

Sprinter MY2019 – Supplemental Installation Instructions Auxiliary Battery in Engine Compartment (E2M) with Code (E36) Technical Bulletin 907

CSP 11/10/2019 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 up fitters and dealers 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 907.

This document is meant to aid in the installation and provisioning of the auxiliary battery in the engine compartment (E2M) in 907 Sprinter with code E36 separation relay for additional consumers.

Required Parts:

OE Parts:

Part Number	Description	Quantity	Notes
A0019828008	Additional Battery	1	12V70AH
A0009903872	Angle Piece	1	Venting tube
A0249974982	Hose 5x1MM	1	ordered by the meter
A0029972486	Plug	1	for blocking battery vent
A0015460835	Positive battery cover	1	
A9075461900	Retaining Plate CDI ECU	1	
N00000003477	Nut M6	1	for attaching A9075461900
A9075402505	Bracket Battery	1	
N913024008100	Rivet Nut	2	for attaching A9075402505
N910105008005	Bolt M8x25	2	attaching support to firewall inner fender
N910105008005	Bolt M8x25	2	attaching bolt for hold downs
N00000003477	Nut M6	1	for attaching A9075402505
A9015410013	Mounting rail	2	for securing aux battery to tray
			Modified accordingly depending on vehicle
A9065402411	Aux battery positive line	1	equipment and presences of SA Code E36
A9065400341	Aux battery ground line	1	

Work Instruction: Disassembly

- 1. Review supplemental information:
 - Information on preventing damage to electronic components due to electrostatic discharge AH54.00-P-0001-01A
 - Risk of injury during testing and repair operations related to pyrotechnical components AS91.00-Z-0008-01A
 - Information, assessment and legal requirements when working with, handling and storing pyrotechnical components – AH91.00-Z-0000-10A
- Disconnect ground line of auxiliary battery for park pawl emergency shift mode, see
 AR54.10-D-0026TSR or expose fuse holder at driver's seat and remove f32 at the driver's seat fuse
 holder.
- 3. Disconnect ground line of on-board electrical system battery, see AR54.10-D-0029TS
- 4. Remove driver's front seat and seat box covering, see AR91.10-D-1000TS

Work Instruction: Disassembly

- Remove left front floor covering, see AR68.80-D-0006TSR
- 6. Remove lower center cover for instrument panel, See AR68.10-D-1498TSR
- 7. Remove cover for systems battery, see AR54.10-D-0009TSR NOTE: the systems battery does not need removed
- 8. Open hood and protect fenders with fender covers
- 9. Remove CDI control unit and set to the side
- 10. Loosen wiring harness clips at CDI control unit bracket, and remove the CDI control unit bracket

- 1. Install retaining plate for CDI ECU (A9075461900) using nut (N00000003477) in the left inner fender area.
- 2. Reposition engine wiring harness and attach to the underside of retaining plate for CDI ECU





3. Install Rivet nuts (N913024008100) in the left inner fender area



1. Install battery bracket (A9075402505) as shown below using nut (N000000003477) and bolts

N910105008005)

NOTE: battery bracket must be separated to facilitate installation

NOTE: CDI control unit must not be installed unit the battery

bracket is installed

CAUTION: Take care not to damage coating of brake lines in the area of the battery bracket support

5. Reinstall CDI control unit



- 6. Modify the auxiliary battery positive line (A9065400341) as follows:
 - Remove the heavy black battery cable from the junction block
 - Remove the accessory harnessed for K57 relay and fuse panels from the main harness
 - The remaining harness assembly can be discarded as it is not used





Only this section of the of A9065400341 will be used for the retrofit

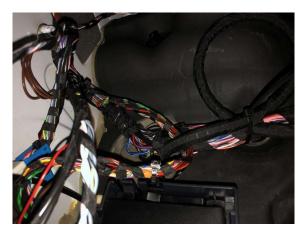


- 7. Route the prepared battery positive cable harness through the firewall grommet
- 8. Route the battery positive cable harness along the main dash wiring harness, down the transmission tunnel, through system battery box, and into the driver's seat base using the cable duct at the rear of the systems battery box
- 9. Secure battery positive cable harness to the main dash harness using cable ties. **CAUTION:** Take care that the harness is routed correctly around moving parts

See pictures on next page:



Bulkhead Grommet



Interior View of Bulkhead



Cable routing through battery box

Mercedes-Benz



Cable routing over brake pedal assembly

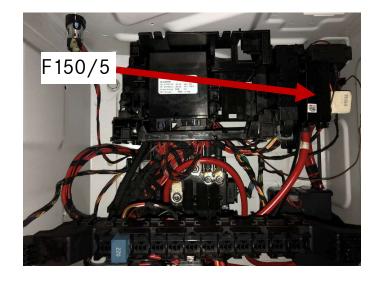


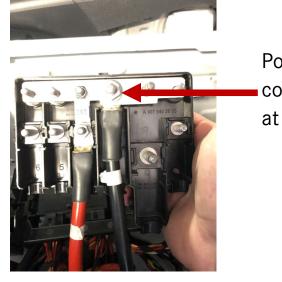
Cable duct into driver's seat base

- 10. Locate F150/5 auxiliary battery pre-fuse box in the driver's seat base, and remove from control unit bracket
- 11. Remove the cover of F150/5

12. Install battery positive cable at F150/5 position 3 as shown using the M8 nut from the discarded battery

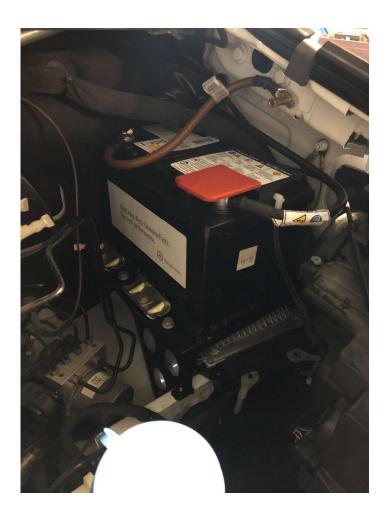
positive harness





Position 3 connection at F150/5

- 13. Reinstall F150/5 back into the control unit bracket in the driver's seat base.
- 14. Install plug (A0029972486) into the bulkhead facing or ground side of the additional battery vent port
- 15. Install additional battery (A0019828008) onto the battery tray under hood
- 16. Secure additional battery to tray using mounting rails (A9015410013) and bolts (N910105008005)
- 17. Install positive battery cable harness onto additional battery and secure excess cable using zip ties
- 18. Install auxiliary battery ground (A9065400341) line at the jump start ground point under hood and connect to additional battery.
- 19. Attach 1.5 meters of hose (A0249972486) to angle piece (A0009903872) and install into the positive side vent port of the additional battery. Route hose into the bumper area and secure with cable ties
- 20. Install positive battery cover (A0015460835) over the positive battery terminal **See picture on next page for reference:**



- 21. Reinstall the center dash lower paneling, systems battery cover, left front floor covering, driver's seat base cover, and driver's seat
- 22. Reconnect ground line of auxiliary battery for park pawl emergency shift mode, or expose fuse holder at driver's seat and install f32 at the driver's seat fuse holder.
- 23. Reconnect ground line of on-board electrical system battery
- 24. Connect battery charger
- 25. Connect XENTRY diagnosis unit
- 26. Add E2M via retrofits and modifications to the vehicles data card via XENTRY diagnosis
- 27. Perform SCN Coding to the following control units: IC, SAM
- 28. Perform quick test and clear fault memories. Disconnect battery charger and diagnosis unit