

17+ Raptor Bumper Mount Installation

Instructions

Step 1:

Remove the 2 forward facing bolts on the inner side of the wheel well



Step 2:

Gently pull the lower side of the fender flare out. There are 2 yellow clips. You may want to use a very small screw driver or a pic to release the tabs on the clips. Once clear of the holes, let it hang off to the side. Make sure the clips are out of the holes or the tension will pull them right back in.



Step 3:

Remove the push pin from the top of the trim panel



Step 4:

Gently pull on the outer side of the panel near the wheel well to release it from its clips. Work from the outside in.



Step 5:

Once the trim panel is removed, make sure all the plastic clips are in place on it. Sometimes they fall off.



Step 6:

Locate the bolt BEHIND the bumper on the upper side that attaches the outer portion of the bumper to the middle. This will be straight down from where the headlight and the grill meet.



Step 7:

Remove the original 8MM bolt and replace it with the new longer 8mm bolt inserting the bolt through the hole in the tab on the new bracket first, and then through the bumper clip. You should start the bolt, but leave it loose so it hangs down like pictured below. That allows room for you to install the trim panel that was previously removed.



Step 8:

Install the trim panel in reverse. Since the clips are angled, you need to start snapping it back in from the INNER side first. Working from the grill, out toward the flare. Last, you will reinsert your push pin on the top.



Step 9:

Once the panel is attached, tighten the upper bolt holding the top mount tighter, but not too tight so you can adjust it to the brace when installed.



Step 10:

Locate the second bolt. This is on the under backside of the bumper. Like the upper bolt, this holds the outer side of the bumper to the middle. You will remove and replace that bolt with the new, longer 8mm supplied.



Step 11:

Install the lower brace by putting the replacement 8mm bolt through the hole and into the bumper clip. Tighten, but not too much so you have room to move it when attaching to the upper bracket. NOTE: The slotted hole goes on top.



Step 12:

Insert the carriage bolt in the upper bracket in the square slot. Then install the lock nut on the bottom.



Step 13:

Tighten ALL 3 bolts now that you have them all aligned.



Step 14:

Snap the flare back in place and then reinstall the 2 small bolts in the inner part of the flare.



Step 15:

Repeat steps 1-14 on the driver side. With one exception... (See step 16)

Step 16:

It is recommended, if you have a plug on the end of the cable on your light, to feed it behind the bumper BEFORE reinstalling the trim panel because there may not be enough room after.



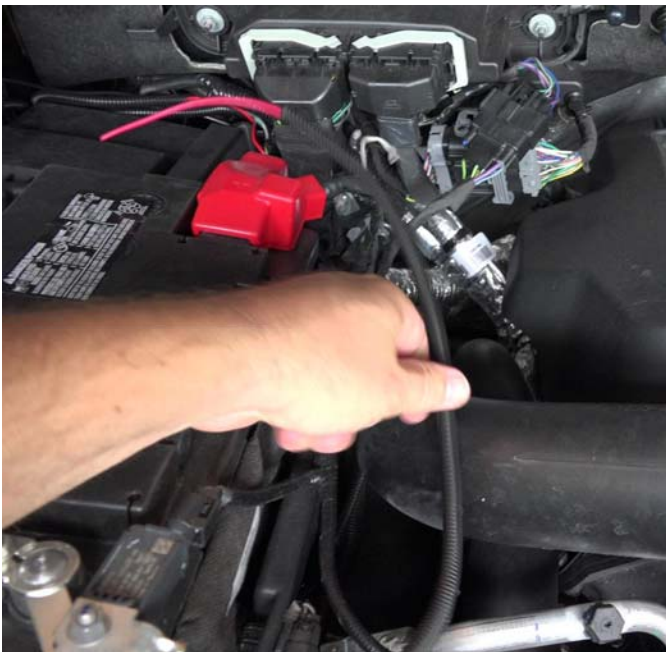
Step 17:

Running the wire harness. You will run it with the plug side across from the passenger side to the driver side BEHIND the skid plate. (wait until all the connections are made, but then zip tie it along the backside harness along the frame)



Step 18:

Pull the other end up into the engine bay area behind the passenger side headlight and run it along the battery (engine side of the battery) toward the firewall and switch wires. You will take the ground ring and connect it to the ground bolt shown in the pictures behind the battery along the fender side.



Step 19:

You will then make your connections to your switch wires. See the following page for details on switch wires and options. If your kit includes a Radiance light bar, you will have a white wire as well, which will power the amber backlight. This can either be connected to an additional switch (the red wire will connect to a switch and power the main white light) or if you purchased the optional radiance ignition wire kit, you can connect it that way.

There is a FULL video:

<https://www.youtube.com/watch?v=84emy-Dx0LY>

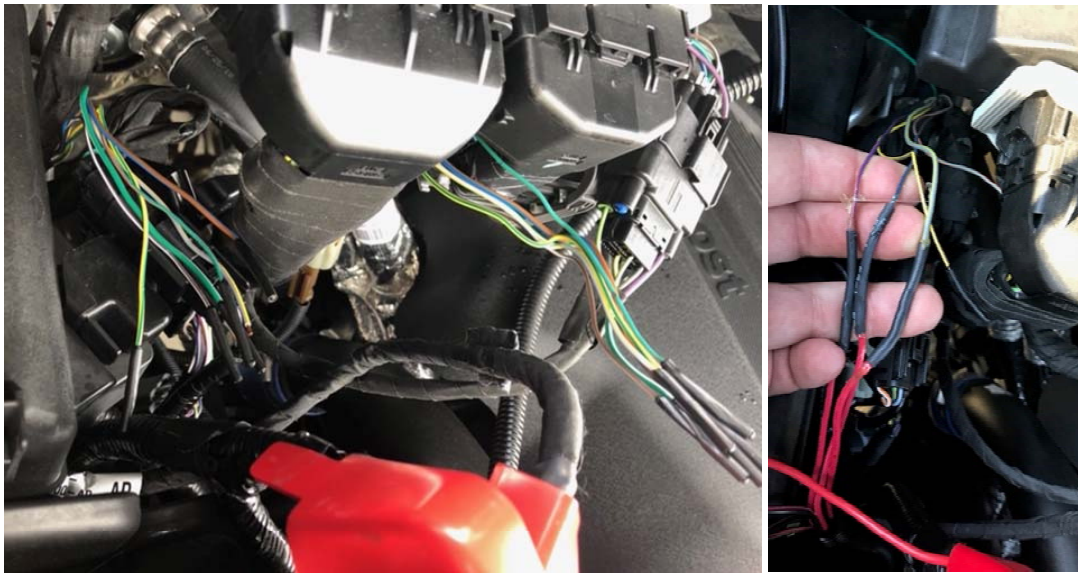


IMPORTANT WIRING DIRECTIONS

It is extremely important to check which light you have and how many amps it draws. Switches 1-2 are 15 amps. Switches 3-4 are 10 amps. Switches 5-6 are 5 amps. You can ONLY connect the wire direct to a switch that has more amps allowed than the light uses. For example. The Radiance curved light bar uses 14.57 amps. So it can be connected directly. Most any other light bar will draw MORE than that and require to be passed through a relay. (The relay harness is included with your light bar.) The relay allows you to connect a red power and a black ground leads to your battery directly. You then connect a trigger wire to your switch wires on the firewall. That wire color is usually BLUE. It may have a spade connector on it and it should also be grouped with a red and black wire with a spade connector on those. They do NOT get used. Only the blue trigger wire. The red and black are to POWER a little aftermarket rocker switch. Your switches on the Raptor are powered already. They just can't power more than 15 amps. It is important to to either cap off, or securely seal or tape those red and black wires because they do have power. The last connection you will have is the end with the plug on it that connects to your light. You will plug that into your light. There may be an extension included in your kit to run that the extra distance under the skid plate.

Now, you may run into some issues. And get stuck because you pulled out a set of wires that have no power. Ford installed 2 sets of wires. One set is powered by the switches. The other set is a PASS THROUGH set. There is no power. These are just a jumper set that are run into the passenger side fuse panel area on the floorboard in case you wanted to connect something interior wise to a switch. If that were the case, you would connect the two of the same color together.

If you grab the wrong group of wires and don't have power to your lights, don't fret. Just find the second set. All will be good. See picture below showing BOTH sets and how close they are to each other. GENERALLY, the powered set is toward the fender, or higher up. HOWEVER there have been SEVERAL cases that they are reversed. So.... Pick a set and hopefully you get it right the first time... GOOD LUCK! Crimp your Red wire to your preferred switch (Right)



2017-2018 ½

The relays are coded as follows:

Switch	Circuit number	Wire color	Fuse
AUX 1	CBB47A	Green/Blue	15A
AUX 2	CBB48A	Gray/Yellow	15A
AUX 3	CBB94	Violet/Orange	10A
AUX 4	CBB96	Brown/Blue	10A
AUX 5	CBB98A	Gray/Orange	5A
AUX 6	CBBA0B	Yellow/Violet	5A

The relays are coded as follows:

2018 ½ - 2020

Power Distribution Box	Wire Color	Under-hood Pass Through	Wire Color	Passenger Footwell	Wire Size	Fuse
AUX 1	Green/White	AUX 1	Green/White	AUX 1	1.0 mm ²	15A
AUX 2	Brown/Blue	AUX 2	Brown/Blue	AUX 2	1.0 mm ²	15A
AUX 3	Gray/Yellow	AUX 3	Gray/Yellow	AUX 3	0.50 mm ²	10A
AUX 4	Green/Brown	AUX 4	Green/Brown	AUX 4	0.50 mm ²	10A
AUX 5	Brown/White	AUX 5	Brown/White	AUX 5	0.35 mm ²	5A
AUX 6	Green/Orange	AUX 6	Green/Orange	AUX 6	0.35 mm ²	5A