Mercedes-Benz

star bulletin

DTB

Date: January 9, 2008

Order No.: P-B-42.10/90

Supersedes:

Group: 42

SUBJECT: All Model 211 Vehicles

"Brake Wear! Visit Workshop" Displayed in Instrument Cluster

If you receive customer reports in the above model vehicles of the message "Brake Wear! Visit Workshop" being displayed in the instrument cluster; and if after inspection, it is determined that the 100% brake wear sensors (S10/2 and S10/4) are OK, perform the following checks to determine the origin of the erroneous message.

The erroneous message may be caused by any of the following conditions.

- Brake wear sensor connector not completely plugged in.
- Corrosion in the connector of brake wear sensor.
- Corrosion in the connector of driver's side SAM.
- Open circuit or ground discontinuity between SAM and brake lining wear sensor.

Note: A contacted 50% brake wear sensor is not the cause, as this only starts the service processor.

1. Determine which sensor triggered the displayed message from the following STAR Diagnosis path: DR-side SAM – Driver Signal Acquisition and Actuation Module → Actual Values → Indicators → Right Front Brake Lining (S10/2) or Right Rear Brake Lining (S10/4) Sensor.
2. On the relevant sensor, perform the following checks in sequence and repair any issues encountered during checks.

Note: If the fault message is currently present, check whether the display message continues to appear after each check.

3. Check the connector between the brake wear sensor and vehicle side wiring harness. Visually check the connector for corrosion and or poor contact.
4. Check the driver's side SAM (N10/1) connector for corrosion (front sensor connector M5 pin 1, rear sensor connector L13 pin 2).

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.

5. When the pads are not worn, the connecting pins of the wear sensor must have contact with vehicle ground. With the brake wear sensor plugged in, check for continuity to ground for each respective brake wear sensor pin from the SAM connector.
6. Check for continuity for the entire circuit from the SAM to the brake wear sensor.
7. If it is not possible to determine the sensor responsible for the erroneous fault or the above test steps do not resolve the issue, check both sensor's wiring harness over the **complete run** (from the respective wheel up to the driver's side SAM) for kinks / crushed sections / chafing marks. Even slight external damage can lead to a fault which occurs sporadically. Review the images below for examples and locations for possible areas of damage.
    - Figure 1 and 2 – kinked / crushed section of rear brake wear sensor harness
    - Figure 3 and 4 – Location of above kinked / crushed section (right rear axle)

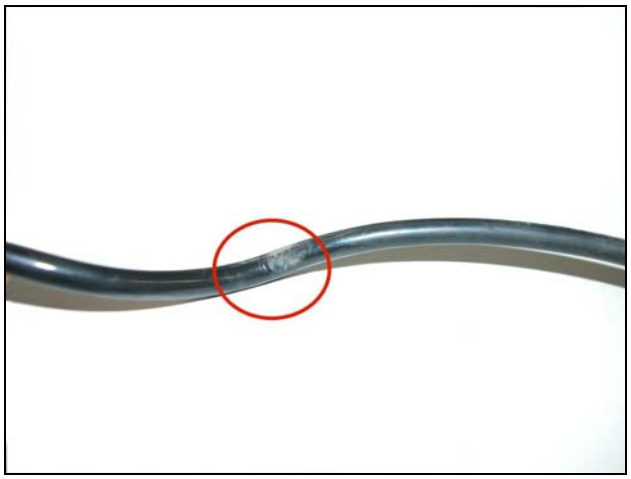

Figure 1 P-B-42.10/90

Figure 2 P-B-42.10/90

Figure 3 P-B-42.10/90

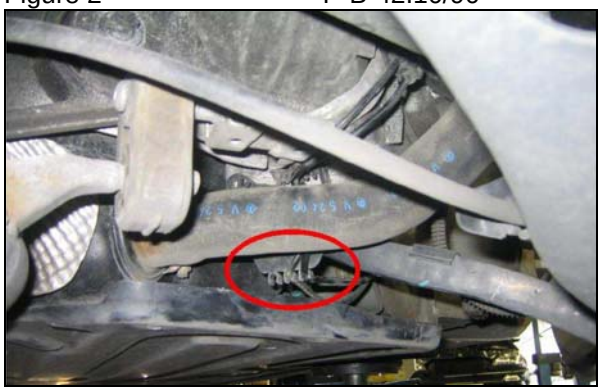

Figure 4 P-B-42.10/90

Note: The following allowable labor operations should be used when submitting a warranty claim for this repair. This information has been generated on January 9, 2008. 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)
Corrosion in brake wear sensor connector or driver's side SAM connector, check (54-0000)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
42119 74	54 1011	0.3 hrs.	T1, T2, T3, T4, T5, T6, T7, T8, T9, TA, TB, TC, U1, U3, U4, U5, U6, U7, U8
If necessary	54 0000	0.0 hrs.	T1, T2, T3, T4, T5, T6, T7, T8, T9, TA, TB, TC, U1, U3, U4, U5, U6, U7, U8