

# 2021+ Ford Raptor OEM Fog Replacement Installation

These instructions cover 3 different model lights. Rigid SR-M Pro (Which have the same case style as the OEM lights, but are higher power.), Baja Designs S2 Sport & Pro, and Diode Dynamics SSC2 Sport and Pro.

First, start by removing the factory housings. To make it easier to see, we have them here as they would be installed on the bumper. Notice Fig 1. The 4 bolts that are circled need removed. This will remove the back cover and then you will see the housing like in fig 2. The housing is still secure by the top 2 bolts only. You will remove those star bit bolts and the housing will release. Before you do that though, be sure to unplug the two factory connectors from the lights and slide them out of the clips as seen in Fig 2 with the arrow pointing to a clip that holds the wires. You can clip your new wires back in those locations.

Fig 1:

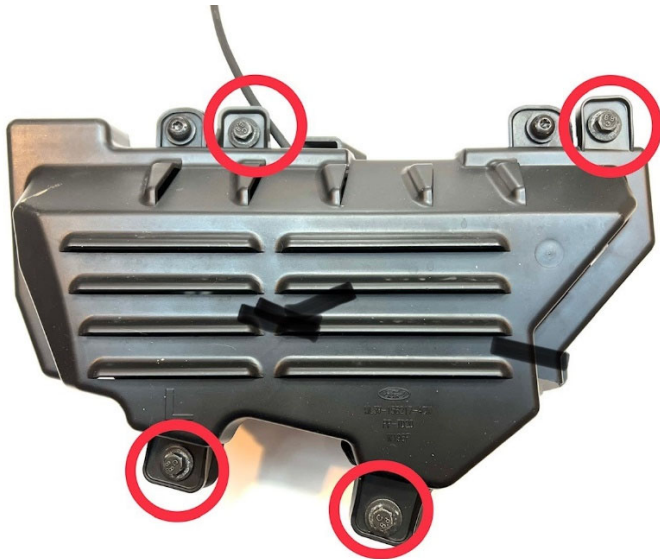
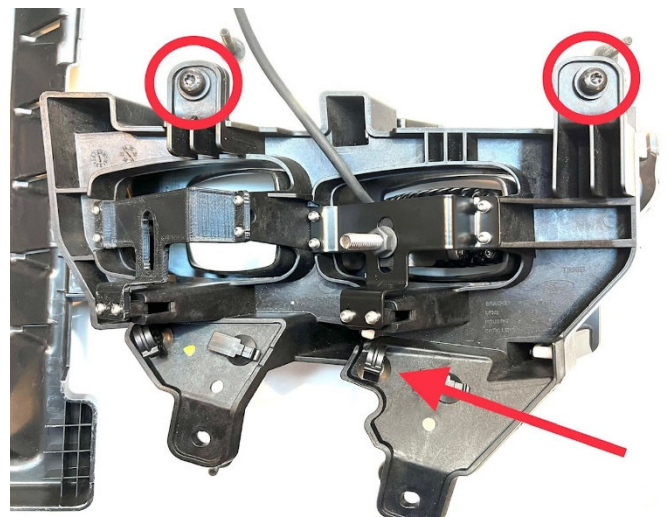


Fig 2:



The next thing you need to do, once you have the housings out and sitting on a table is remove the stock lights. You will remove the 6 screws that hold the plastic clips over the metal housings of the lights as illustrated below in fig 3. Save the screws though. You will need those again.

Next, you need to install the plastic spacers over the screws that were included with your mounts. The spacers may be black, or natural white. They are made out of automotive nylon and are resistant to the elements. They also keep the screws tight. The color doesn't matter, as you won't see them and the screws are silver anyway. The reason the spacers are important is because the metal bracket isn't as thick as the plastic you removed. Without the spacers, the screws will bottom out in the OEM housings and CRACK them. So be sure you use the spacers! They may be tight, but you can screw them over the threads by turning the spacer over the threads. As seen in Fig 4:

Fig 3:



Fig 4:



Lay the new brackets over the locations where you removed the stock lights and retainer clips as seen in fig 5 and 6, and install the screws back over the 6 locations for each bracket. Remember, the brackets are mirrored for right and left, so if they don't line up, you have the opposite side.

Fig 5:

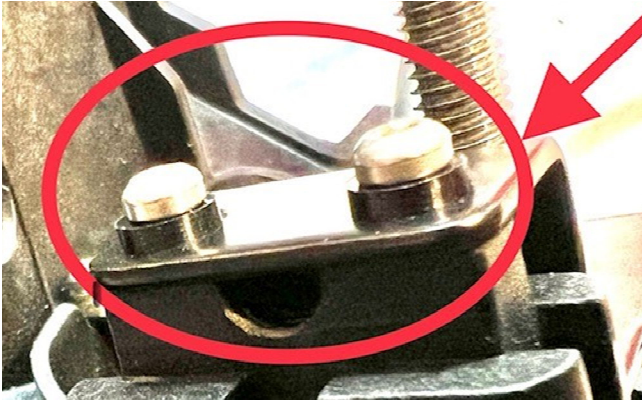
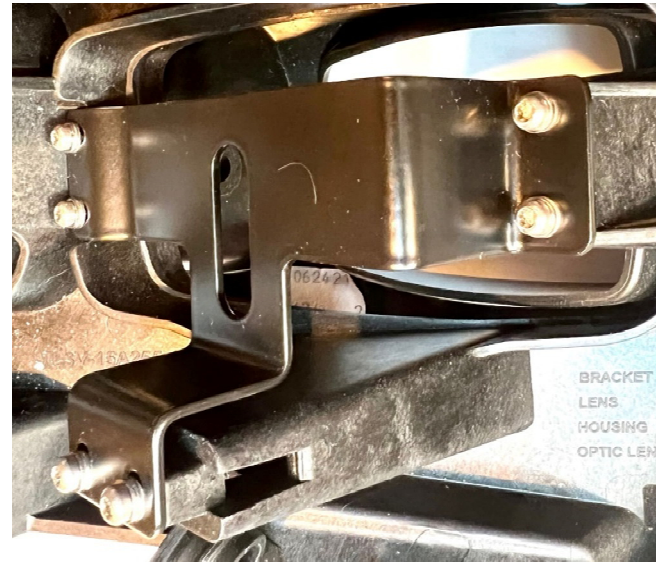


Fig 6:



This next part refers ONLY to Diode Dynamics and Rigid SR-M. **If you are installing Baja Designs S2's, then you can skip this and go straight to section 2.**

We provide replacement brackets for the Rigid SR-M and Diode SSC2 lights as seen below. This is because the OEM brackets from those 2 companies both don't line up correctly with the housings and they don't allow proper rear mount and forward facing. Depending, you will either get just the brackets (Diode Dynamics Fig 8) or both the brackets AND replacement bolts (Rigid Fig 7). Pay close attention to the DIRECTION the brackets mount on the lights.

On Rigid, place the washers between the bracket and lights as seen in fig 11. Make sure the bracket is the same direction as fig 9, and not upside down.

Fig 7:

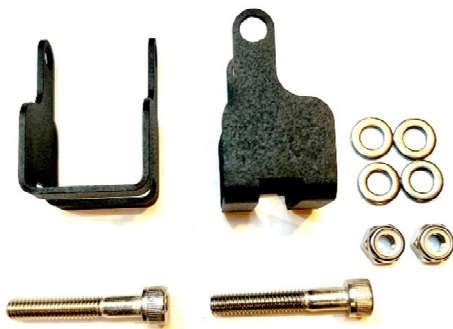


Fig 8:



Fig 9:

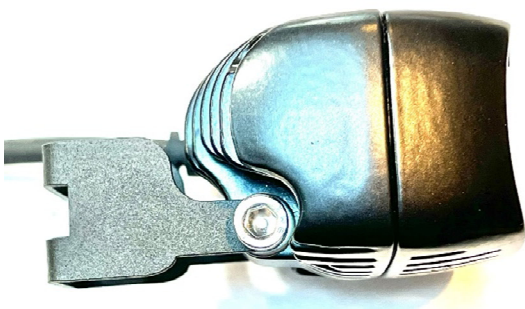


Fig 10:



Fig 11:



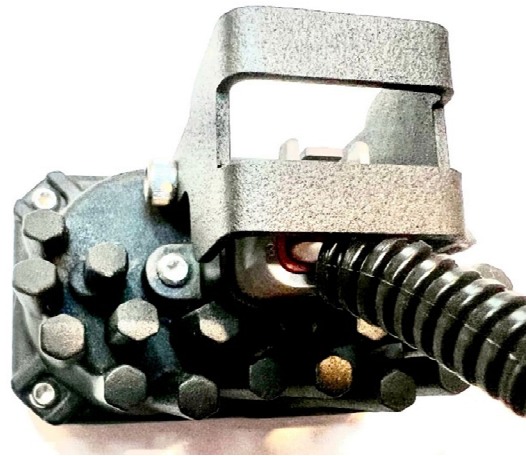


Next, for Diode Dynamics, you will have a lead harness as shown in Fig 12. This is because unlike Rigid and Baja, they don't have any wires coming out of the housings. So be sure to plug in the extension FIRST as you won't be able to after the bracket is put on. Make sure the bracket is installed as shown in Fig 12 and 13.

Fig 12:



Fig 13:



## Section 2:

Install the Baja bracket as shown in Fig 14 if you have the S2 kit. Make sure it looks like this or it won't fit.

Fig 15 shows the back side of the Baja. Fig 16 shows the backside of the Rigid and Fig 17 shows the backside of the Diode, all in the housings. More on that on the next page.

Fig 14:



Fig 15:



Fig 16:

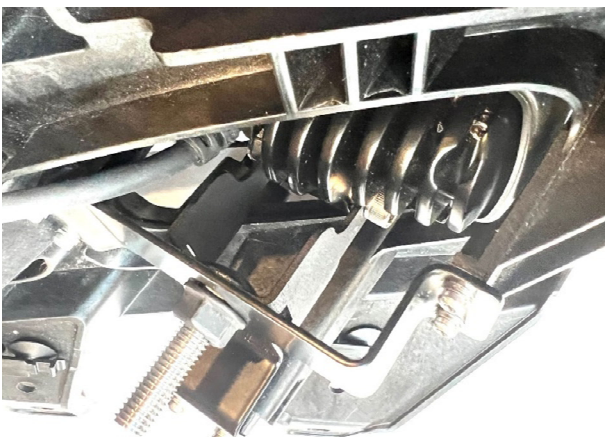
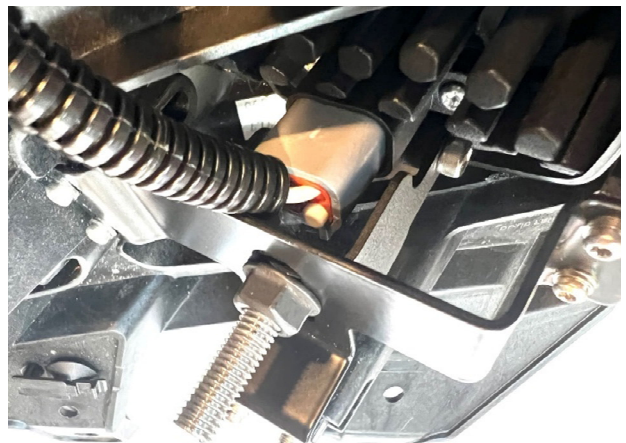


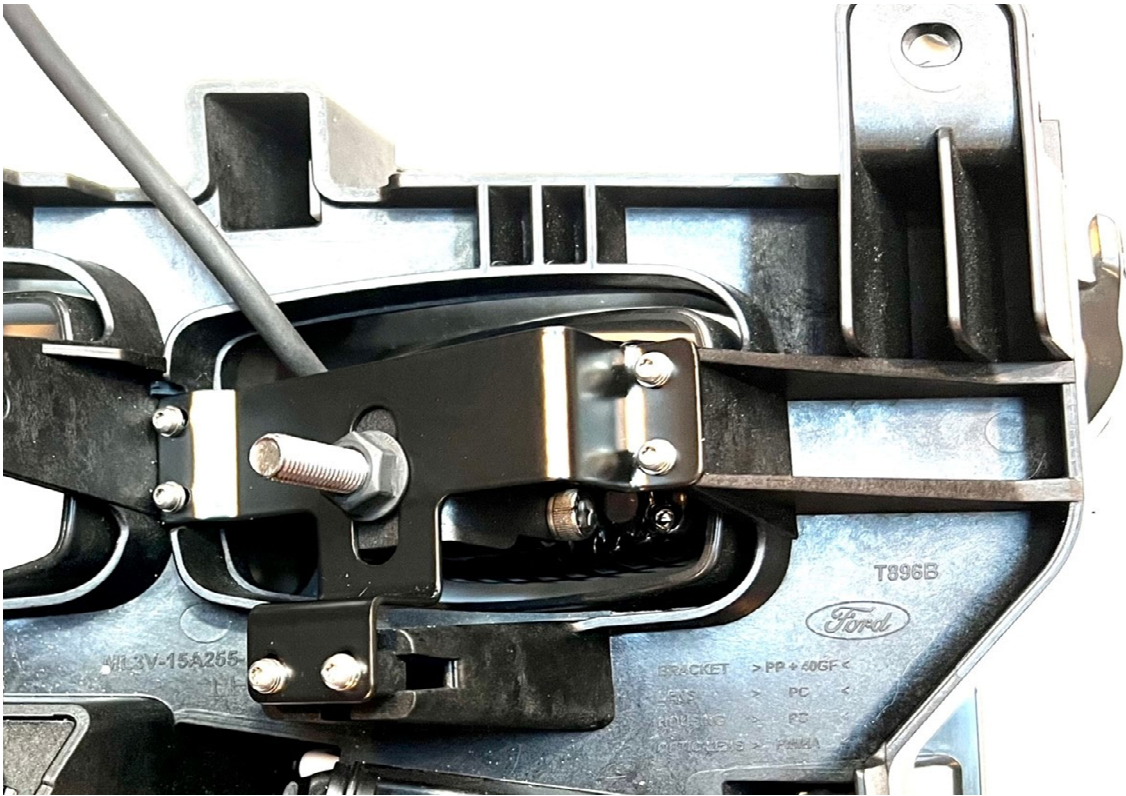
Fig 17:





Now, it's time to install the lights into the housings. (Also shown in Figs 15-17 on previous page) Use the Large bolts that came with the lights that come out the back of the brackets. (Fig 18) There should be washers and nuts as well. Tighten the nuts down over the bolts somewhat snug, but not tight yet. Now, turn the housing over so you can make sure you have the light straight. Then, tighten the nut down the rest of the way and repeat for each light.

Fig 18:



Camera angles can of course throw things off, but once you align them, they should look like fig 19 below.

Fig 19:





Next, comes the connection to power. This part is pretty easy. Your kit includes plug in connectors for the factory connectors in the bumper. These adapters provided in the kit allow quick weather proof plug n play into your original switches. Be sure to check that you have both pairs connected to the same switch before you put the cover back on. You can do this by plugging one in on each side and turning on either the fog switch or Aux 1. If you get nothing, try the other switch. If you get one on one side and not the other, you need to swap the connection to the second one on the side with no power. Once you have them connected to your chosen switch, you can organize your wires and reinstall the back cover.

The connectors in Fig 20 are for the different types of lights. (From left to right Diode D, Rigid, Baja) The first connector is for Diode which has an amber backlight. You'll notice that it has a white wire and an extra connector on it. This is for the backlights. On each side, you will have 2 of those single connectors. **Rigid and Baja just plug in and you're done.** The Diode lights are more involved, but not more difficult. Fig 21 shows all the wiring with the Diode kit. Including a harness for the backlights, the adapters and the extensions already plugged into your lights. More on the next page.

Fig 20:

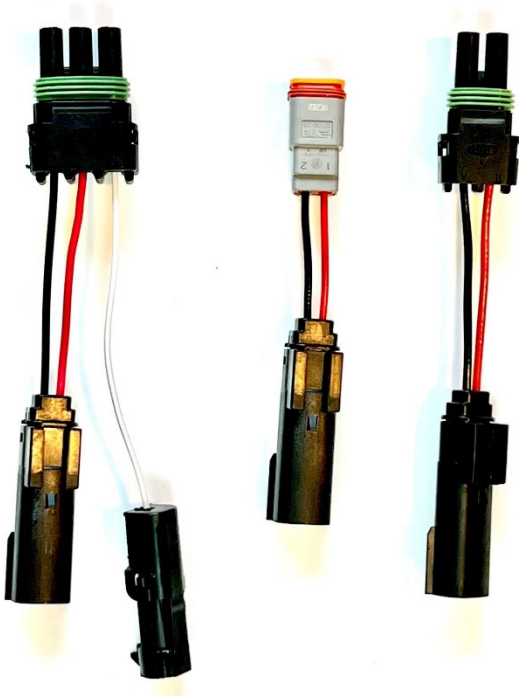
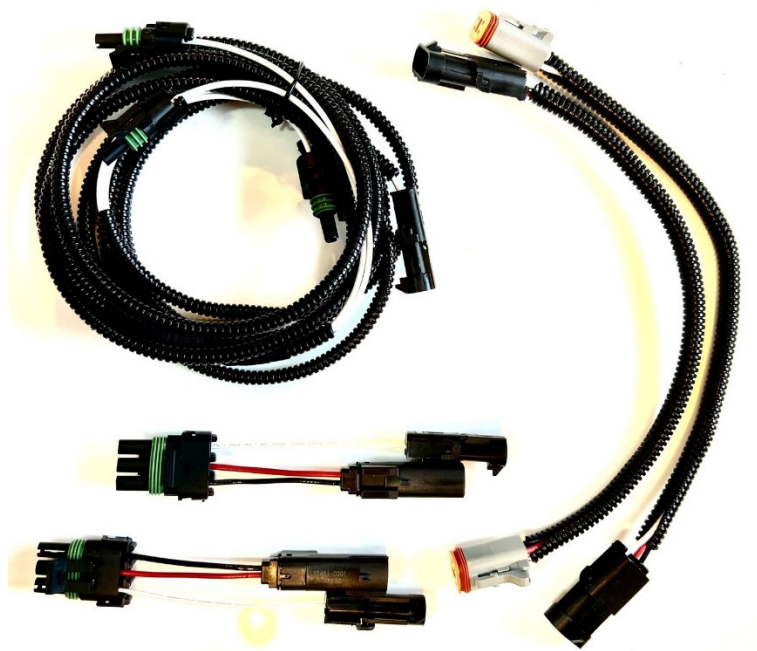


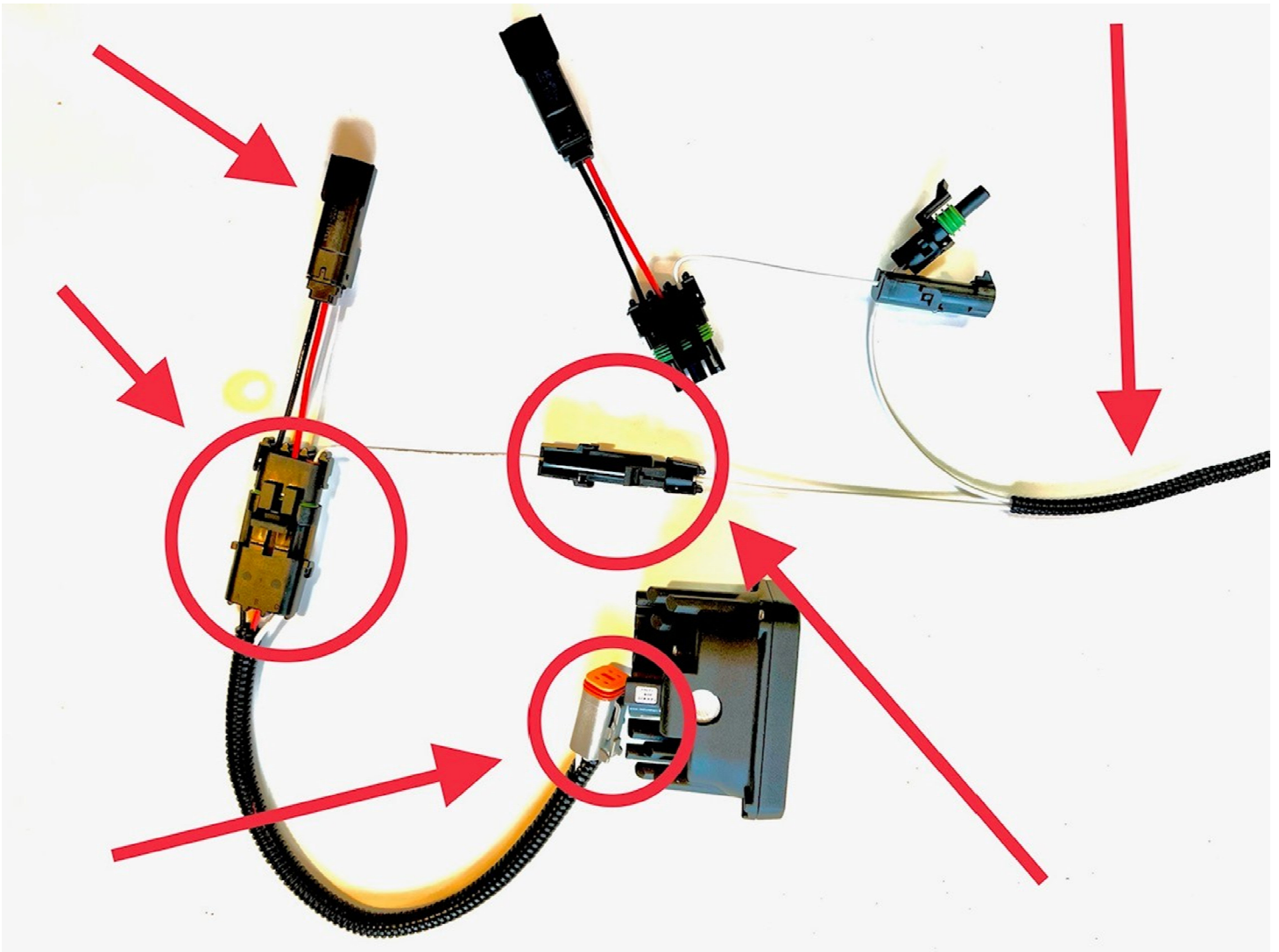
Fig 21:



In the next diagram (Fig 18) it is all laid out for easy understanding. The far right arrow points to the backlight harness. This you will run the long side behind and across, behind the bumper from the passenger side. The short end goes to the passenger side, and the 2<sup>nd</sup> longest end goes up behind the bumper/headlight, and to the battery area where your other switch wires are. From there, you just connect it to a switch to turn the ambers on and off. Or, you can purchase our Marker adapter and plug them into that instead. This will allow the amber to be tied into the marker/parking lights. So they will flash when you lock the truck. Turn on when you unlock or open the door and come on when the headlights come on. The white lights will still be tied to your switches.

The next arrow in the middle with a circle points to where the white wire from the adapters plug into that harness. To the left of that, you see circled, where the factory fog adapter plugs into the extension connected to your light. The TOP left arrow is the Ford OEM connector which plugs into the stock connection.

Fig 18:



**You're Done!**