



Changing From Exide to C&D 12V Battery

Classification Repair Bulletin **Section/Group** 17 - Electrical **Country/Region** All

Year 2012 – 2013 **Model** Model S **Version** All

Bulletin Classification: *This repair bulletin provides instructions and guidelines for a noted condition or a customer concern. The information provided can address a broad range of known or perceived issues with the operation of Tesla vehicles. This bulletin might not be VIN-specific. These instructions assume knowledge of motor vehicle and high voltage electrical component repairs, and should only be executed by trained professionals. Tesla Motors assumes no liability for injury or property damage due to a failure to properly follow these instructions or repairs attempted by unqualified individuals.*

This Service Bulletin supersedes SB-13-17-008 R3, dated 24-Mar-14. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Condition

Tesla currently has 2 12V battery suppliers for Model S. If an Exide battery is replaced with a C&D battery, several steps are needed to adapt the battery to the vehicle.

Correction

Install terminal adapters on the C&D battery. Remove the Exide-specific terminal adapter from the battery fuse box. Replace the battery. Use Toolbox to set the vehicle configuration.

| Correction Description | Correction | Time |
|------------------------------------|------------|------|
| Replace Exide 12V Battery with C&D | S011317008 | 1.5 |

| Required Part(s): | Part Number | Description | Quantity |
|-------------------|--------------|---|----------|
| | 1024463-00-A | 12V BATTERY | 1 |
| | 1023696-00-A | ADAPTER, POSITIVE TERMINAL, 12V BATTERY | 1 |
| | 1024078-00-A | SCREW, 10-32, FLANGED, SERRATED, 3/8 LENGTH | 1 |
| | 1024082-00-A | BOLT, 5/16, SQUARE HEAD, 3/4" LENGTH | 1 |
| | 1023921-00-B | SAE ADAPTER, NEGATIVE TERMINAL, 12V BATTERY | 1 |
| | 1024079-00-A | SCREW, 10-32, FLANGED, SERRATED, 1 LENGTH | 1 |
| | 1024085-00-A | NUT, 5/16, FLANGED, SERRATED | 1 |
| | 1005103-00-D | 12V BATTERY CLAMP STRAP | 1 |

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Manual.

Procedure

1. Update the vehicle firmware.
2. Remove the 12V auxiliary battery (refer to Service Manual procedure 17011002).
3. Place the square-head bolt in the bottom cavity of the new positive adapter (Figure 1).



Figure 1 (Bottom of positive adapter)

NOTE: The C&D battery has a red case. The figures in this bulletin show a prototype battery that has a black case.

4. Use the shorter 10-32 bolt to attach the new positive adapter to the positive terminal of the new battery (torque 3.4 Nm) (Figure 2).



Figure 2

5. Use the longer 10-32 bolt to attach the negative adapter to the negative terminal of the new battery (torque 3.4 Nm) (Figure 3).

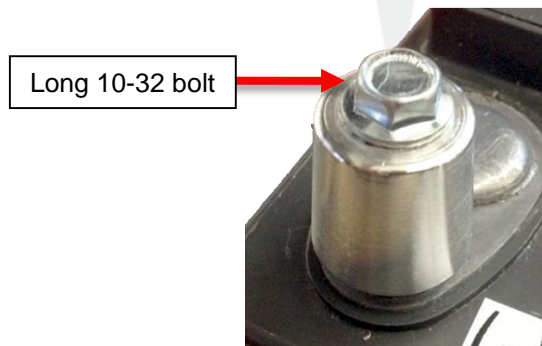


Figure 3

6. Remove and discard the nut that holds the existing positive adapter to the fuse box (Figure 4). Remove and discard the positive adapter (Figure 5).

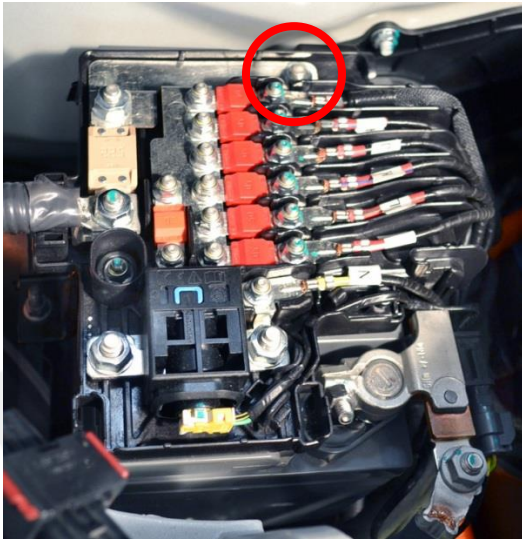


Figure 4 (Shown installed on Exide battery)



Figure 5

7. Install the new battery, using the revised battery strap to secure it in place.
8. Place the fuse box on the battery. The stud on the battery strap passes through the hole in the fuse box.
9. Reinstall the existing mounting nut on the fuse box mounting stud (torque 6 Nm) (Figure 6).
10. Install a new nut to secure the fuse box positive bus bar to the positive terminal of the battery (torque 12 Nm) (Figure 6).

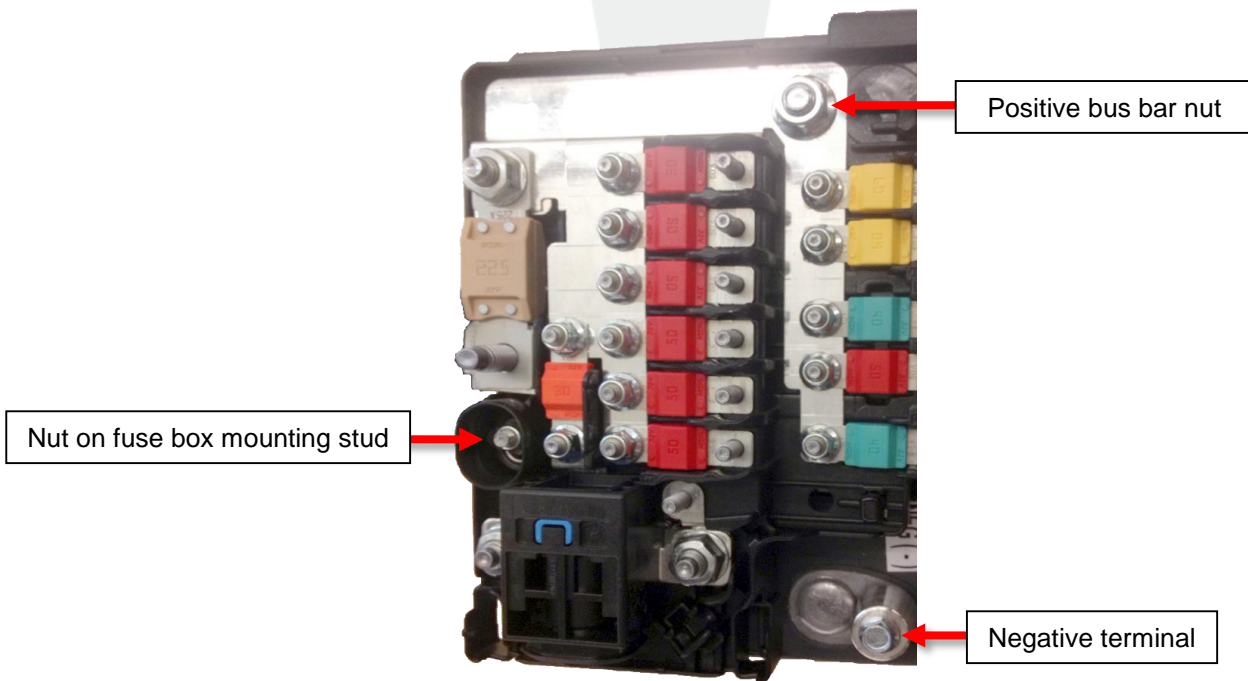


Figure 6 (Shown without harnesses)

11. Reinstall the body harness connector, fuse box cover, and the parts removed for access. Installation is the reverse of removal.

12. Use Toolbox to change the "12V Battery Type" configuration variable to **C & D**.

Affected VIN(s) This information is for reference purposes only. This list is not intended to be the sole information source for updates.

5YJSA1CN2DFP07482 - 5YJSA1CN2DFP07482
5YJSA1CG6DFP07521
5YJSA1CG6DFP07549
5YJSA1DPXDFP07651
5YJSA1DP4DFP08195
5YJSA1DG8DFP08278
5YJSA1AG6DFP08493
5YJSA1AG2DFP08927
5YJSA1CP0DFP09040
5YJSA1DP1DFP09062
5YJSA1CG6DFP09088
5YJSA1DP0DFP09098
5YJSA1CG0DFP09149
5YJSA1CG2DFP09170 - 5YJSA1CG0DFP09197
5YJSA1CG1DFP09208 - 5YJSA1AG5DFP11403
5YJSA1DN6DFP11422 - 5YJSA1CN8DFP11438
5YJSA1CN8DFP11455 - 5YJSA1CG1DFP11475
5YJSA1CNXDFP11490
5YJSA1DN8DFP11518 - 5YJSA1DP9DFP11612

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