Body and Equipment Guideline (BEG) Addendum



Sprinter 2019 - Model Designation 907

Addendum Topic: Center of Gravity (CoG)

Publication Date of this Addendum 12/07/2018



Legal disclaimer

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This Addendum is not intended to serve as a work instruction, but merely to provide some helpful information for upfitters to take into consideration before retrofitting or modifying a Mercedes-Benz or Freightliner branded Sprinter.

This Addendum does not in any way cancel the information provided in the <u>Body & Equipment Guidelines (BEG) for Sprinter 2019 Model Series 907 publication date 06/2018</u>, provided by UPFITTER MANAGEMENT VANS, but rather supplements.

All additional information provided in this Addendum and changes to specific chapters are intended to supersede and replace information found in <u>Body & Equipment Guidelines (BEG) for Sprinter 2019 Model Series 907 publication</u> date 06/2018.

Prior to making any modification to or installing any equipment in or on a Mercedes-Benz or Freightliner Sprinter, you should review and insure compliance with all applicable laws and regulations, consult with Upfitter Management Vans for additional and updated information, and read the Body & Equipment Guidelines (BEG) for Sprinter 2019 Model Series 907 publication date 06/2018.

<u>UPFITTER MANAGEMENT VANS Contacts</u>: For information or upfitter inquiries Please submit a request via our website: www.upfitterportal.com

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Change history

1 Change history

No.	Date	Description of changes
1	12/07/2018	Chapter 4.1.2
		Maximum permissible position of the center of gravity

2 Center of gravity

4.1.2 Maximum permissible position of the center of gravity

y-axis:

The maximum wheel load (1/2 the axle load) of the laden vehicle may only be exceeded by 4%.

Maximum permissible center of gravity (CoG) height

The overall center of gravity height of a vehicle influences the braking and driving characteristics significantly.

Therefore, when designing the body components, it must be ensured that the center of gravity of the basic vehicle and also of the laden vehicle are kept as low as possible.

The basic ESP functionality is designed up to a total of 1300 mm (51.2 inches) above the roadway.

The overall Cog height shall never exceed 1300 mm (51.2 inches).

Irrespective of this, the tendency to tilt vehicles is physically caused by the increasing center of gravity height.

The ESP of the new Sprinter (Sprinter MY2019) is optimized to reduce the vehicle's tilt tendency up to a total center of gravity height of approx. 1000mm (39.4 inches). In this context, it is essential to ensure that the vehicles are equipped with the suspension and ESP variant recommended in the "Suspension Matrix" of the Sprinter Dealer Ordering Guide (DOG). This applies in particular to vehicles with a total center of gravity of more than 1000mm (39.4 inches).

The "Suspension Matrix" is available in the Sprinter Dealer Ordering Guide (DOG) page and in section 4.2.1 of the BEG.

The upfitter is responsible for determining and complying with the vehicle centers of gravity.

For more information see Chapter 9.1 Center of gravity (\rightarrow page 294)