Latest Revision: 1/10/2023



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

# **Product Packing List**

PIOUGET PECKING LIST			
Product: <u>SDHQ-13-3003-614</u>			
Description: 2021–current Ford F150/Rap	tor Complete Billet		
Battery Terminal and Distribution Kit			
(1) CDUO Billot Bottoon Biotoile tion 16th	CDUO 63 3663 D3		
(1) SDHQ Billet Battery Distribution Kit	SDHQ-02-3003-D2		
(1) Billet Negative Sensor Terminal Kit	SDHQ-02-3003-TS1		
(1) 18" 4 AWG Negative Wire	SDHQ-02-3304-B18-15		
(1) SDHQ 1-26A Lug & Heat Shrink			
<ul> <li>Compression Lugs</li> </ul>	SDHQ-02-3802		
<u>OR</u>			
o Solder Lugs	SDHQ-02-3701		
(1) Hardware Package	SDHQ-02-3304-B18-HF		
(1) M6 - 1.0 $\times$ 35mm S.S. Socket Head Bolt			
(1) ¼" S.S. "AN" Washer			

Inspected and Packaged By:	Date:
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Included in SDHQ-02-3003-D2	
(1) Billet Positive Battery Terminal	SDHQ-02-3003-T2-P-Rev2
(1) Billet Negative Distribution Block	SDHQ-02-3003-D2-N
(1) Hardware Package	SDHQ-02-3003-D2-A
(1) Positive Battery Protective Boot	
(1) Red Post Washer	
(1) M8 – 1.25 x 30mm S.S. Socket Hea	d Bolt
(1) 5/16" - 18 x 1 ½" Battery Terminal (	Bolt
(1) 5/16" - 18 Battery Shoulder Nut	
(5) ¼" - 20 x ½" S.S. Hex Head Bolt	
(5) ¼" 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 Bo	olt
(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	
Included in SDHQ-02-3003-TS1	
(1) Billet Negative Sensor Terminal	SDHQ-02-3003-TS1-N
(1) Hardware Package	SDHQ-02-3003-TS1-HP
(1) Black Post Washer	
(1) 5/16" - 18 x 1 ½" Battery Terminal I	Bol†
(1) 5/16" – 18 Battery Shoulder Nut	
(1) M6 SS Serrated Flange Head Nut	



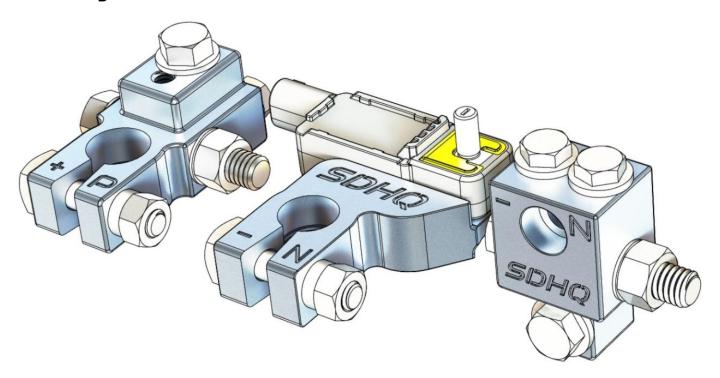
**SDHQ Motorsports** 190 S McQueen Rd Phone: 480-633-2929

## **INSTALLATION INSTRUCTIONS**

Product: SDHQ-13-3003-614

Description: 2021-current Ford F150/Raptor Complete Billet

Battery Terminal/Distribution Kit



<u>Parts List</u>	<u>Hardware List</u>	Required Tools
(1) SDHQ Billet Battery Distribution Kit	(1) M6 - 1.0 x 35mm S.S. Socket Head Bolt	7/16", ½", 9/16" Sockets
<b>SDHQ</b> -02-3003-D2	(1) 1/4" S.S. "AN" Washer	10mm, 12mm Sockets
(1) SDHQ Negative Sensor Terminal Kit		5mm Hex Key
<b>SDHQ</b> -02-3003-TS1		Ratchet
(1) SDHQ 18" 4 AWG Negative Wire		9/16" Wrench
<b>SDHQ</b> -02-3304-B18-15		Rubber Mallet
(1) SDHQ 1-2GA Lugs & Heat Shrink		Pliers
<b>SDHQ</b> -02-3802 <b>OR SDHQ</b> -02-3701		E16 Torx Socket
(1) Hardware Package		
<b>SDHQ</b> -02-3304-B18-HP		

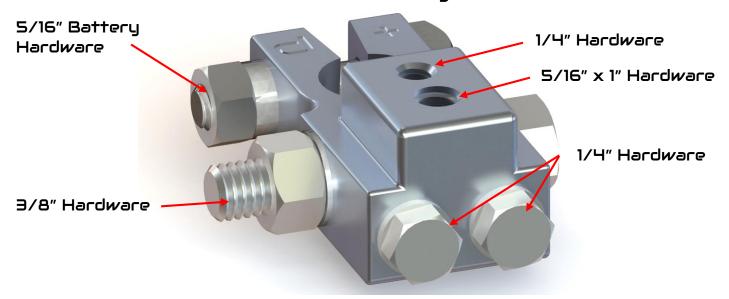
### **Tech Notes**

Apply Anti-Seize to all hardware.

Follow the Torque Specifications on the bottom of Page 5. See **SDHQ**-02-37(01/04/10) for (1-2GA, 4-6GA, 1/0GA) Solder Lug Kits. See SDHQ-02-38(02/04/06/10) for (1-2GA, 4GA, 6GA, 1/0GA) Compression Lug Kits.

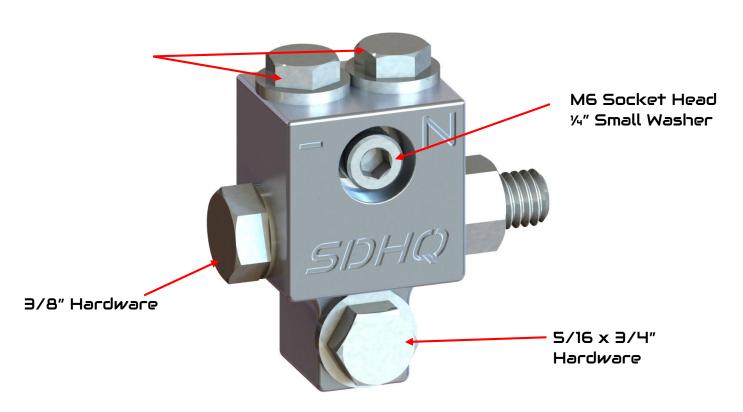
Approx. Install Time: 1 Hour

### SDHQ Positive Battery Terminal



## SDHQ Negative Distribution Block

#### 1/4" Hardware



#### **Installation Instructions:**

- 1. Unbox your SDHQ Built Complete Billet Battery Terminal Kit and check over all parts. Familiarize yourself with the parts and diagrams above.
- 2. Disconnecting Battery. Disconnect the stock negative battery terminal using 10mm socket. Removing all wires from the negative terminal and unplug the Bosch BMS (battery management sensor). Remove the terminal from the BMS using a E16 Torx socket and discard factory terminal. Disconnect the factory positive battery terminal using 10mm socket. Remove all wire terminals from the factory positive battery terminal and discard the factory terminal.
- **3. TS1 Install.** Add the 5/16" battery bolt to the terminal and attach the TS1 Terminal to the BMS using the supplied stainless M6 flange head nut. Place the battery post washer on the negative terminal with the TS1 over it. Using a rubber mallet, tap the terminal to help it seat on the battery post. Tighten the 5/16" battery hardware once you're happy with terminal location. Leave grounds disconnected for now.







- 4. Installing the Negative Distribution Block. Locate the 10mm ground bolt in front of the battery, and remove. Position the negative terminal block as shown below and secure with supplied M6 socket head bolt and ¼" "AN" washer. Secure the larger 5/16" hole on the 18" 4GA Ground wire to the Negative Terminal Block. Attach any other accessories to the ground block and tighten all hardware.
- 5. Installing SDHQ Lugs. Using wire cutters, cut the factory positive terminal off, leaving as much wire as possible and discard the factory terminal. Strip 1" of insulation off the positive wire. Slide the heat shrink over the wire. Be mindful of the orientation of the lug for ease of wiring to the terminals next. For Compression Lugs (shown below): Slide the compression end



of the 1-2GA lug over the striped wire.
Using the 9/16" wrench and pliers, tighten the compression lug until it is snug. Be cautious not to over tighten as the threads can strip. Secure the heat shrink over the lug. For Solder Lugs:
Using pliers, securely grab the ring end of the solder lug. Heat the solder in the lug until the solder is liquid. Cautiously insert the stripped wire into the solder lug and allow to cool before proceeding. Secure the heat shrink over the lug.









- 6. Installing the Positive Battery Terminal. Secure the SDHQ Lug installed on Step 4 to the battery terminal as shown. Remove the electrical tape securing the wire to the battery tray. Place the Red Post Washer and SDHQ Positive Battery Terminal on top of the positive battery post. Lightly tap on the top of the terminal using a rubber mallet to set it on the battery post. Tighten the 5/16" Battery Bolt and Nut using ½" wrenches on both to prevent damaging the battery post. Use the top ¼" or 5/16" hole for factory wiring.
- 7. Connecting Negative Terminal. Install the smaller 1/4" hole on the 32" 2GA Ground Wire and the factory ground cable and secure with supplied M6 Flange Nut.



### **Torque Specifications**

1. Torque the M6 and ¼" bolts to 4 ft-lb. Torque the 5/16" hardware to 8 ft-lb. Torque the 3/8" hardware to 18 ft-lb. M8 – 1.25 x 30mm Socket Head Bolt will not be used.



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

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



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