



Bulletin: PSM – Parametric Special Module

09/08/2015



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NOTICE:

The specifications, descriptions, information, and recommendations contained in this bulletin are believed to be accurate as of September 8, 2015.

Upfitter Management Vans reserves the right to modify or append this document without prior notification.

This bulletin is not intended as a work instruction, but as a guideline for upfitters to provide technical information necessary to retrofit or modify Mercedes-Benz Sprinters & Freightliner Sprinters (906).

Prior to making any modification to or installing any equipment in or on a Mercedes-Benz Sprinter & Freightliner Sprinter, please consult with Upfitter Management Vans for additional and updated information, and read the Body & Equipment Guidelines for Sprinter Model Series 906.

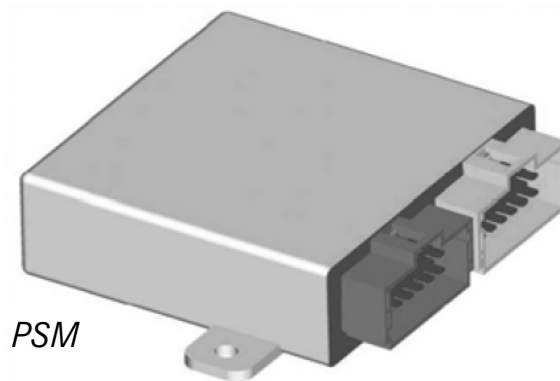
Upfitter Management Vans Contacts:

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

www.upfitterportal.com

PSM – Gateway for Vehicle Information

- The Sprinter is networked with several bus systems
- The PSM was developed to give upfitters access to CAN bus data
- The PSM forms the interface between the vehicle and the electronic systems of the upfitter
- The PSM is the gateway to the CAN bus and can be used to read vehicle status information and control vehicle functions (e.g. the central locking)
- PSM option code: **ED5**



Do not connect to the CAN Bus or components connected to the CAN Bus.

Programming Services

- The Sprinter Sales Engineering Team provides the PSM software program free of charge to Upfitters, Dealers, Fleets and Sprinter customers.
- The Sprinter Sales Engineering Team develops software solutions for different requirements as an interface between the vehicle and after market equipment.
- By request and under certain conditions the PSM software can be uploaded in the reassembly plant in Ladson, SC.



Programming can NOT be done by upfitters or authorized dealers.

Program Capabilities & Examples

PSM can be used for: Improving fuel economy, safety, vehicle tracking and fleet management, custom vehicles, providing and using information, etc. Examples:

- Continuous engine running feature for ambulances
- Speed Limitation V_{max} limit = 70mph
- Engine idle shut down
- Maximum torque limit of the engine
- Limit speed V_{max} or RPM for special usage
- Remote Engine START/STOP
- Alert signal output as a buzzer when “kick-down” or vehicle speed over a defined Speed limit
- Vehicle tracking and Fleet-management by providing FMS-Standard and ISO 11992-2/3 standard on CAN-bus
- Providing vehicle status system to alarm systems

Functions

Outputs:

- A total of 20* Outputs are available.
- All Outputs are internally fused, ranging from 0.5 -10 Amp
- Output signal examples:

Vehicle status

- Doors open / closed; locked / unlocked etc.
- Hand brake applied

Light control

- Side lamps; brake light etc.
- Turn signals; main-beam headlamps etc.

Engine CAN information

- Vehicle speed, engine speed, gear selector position, AC compressor on etc.

Inputs – via switches:

- A total of 10* Inputs are available.
- Input (vehicle function) examples:

Light functions

- Interior / Exterior lights, Turn signals etc.
- Wig Wag

Central locking

- Lock / Unlock entire vehicle, load compartment

Alarm functions

- Hazard warning flasher
- Warning buzzer
- Horn

The above listed signals are examples only. For a complete list of signals see 'Sprinter Body Builder Information Book' or contact sprinter.engineering@daimler.com

* Number of Outputs and Inputs available are variable by equipment (e.g. High Idle function; electric step)

Logic & Other Functions

- PSM signals can be combined to create logic combinations (AND, OR, IF etc.)

*Example: An Output signal is only available **IF** “Parking Brake is applied, **AND** the Gear Shift Level is in Park position”*

- Signals can be processed to trigger specified Output signals or Input functions internally in Timer, Counter and Hysteresis Blocks or Threshold Switches

Example: An Output signal becomes available “After the vehicle reaches a certain speed”

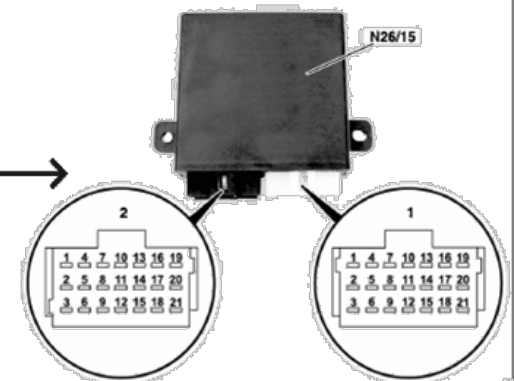
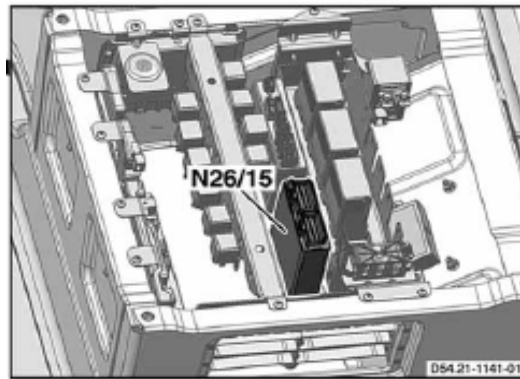
Required Parts

- Terminals to connect wiring to PSM

Terminal (Wire 18 - 24 AWG)	Part # A 013 545 76 26
Terminal (Wire 10 - 15 AWG)	Part # A 013 545 78 26

Location

- The PSM module is located in the driver's seat pedestal.



Retrofit

- PSM can be retrofitted on vehicles equipped with PSM prep code **ED8**
- ED8 is standard equipment on SPRINTER NAFTA MY08 and later vehicles
- PSM part number : Due to model year revisions , pls. inquire with vehicle VIN number the correct PSM module part number at your local authorized Sprinter Dealer or Sprinter Sales Engineering Hotline.

Operational Procedure

1. Submit a PSM request with your desired functions at: www.upfitterportal.com
2. After a feasibility study of the desired functions, Sprinter Sales Engineering will program, test and document the PSM program
3. The PSM program will be provided to client via e-mail together with a PIN information diagram
4. Client will download PSM program on to a USB storage device
5. Using USB and diagnostic tool, authorized Sprinter dealer will upload the PSM program to Sprinter
6. To ensure correct connection to the PSM module, client will use PIN information according to the provided PIN information diagram