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## **2015-2018 Ford F150, 2017-2018 Raptor A-Pillar Mount Kit Instructions**



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### 15-18 Ford F150 A-Pillar kit Instructions

#### Tools Required

- 10mm, 3/8", 7/16", 9/16" Socket wrench
- Flathead screwdriver
- 12mm, 3/8", 7/16" & 9/16" open-end wrench
- Needle-nosed pliers

1. To begin, place windshield wipers in the position shown below on the left. Lift small lever near the base of each wiper and pull wiper straight up from the surface of the windshield to release. Set aside for later.





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2. Open the hood. With a flathead screwdriver, gently pry up at the circled locations below until the upper cowl releases. **Do not** pull up more than what is necessary to unclip the tabs.



3. Before the cowl can be removed, there are six clips total that need to be removed on the driver side and passenger side upper cowl. Carefully lift the front edge of the driver side cowl just enough to see in and locate the plastic clip fasteners. With the needle-nose pliers, squeeze each as shown below to release. Once driver and passenger side cowlings are unclipped, remove the windshield wiper fluid hose from the cowl and set them aside.

**Ford cowl clip fastener OEM part#: W708771-S300**



4. Find the Rubber pads supplied with the kit. Place them on the brackets as shown below.





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5. Remove the two bolts shown below with a 10mm Socket wrench for the bottom left and a 12mm Socket wrench for the bottom right. Once bolts are removed, carefully orient the bracket from the front of the vehicle, through the gap between the hood and the fender, and onto the two bolt locations. Take whatever precautions necessary (i.e. masking tape). Reuse bolts and tighten. Use 10mm open-end wrench for bolt in bottom left picture. Repeat for opposite side of the vehicle.



6. Place the passenger side cowling first. Make sure windshield wiper fluid hose is placed back into the grooves. Gently press the wiper rubber over the wiper hub first. Carefully watch the plastic clips to make sure they align properly. There should be a distinct click if they are clasped correctly. Make sure the rubber around the perimeter has seated properly inside the upper fender. Now, press the front edge tabs down over the mating bottom cowl clasps. Repeat for the driver side.
7. Replace the windshield wipers.  
**Note:** they need to be angled like the picture from step 1 while installing.
8. See Squadron 2.0/S2 instructions to assemble the standard brackets to the lights.
9. Using the 3/8" hardware included with the lights, mount the Squadron 2.0/S2 assemblies to the F150 A-Pillar brackets.

#### **Raptor Wiring:**

1. With the supplied splitter harness in hand, route the shorter lead to the passenger side light and the longer to the driver side light. Connect the corresponding plugs and tie the harness tight against the firewall away from any hot or rotating components.



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2. On the passenger side firewall, there are two large harness plugs that pass through. Taped to those harnesses are the upfitter wires. The bundle of wires nearest the engine are to be used. The other wires route power back into the cab for interior auxiliary accessories.
3. With the supplied upfitter harness in hand, find an appropriate chassis ground and fasten the (-) negative eyelet to the chassis. The (+) positive splice connector will need to be attached to the appropriate OEM upfitter switch wire. The color designations for 2017 and 2018 are listed below. Squadron 2.0 Pros will need a 15A switch, while Squadron 2.0 Sports will need a 10A switch.

#### **2017 Colors**

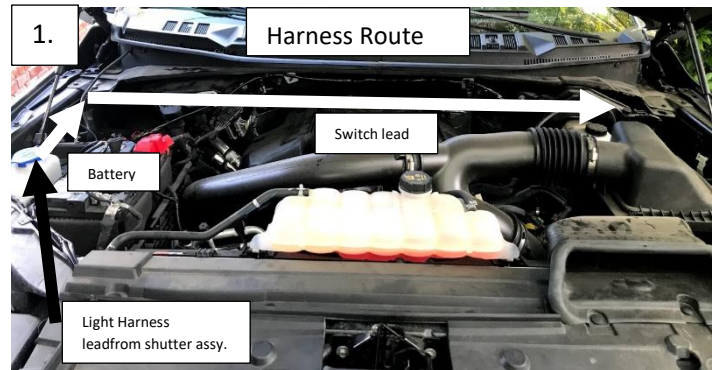
Aux 1 – Green/Blue	15A
Aux 2 - Gray/Yellow	15A
Aux 3 - Violet/Orange	10A
Aux 4 - Brown/Blue	10A
Aux 5 - Gray/Orange	5A
Aux 6 - Yellow/Violet	5A

#### **2018 Colors**

Aux 1 - Green/White	15A
Aux 2 - Brown/Blue	15A
Aux 3 - Gray/Yellow	10A
Aux 4 - Green/Yellow	10A
Aux 5 - Brown/White	5A
Aux 6 - Green/Orange	5A

#### **F150 Wiring:**

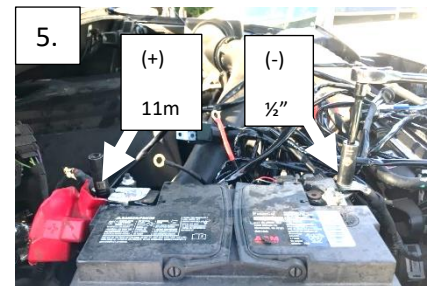
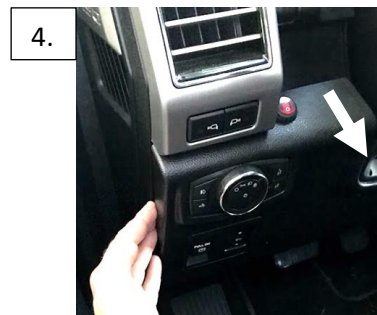
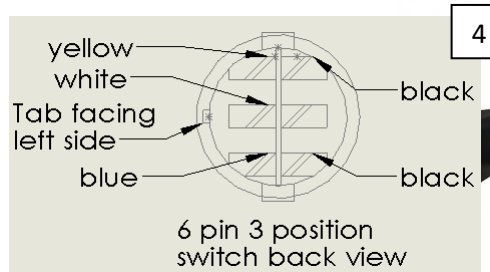
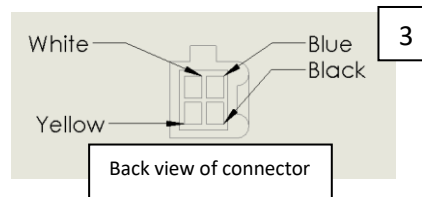
1. With the supplied splitter harness in hand, route the shorter lead to the driver side light and the longer lead to the passenger side light. Connect the corresponding plugs and tie the harness tight against the firewall away from any hot or rotating components.





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2. Connect the main wiring harness to the splitter and route to the passenger side inner fender region. Route the switch portion of the harness from the passenger side firewall across the engine compartment to the driver side above the brake booster. (See image 1)
3. Be sure to take a picture of the wire harness before depinning it to pass through the firewall. Locate the firewall passthrough grommet and gently pull it away from the firewall. Cut the zip tie on either side holding the wires together.
4. Take a quick photo of the switch terminal orientations. Remove the switch, route the harness through the grommet, and zip tie either side. Pull the grommet gently from inside the cab to seal the firewall. Gently pull the dash open at the two edges as shown. Drill a  $\frac{3}{8}$ " hold in a desired location on the dash with clearance on the back side. Pull wires through the hole, connect switch, and press switch into location.
5. Attach the red ring terminal end of the harness to the (+) positive terminal of the battery with the 11mm socket wrench. Then attach the black ring terminal to the (-) negative terminal with the  $\frac{1}{2}$ " socket.
6. Go over the entire wiring harness and make sure the wires are tied up and away from all hot, sharp, and/or spinning components.





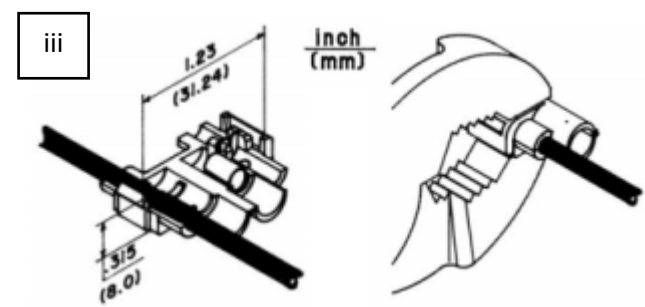
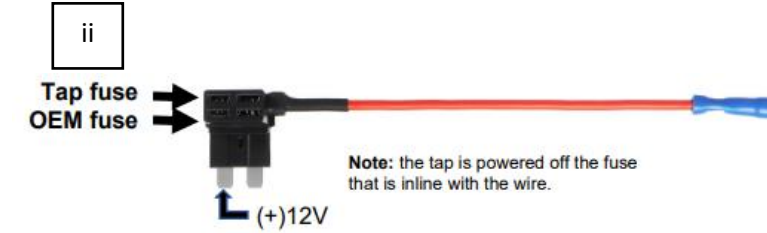
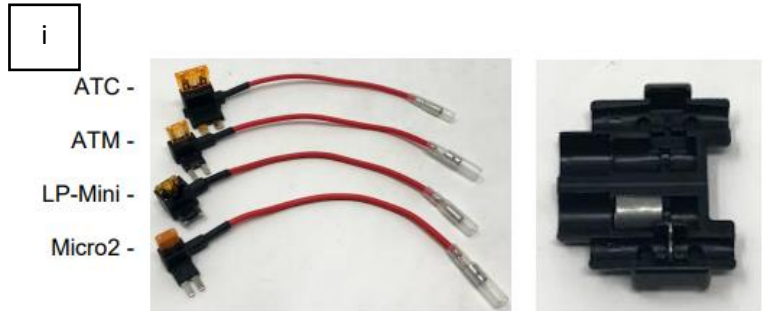
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### Backlight add-on harness instructions for Squadron 2.0

**Note:** Included with this harness is four fuse taps. In the event that none will work for your application, a splice connector is included (shown on right).

1. Locate the fuse panel in the engine compartment. Remove cover.
2. Observe the inside of the fuse box cover, or the owner's manual to determine fuse locations and functions. The goal is to find a suitable circuit that is powered on when the vehicle is turned on. It is important to choose a fuse location that does not power sensitive electrical components, such as sensors and ignition modules. Choose a fuse that is activated by turning the key and remains active while the vehicle is starting and running. The IGN fuse is highly recommended for this. Using other circuits to run the backlight may result in the color changing when not desired.
3. Once the fuse location has been chosen, the multimeter or test light will be used to determine which side of the fuse is power and which side is the output. Using either tool, touch the positive test lead to one side of the fuse socket and touch the negative lead to the negative battery post, or any convenient ground. With the keys in the off position, neither side of the fuse socket should have power. If they do, another fuse location will need to be chosen.
4. Now, turn the keys to the on position and measure each side of the fuse socket. When the test light illuminates, or the multimeter DC voltage measures 12-14V, the power side of the fuse has been determined. Insert the fuse tap into the socket with the arrowed side blade (shown in image ii) contacting the power side. Plug in the backlight harness to the female bullet receptacle of the fuse tap. If the fuse socket originally had a fuse, place it into the open socket on the fuse tap.
5. Every fuse panel is different and sometimes there are adjacent components that make it difficult or impossible to plug in a fuse tap. In this case, the splice connector will need to be used. Find a wire that is powered when the keys are on. Ideally, this wire would power the daytime running lights and not an electrically sensitive component like a sensor. With the backlight harness inserted into the female bullet receptacle of the splice connector, clasp the splice over the desired power wire and clamp with pliers until an audible click is heard. (See image iii for reference)

Tools Required	
- Trim Tool (Or Flathead Screwdriver)	- Test Light, or Multimeter
- Scissors	



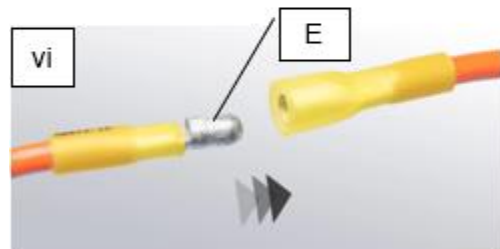
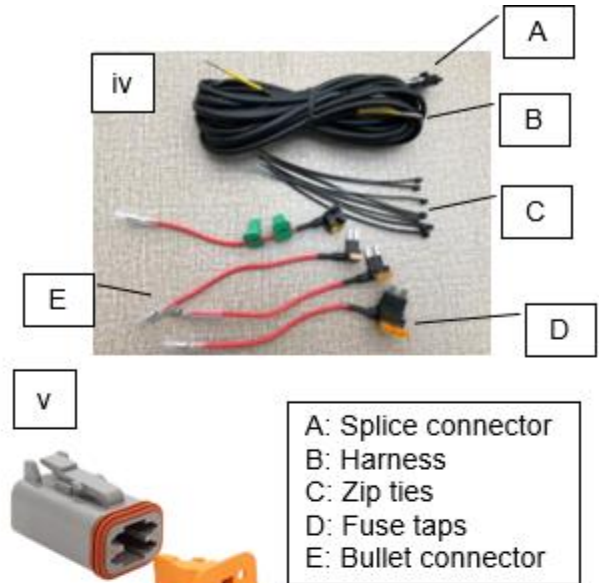
Fuse tap kit part #: 63-9209



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### Backlight add-on harness instructions

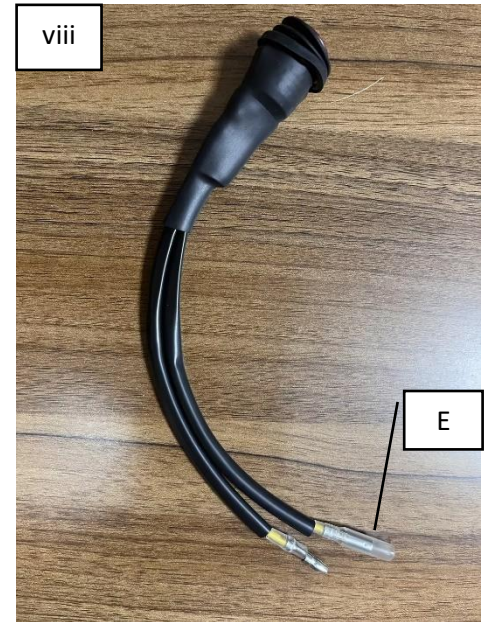
6. Use the provided 5-amp fuse in the fuse tap for the backlight add-on harness (See image ii for reference).
7. Remove the Wedge lock from the plug by using a flat head screwdriver and **gently** prying along the edges with a flathead to release the lock (see image v for reference)
8. Locate the backlight add-on harness supplied in the kit. If a cavity plug was inserted previously in the PnP (Plug-n-Play) adapter, please remove it and insert the terminal inside the (3) pin location. (See image vii for reference)
9. To reinstall the wedge lock, simply push the wedge lock back in until it clicks in. (See image v for reference)
10. Determine the best routing for the backlight add-on harness.
11. Connect the bullet connector from the backlight add-on harness to the fuse tap and secure the wire harness. (Use image iii for reference)
12. Turn on the vehicle and test to see if the backlight function on the Squadron 2.0 works appropriately.
13. Use included zip ties to tie the harness out of the way of any hot and/or rotating components.





### Backlight switch adapter instructions

1. Connect the bullet connectors from the switch inline between the fuse tap and the backlight add-on harness.
2. Turn the vehicle on and rapidly turn the switch on and off until the desired color is displayed as the backlight.
3. Once the desired color has been achieved, the switch can be either removed or left in. To remove the switch, turn the vehicle off and remove the switch. Reconnect the bullet connectors between the fuse tap and the backlight add-on harness. To leave the switch in line, secure the switch so it does not move. **Be sure to always leave switch in the "on" position if the switch will be left in.**



Inline switch part #: 60-0071