator, replace (20-4000)  
 Addl. to operation no. 3865/4000 – vehicles with auto. Trans. (20-4300)  
 Automatic transmission and torque converter, flush (27-4863)  
 Automatic transmission (722.6-electronic), R&R (27-2028)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
27431 04	54 1011	0.3 hrs.	P1, P2, P3, P4, P5, P6 P7, P8, P9, Q1, Q2, Q3, Q4, S1, S2, S3, S4, S5, T1, T2, T3, T5, U1, U3
If necessary:	54 0992	0.1 hrs.	P1, P2, P4, P5, P6, P7, P8, P9, Q1, Q2, Q3, Q4, S1, S2, S4, S5, T1, T2, T5, U1, U3
	00 9151	0.3 hrs.	P1, P2, P4, P5, P6, P7, P8, P9, Q1, Q2, Q3, Q4, S1, S2, S4, S5, T1, T2, T5, U1, U3
	27 2351	0.3 hrs.	P1, P2, P4, P5, P6, P7, P8, P9, Q1, Q2, Q3, Q4, S1, S2, S4, S5, T1, T2, T5, U1, U3

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**In Case of Warranty**

<b>Damage Code</b>	<b>Operation Number</b>	<b>Time (hrs.)</b>	<b>Model Indicator (s)</b>
	02 4609	0.5hrs.	P1, P2, P3, P4, P5, P6, P7, P8, P9, Q1, Q2, Q3, Q4
		0.6 hrs.	S1, S2, S3, S4, S5, T1, T2, T3, T5, U1, U3
	00 9151	0.3 hrs.	P1, P2, P4, P5, P6, P7, P8, P9, Q1, Q2, Q3, Q4, S1, S2, S4, S5, T1, T2, T5, U1, U3
	20 4000	1.6 hrs.	S1, S2, S4, S5, U3
		1.7 hrs.	T1, U1
		1.9 hrs.	P3, S3
		2.1 hrs.	T2, T5
		2.2 hrs.	P1, P2, P4, P6, P7, P8, P9, Q2, Q4, T3
		3.3 hrs.	P5
		3.6 hrs.	Q1, Q3
	20 4300	0.2 hrs.	P5, Q1, Q3
		0.3 hrs.	P1, Q2, Q4
	27 4863	2.4 hrs.	P1, P2, P3, P4, P5, P6, P7, P8, P9, Q1, Q2, Q3, Q4, S1, S2, S3, S4, S5, T1, T2, T3, T5, U1, U3
	27 2028	3.7 hrs.	T1, T2, U1
		4.0 hrs.	T3
		4.2 hrs.	S1, S4
		4.8 hrs.	T5, U3
		5.1 hrs.	P1, P2, P3, P4, P5, Q2, Q4, S2, S5
		5.2 hrs.	S3
		6.3 hrs.	Q1, Q3
		6.6 hrs.	P6, P7, P8, P9