



Skill Module Number: **6-3**

Subject: W211 SAS Load Leveling
Instructor Led

Objective: Participants will:

- become familiar with ride height increase using the level adjustment switch
- become familiar with SAS load leveling function with the engine running
- become familiar with SAS load leveling “Wake-up” operation
- become familiar with SAS load leveling “After-run” operation

Vehicle and tools required:

- W211 with AIRmatic (SAS)

Required material:

- Classroom presentation handout

Instructions:

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

Normal Operation with Engine Running

Start the engine.

Raise the vehicle using the level adjustment switch. Allow the vehicle level to stabilize.

1. Did the SAS compressor run to raise the vehicle? Yes / No

Lower the vehicle using the level adjustment switch. Allow the vehicle level to stabilize.

Have 3 participants sit in the rear seat simulating a load change.

2. Did the SAS system raise the vehicle? Yes / No

Have the 3 participants exit the vehicle simulating an unloading of the vehicle.

3. Did the SAS system lower the vehicle? Yes / No

Wake-up Function

Shut off the engine and remove the key from the EIS. Open the rear doors and trunk lid. Wait for more than one minute to allow the SAS control unit to go to sleep.

Have 3 participants sit in the rear seat simulating a load change. (Do not close the rear doors or trunk lid and do not open the front doors)

4. Did the SAS system raise the vehicle after it was loaded? Yes / No

Open a front door.

5. Did the SAS system raise the vehicle? Yes / No

6. Why did the SAS system not raise the vehicle until a door was opened?

After-run Function

Start the engine and raise and lower the vehicle using the level adjustment switch. Allow the vehicle level to stabilize at each point.

Shut off the engine and remove the key from the EIS.

Immediately after shutting the engine off and removing the key, have 3 participants sit in the rear seat simulating a load change.

7. Did the SAS system raise the vehicle? Yes / No

Start the engine briefly, then shut it off and remove the key from the EIS.

Immediately after shutting the engine off and removing the key, have all of the participants exit the vehicle.

8. Did the SAS system lower the vehicle? Yes / No

9. For how long after shutting the vehicle off will SAS make level adjustments?
