

# Sprinter MY2014 - MY2018 - Sensors vs paint Technical Bulletin 906

EVS Charleston 6/13/2018 Mercedes-Benz Vans, LLC



### Notice

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This bulletin 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 Sprinter.

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 Vans Engineering Support for Upfitter Management for additional and updated information, and read the Body & Equipment Guidelines for Sprinter Model Series 906.

#### <u>Upfitter Management Vans Contacts:</u>

For information or upfitter inquiries please submit a request via our website:

www.upfitterportal.com

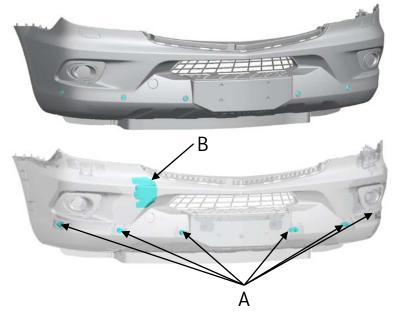
## Sprinter MY2014 -2018 – Sensors vs paint

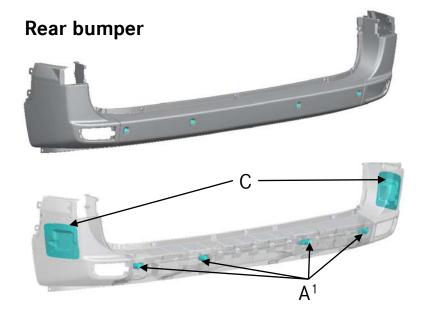
## Introduction

The "Parktronic"-, "Collision Prevent Assist"- and "Blind Spot Assist"- sensors are located inside and behind the plastic bumpers of the vehicle. Bumpers, which get painted or repainted by the Upfitters, especially in the area, which might affect the radar signal of the sensors, have to comply with Mercedes-Benz standards. This bulletin will show the locations of the sensor affecting areas and will give a paint recommendation regarding version and thickness.

	Sensor	Quantity front bumper	Quantity rear bumper
Α	Parktronic	6	4
В	Collision Prevent Assist	1	0
С	Blind Spot Assist	0	2

#### Front bumper





<sup>1</sup> In case of a step at the rear bumper, the "Parktronic" sensors are located in the step

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### **BEG** Information

Among other things, radar sensors are sensitive to:

- the thickness of the paint layers
- the relative permittivity of the paint
- the amount of conductive materials in the paint (e. g. metals, graphite, etc.)

The higher the thickness of the paint layers, the relative paint permittivity, or the amount of conductive materials in the paint, the more the functionality of the sensors is affected.



#### Warning

Depending on the version and thickness, paints or film coating may absorb radar signals. This may lead to malfunction or system failure. The driver could lose control of the vehicle and cause an accident.

Mask the following areas before painting:

- Sealing surfaces
- Windows
- Contact areas between wheels and wheel hubs
- Contact areas for wheel nuts
- Vents on transmission, axles, etc.
- Disc brakes
- Door Locks
- Door retainers in the rear door hinges
- Contact surfaces on the guide rails for the sliding doors
- Door retainers and opening limiters in the center guide rails
- Moving parts of the sliding door carriage
- Airbags and seat belts
- Parktronic sensors (→ Chapter 7.9.8)
- Collision Prevention Assist sensor
- Blind Spot Assist sensor

# Sprinter MY2014 - 2018 - Sensors vs paint Requirements

#### **Available codes:**

Painted bumpers ex-factory:

Code CM0: painted metallic front and rear bumper

Primed bumpers ex-factory:

- Code C72: bumper front / rear primed
- Code CM9: primed side moldings

#### Recommended paint brands:

- OEM paints only
- USA: Glasurit, R-M, Standox, Spies Hecker, PPG
- Canada: Glasurit, R-M, Standox

#### Requirements for unpainted / primed bumpers:



Thickness limitation for <u>metallic</u> paint:

max. 15µm of paint + 1 layer of clear coat

Thickness limitation <u>non metallic</u> paint:

no constraints

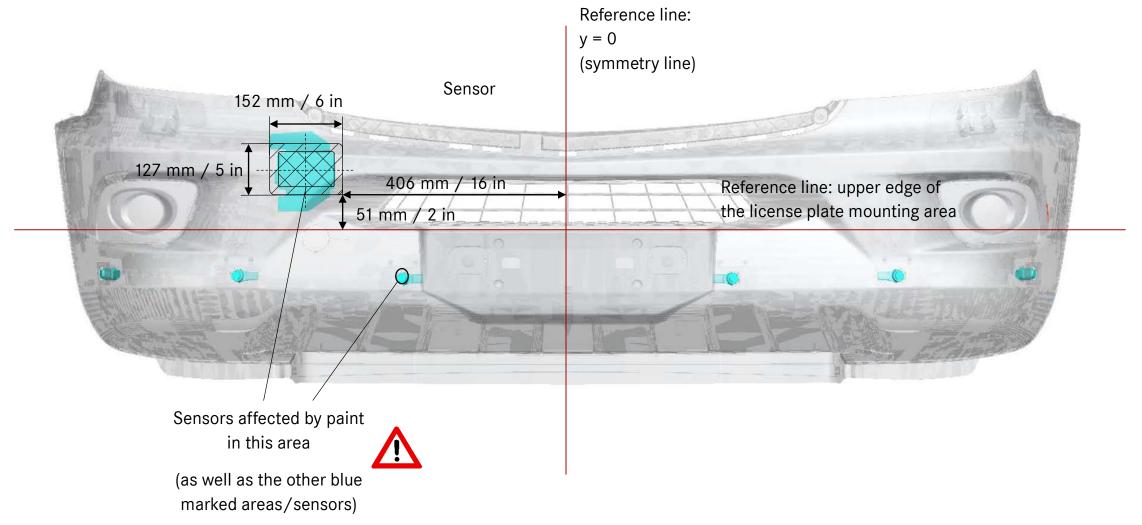
#### Requirements for repainting bumpers:



In case of repainting the bumpers / side moldings, make sure to remove the top layer of paint in the area of the sensors by grinding. Then, comply with the following requirements showed above.

# Sprinter MY2014 - 2018 - Sensors vs paint Detailed view front bumper

Front view



## Sprinter MY2018 – Sensors vs paint Detailed view rear bumper

Reference line: vertical edge of rear bumper

Reference line: horizontal edge of the rear bumper

