



	<p>Skill Module Number: 3-4</p> <p>Subject: Vario Roof Familiarization</p>
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Objective:

At the conclusion of this module, you will be able to:

- Operate the Vario roof safely and be aware of its safety precautions
- Operate and explain the load assist (easy pack) function
- Understand rollover bar crash deployment

Vehicle and tools required:

- R230 vehicle (roof closed, luggage partition cover closed)
- A person in your group with a watch

Required material:

Instructions:

1. Follow the instructions and answer the questions.
2. Ask your instructor if assistance is needed.
3. Stop at Instructor checkpoints for sign-off.

Rollover Bar Operation (Crash Deployment)

The instructor will simulate a crash deployment situation of the rollover bar using SDS. After the rollover bar has been deployed, you may continue with this module.

1. Insert the key into the ignition and turn it to position 2 (ignition ON).
2. Lower the rollover bar using the switch located under the Vario roof switch.
3. Did the rollover bar lower? _____
4. Press and hold the rollover bar raise switch until the pump stops running.
5. Press and hold the rollover bar lower switch.
6. Did the rollover bar lower? _____

NOTE: The rollover bar is deployed using a spring during a crash situation. The hydraulic cylinder that normally raises and lowers the rollover bar becomes disconnected. In order to reconnect the hydraulic cylinder, you must raise the cylinder to contact and lock the rollover bar. Then it is possible to lower it using the switch.

Instructor check point _____

Vario Roof Operation

1. Insert the key into the ignition and turn it to position 2 (ignition ON).
2. Pull up and hold the Vario roof switch located in the center console.
3. Observe the top during the opening sequence.
4. How do you know when the roof has finished operating and it is safe to drive the vehicle now? Hint: What is displayed in the instrument cluster?

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5. Turn off the engine and exit the vehicle with the SmartKey.

SAFETY NOTE: Next you will close the Vario roof with the SmartKey. When the roof is less than half way closed, (see picture below) release the lock button to stop the operation. This could be done in a situation were the roof needed to be stopped immediately. KEEP AWAY from the roof while performing this step.



6. Read steps 7 to 12 before continuing so you understand what you'll be performing and looking for as a result.
7. Close the Vario roof using the SmartKey. The key must be continuously pointed at the infra red receiver on either door while the lock button is held down on the SmartKey.
8. Stop the roof travel when it reaches the half way point (see picture on page 3) and count how long it stays stationary.
9. How many seconds did it hold? _____
10. What happened after a specific period of time? _____
11. Did you hear any audible noise when this happened? _____
12. What is displayed in the multi-function display? _____

Operational Note: For the SmartKey operation you just performed, the hold time of the roof is 7 seconds (ignition "OFF"). The hold time for Vario roof switch operation is 7 minutes (ignition "ON"). In both cases, after the time expires an audible noise will occur before the roof begins to fall forward or backward depending on the position in which it was stopped.

13. Use the SmartKey to fully open the Vario roof, if it's not already fully open.

Instructor check point _____

Load Assist (Easy Pack) Function

1. Open the trunk lid all the way.
2. Press the red illuminated button on the right rear of the trunk area to operate the load assist (easy pack) function.
3. Gently try to close the trunk lid. Indicate below what two things you noticed.

4. Can you see where the mechanical block is located on the trunk lid? If yes, describe it below.

5. Open the luggage partition cover.
6. Attempt to operate the load assist (easy pack) function (close) using the red button. Indicate what happened below.

7. Close the luggage partition cover.
8. Attempt to operate the load assist (easy pack) function (close) using the red button. Indicate what happened below.

9. Reach under the Vario roof and attempt to open the luggage partition cover. Indicate below what happened.

10. Close the luggage partition cover and operate (close) the load assist (easy pack) function.

11. Close the trunk lid.

If you have noticed any parts that need to be replaced on this vehicle, please inform your instructor now.

Instructor check point _____