

Foutz Motorsports 2017 Ford Raptor Front light mount kit.

The add on front light mount kit was designed and used on the 2017 Ford Raptor race truck that the team raced in all of the Best in the Desert off-road races in 2016, and also the Baja 1000, so you know its durable and well proven.



1. Remove the bolts that hold the stock skid plate assembly and save them. The main lower skid plate needs to be removed to do this installation.



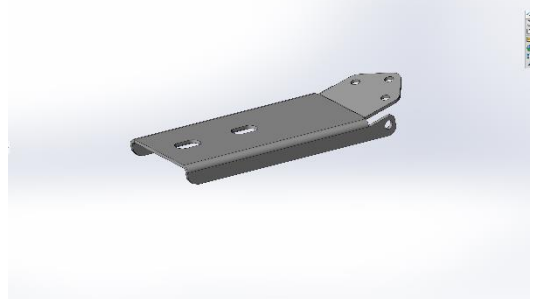
2. Remove the single bolt in the skid plate front support bracket in the picture. Again save the bolt as you will re-install this near the end of the project.

3. Remove the rubber / plastic ring that is on the stock bumper where the tow hooks are.



4. Remove the stock tow hooks off bottom of the frame and save all parts.

5. Remove the front plastic cover in the center of the bumper. Pull carefully so you don't break the clips on the plastic mounts. This piece covers both frame caps and the intercooler opening.



6. Locate the light mount tube section and the lower "sleds" and find the 5 - 3/4" long 3/8 button head bolts to put in the 5 holes on each side. Install with washers on the nut side, leave loose for now. Snug but not tight.



7. Bring the assembly up to the truck and locate the sled section to the bottom of the frame and align the holes to where the tow hook bolts came out. You may need a second person to help you hold it up for this step, or some jack stands to help hold the assembly in place.



8. Put in the rear most bolt in the hole without the tow hook to help hold while you align. The tow hook has a slotted hole in the rear so you can slide it over the bolt while loose and then put in the 2nd front bolt, but don't tighten.



9. Slide the tow hook over the rear bolt in the middle of the "sled" and put front stock bolt back in, thread in but do not tighten.



10. Do the same for both sides of the truck

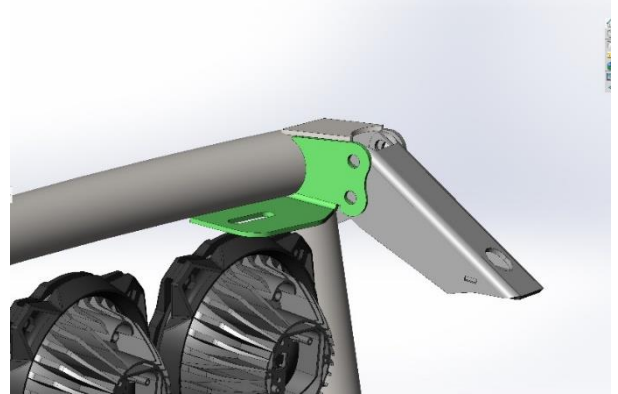
11. Put all bolts in and do not tighten nuts yet. Snug, but so you can still move the carrier to ensure its straight to the truck before you tighten anything.

12. Look down the top of the bumper and mount and match up the gap to the radius of the front bumper and snug up the bottom tow hook mount bolts.



13. Check for straightness again and begin to snug up the 5 - 3/8 lower sled mount bolts on both sides.

14. Locate the upper strut sections. You will notice one right and one left that are cut differently to match the contour of the factory bumper.



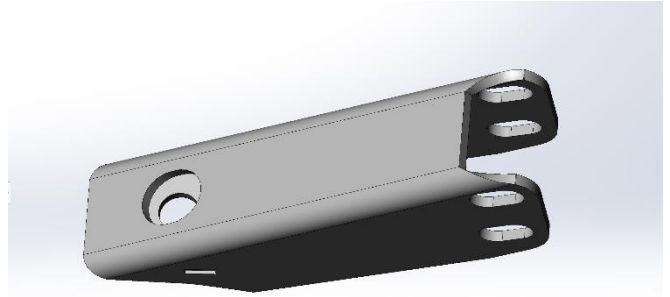
15. Find the 2.5" long 3/8 bolts that go through the top holes to match the strut up to the light mount tube section.



16. Put the bolts in, with washers on each side, and put the nuts on but do not tighten. Line up with the stock bumper top surface.

17. Recheck that the light mount is straight and you are happy with the alignment. If not, stop and loosen the mount bolts and re-straighten again now. Do this until you are happy with the look. You may need to put a support under the light mount to hold in place during this process.

18. Once in good position use a marker and mark the hole in the bottom of the strut to the stock bumper with a sharpie. You will later drill this hole to mount the strut to the top of the stock bumper so it must be right the first time.



19. Once marked well, remove the top struts on both sides by removing the 2.5" long bolts that attach the strut to the light carrier tube section on both sides.

20. Locate the marked spots on the factory bumper and drill the hole in the stock bumper for the strut bolt to go through.

21. Clean up the hole as needed after drilling.

22. Put the struts back in the light carrier with the 2.5" long 3/8 bolts at the top side to the tube section and also put the 1.5" long 3/8 allen bolt through the strut hole into the factory bumper and leave loose. Putting the washer and nut on the bottom of the strut under the factory bumper is a little tricky and having the front plastic covers off make it a little easier to get to.

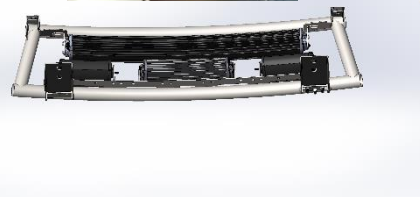
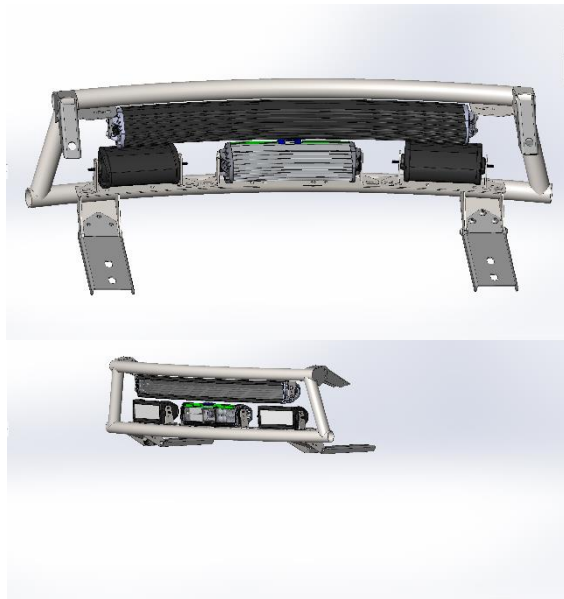
23. Check the light mount for alignment again and begin to tighten upper bolts one at a time until all are tight.

24. Re-install the plastic cover now and snap back into stock clips. If the clips have come out of the bumper, you may need to use some needle nose pliers to re-tighten them a little before re-install.



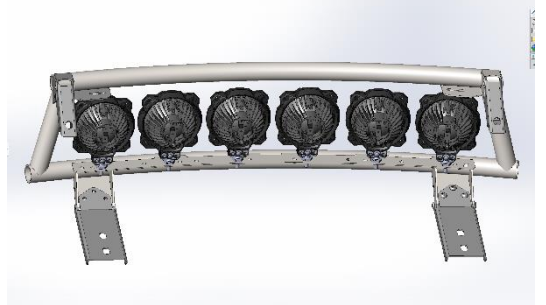
25. Install the lights on the light mount. Choose which style light you plan to use now and bolt your lights on.

- a. Rigid LED Bar mounting – The kit came with 8 small black angle mounts that were designed to work with LED bar mounts and a group of black 3/8 bolts to attach them to the light mount tabs in the tube section. Look at the pictures for placement locations for the mount brackets to match. See Images. Don't tighten any until all are installed and you have a chance to aim the lights.



- b. KC Gravity LED Round Light mounting – Locate the correct holes for the 6 lights from the images at the bottom of the instructions, install each light and leave a little loose until all are positioned. The post mount makes this pretty easy to work with. You will tighten the lights last, after the full install is done and you aim them.





26. Wire lights up to accommodate your needs and you should be done. Most utilize the factory supplied upfitter switches you will find in the center roof section of the 2017 Raptor. Be careful to check the amp draw on the lights you have selected and make sure the switch circuit you use has enough power to accommodate the light(s) you are putting on that switch. In many cases you may need an external relay to provide the power to the lights and use the switch in the truck just to trigger power to the relay.
27. Once you test the lights and ensure they are working well, secure the wires with zip ties.
28. Find the front skid plate mount tab you removed in step #2 and re-install them back on the frame.
29. Now put the factory skid plate back on the truck and re-tighten all bolts after installed.