





Date May 2009

Order no.: P-B-83.10/108b

Supersedes: P-B-83.10/108a dated February 29, 2009

Group: 83

### **Revision History:**

Revision	Date	Purpose
b	05/22/09	VIN information included for model 221, update to warranty information
а	02/29/08	Update to warranty information
-	01/23/08	Initial Issue

SUBJECT: MODELS 216 and 221 up to 033538 1)

Water Leakage Causing Erroneous Blower and A/C Operation

Water leakage into the passenger compartment on models 216 and 221 may cause erroneous blower and A/C operation:

 Model 216: Due to moisture accumulating in passenger compartment caused by blocked drain holes on the right and/or left side walls.

### Note: (applies to model 216):

Please check VMI for open service campaign: P-SC-2008010002 and clear drain holes as described in this campaign.

 Model 221: Due to body tolerances, the left rear or right rear wheelhouse may leak despite a visible seam seal. Moisture can penetrate the rocker panel on one and/or both sides. If the drain grommets do not open when moisture enters the rocker panel, moisture can enter the passenger compartment. The result of which is that control units, electrical connectors, and lines become damp.

### Note (applies to model 221):

Please check VMI for open service campaign: P-SC-2006020007 and replace the drain grommets as described in this campaign.

#### Note:

- Please read this bulletin in its entirety before proceeding.
- As of January 11, 2008, this Bulletin has been superseded by Service Campaign No. 2008010002.
   Combining the work called for in this bulletin with that required in the above referenced Campaign will result in a charge back for the work performed in accordance with this bulletin.
- Prior to performing this repair, please check VMI to determine if the vehicle is involved in Service Campaigns P-SC-2008010002, P-SC-2006020007 and if it has been previously repaired.

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

As of VIN: 1A030660 additional sealing pads on the wheel arch and inner sill at left and right (production break point 12/14/05). As of VIN: 1A033539 new water drain grommets.

#### **Procedure**

### **A. MODEL 216**

1. Detach the rocker panel cover: Refer to WIS: AR88.80-P-6000SC

Note (regarding the above WIS instructions):

Detach rocker panel starting at rear (of panel). DO NOT completely remove rocker panel.

### **CAUTION!**

Allow vehicle (body) to warm up to room temperature before perfoming work or damge may occur to rocker panel and/or fasteners.

2. Pull the rear of the rocker panel cover outwards at the bottom.

## **CAUTION!**

To prevent creasing the rocker panel, pull the panel only far enough away from the body allow acces to the drain holes.

3. Clean the drain holes (A, Figure 1) of excess preservation agent by pushing a **plastic** cable tie repeatedly in and out of each drain hole (A) until the drain holes (A) are clear.

#### Note:

- Cable tie dimensions approx.: 7" X 4.8 mm
- Do not use a metal tool to clear drain holes.

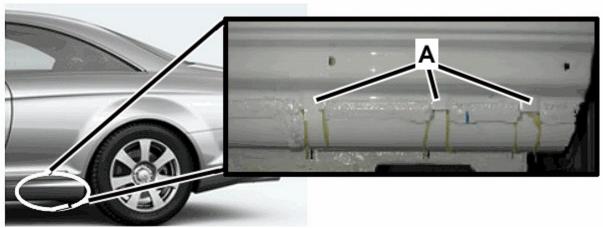


Figure 1

- If water pours out from the left and/or right side drain holes, proceed to step 4.
- If no water pours out from the left and/or right side drain holes, preceed to step 7.
- 4. Check the rear floor and the underside of the rear floor lining for dirt and signs of moisture:
- If there is moisture present in the passenger compartment under the floor covering, proceed to step 5.
- If there is no moisture present in the passenger compartment under the floor covering, proceed to step 7.

- 5. To identify all of the components that have come into contact with water, perform the following test procedure:
- Unclip door sill moldings and remove then remove lower B-pillar paneling.
- Remove the left and right front seats (refer to WIS: AR91.10-P-1000SC)
- Remove the seat cushions from the rear seats (refer to WIS: AR91.12-P-1020SC) and if necessary, remove the rear center console in the same manner as the rear seat cushion.
- Remove the accelerator pedal (refer to WIS: AR30.12-P-1321SX).
- Detach the center console (refer to WIS: AR68.20-P-2000SC)
  - **Note** (regarding above WIS instructions):
  - Do not completely remove center console, detach only.
- Loosen the floor covering.
- Inspect the terminal points (Figure 2) before checking the ground points, connectors, and CAN hubs: If there is visible corrosion of the terminal points, it is not necessary to check the other points. However, it is necessary to exchange the main wiring harness for the frame floor assembly. The tape on the terminal points should be removed during the checking procedure. If no moisture and/or corrosion are detectable, only replace the tape.

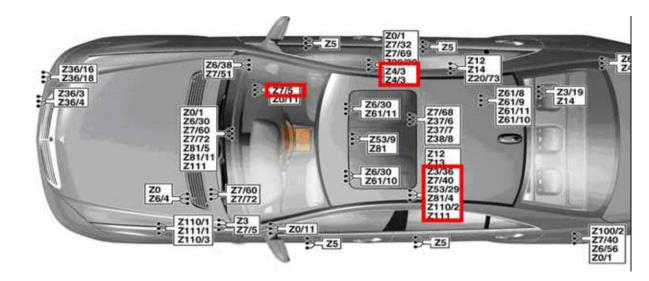
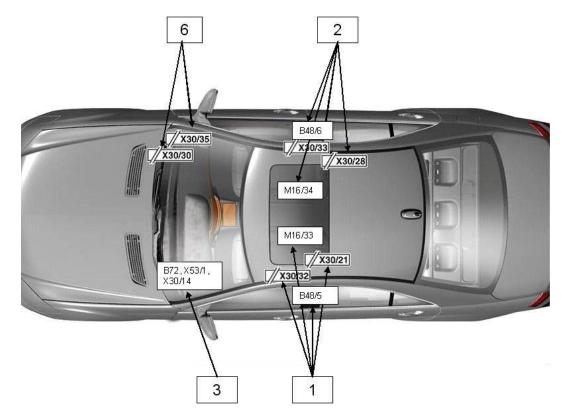


Figure 2
Overview of terminal points.

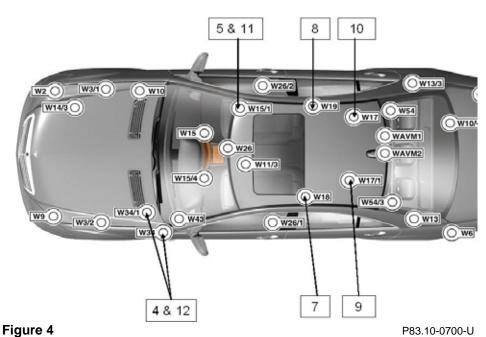
P83.10-0200-U

Check all affected CAN hubs, connectors, and ground terminal points (Figures 3 and 4).



**Figure 3**Overview of affected CAN hubs and connectors.

P83.10-0200-U



Overview of affected ground terminal points.

6. Repair the wiring harness using end soldered sleeves and a heat gun.

## Repair instructions notes:

- Repair wiring harnesses are longer than necessary to ensure compatibility.
- Shorten the wires if necessary and insulate them with end solder sleeves.
- Do not cut off the line directly behind the crimp.
- Remove unnecessary wire connector pins on the CAN hub.
- When using several solder connectors

   (A, Figure 5) per repair harness, arrange them in an offset pattern (arrows, Figure 5).
- Repair points (arrows, Figure 6) should be inside the harness duct (A, Figure 6) wherever possible.
- Ground the ATA siren line to ground point W34/1.
- Ground the CAN hub (PT-CAN) X30/21 line to ground point W18.
- Ground the CAN hub (body CAN) X30/33 line to ground point W19.
- Large line cross sections are present in the repair harness at ground point W34/1 (ground, frame floor assembly, left footwell). They can be soldered to the lines located inside the vehicle.
- In the event of corrosion of the B-pillar air distribution actuator motors (M16/33, M16/34), replace the actuator motors (they are available as a replacement parts).

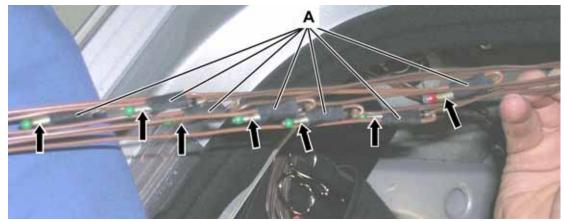


Figure 5 P55.55-0000-01



Figure 6 P55.55-0000-01

- Disconnect the battery ground cable (refer to WIS: AR54.10-P-0003SX).
- Leave an extra 20 mm length when wiring for the solder point.
- Strip 15 mm of insulation off the wire ends and twist the ends together.
- Twist the stripped wires using wire ends from the repair kit and push the end solder sleeve onto the wire ends (while twisting).
- Use the heat gun with reflector when soldering. Preheat the gun to 400 °C (750 °F) and make sure that the heat shrink wrapping of the solder connector contacts the wires properly after soldering (refer also to WIS: AR00.19-P-0100-09A).
- After soldering, position the solder connectors (arrows, Figure 7) on the wire and wrap it in fabric tape (A, Figure 7).



**Figure 7** P83.10-0700-U

- Secure the indivdual wires of each wiring harness together with fabric tape (arrows, Figure 8).
- Route the harnesses back to their original positions so that the harness ducts can be properly closed.
- Clean the ground points to eliminate further corrosion. Additionally, check ground point W43.
- Dry the floor covering, or replace if necessary.
- Reassemble in reverse order.
- 7. Reattach the rocker panel cover.

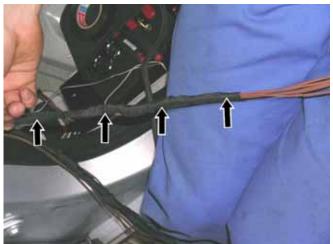


Figure 8 P55.55-0000-01

## B. Model 221

1. Remove the rear wheel and detach wheelwell cover in the front area (arrow, Figure 9).



Figure 9 P55.55-0000-01

 Clean sealing seams in the rear wheelwell (arrows, Figure 2) over a large area with silicone remover and reseal. In particular seal the place of the joint of the wheelhouse panel to the side panel fold. The location of the leak can also be up to ten centimeters above the transverse seam seal.



Figure 10

- Seal the body seam on the inner rocker panel:
- Remove the door sill molding to expose area and loosen inner sound insulation (A, Figure 11) in the area of the opening of the fold.
- Heat up the sound insulation (A) using a hot air gun and detach carefully using a suitable tool (e.g. plastic wedge [arrow]).



Figure 11

- Seal body seam and sheet metal flange (arrow, Figure 12).
- Installation: Heat up sound insulation with a hot air gun and press on at the rocker panel.

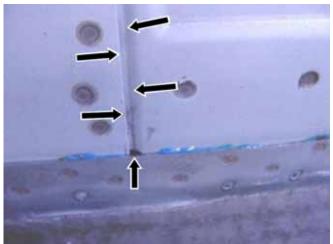


Figure 12

 Check the rear floor and the underside of the rear floor lining in the area that has been detached for moisture (dirt and signs of moisture) and replace the plug (arrow, Figure 13).

### Note:

- If there was still no moisture in the passenger compartment under the floor covering proceed to step 5
- On vehicles which have moisture in the rear floor preced to step 6.



Figure 13

 Replace the drain grommets on the lower rocker panel:
 Partially detach the rocker panel cover (arrows, Figure 14) only in the area of the jack support points. Then and push the cover (arrows, Figure 6) to one side.



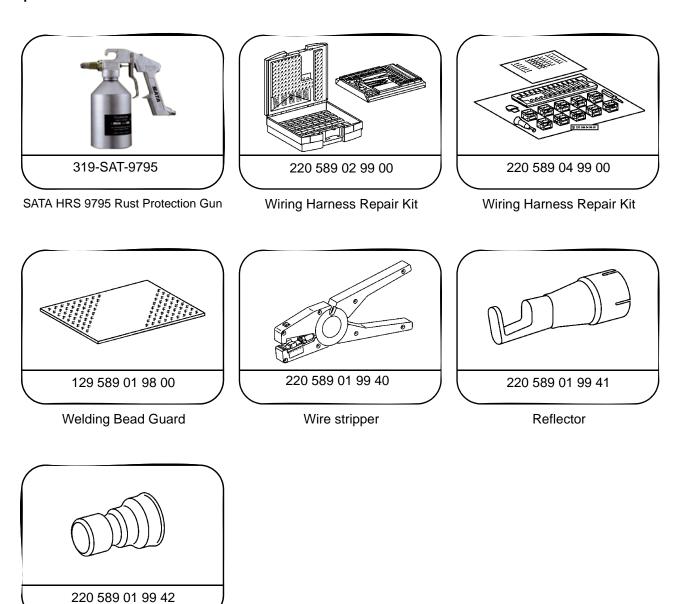
Figure 14

- 6. The damp vehicle side should be treated as follows:
- Remove rocker panel cover (arrows, Figure 14).
- Remove all grommets on the lower rocker panel and the grommet in the wheelhouse (arrow, Figure 15). Flush out dirty rocker panel with water.
- Blow out rocker panel thoroughly with compressed air and preserve rocker panel cavity.
- Replace drain grommets and reinstall all other grommets.
- Dry the floor covering or inspect and replace, if necessary.



Figure 15

# **Special tools**



Adapter, Nozzle

# Note:

The SATA HRS 9795 Rust Protection Gun (part number 319-SAT-9795) is available via the Mercedes-Benz Standard Service Equipment Program by calling SPX/DES at (888) 458-4040.

# Parts information for model 216

Qty.	Part Name	Part number	
As required	Solder splice connector (total wire cross-section area range	A001 546 99 41	
	0.7 - 2.4 mm²)		
As required	Solder splice connector (total wire cross-section area range	A002 546 00 41	
	2.0 - 4.0 mm <sup>2</sup> )		
As required	Solder splice connector (total wire cross-section area range	A002 546 01 41	
	3.5 - 8.0 mm <sup>2</sup> )		
As required	Solder splice connector (total wire cross-section area range.	A002 546 11 41	
	7.5 - 12.0 mm²)		
1	CAN hub B-low w/accel. sensor pigtail, left frame floor assy.	A221 440 58 13 05	
1	CAN hub B-low w/accel. sensor pigtail, right frame floor assy.	A221 440 59 13 05	
1	ATA siren, rear ACC and wake-up hub, left frame floor assy	A221 440 60 13 05	
1	Ground, left frame floor assembly	A221 440 61 13 05	
1	Ground, right frame floor assembly, left-hand drive vehicle	A221 440 62 13 05	
1	CAN hub, front passenger footplate	A221 440 63 13 05	
1	Ground under left seat	A221 440 64 13 05	
1	Ground under right seat	A221 440 65 13 05	
1	Ground left rear crossmember	A221 440 66 13 05	
1	Ground right crossmember	A221 440 67 13 05	
1	Polyester fabric tape	A006 989 84 85 10	

# Parts information for model 221

Qty.	Part Name	Part number	
2	Sealing washer	A110 987 05 44	
4	Drain Grommet	A000 998 89 01	
10	Plug	A003 997 04 86	
1	Sealing compound 1)	A001 989 63 20	
1	Cavity wax 2)	A000 986 72 70 05	

<sup>1)</sup> Sufficient for at least 10 cars, submit as Local Purchase part number SCD00273, Qty. 1, handling is included.

<sup>&</sup>lt;sup>2)</sup> Sufficient for at least 5 cars, submit as Local Purchase part number PRA00574, Qty. 1, handling is included.

# In Case of Warranty

Operation: DETACH REAR PART OF ROCKER PANEL AND CLEAR DRAIN HOLES, PERFORM

(63-0000)

**ELECTRICAL LINE FOR....(SPECIFY), REPAIR (54-9204)** 

Damage Code	Operation number	Time (hrs.)	Model Indicator(s)
63B31 ZZ (left side)	63-0000*	0.6	DA, DB, DC, DD
And / or			AA, AB, AC, AD, AE
63P31 ZZ (right side)			
If necessary	54-9204*	0.0	DA, DB, DC, DD
			AA, AB, AC, AD, AE

<sup>\*</sup> Separate punch times per side.