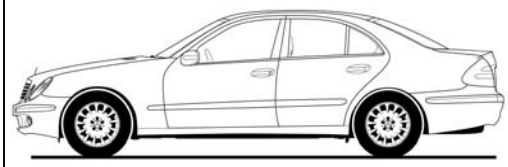
Mercedes-Benz

Name _____



Skill Module Number: **6-2**

Subject: SAS Leak Detection

Objective: Technicians will be able to:

- Explain how the SAS system determines that there is a leak in the system.
- Explain how the system maintains vehicle ride height if a leak occurs in an SAS air supply line.

Vehicle and tools required:

- W211 with SAS and an in-line coupler installed in the air line to the LF strut

Note: This coupler has been installed for training purposes only. Under no circumstances should a repair be performed on a front strut air line.

- SDS / DAS
- 10mm and 11mm open end wrenches

Required material:

- None

Instructions:

1. Follow the instructions and answer the questions.
2. Ask your instructor for assistance if needed.

- Connect SDS / DAS to the vehicle. **(Do not select chassis or model at this time)**

- Make sure the vehicle is at normal ride height.

    A. Start the engine
    B. Push the level adjustment switch on the Lower Control Panel (LED 'on')
    C. Allow the vehicle ride height to increase and stabilize
    D. Push the level adjustment switch on the Lower Control Panel (LED 'off')
    E. Allow the vehicle ride height to drop and stabilize

- Using SDS/DAS, select "Control Unit/Chassis/Airmatic/Fault Codes" and erase any fault codes in the Airmatic Control Module

- Select "Control Unit/Chassis/Airmatic/Actuations"

- Select "Release pressure in Central Reservoir".

- Reduce the pressure in the Central Reservoir by pressing "F3". (The pressure reading will drop to approximately 3 bar)

- Using the 10mm & 11mm open-end wrenches, disconnect one end of the LF strut air line from the in-line coupler in the line.

Note: the threads in this fitting are "left handed". To loosen the end, turn clockwise. To tighten the end, turn counter clockwise.
This coupler has been installed for training purposes only. Under no circumstances should a repair be performed on a front strut air line.

1. What happened to the pressure reading of the Airmatic Pressure Sensor (B7) when you did this?

_____

_____

Explain why this happened. _____

_____

- Exit the DAS program.

Please read the following instructions completely before proceeding.

Have one member of your group activate the level adjustment switch (LED 'on') on the Lower Control Panel. At the same time, have another member monitor vehicle ride height and have a third member monitor for air escaping at the two open ends of the in-line coupler you previously disconnected.

2. Was there air escaping from the line going to the left front strut? Yes / No

3. Was there air escaping from the line coming from the left front strut? Yes / No

4. Did the vehicle ride height increase? Yes / No

   Why? _____

   _____

5. Did the vehicle ride height decrease? Yes / No

   Why? _____

   _____

6. Do you have a white or a red warning display on the instrument cluster?

   _____

- Activate the level adjustment switch again to lower the vehicle.(LED 'off')

7. Does the vehicle ride height decrease? Yes / No

- **Carefully** reattach the open air line to the in-line coupler. Remember, these are left-handed threads. (Counter clockwise to tighten)
- Restart the DAS program.
- Select "Control Units/Chassis/Airmatic/Fault Codes".

8. What fault code do you have? _____

9. Is there a diagnostic test available? Yes / No

- Erase the fault code.

- Exit DAS and disconnect SDS from the vehicle.
- Start the engine.
- Push the level adjustment switch to raise vehicle. (LED ‘on’) After the vehicle has risen completely, push the switch to lower it.
- After the vehicle suspension is settled, shut off the engine, remove the key from the EIS and return the workstation to normal.