

INSTALL INSTRUCTIONS FOR 76-6001

PART#: 76-6001



PRINT

Helmet Particle Separator

Thank you for purchasing your new S&B Filters Helmet Particle Separator. If at any time you need additional assistance with installation or have any other questions or comments, feel free to call our customer support team at 909-947-0015.

You can also take advantage of our live chat at www.sbfilters.com and connect with an S&B representative immediately. We hope you enjoy your new S&B Filters product and thank you for your continued support.

Tools Required

- 4mm Hex Key
- 5mm Hex Key
- 13mm Wrench or Socket Wrench

Thread Locker Use

We have provided a small tube of thread locker in your kit. Whenever you see the symbol above on a step of the instructions apply 1 small drop of the thread locker to the threads of the screws or bolts. This will keep your hardware from vibrating loose during rough driving. If the hardware ever needs to be removed, do so slowly to avoid having the inserts strip out from the plastic.

Related Products

Fresh Air Hose Kit

Various Sizes (<https://www.sbfilters.com/particle-separator/accessories/hose-kit>)

 **Support**

Hose Hanger Kit

Various Sizes (<https://www.sbfilters.com/particle-separator/accessories/hanger-kit>)

Strap Kit

Various Sizes (<https://www.sbfilters.com/particle-separator/accessories/strap-kit>)

Fan Replacement Guides

Blower Fan (<https://www.sbfilters.com/blowerfanreplacement>)

Exhaust Fan (<https://www.sbfilters.com/exhaustfanreplacement>)

Warnings

This equipment should be installed, adjusted, and serviced by personnel familiar with the construction and operation of this type of equipment and the hazards involved. Failure to observe this precaution could result in severe injury. Read this manual thoroughly and make sure you understand the procedures before you attempt to operate this equipment. The purpose of this manual is to provide you with information necessary to safely operate, maintain, and troubleshoot this equipment. Do not use this equipment for any reason other than its intended purpose. Failure to follow these instructions will void any warranty. Keep this manual for future reference. The information contained in this manual is subject to change without notice. If you are a Technician installing the Helmet PS for the customer, please remember to give the instruction sheet included with this kit to the customer. Verify that the customer has access to all the information required for proper use of the Helmet PS..

Product will intake and expel both air and loose materials with high force and velocity. Install product by affixing to the rear upper or rear lower roll bar and ensure the air inlet is not blocked.

- If using product with only one rider, place provided rubber cap over helmet air output port not in use. Failure to do so may result in low pressure and low flow to the port that is in use. It will also lead to possible contamination of the clean air chamber resulting in a greater chance of debris entering the connected helmet.
- Do not place face, hair, extremities, clothing, or other loose material in front of air inlet or outlet during use.
- Install product by affixing to the rear upper or rear lower roll bar to avoid placing hair, extremities, clothing, or other loose material in front of air inlet during use.

Moving parts are sharp and could cause personal injury.

- Keep fan safety cages, blower outlet, and exhaust cover in place while operating service.

- Disconnect product from power source before servicing. Product is designed to filter approximately 99% of solid particulate, such as dirt and dust. No filtration device is 100% effective, and users may still experience distribution of dirt/dust within their helmet. To minimize this experience, ensure connection of the product to user helmet at either of three locations. Directly on the helmet at the top right, top left, or top center ports. Connection of the product to another location on the user helmet may increase the risk of use inhalation or eye exposure to dirt, dust, or other solid particulate matter.

Product is designed for use in conjunction with an ATV's operating manual, and state and federal law.

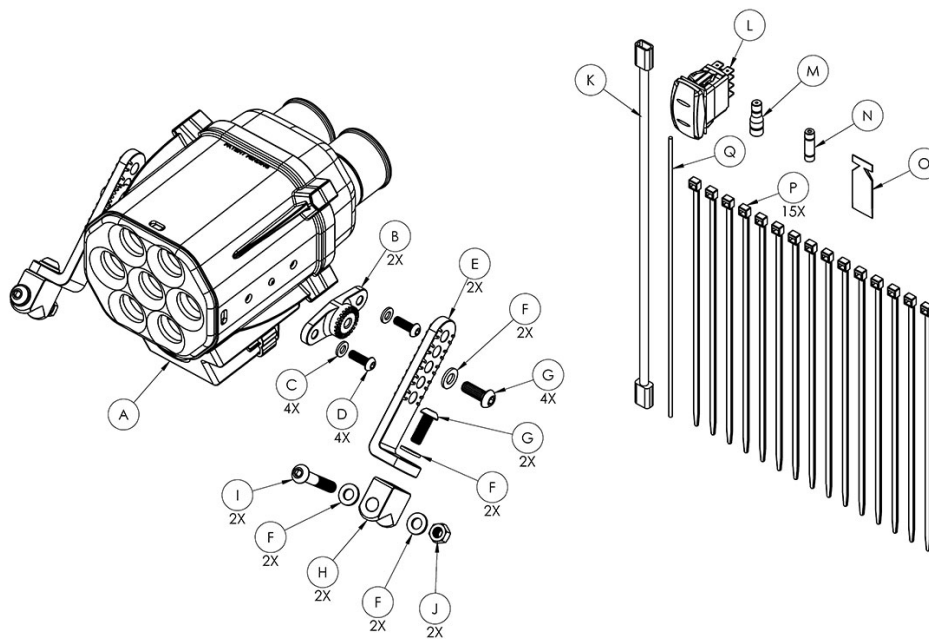
- Keep your seat belt fastened and wear a helmet while operating the vehicle.
- Improper installation, maintenance or operation could cause serious injury or property damage.

Periodically check the following:

- the Helmet PS exhaust fan and blower fan making sure they are working properly and blowing out air like when it was new.
- the fasteners of the Helmet PS assembly making sure they are tight and secured.
- the mounting brackets, straps and fasteners making sure they are tight and secured.
- the wire harness for any signs of wear making sure it is secured and away from any hot or moving components.

Caution: The S&B Helmet Separator is not a respiratory system and is not capable of filtering 100% of particulate matter, including dust. Dust, dirt, and other particulates may be inhaled by the user while using this device.

PARTS LIST



ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
A	1	AL2008-00	Helmet PS
B	2	AI1800-01	Clamp Adapter
C	4	AI1416-00	M6 Washer, 12mm OD, 18-8 SS
D	4	AI1802-00	BHSC, M6 x 1 x 18mm Long, 18-8 SS
E	2	AI1781-01	Clamp L-Bracket
F	8	AI1740-00	M8 Washer, 16mm OD, 18-8 SS
G	4	AI2111-00	BHCS, M8 x 1.25 x 22mm Long, 18-8 SS
H	2	AI1782-02	Clamp Pivot
I	2	AI2038-00	BHCS, M8 x 1.25 x 50mm Long, 18-8 SS

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
J	2	AI1736-00	M8 X 1.25 Nylon Insert Locknut, Class 10, Zinc Plated
K	1	AI2088-00	Helmet PS Wire Harness
L	1	AI2078-00	Rocker Switch, 2 LED, with S&B logo and "HELMET"
M	1	AI1799-00	Posi-Tap, Electrical Wire Line Tap
N	1	AI2004-00	Posi-Seal Connector, 14-16 Ga
O	1	AI1595-00	Threadlocker
P	15	AI1750-00	Cable Tie, 9" Long
Q	1	AI2141-01	Orange Primary Wire, 16 ga, SAE J1128, Cut to 10 ft

INSTALLATION STEPS

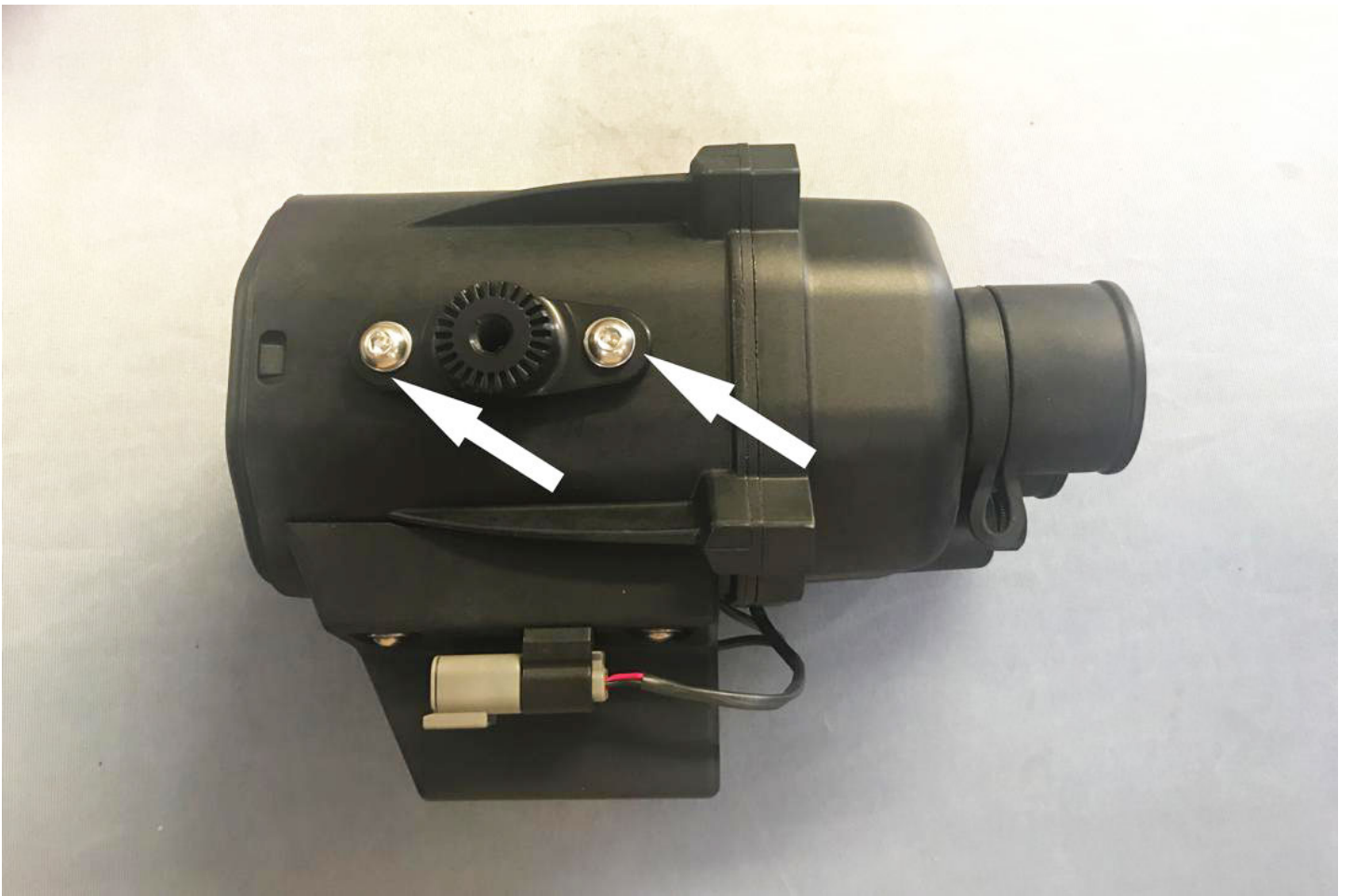
Before you Start

- Please read the entire product guide before proceeding.
- Ensure all components listed above are present.
- If you are missing any of the components, call the S&B Customer Support Team at (909) 947-0015.
- Disconnect your battery before doing any electrical modifications.



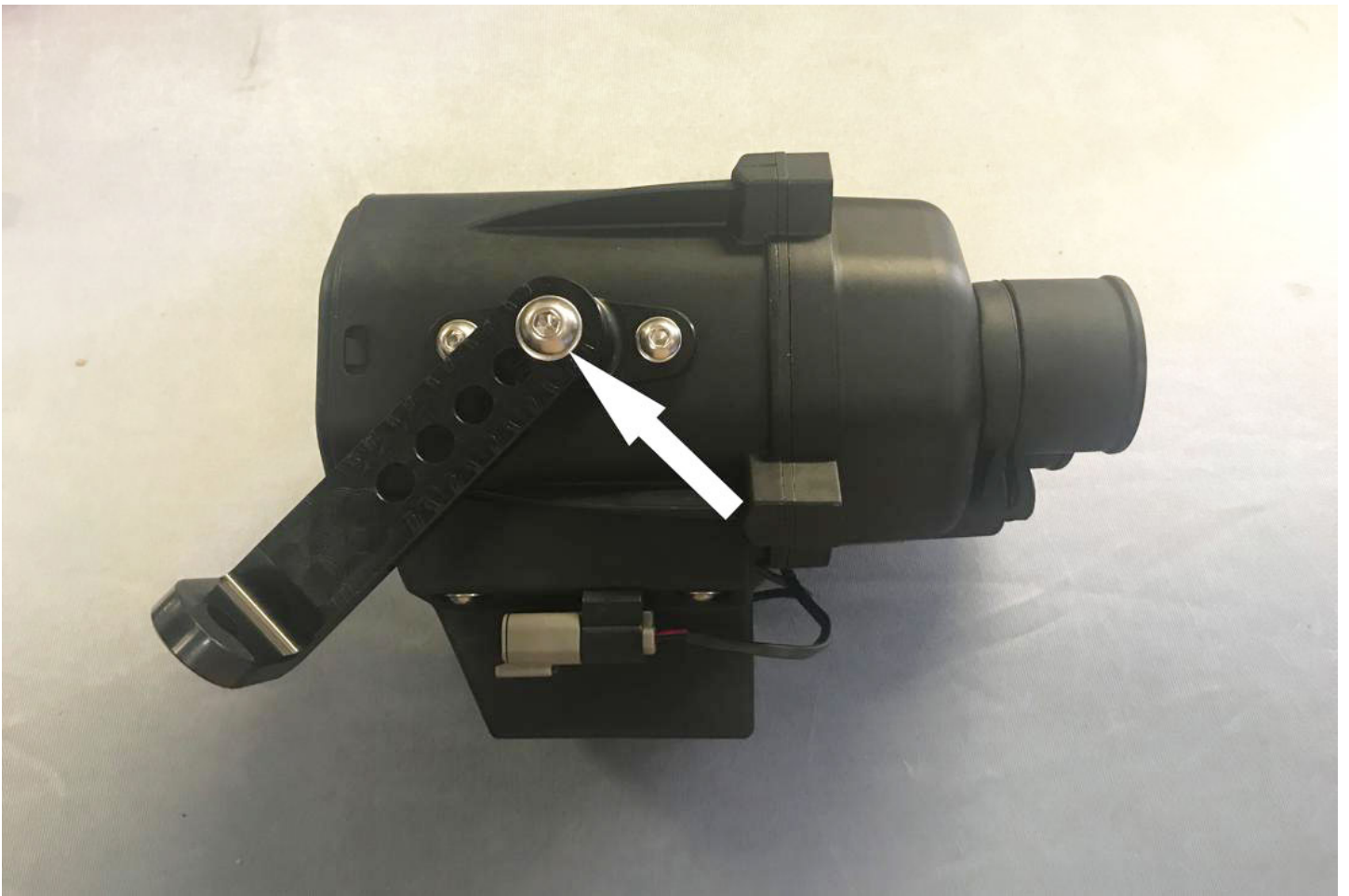
STEP 1

Determine where you want to mount the Helmet Particle Separator. The intake can face forwards or backwards, but it needs to be mounted horizontally, with the Exhaust Fan pointing straight down. It is recommended to mount the Helmet PS in an orientation where there is less dust entering the vortex separators. Also note the Fan Speed Knob is between the Helmet Ports



STEP 2

Install the Adapters (B) onto the Helmet Particle Separator Assembly (A) with the Screws (D), Washers (C), and Thread Locker (O), then tighten. Tool Needed:



STEP 3

Install the L Brackets (E) onto the Adapters with the Screws (G), Washers (F), and Thread Locker (O), selecting the proper angle and orientation based on the desired location for the Particle Separator, then tighten. Tool Needed: 5mm Hex Key



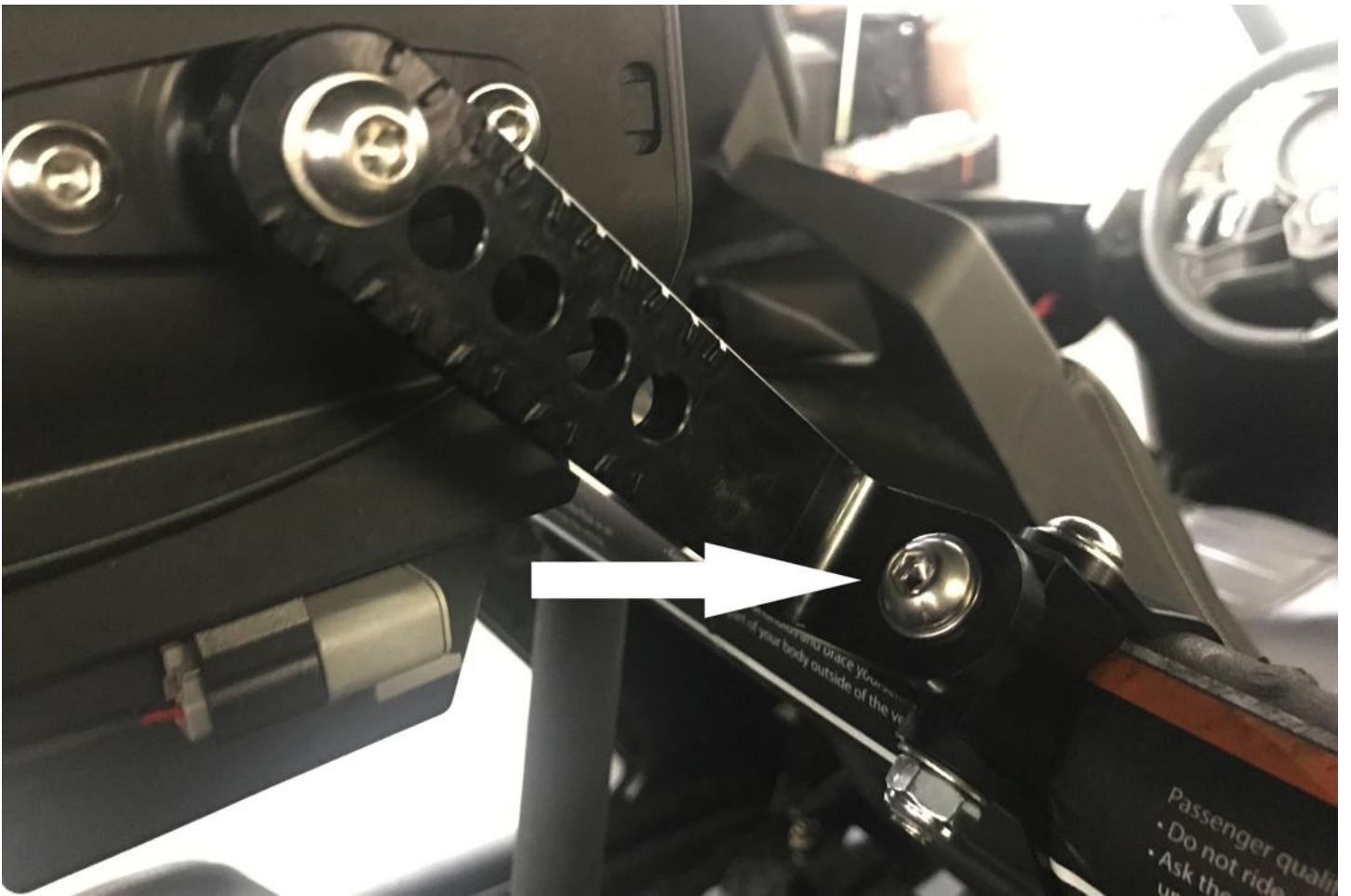
STEP 4

Slide the bar mount straps over roll cage. Wrapping a small parts bag around the roll cage will make sliding the strap over the roll cage easier and help protect the roll cage from scratches.



STEP 5

Install the Pivot Bodies (H) with the Screws (I), Washers (F), and Locknuts (J). Snug the straps up, but do not fully tighten, leave the straps loose enough so they can be slid side to side and rotated. Tools Needed: 13mm Wrench, 5mm Hex Key.



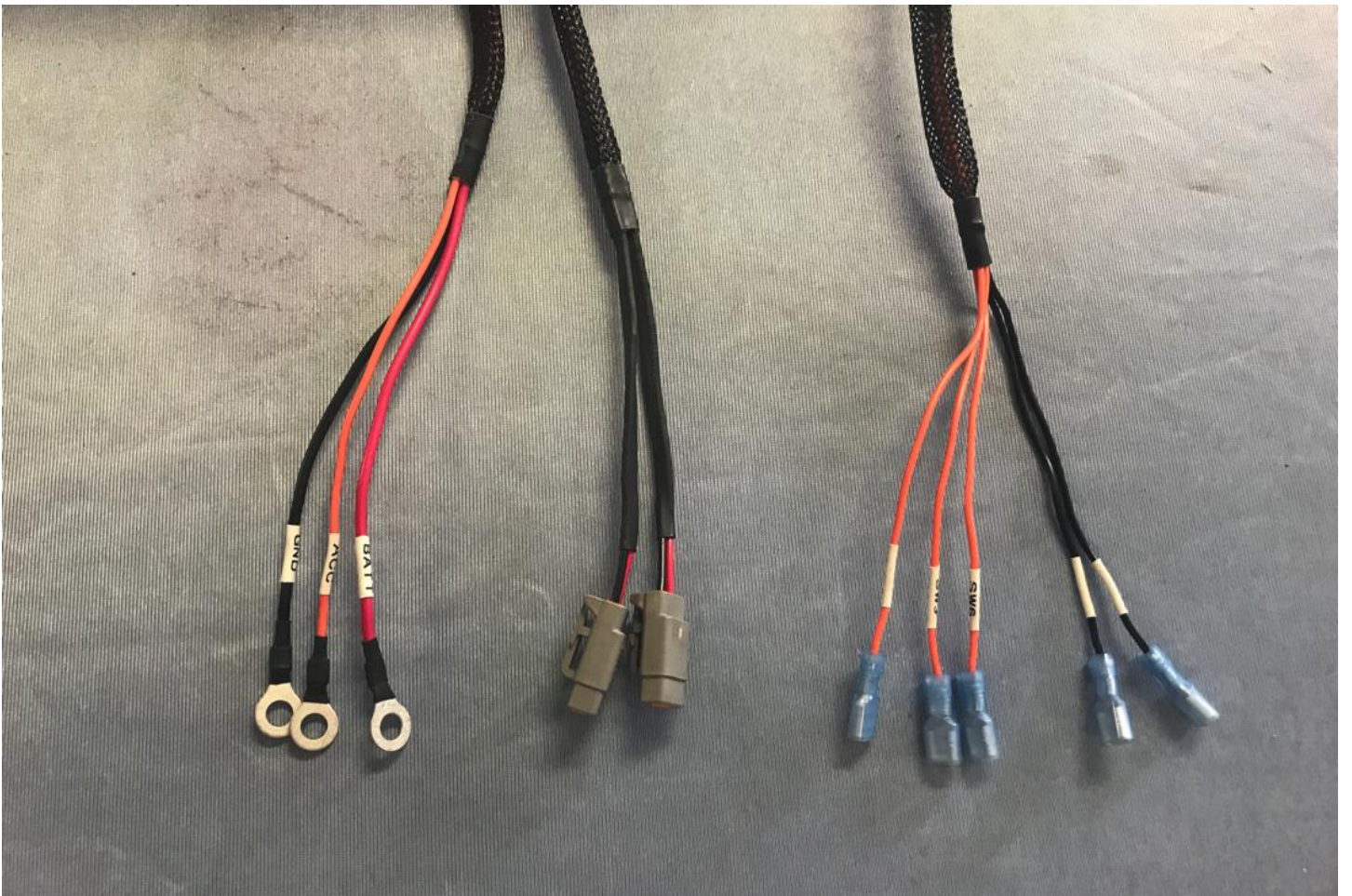
STEP 6

Install the L Brackets (E) onto the Pivot Bodies (H) using the Screws (G) and Washers (F), and Thread Locker (O), then tighten. Tool Needed: 5mm Hex Key.



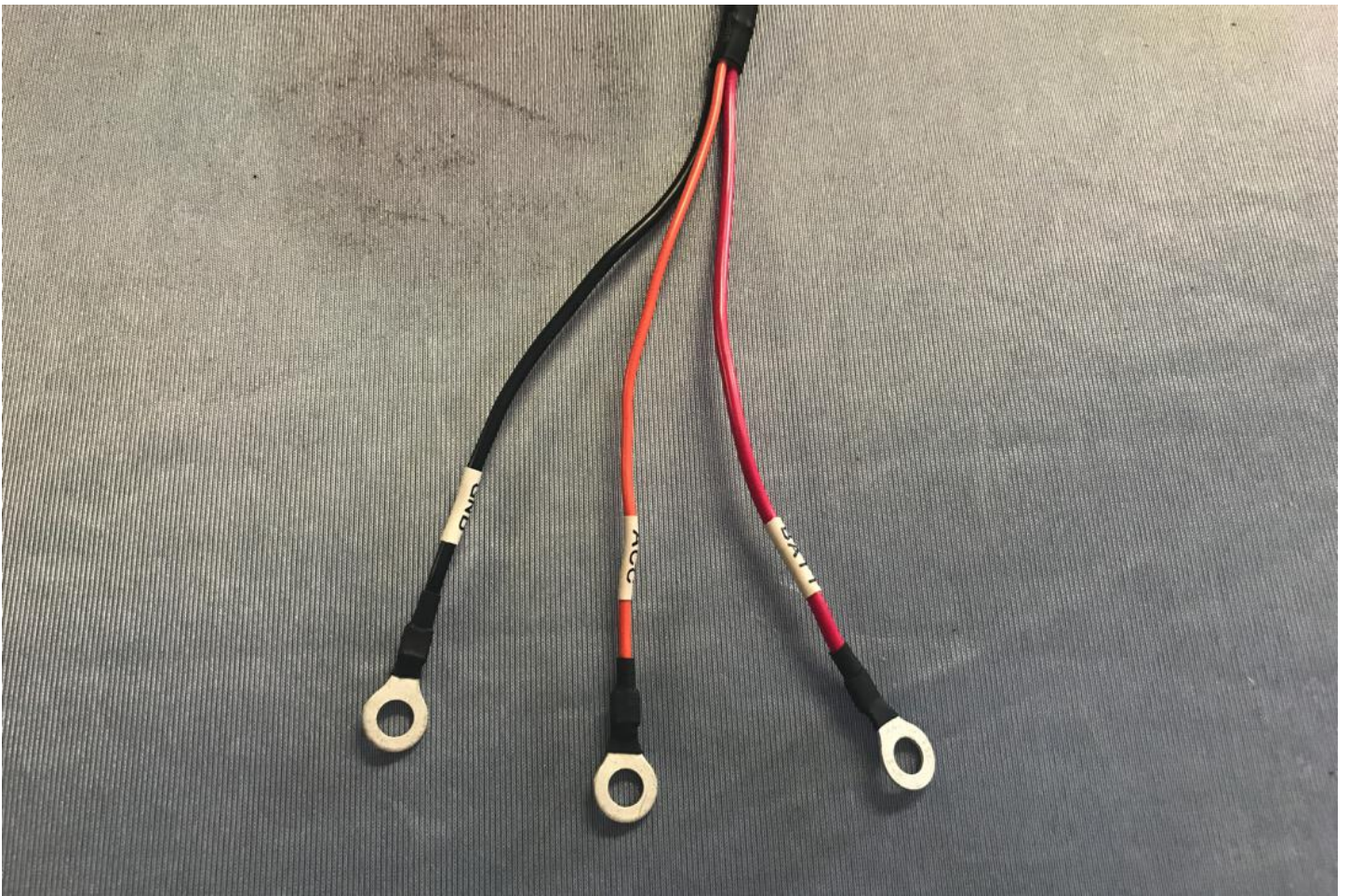
STEP 7

Once you are satisfied with the position of the Particle Separator, tighten the Straps, double check that all mounting screws and nuts are tight and that they are securely mounting the Particle Separator on the roll cage. Tools Needed: 13mm Wrench, 5mm Hex Key.



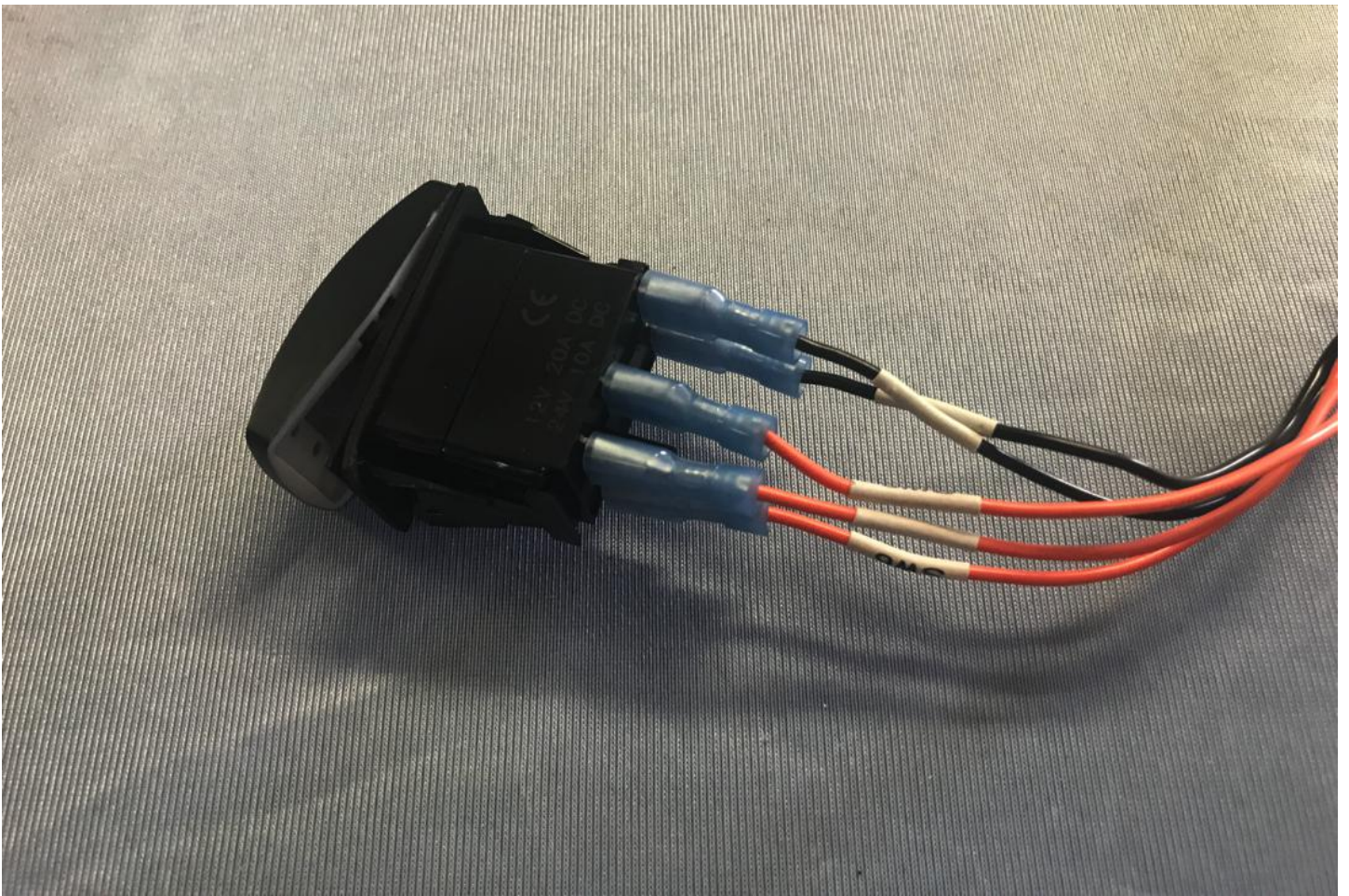
STEP 8

Familiarize yourself with the Wire Harness (K). It has a red Power Wire (BATT), a black Ground Wire (GND), an orange Accessory Wire (ACC), dual Fan Connectors, and labeled female spade terminals for the supplied Rocker Switch.



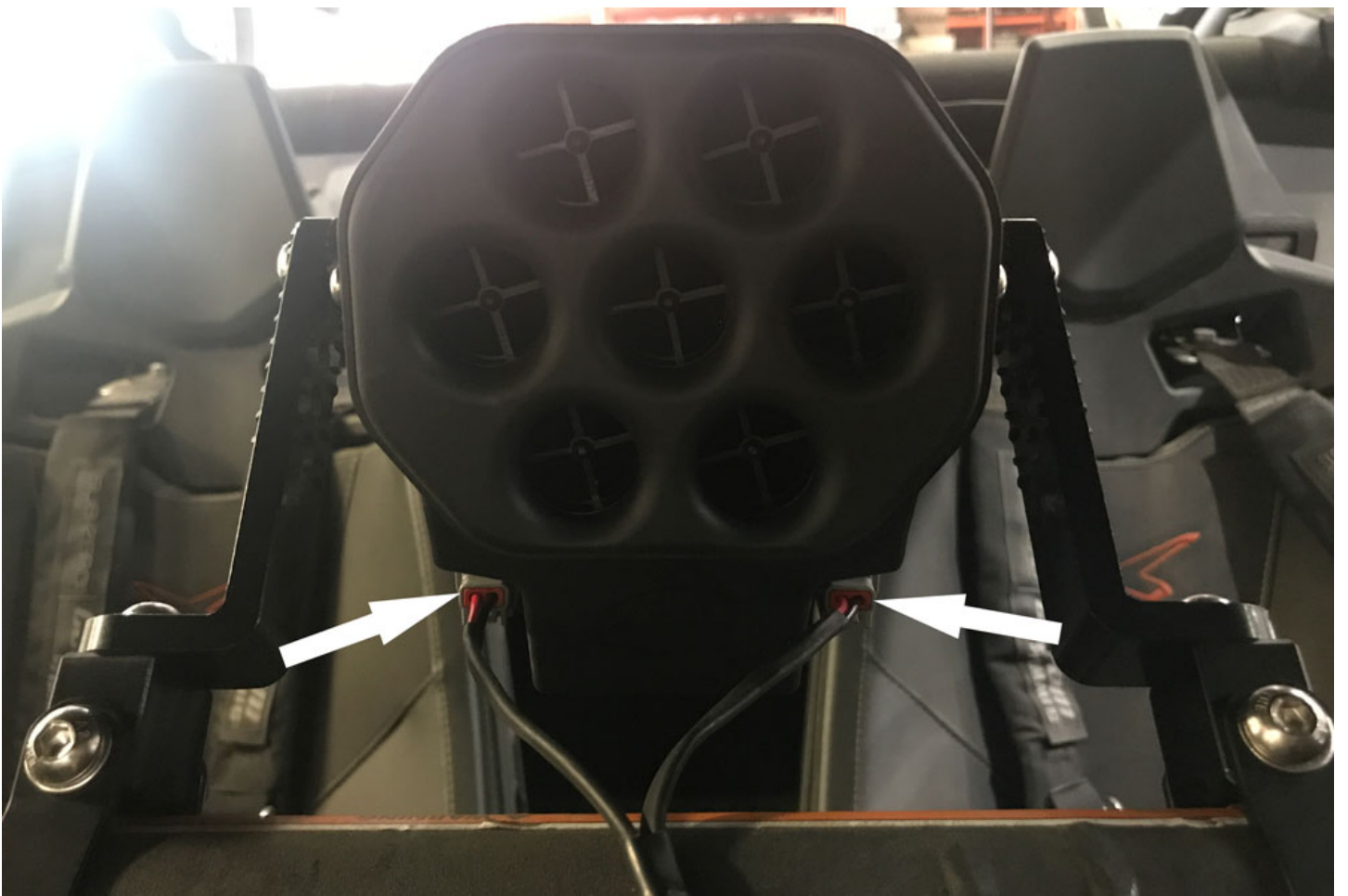
STEP 9

The Power, Ground, and Accessory Wire go to the corresponding posts of the vehicle buss bar. If you don't have a buss bar, the Power and Ground can go to the battery, and the Accessory wire can go to a keyed power source. Use the Posi-Seal (N) and Wire (Q) to extend the ACC wire and use Posi-Tap (M) to connect to the switched power source.



STEP 10

Cut a $\frac{13}{16}$ " by $1\frac{7}{16}$ " hole in the desired mounting location for the Rocker Switch. Use a file to slowly open up the hole for a precise fit. Plug the female spade terminals into the corresponding male spades on the Toggle Switch. Optional, if you choose to use your own 2 post switch wire #2 & #6 together on one post, and #3 on the other post, then exclude #7 & #8 which are grounds.



STEP 11

Route the Fan Connectors up to the particle separator and plug them in. There are 2 fans in the Helmet Particle Separator, the scavenge fan that separates the dust, and the blower fan that forces fresh air into your helmet, the connectors are identical.



STEP 12

Double check to make sure all connectors are plugged in and secured. Turn the ignition and switch on and make sure air is blowing out the blower and exhaust ports of the Particle Separator. If the exhaust fan does not turn on, double check your electrical wiring. Your installation is now complete. Enjoy your new Helmet Particle Separator.

