

eSprinter
Charging
Handbook for
eXpertUpfitters



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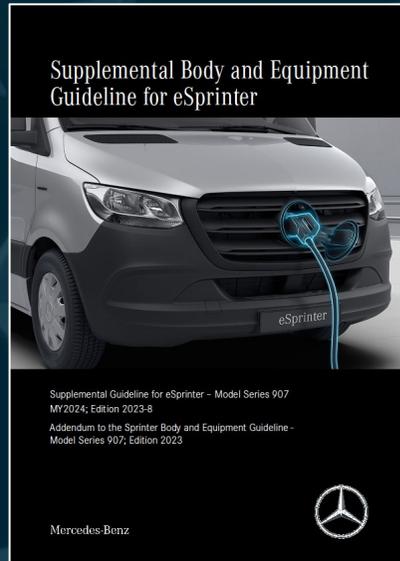
eSprinter Resource Overview

The intent of this document is to provide ExpertUpfitters™ with information to properly handle, store, and charge an eSprinter as the van cycles through to the upfitting process.

For information about modifying the eSprinter, please refer to the existing publications below, available on the [MBUSA Upfitter Portal](#)

eSprinter Body & Equipment Guidelines

This document supplements the [Body and Equipment Guideline for Sprinter - Model Designation 907; Edition MY2023](#)



Technical Overview & Key Upfit Considerations



Product and upfitting highlights

eSprinter Technical Specifications



Measurements and metrics

[Click on images above for full document]



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Electric Safety Considerations

BATTERY INTERACTIONS

For a comprehensive account of electrical requirements, please refer to the [eSprinter Body & Equipment Guidelines](#)



Do not connect with or modify the high voltage system components



Only the low voltage (12-volt) electrical system is available as a power source*



Never disconnect the 12-volt battery as it's needed to monitor the high voltage battery State of Charge

HIGH VOLTAGE SAFETY TRAININGS

MBUSA recommends all upfitters interacting with eSprinters to become BEV High Voltage certified.

Below are examples of accredited programs. Click on the company logo or copy & paste the respective links for more information.



dekra.us/en/training/high-voltage-training/



tuvsud.com/en-us/store/academy-us/transportation-industry/safety/36-34-21-0001?tracking=searchterm:+36-34-21-0001



<https://www.sae.org/search/?qt=high%20voltage&sort=relevance&sort-dir=desc&display=list&content-type=%28%22PDD%22%29>



ase.com/ev

*Please refer to page 20 of eSprinter Product and Upfit Considerations for power supply options: <https://www.mbvans.com/en/upfitter/tech-info/bulletins>



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Charging Guidelines

To guarantee a maximum service life for the high voltage battery and to avoid any consequential damage, the upfitter should maintain a high voltage battery State of Charge (SoC) between 30% to 50% at all times.

HANDOVER SoC REQUIREMENTS

Depending upon the vehicles' final destination, the following SoC levels should be maintained prior to transport



Upfit
Complete

To Dealer



SoC = 30% to 50%
prior to carrier
handover

To End Customer



SoC = 100%
prior to final
handover



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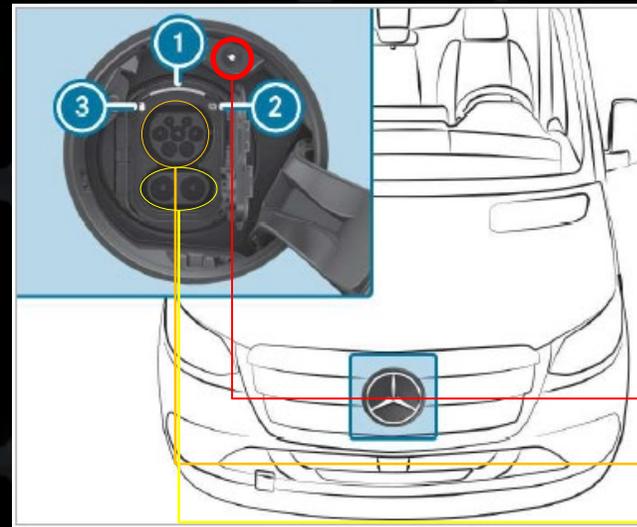


Charging Instructions

Below are the general actions to charge the eSprinter. For more comprehensive information, please refer to the Operator's Manual

eSPRINTER CHARGING STEPS

1. The eSprinter charging ports are located behind the Mercedes badge on the grille. Press and release the badge to open. The vehicle must be in Park with door unlocked.
2. To expose the ports, press the release locks on the left side. AC charging (Level 1 & 2) = Top port | DC charging (Level 3) = Bottom port
3. Insert charging cable in appropriate port
4. When connected, status indicator lamp (1) will flash orange, then green when charging. Indicator will flash red if there is a problem
5. Monitor charging status on instrument cluster. The max charge can be set to 50% on the E-menu.
6. When SoC level achieved (30% -- 50%) push and hold the lock release button and remove the charging cable. If the cable will not unlock from the port, press the lock release 3x to interrupt the charging process and remove the cable.



- ① Status indicator
 - ② Charging process indicator
 - ③ Locking status indicator
- Status display (1) flashes or lights up as with indicator lamps (2) and (3).
- Lock Release
 - Alternating Current port
 - Direct Current port



Additional instructional video located here:
<https://www.youtube.com/watch?v=qgEuJETK9DQ>



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Charging Options

Expert Upfitters may select the necessary charging hardware to suit production and delivery requirements

eSPRINTER HV BATTERY CHARGING OVERVIEW



Level 1 (AC)

Standard 120V outlet

Not recommended due to lengthy charging time
Must use J1772 connector

Level 2 (AC)

Wallbox (240V)

Must use J1772 connector
Available for purchase through your local MBUSA dealer

Level 3 (DC)

Charging station (480V)

Public option unless professionally installed onsite



For assistance, MBUSA offers consultation and preferential pricing for ChargePoint equipment.

Please fill out the online form for more information:

<https://info.chargepoint.com/2023-mbusa-chargepoint.html>

Category	AC				DC	
Product Family Name:	Home Flex (CPH50)	CP6000	CT4000	CPF50	CPE280 Paired	CPE250 Paired E-Skid
Station Model:	NEMA 6-50 or NEMA 14-50	CP6021X-80A-L7	CT4021-GW1	CPF50-L18	CPE280-800-NA-3A1S1	CPE250-625-CSS1-200A
Product Photo:						
Ports (SAE J1772 or CCS1):	1	2	2	2	2	2
Data Sheets:	Data Sheet	Data Sheet	Data sheet	Data sheet	Data Sheet attached	Data sheet
Use Location:	New Vehicle Delivery Area	FoH, Workshop, or BoH	FoH	New Vehicle Delivery Area, or Workshop	FoH, Workshop, or BoH	Wherever the dealer deems fit. Not meant for customers paying for charging.
Max Charging Power (kW):	12	19	7.2	12	160	125



Thank you!

EXPERT
UPFITTER

eSPRINTER

If you have any questions, please email us at:

upfitterinfo@mbusa.com

