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Group: 83

Revision a: Note added for models equipped with recirculated air filtering and biocide-coated evaporator.

**SUBJECT: MY-All, Models 164, 171, 203, 209, 211, 215, 216, 219, 220, 221, 230 and 251
Air Conditioning Musty/Moldy Odor Complaints Cleaning Procedure**

Under certain environmental conditions, typically in a hot and humid climate, the vehicle may emit a musty/moldy odor from the air conditioning system. This may be more noticeable when starting the vehicle due to residual condensation on the evaporator and on the interior surface of the heater box.

i **Note:** For the following model series 204, 172, 166, 212, 207, 218, 164 as of A407859, 251 as of A083326, 216 as of A012332, 221 as of A174161, equipped with recirculated air filtering and biocide-coated evaporator.

In these vehicle models the evaporator can be ruled out as the cause of the odor. Cleaning the evaporator is not an appropriate remedial measure. Therefore MBUSA **does not** recognize the cleaning of the evaporator under warranty. The procedure if completed on these models can only be billed as customer pay.

For additional information related to odor from the air conditioning system, also refer to:

- LI83.00-P-051588 in Xentry TIPS
- Diagnosis tree "Odor" from the Technology Guide "Vehicle Climate Control - Troubleshooting - Function - Design - Operation". (The "Technology Guide - Vehicle Climate Control - Troubleshooting - Function - Design - Operation" is available in pdf format in SDmedia SDS).

This bulletin describes the air conditioning evaporator and interior cleaning procedure for musty/moldy odor using Mercedes-Benz Contra Sept and the A.C system "ultrasonic atomizer". Refer to WIS document AR83.30-P-5556A for information. For the best lasting results, follow the instructions provided below.

1. Remove all filters installed in the air conditioning system. The following filter may be fitted: Pollen filter, dust filter, combination filter or active charcoal filter. Filters are not warrantable items and are to be replaced as per maintenance recommendations and requirements.

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.

- Clean evaporator with Mercedes–Benz Contra Sept as per WIS document AR83.30-P-5555T. Contra Sept is applied using a spray gun attached to a long probe. It is imperative to have as much of the evaporator sprayed with the cleaner by moving the probe in / out and up / down inside the case. It may be necessary to bend the probe in order to gain access. The cleaner is applied and allowed to dry. Refer to Figure 1a for spraying angle recommendation.

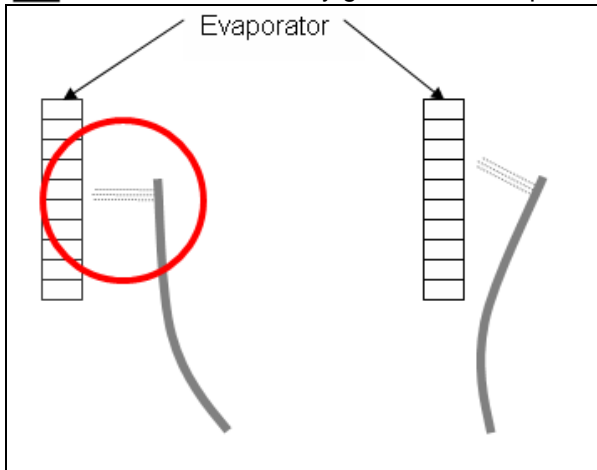


Note: After cleaning the evaporator, a second treatment has to be conducted. After completion of section A (ContraSept), refer to section B (Wynns).

A. ContraSept Cleaning Procedure:



Caution! Wear safety glasses and respiratory protection when spraying cleaner.



- Spray the evaporator at a 90° angle.
- Move up and down, left and right to reach all areas of the evaporator.
- Do not rotate the probe to reach other areas of the evaporator. This will change the spraying angle and the cleaning effect will diminish.

Figure 1a.

P-B-83.30/74k



Warning! Do not exceed the manufacturer's recommended maximum air pressure as stated on the label affixed to the pressure cup (Figure 1b). Excessive air pressure could cause the canister to explode and potentially cause personal injury. The recommended pressure to clean the evaporator effectively is 120psi.

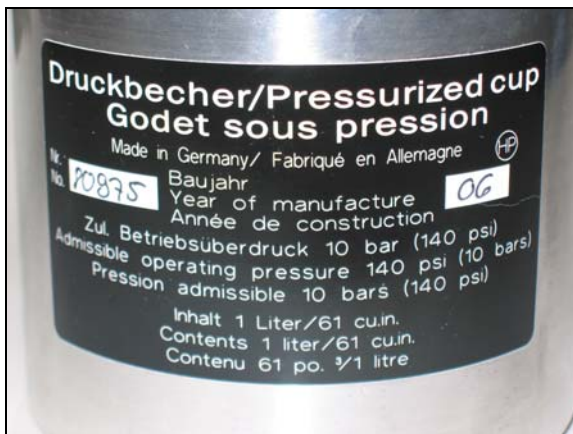


Figure 1b.

P-B-83.30/74g

To reduce the possibility of this condition reoccurring, advise the owner to operate the blower at a higher speed, especially during humid conditions. For vehicles with a REST function, it also helps to use this feature during humid conditions when parking the car.

Additional Procedures – Model 203 / 209

- Equipped with ACC climate system Option Code 580 - It is necessary to drill a 15mm hole in the climate housing to access the evaporator with the spray probe. The location for drilling the hole is described in WIS document AR83.30-P-5555-01A and Figure 1, A1 and B1.

2. A white foam block may be mounted to the housing between the blower motor and the main section of the case, see (Figure 2). On these housings, there is an alternate location of the hole as shown in Figure 1, A2 and B2.

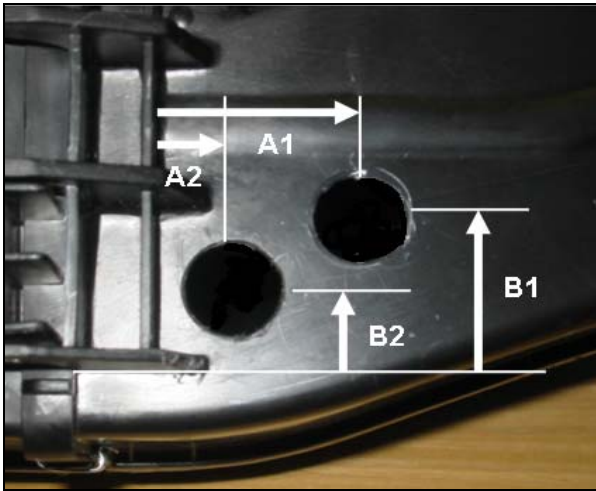


Figure 1. P-B-83.30/74h



Figure 2. P-B-83.30/74h

Without foam block as in WIS AR83.30-P-5555-01A

Dimension A1 = 30 mm

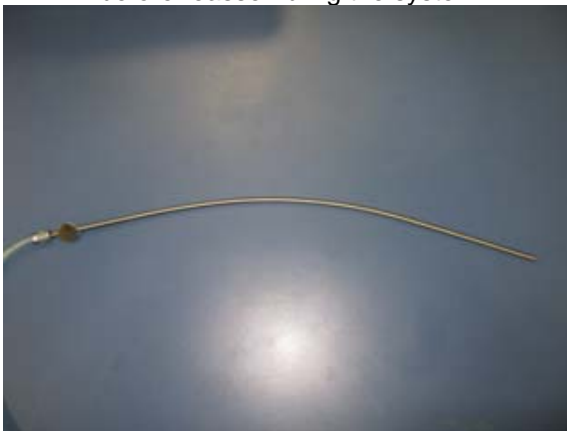
Dimension B1 = 25 mm

With foam block

Dimension A2 = 10 mm

Dimension B2 = 15 mm

3. Bend the shorter of the two probes (Figure 3). Move the probe up and down as well as side to side to ensure the entire evaporator is sprayed with the cleaner. Plug hole after cleaning with seal plug A110 987 10 44 64.
4. Using the instructions below check the 'REHEAT' setting. It should be set to 'Anti-icing'.
Control Units → Body → EIS → Control unit adaptations → Read coding and change if necessary
→ Climate control → Standard setting: Climate control → REHEAT mode → Change From:
"Standard" to: "Anti-icing protection"
5. Should a customer report on the air conditioning system emitting a musty/moldy odor from the vents within three months after using the Mercedes-Benz Contra Sept product as described above, a Biocide coated evaporator can be installed on 203 vehicles (production up to VIN A731367 and F634899) and on 209 vehicles (production up VIN F144090 and T042953). The Biocide coated evaporators were phased into production on these vehicles past the VINs indicated above. Be sure to thoroughly clean the inside of the heater box and make sure the drain tubes are not clogged before reassembling the system.




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Figure 3. – Bend probe as shown P-B-83.30/74k

Additional Procedures – Model 211

1. Using the instructions below, check the 'REHEAT' setting. It should be set to 'Fixed value'.
Control Units → Air Conditioning → C-AAC, AAC → Control unit adaptations → Read coding and change if necessary → Workshop coding → Evaporator-Control (REHEAT mode) → Change From "Humidity-dependent (SERIES)" To: "Fixed value"
2. In case of customer reports that the air conditioning system is emitting a musty/moldy odor from the vents within three months after using the Mercedes-Benz Contra Sept product as described above, a new slanted heater box bottom which allows the condensation to drain better and a coated evaporator entered production as of VIN A675828 and X171590. In this case, these parts can be installed in earlier vehicles. Be sure to thoroughly clean the inside of the heater box and make sure the drain tubes are not clogged before reassembling the system.

Procedure for 164 and 251

 **Caution!** Wear safety glasses and respiratory protection when drilling hole and spraying cleaner.

1. Clean the evaporator with Mercedes-Benz Contra Sept as per WIS document AR83.30-P-5555T and the additional information in this document.
2. To clean the driver side of the evaporator, the spray probe is inserted into the hole for the evaporator temperature sensor as described in WIS document AR83.30-P-5555T, Step 4.1.
3. To clean the passenger side of the evaporator, the spray probe is inserted into a 15 mm hole that needs to be drilled in the climate housing as described in Steps 4 through 6.
4. Remove the cover below the instrument panel on the passenger side and fold carpet down. Refer to WIS document AR68.10-P-1520GZ (164) or AR68.10-P-1520RT (251).
5. Location of hole is shown in Figures 4 and 5. The hole should be centered in the triangular shaped section of the climate housing as shown in Figure 5.
6. Drill a 15mm hole in small increments using a mechanical drill stop to limit how far the drill bit penetrates the climate housing. A collar type drill stop, a piece of rubber hose or tape can be used as the drill stop.


 **Warning!** The drill bit cannot be allowed to penetrate the housing more than 13mm or damage to the evaporator could occur. When the drill bit breaks through the housing it has a tendency to pull inward. This is why a drill stop is necessary.



Figure 4. S-B-83.30/74k



Figure 5. S-B-83.30/74k

- 7 Bending of the probe may be required to be able to spray all parts of the evaporator. Move the probe up and down as well as side to side to ensure the entire evaporator is sprayed with the cleaner.
- 8 Follow the remainder of instructions in WIS document AR83.30-P-5555T. Reassemble vehicle in reverse order. Do not replace any filter back into the system!



Warning! Do not exceed the manufacturer's recommended maximum air pressure stated on the label affixed to the pressure cup (Figure 3). Excessive air pressure could cause the canister to explode and potentially cause personal injury.

B. Wynns Treatment

1. Warm up vehicle with air conditioning switched off for a minimum of 30 minutes in order to dry out the climate housing and ducts. Set the climate control to the following settings:

- Blower speed 2-3
- Heat to maximum
- Recirculation activated
- Air distribution to the footwell
- All doors, windows and sliding roof closed



Note: AC compressor does not turn off immediately when the AC Off is selected at the control module. In order to ensure the compressor is off, use the following instructions:

- Select AC Off
- Select Climate System Off
- Select Climate System On. The AC compressor will now be off.

2. Remove all filters installed in the climate system. This could include dust, activated charcoal or combination filters.
3. Close the recirculation flap for cleaning using SDS.

For 171, 211, 219, 216, 221, 164 and 251 models follow path: Control Units → Air Conditioning → C-AAC, AAC → Actuators → Closing air recirculation flap for cleaning → Select recirculation.

For 203 and 209 models, follow path: Functions performed by more than one control unit → Body → Climate control → Climate control → C-AAC → Actuators

The system will come out of recirculation when SDS is disconnected from the vehicle.



Note: This menu item is not available in SDS for all vehicles. On these vehicles, recirculation must be manually selected on the control module.

4. Place the Wynn's® AIRCOMATIC™ Ultrasonic Cleaning System in the passenger footwell. Insert the hose in the luggage net and orient the end of the hose to insure the output from the device is sucked into the footwell vents.
5. Start engine, **AC off**, press recirculation button, select lowest blower speed and set the temperature(s) to minimum.



Note: The compressor must not be running.

6. Install one container of Wynn's® AIRCO-CLEAN™ in the Wynn's system.
7. Plug in the Wynn's system and check that it is running.
8. Close all doors and windows.
9. When the fog stops coming out of the Wynn's® system (after approximately 20 minutes), the dispersion process has been completed.
10. When the cleaning procedure is finished, switch engine off, turn off the Wynn's® system and leave windows and doors closed for approximately 1 hour.
11. Open doors and trunk lid/tailgate.
12. Open the air recirculation flap again if the automatic recirculation function has been deactivated by coding, and set the recirculated air function to "unlimited" again.

13. Restart engine, switch on A/C, select the highest blower speed and set the temperature(s) to minimum.
14. Allow system to run for about 10 minutes. The cleaning process is now complete.
15. After cleaning, install new filters.

To reduce the possibility for this condition to reoccur, advise the owner to operate the blower at a higher speed, especially during humid conditions. For vehicles with a REST function, it also helps to use this feature during humid conditions when parking the car.

Parts Information

Qty.	Part Name	Part Number
ContraSept treatment		
1	Spray gun and probes	A000 581 00 04
1	Mercedes-Benz Contra Sept (1 liter bottle per vehicle)	A009 989 61 71
1	Spray probe, short	A000 581 00 05 *
1	Spray probe, long	A000 581 01 05 *
1	Mixer insert	A000 997 15 03 *
1	Coupling	A005 997 47 89 *
1	Flat sealing ring	A016 997 91 45 *
1	Coated evaporator (211)	A211 830 07 58
1	Heater box bottom	A211 830 22 03
1	Biocide coated evaporator (203 and 209)	A209 830 03 58
1	Seal plug for drilled hole	A110 987 10 44 64
Wynns treatment – order through SSEP Catalog, Section E3		
1	Ultrasonic atomizer	211 – 03000
1	Interior cleaner	211 – 30208 ¹

* Replacement parts for Spray gun, order only when needed

¹ Part number is quantity of 12. Submit as local purchase WYNN03354, quantity of 1.