



SDHQ Motorsports
190 S McQueen Rd
Ste 109 Gilbert, AZ 85233
www.SDHQoffroad.com

Product Packing List

Product: SDHQ-11-3003-G5

Description: SDHQ Built 2023-Current Ford Super Duty Billet Dual Battery Terminal Kit

- | | |
|--|---------------------|
| _____ (1) SDHQ Billet Terminal and Distribution Kit | SDHQ-02-3003-D2 |
| _____ (1) SDHQ Billet Negative Terminal Sensor Kit | SDHQ-02-3003-TS1 |
| _____ (1) SDHQ Complete HD Billet Battery Terminal Kit | SDHQ-02-3003-C1 |
| _____ (1) SDHQ 2/0 GA Solder Lug & Heat Shrink | SDHQ-02-3720 |
| _____ (2) SDHQ 1-2 GA Solder Lug & Heat Shrink | SDHQ-02-3701 |
| _____ (1) SDHQ 13" Negative 4GA Battery to Block | SDHQ-02-3304-B13-35 |
| _____ (1) Hardware Package | SDHQ-11-3003-G5-HP |
| _____ (1) Bent Aluminum Bracket | SDHQ-11-3003-G5-A |
| _____ (1) M8 x 1.25mm S.S. Serrated Flange Locknut | |
| _____ (1) 1/4"-20 x 3/4" S.S. Button Head Bolt | |
| _____ (1) 1/4" S.S. Washer | |
| _____ (1) 1/4" S.S. Fender Washer (1" OD) | |
| _____ (1) 1/4"-20 S.S. Nylock Nut | |

Inspected and Packaged By: _____ **Date:** _____

Included in SDHQ-02-3003-D2:

- (1) SDHQ Billet Positive Battery Terminal
- (1) SDHQ Billet Negative Distribution Block
- (1) Hardware Package
 - (1) Positive Battery Protective Boot
 - (1) Red Post Washer
 - (1) M8 - 1.25 x 30mm S.S. Socket Head Bolt
 - (1) 5/16" - 18 x 1 1/2" Battery Terminal Bolt
 - (1) 5/16" - 18 Battery Shoulder Nut
 - (5) 1/4" - 20 x 1/2" S.S. Hex Head Bolt
 - (5) 1/4" S.S. Washer
 - (1) 5/16" - 18 x 1" S.S. Hex Head Bolt
 - (1) 5/16" - 18 x 3/4" S.S. Hex Head Bolt
 - (2) 5/16" S.S. Washer
 - (2) 3/8" - 16 x 2" S.S. Hex Head Bolt
 - (4) 3/8" S.S. Washers
 - (2) 3/8" - 16 S.S. Nuts
 - (1) Small Tube of Anti-Seize

SDHQ-02-3003-T2-P-Rev2
SDHQ-02-3003-D2-N

Included in SDHQ-02-3003-TS1:

- (1) SDHQ Billet Negative Sensor Terminal
- (1) Hardware Package
 - (1) Black Post Washer
 - (1) 5/16" - 18 x 1-1/2" Battery Terminal Bolt
 - (1) 5/16" - 18 Battery Shoulder Nut
 - (1) M6 S.S. Serrated Flange Nut

SDHQ-02-3003-TS1
SDHQ-02-3003-TS1-HP

Included in SDHQ-02-3003-C1:

- (1) SDHQ Billet Positive Battery Terminal
- (1) SDHQ Billet Negative Battery Terminal
- (1) Hardware Package
 - (1) Positive Terminal Insulator
 - (1) Negative Terminal Insulator
 - (1) Positive Terminal Post Washer
 - (1) Negative Terminal Post Washer
 - (2) 5/16" - 18 x 1 1/2" Battery Terminal Bolt
 - (2) 5/16" - 18 Battery Shoulder Nut
 - (2) 3/8" - 16 x 2" S.S. Hex Head Bolt
 - (4) 3/8" S.S. Washers
 - (2) 3/8" - 16 S.S. Nuts

SDHQ-02-3003-T1-P-Rev2
SDHQ-02-3003-T1-N-Rev2
SDHQ-02-3003-T1-A



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INSTALLATION INSTRUCTIONS

Product: SDHQ-11-3003-G5

Description: SDHQ Built 2023-Current Ford Super Duty Billet Dual Battery Terminal Kit



Parts List	Hardware List	Required Tools
(1) SDHQ Terminal and Distribution Kit SDHQ-02-3003-D2 (1) SDHQ Negative Terminal Sensor Kit SDHQ-02-3003-TS1 (1) SDHQ Complete HD Terminal Kit SDHQ-02-3003-C1 (1) SDHQ 2/0 GA Lugs & Heat Shrink SDHQ-02-3720 (2) SDHQ 1-2 GA Lugs & Heat Shrink SDHQ-02-3701 (1) SDHQ 13" Negative 4GA Cable SDHQ-02-3304-B13-35 (1) Hardware Package SDHQ-11-3003-G5-HP	(1) Bent Aluminum Bracket (SDHQ-11-3003-G5-A) (1) M8 x 1.25mm S.S. Serrated Flange Locknut (1) 1/4"-20 x 3/4" S.S. Button Head Bolt (1) 1/4" S.S. Washer (1) 1/4" S.S. Fender Washer (1" OD) (1) 1/4"-20 S.S. Nylock Nut	7/16", 1/2", 9/16" Sockets 7mm, 10mm, 12mm, 13mm Sockets Ratchet 7/16", 1/2", 9/16" Wrenches 5/32" and 6mm Allen Wrenches Pliers Wire Cutters Heat Gun Rubber Mallet E16 Torx Socket

Tech Notes

Fits 2023+ Ford F-250/350 with factory dual batteries.
 Cutting the factory terminals off is required.

Torque Specifications

Torque the 1/4"-20 bolts to 4 ft-lb. Torque the 5/16"-18 bolts to 8 ft-lb. Torque the 3/8"-16 bolts to 18 ft-lb.

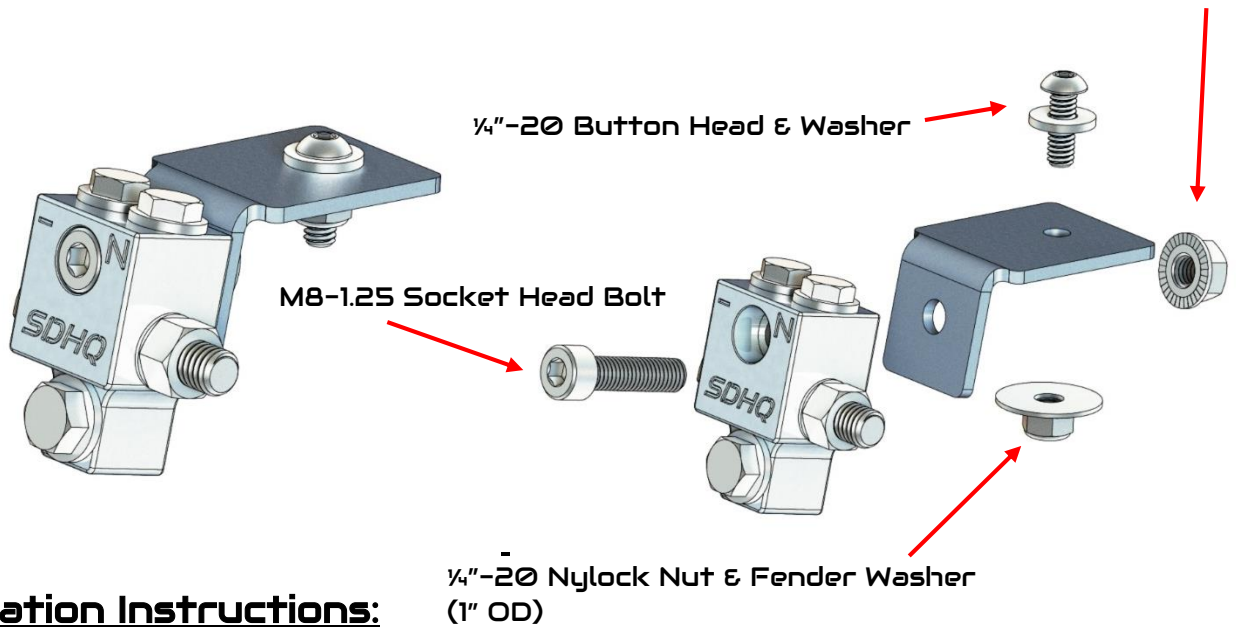
Approx. Install Time: 1+ Hour

*****READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION!*****

For questions or help with the installation, please email help@sdhqoffroad.com
 Store front hours: Mon. – Fri. 8:00am – 5:30pm and Sat. 9:00am – 2:00pm Arizona Time.

SDHQ-11-3003-G5

M8-1.25 Serrated Flange Nut



Installation Instructions:

1. Unbox and verify all parts are present. Familiarize yourself with the parts and diagram above.
2. Using a 10mm socket disconnect the negative terminal on both batteries.



Primary Battery - Passenger Side



Secondary Battery - Driver Side

3. **Removing the Terminals on Driver Side.** Remove the positive terminal from the battery using a 10mm socket. Trim the terminals from the wires leaving as much wire as possible.



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4. Using a 10mm socket remove the nut for the battery hold-down. Remove the tape from the negative cable over the battery hold-down clip it will not be reused. Remove the other nut and then the battery and hold-down.



5. Follow the wire harness from the battery and remove the clip on the engine block as shown below. This will add slack to the wires, allowing for an easier install of the billet terminals.



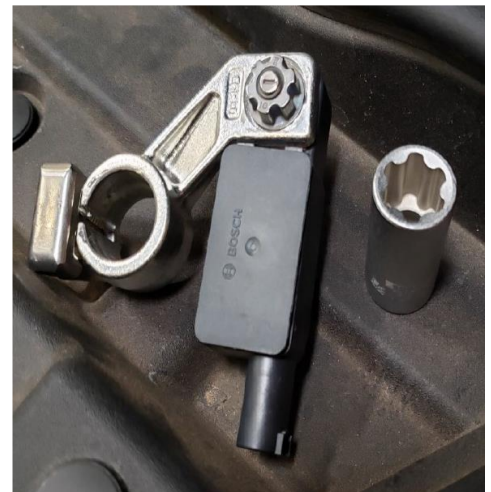
6. **Installing Lugs** Strip 1" of insulation off the positive wire. Using pliers/channel locks to hold the 1-2 GA solder lug, heat the lug upright with the wire inserted. Twist the wire back and forth applying downward pressure until it is fully seated in the solder lug and let cool. Check the connection for a strong bond then place 3" of heat shrink over the lug and wire and heat to secure. Repeat the process for the negative wire. ****Recommended to have an extra person to hold the torch or heat gun when installing the solder lug.****



7. **Removing the Positive Terminal on Passenger Side.** Using a 10mm socket remove the nut retaining the small positive wire. Using a 10mm socket remove the positive terminal from the battery. Use scissors to trim back the wiring tape to expose the wires. Strip 1" of insulation off the positive wires. There are two large power wires attached to the positive terminal, these wires be installed into (1) 2/0 GA Solder Lug. Recommended to remove the battery to install the solder lug.



8. Using a 10mm socket remove the ground wires attached to the negative terminal on the passenger side battery. Disconnect the wiring harness attached to the Bosch BMS (battery management system). Using a E16 Torx Socket remove the BMS. Using a 10mm socket attach the BMS to the TS1 Terminal using the supplied M6 flange nut.



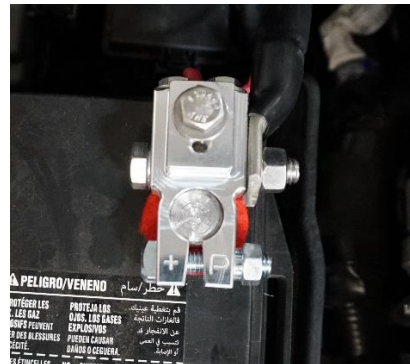
9. **Installing Lug.** Strip 1" of insulation off the positive wire. Using pliers/channel locks to hold the 1-2 GA solder lug, heat the lug upright with the wire inserted. Twist the wire back and forth applying downward pressure until it is fully seated in the solder lug and let cool. Check the connection for a strong bond then place 3" of heat shrink over the lug and wire and heat to secure. Repeat the process for the negative wire. ****Recommended to have an extra person to hold the torch or heat gun when installing the solder lug.****



10. Installing Battery Terminals. Install the SDHQ HD Battery Terminals (02-3003-C1) and post washers onto the **driver side** battery. Install the SDHQ Battery Terminal (02-3003-T2-P-Rev2) and post washer onto the **passenger side** positive terminal. Install the SDHQ Negative Sensor Terminal (02-3003-TS1) and post washer onto the **passenger side** negative terminal. Using a rubber mallet lightly tap on the top of the terminals to set them on the battery posts. Tighten the 5/16" Battery Bolt and Nut, using a 1/2" wrench on both to prevent damaging the battery post. Refer to the Battery Terminal Install Instructions for accessory mounting options. **Leave the terminals disconnected from power for now.**



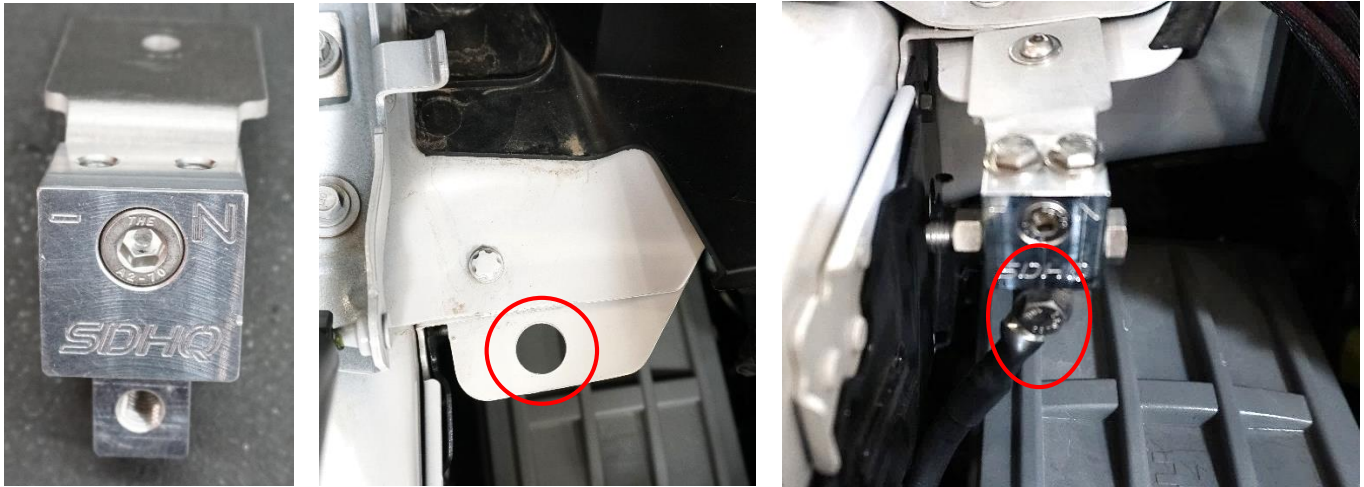
Secondary Battery - Driver Side



Primary Battery - Passenger Side

11. Installing Distribution Block. Install the SDHQ Negative Distribution Block (02-3003-D2-N) onto the Bent Aluminum Bracket using the supplied M8 socket head and flange nut. Using the 1/4" hardware install the bracket over the passenger panel hole by the firewall circled in red, the fender washer is placed below the body panel to secure the bracket. Connect the 3/8" eyelet end of the 13" Negative cable to the 5/16" bolt on the Distribution Block.

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12. Place the 5/16" eyelet end of the 13" Negative cable to the sensor stud, tighten down the nut using a 10mm socket. Use the supplied 3/8" hex head bolt and nut to secure the positive lugs to the positive terminal. Connect all accessories to the terminals and place the positive protective boot on.



13. On the driver side battery, slide the terminal insulators over the corresponding wires. Connect the power and ground wires to their corresponding terminals.

14. You have completed the SDHQ 2023+ Ford Super Duty Battery Terminal Upgrade!



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*****Double check all hardware is installed correctly and tight*****

*****Re-torque ALL bolts after 100 miles*****



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