



Preparation:

- Disconnect the negative battery terminal. Park the vehicle on level ground and set the emergency brake.
- We recommend reading through the installation instructions in whole before performing the work.
- Estimated Installation Time:

Main Rack Assembly/Installation - 1.5 Hours (Add 1 Hour to Wire Lights)

Roof Rack Assembly/Installation - 2.5 Hours (Add 1 Hour to Wire 50" Lights, Add 1 More Hour to Wire Duallys)

Tire Carrier Assembly/Installation - 1 Hour

This installation requires 2 people for best results

Labor rates are based on a vehicle with no pre-existing damage. Wiring labor is based on a standard wiring procedure with light switches installed in an easily accessible location. Custom light triggering or switch mounting location will result in a greater labor charge.

You will need the following tools:

- Ratchet
- 9/16" Wrench
- 5/16" Allen Wrench/Socket
- Zip Ties
- 3/4" Socket & Wrench
- 5/32" Allen Wrench/Socket
- 1/2" Drill Bit
- 7/32" Allen Wrench/Socket
- 7/16" Wrench
- Drill

Chase Rack - HoneyBadger Main			Chase Rack - HoneyBadger Roof Rack Addition			Chase Rack - HoneyBadger Tire Carrier Addition		
12	3/8-16 x 1" Button Head Bolt		70	3/8-16 x 1" Button Head Bolt		46	3/8-16 x 1" Button Head Bolt	
12	3/8 Stainless Flat Washer		70	3/8 Stainless Flat Washer		46	3/8 Stainless Flat Washer	
12	3/8-16 Nylon Lock Nut		70	3/8-16 Nylon Lock Nut		46	3/8-16 Nylon Lock Nut	
6	1/2-13 x 1 1/2" Hex Head Bolt		2	5/16-18 Extruded U-Nut		1	Tire Spinner	
12	1/2 SAE Flat Washers		2	Black Rubber Threaded Bumper 1"		1	Tire Carrier Center Piece	
6	1/2-13 Nylon Lock Nut		2	Black Rubber Threaded Bumper 2"		1	Tire Carrier One Piece Cross Member	
6	Mounting Bolt Backing Plate		1	HB Rack Harness - Upper		2	Tire Carrier Arms	
3	Mounting Grommet for 6.5" Oval LED		1	Dual 50" Light Mount Set		1	Tire Carrier Arm Support Plate	
1	Red Trailer Light		1	Single 50" Light Mount Set		2	Tire Carrier Mounting Brackets	
2	Amber Trailer Light		1	Roof Rack Front Piece				
3	LED Wiring Pigtail		1	Roof Rack Rear Piece				
1	LED Strobe Controller		2	Roof Rack Side Rails				
1	HB Rack Harness - Lower		3	Roof Rack Cross Members				
2	Main Rack Side Piece		2	Roof Rack Reinforcement Brackets				
1	Main Rack Center Piece		2	Roof Rack Union Plates				



Main Rack Assembly:

1. Locate one of the main rack side pieces and the main rack center section. Hold these pieces in place, then loosely install the supplied 3/8" Bolts (x6), 3/8" Washers (x6), and 3/8" Lock Nuts (x6). Leave these loose for now. (Fig A)

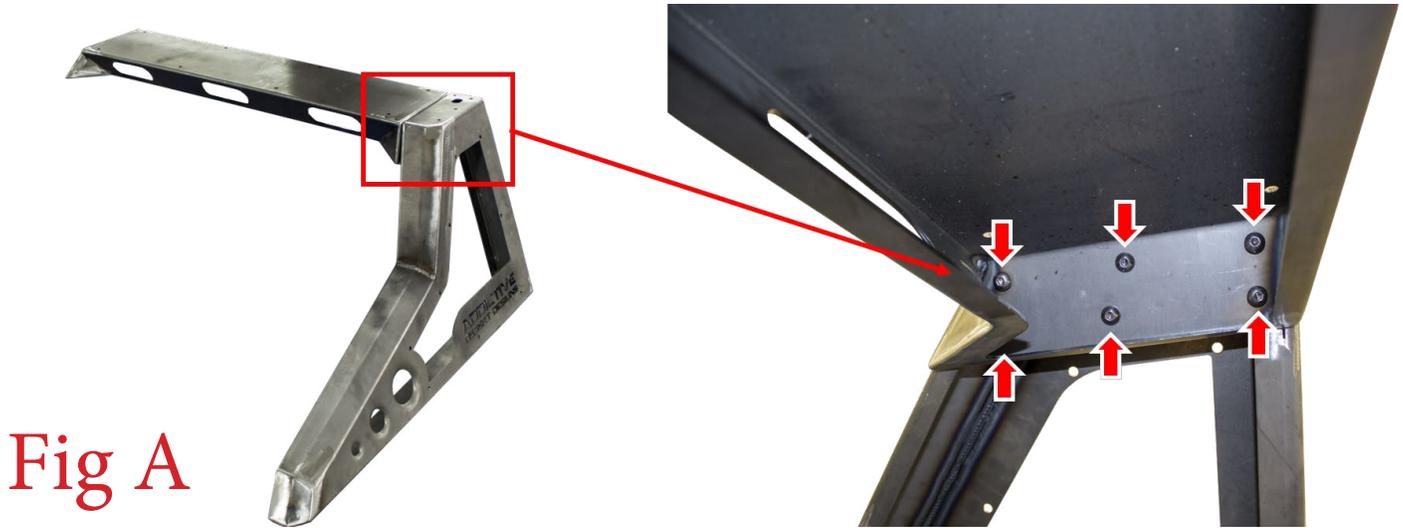


Fig A

2. Set the remaining side main rack piece in place. Secure it to the center section with the supplied 3/8" Bolts (x6), 3/8" Washers (x6), and 3/8" Lock Nuts (x6). Go back and tighten all mounting bolts to 30 foot pounds. (Fig B)



Fig B



Tire Carrier Assembly:

3. Locate the tire carrier center piece and the tire carrier one-piece cross member. Set the cross member in place, then loosely install the supplied 3/8" Bolts (x18), 3/8" Washers (x18), and 3/8" Lock Nuts (x18). (Fig C)

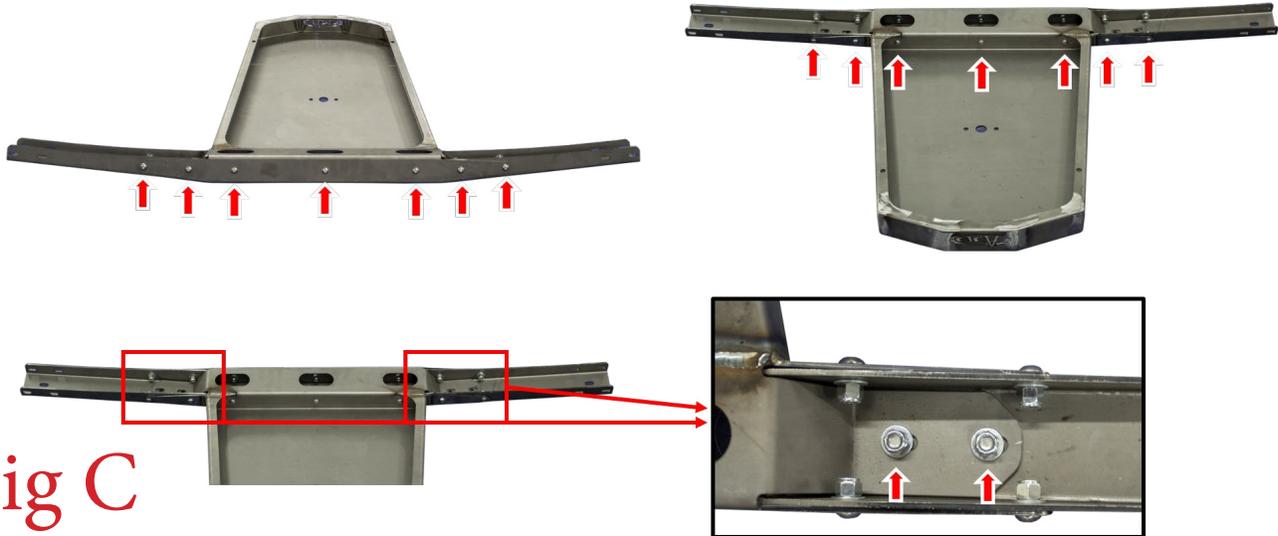


Fig C

4. Locate the tire carrier arms. Secure the arms in place by loosely installing the supplied 3/8" Bolts (x6), 3/8" Washers (x6), and 3/8" Lock Nuts (x6). Make sure to mount the supplied plate between these arms. Once the arms are installed, go back and tighten all mounting bolts to 30 foot pounds. (Fig D)



Fig D

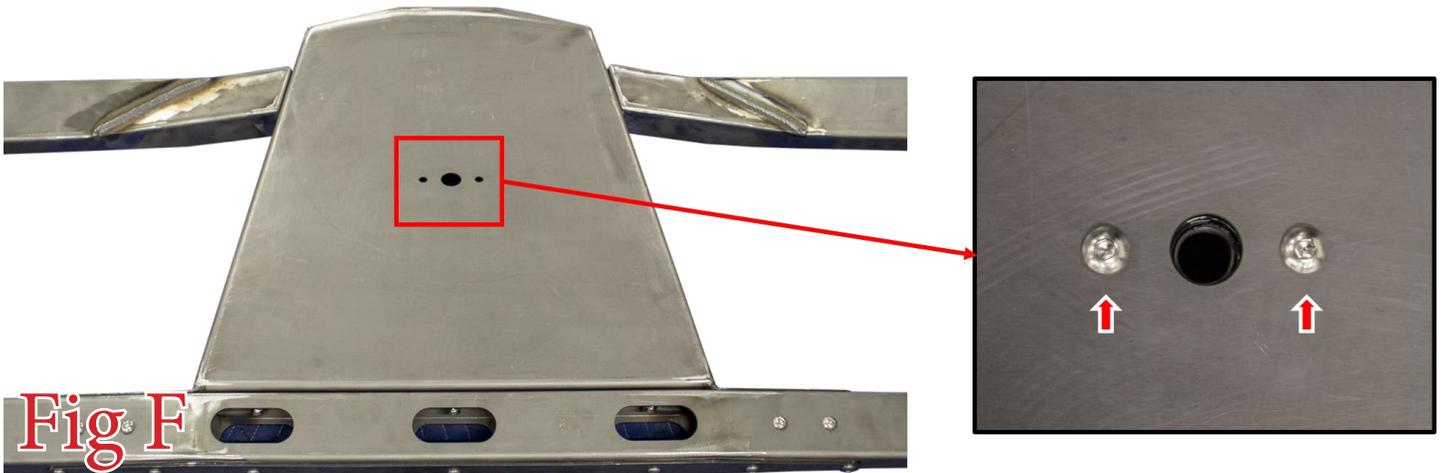
5. Find one of the tire carrier mounting pieces. Set it in place, then secure it loosely by installing the supplied 3/8" Bolts (x10), 3/8" Washers (x10), and 3/8" Lock Nuts (x10). (Fig E) We do not recommend installing the second mounting piece until the tire carrier portion is being installed on the truck.



Fig E

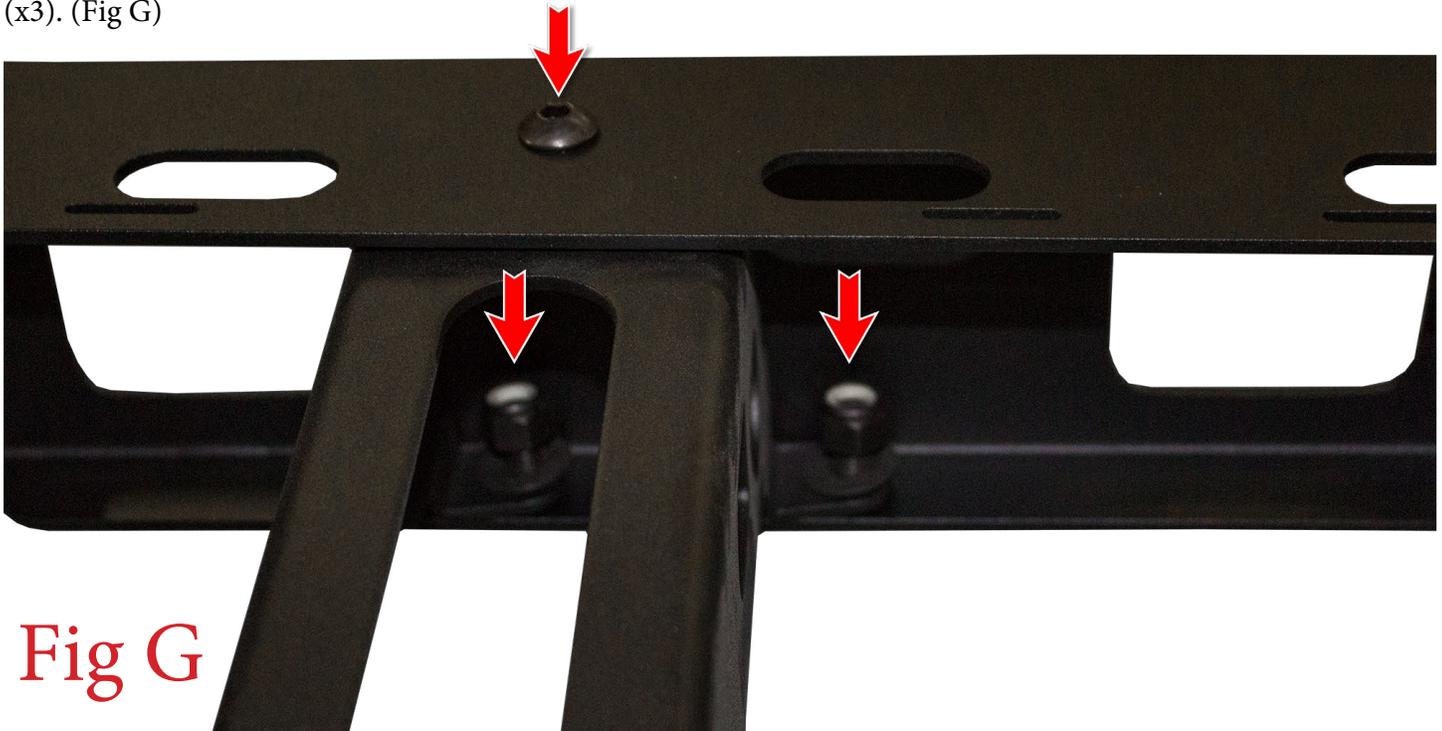


6. Install the receiving end of the tire spinner using the supplied 3/8" Bolts (x2), 3/8" Washers (x2), and 3/8" Lock Nuts (x2). (Fig F) Tighten these bolts to 30 foot pounds.



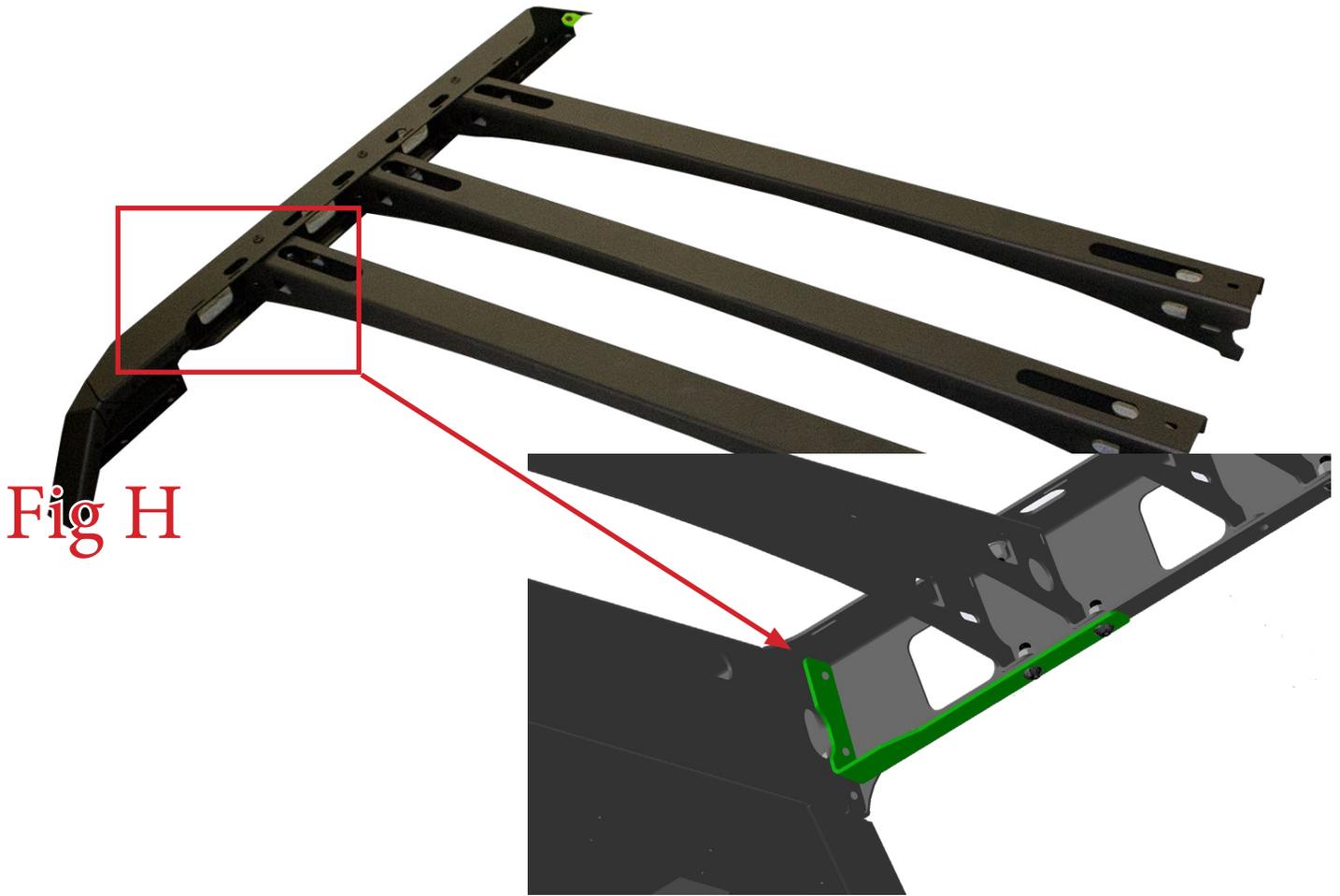
Roof Rack Assembly:

7. Locate one of the roof rack side rails along with one of the roof rack cross members. Set the cross member in place and loosely bolt it to the side rail. Use the supplied 3/8" Bolts (x3), 3/8" Washers (x3), and 3/8" Lock Nuts (x3). (Fig G)





8. Install the other two cross members onto the first side rail the same way. As you install the rear cross member, put the supplied reinforcement bracket in place. Leave all mounting bolts loose. (Fig H)



9. Locate the second side rail, then loosely bolt it in place using the supplied 3/8" Bolts (x9), 3/8" Washers (x9), and 3/8" Lock Nuts (x9). (Fig I)



Fig I



10. Set the roof rack front piece in place. Secure it loosely by installing the supplied 3/8" Bolts (x12), 3/8" Washers (x12), and 3/8" Lock Nuts (x12). (Fig J)

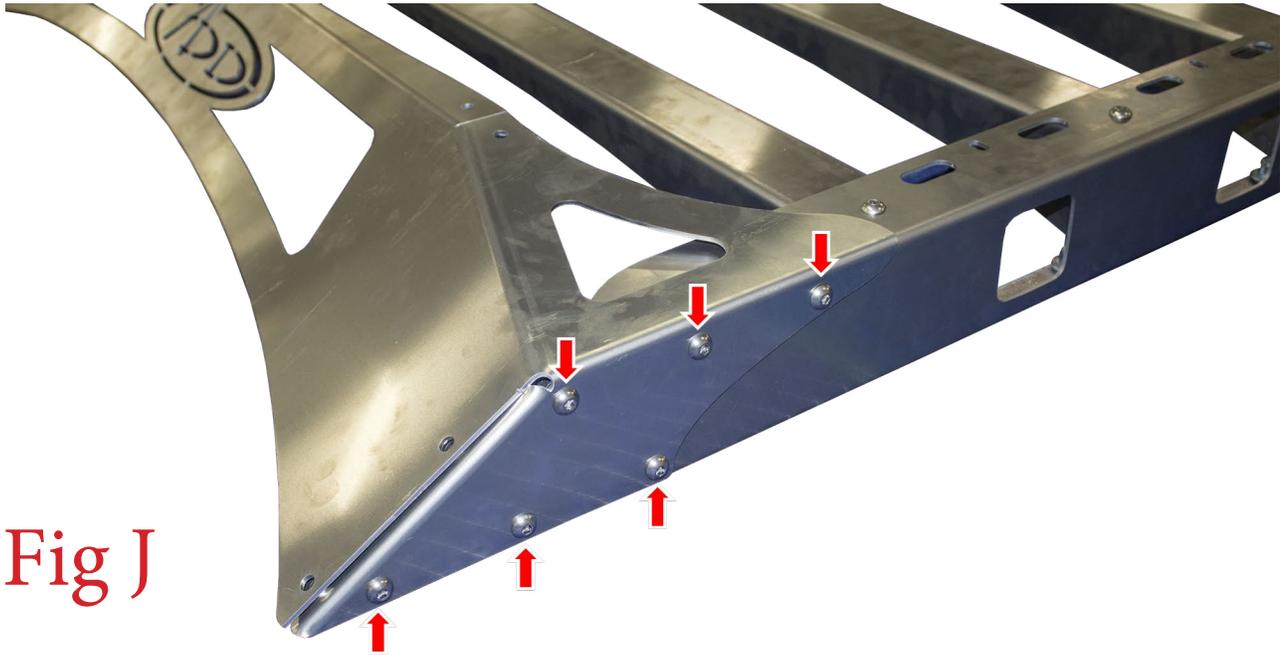


Fig J

11. Set the roof rack rear piece in place. Then, secure it by loosely installing the supplied 3/8" Bolts (x16), 3/8" Washers (x16), and 3/8" Lock Nuts (x16). (Fig K)

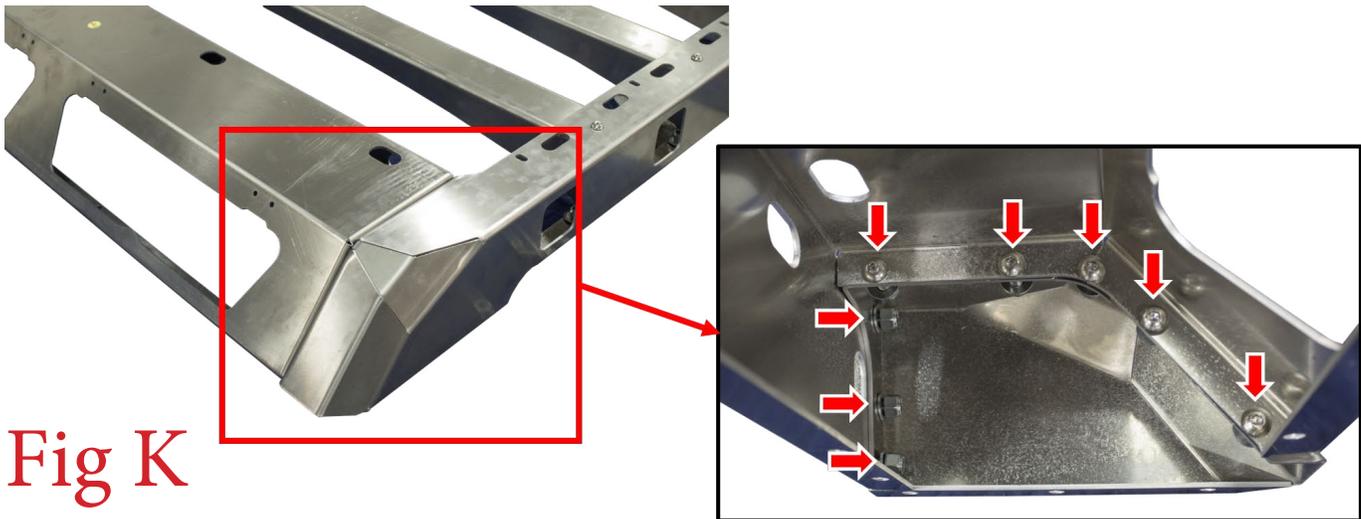


Fig K



12. Locate the roof rack front light mounts. There are two sets of mounts; one for an individual 50" Bar and one for dual 50" Bars. Pick the appropriate set for you and set them in place. Loosely bolt them to the front nose of the rack using the supplied 3/8" Bolts (x4), 3/8" Washers (x4), and 3/8" Lock Nuts (x4). (Fig L)

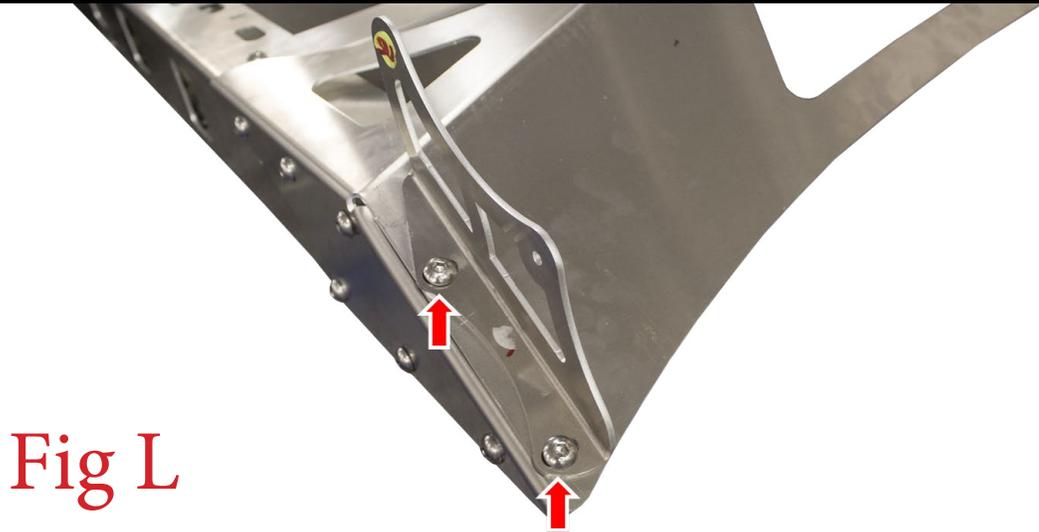
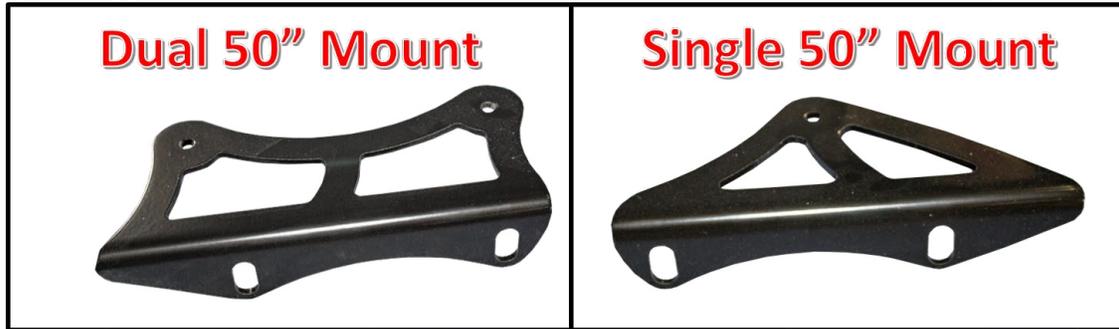


Fig L

13. Locate the roof rack union plates (x2). Loosely secure them to the front nose of the rack using the supplied 3/8" Bolts (x4), 3/8" Washers (x4), and 3/8" Lock Nuts (x4). (Fig M)



Fig M

14. Go back and tighten all roof rack assembly to 30 foot pounds.



15. On the front corners of the side rails there is a hole to mount the rubber bumpers. First, slide the supplied U-Nuts (x2) into the holes, then thread the supplied rubber bumpers (x2) into the newly installed U-Nuts.
(Fig N)



Fig N

Installation:

16. Set the main rack in place. Line the front end of the rack up with the end of the plastic bed rail cap. (Fig O)



Fig O



17. Use the chase rack mounting holes as a template to drill your holes. Use a 1/2" Drill Bit and drill them one at a time. We drill our hole and install a bolt before moving on to the next hole. Make sure to use a backing plate between the locking nut and the bed rail lip. There are 5 mounting holes per side on the main rack section. We recommend using (and have supplied hardware for) at least three of those mounting holes. If you are installing a tire carrier, be sure to use at least two holes (per side) that the main rack shares with the tire carrier. (Fig P)

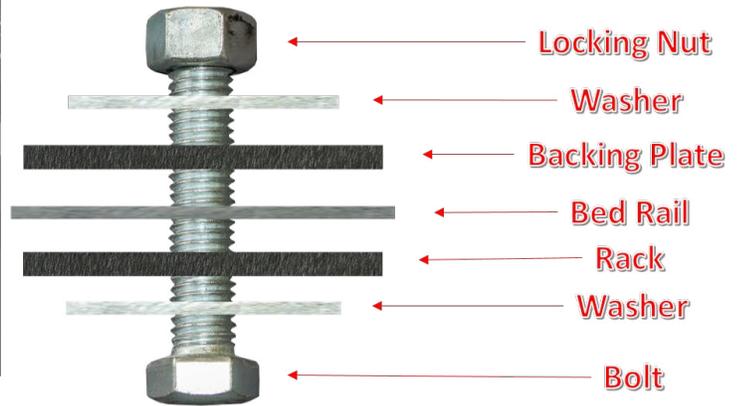
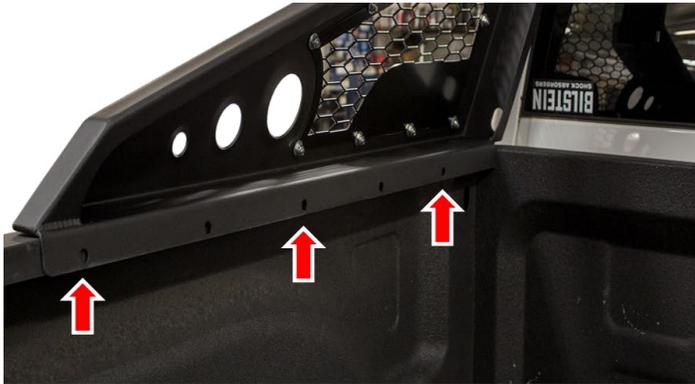


Fig P



Use these as the Chase Rack Mounting Backing Plates

18. Once all the mounting holes have been drilled and you've made sure all the bolts fit in their newly drilled holes, remove the front four rack mounting bolts in preparation for the tire rack installation. Set the tire rack in place (with one side's tire rack mounting piece still not installed). Then, mount the remaining tire rack mounting piece using the supplied 3/8" Bolts (x10), 3/8" Washers (x10), and 3/8" Lock Nuts (x10) (Refer to Step 3). With the tire carrier now fully assembled, reinstall the front four rack mounting bolts, using them as the rack and tire carrier mounting bolts. Once everything is in place, torque the 3/8" Bolts to 30 foot pounds. and the 1/2" Bolts to 50 foot pounds. (Fig Q)



Fig Q



19. Set the roof rack section in place. Then, use the supplied 3/8" Bolts (x16), 3/8" Washers (x16), and 3/8" Lock Nuts (x16) to loosely secure it. The bolt holes can be accessed through the toolbox openings (the picture does not show all of the mounting bolts). Once all mounting bolts have been installed, torque them to 30 foot pounds. (Fig R)



Fig R

Wiring:

20. Take the supplied harness and start positioning it on your chase rack. Send the side that ends in 6 wires along the passenger side of the roof rack. Send the harness through the holes in the cross members as shown in (Fig S).

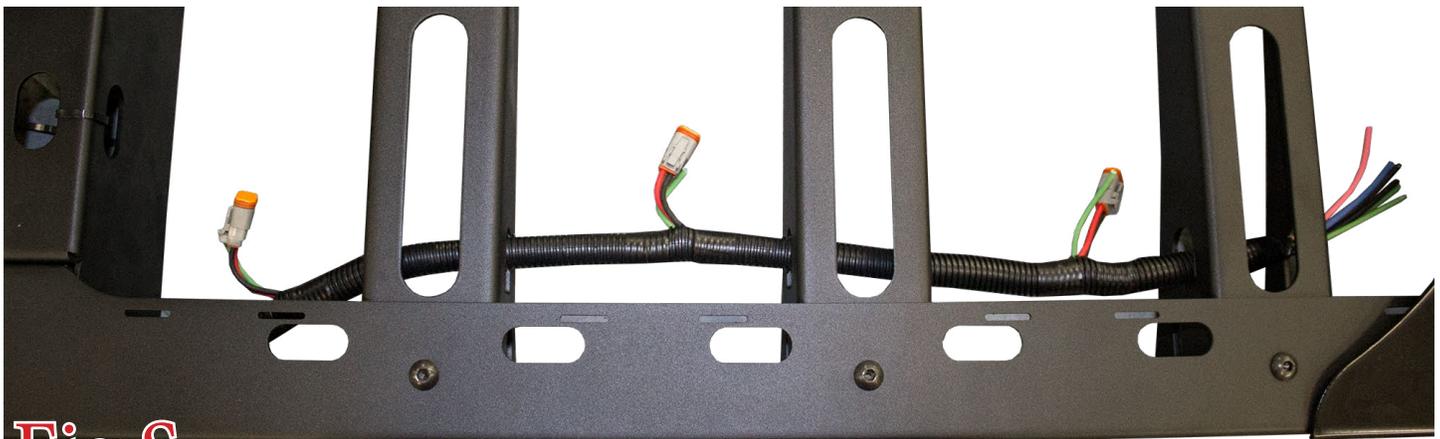


Fig S

21. After you've run the passenger side, run the rest of the upper harness through the toolbox portion of your roof rack over to the driver side. Then, run the harness through the driver side cross member. (Fig T)

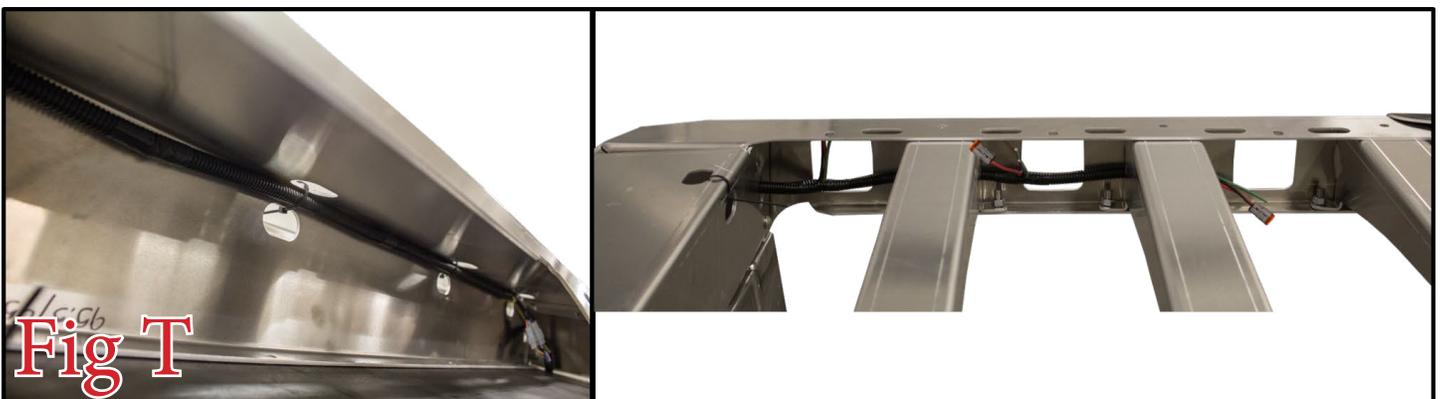


Fig T



22. Use zip ties to secure the harness to the zip tie locations on the tool box portion of the roof rack. (Fig U)



23. Send the long end of the harness down through the hole in the upper part of the main rack and down the back side of the main rack. Use the zip tie locations provided on the main rack to secure the harness. The big connectors should remain in the toolbox portion of the rack. Also make sure these connectors stay connected. (Fig V)



24. Install any lights you have for your roof rack. Refer to the light manufacturer's guide for mounting information.

25. Some lights have a backlight feature, while others do not. Usually, lights with a backlight feature will have three wires instead of two. If your light has a backlight circuit, connect the backlight wire to the green wire in our harness. It doesn't matter which green wire you use for which light because each green wire connects to the same circuit within our harness. If you are unsure if your light has a backlight circuit, read through the light manufacturer's literature that comes in the box with your light or look at the light manufacturer's website. Connect your 50" Lights to the provided power/ground/backlight (if applicable) circuits using the supplied butt connectors. (Fig W)



26. Your cube lights may also have a backlight circuit, which will be identifiable by a third wire coming off the back of your light. If you are unsure if your light has a backlight circuit, read through the light manufacturer's literature that comes in the box with your light or look at the light manufacturer's website. Connect your Cube Lights to the provided power/ground/backlight (if applicable) circuits. If your brand of cube light does not use the same connector as supplied on our harness, cut the connector off our harness and use butt connectors to make the connection. (Fig W)



27. Once all of your 50" Lights and Cube Lights have been connected, zip tie the harness up and out of the way as shown in (Fig X).





28. Send the wires that branch off the main harness 5" below the toolbox portion of your roof rack through the hole in the side of the middle portion of the main rack. Then, wire your middle (red) light to our harness. Connect the brown wire from our harness to the black wire from the supplied LED light, this will provide the taillight power. Connect the orange wire from our harness to the red wire from the supplied LED light, this will provide the brake light power. Connect the black wire from our harness to the white wire from the supplied LED light, this will provide the ground. Once all lights are connected, use the supplied zip tie slots to secure the harness out of the way. (Fig Y)

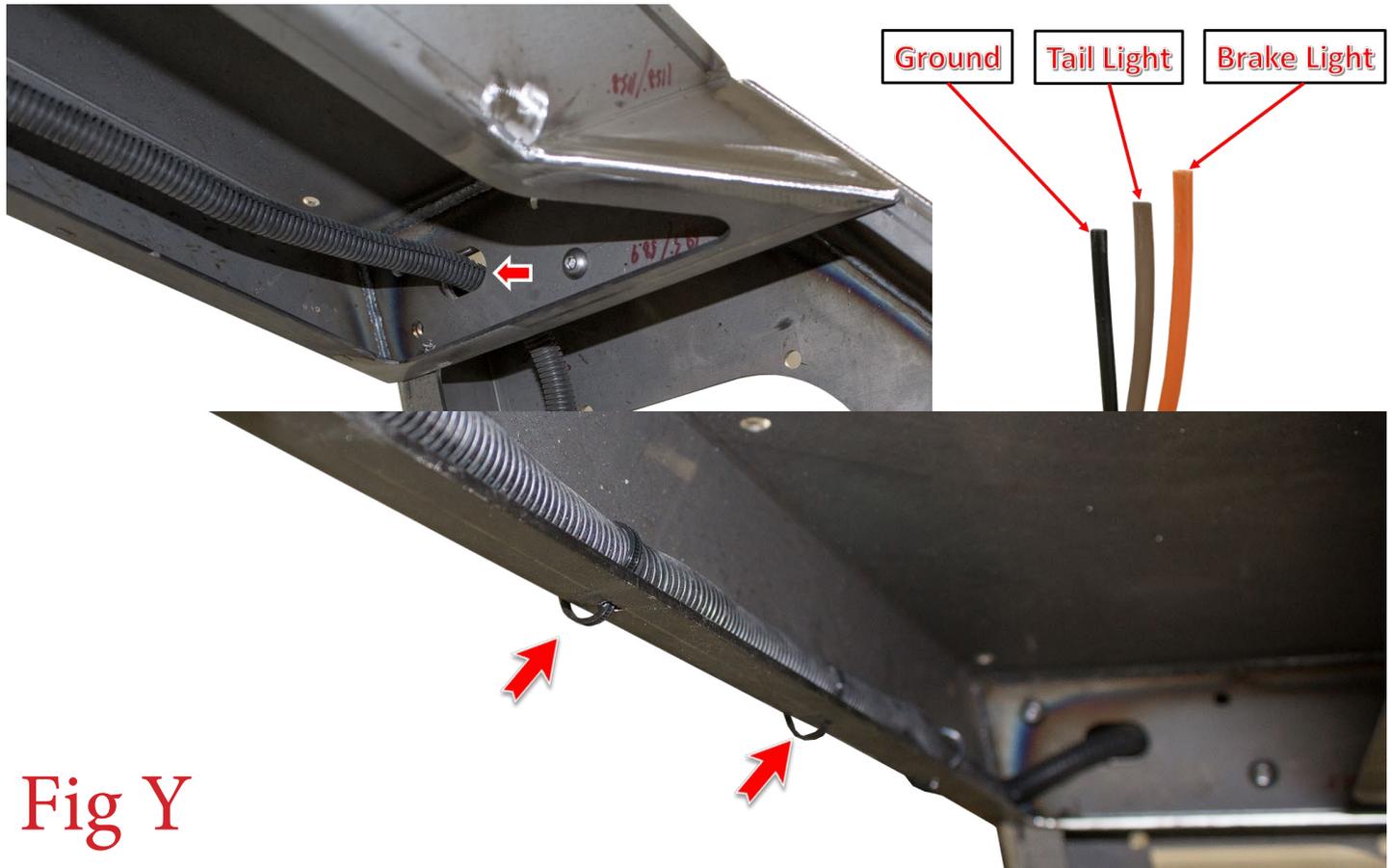
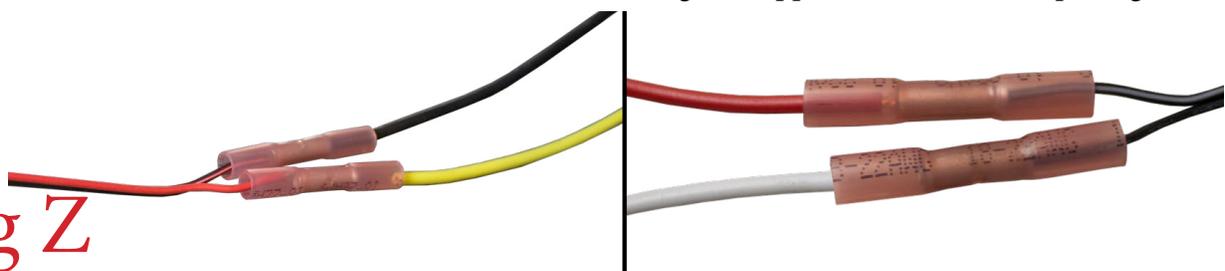


Fig Y

29. This step covers how to wire the supplied strobe controller to the remaining amber LED lights on your main rack. Connect the yellow/black wires that branch off the chase rack harness inside the toolbox portion of the roof rack to the supplied strobe controller inputs (Yellow wire to Red wire, Black wire to Black wire). Then, run the strobe controller outputs to the power/ground wires on your amber lights. Run the strobe controller wires down the hole that the main harness uses. Follow the branch of the chase rack harness into the middle section of your main rack, until the strobe controller wiring can reach each amber light. Connect the controller's Black with White stripe wire to the LED's Red wire. Then, connect the controller's Black wire to the LED's white wire. Cut the wires to size before butt connecting them and zip tie everything out of the way. Once all the wires are connected, secure the strobe controller in a discreet location using the supplied double sided tape.(Fig Z)

Fig Z





30. If you do not have a roof rack or an upper harness, but would still like to use your strobe controller for the amber LED lights, follow this step. Separate the strobe controller's input wires from each other. Connect the black wire from the controller's inputs to the same black wire that the middle red LED light' white wire uses. Then, run the red wire from the strobe controller along the chase rack harness until you reach the big connectors at the end of the harness. Cut the yellow wire at the connector and butt connect it to the controller's red wire. Then, connect the strobe controller outputs to both amber LED lights. Connect the controller's Black with White stripe wire to the LED's Red wire. Then, connect the controller's Black wire to the LED's White wire. Cut the wires to size before butt connecting them and zip tie everything out of the way. Once all the wires are connected, secure the strobe controller in a discreet location using the supplied double sided tape

31. Send the rest of the harness underneath the vehicle along the passenger side. Use zip ties to secure the harness out of harm's way. (Fig AA)



32. Using a 10mm Socket, remove the ground bolt near the forward most body mount. Then, reinstall the ground bolt with the eyelet from the harness's ground attached. (Fig AB)





33. Run the branch of the harness that breaks off about halfway under the cab of the truck through the trans tunnel, to the driver side of the vehicle. (Fig AC)



34. Open the driver side door and remove the two kick panels. There are no tools required for this step, they simply pull off by hand. (Fig AD)





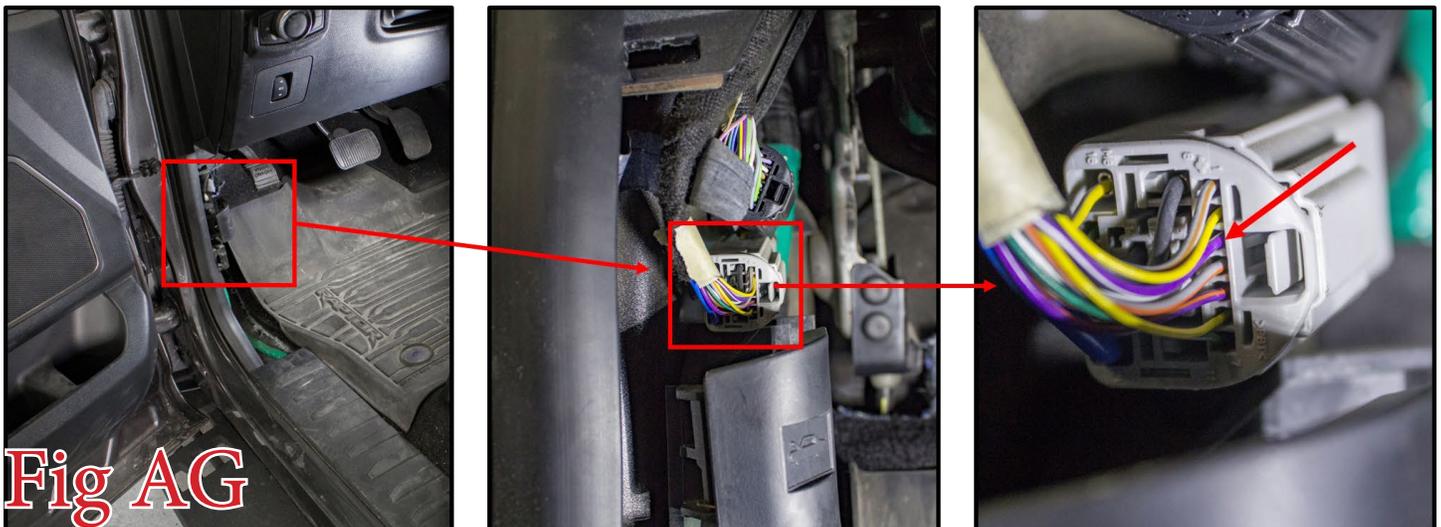
35. Lift the edge of the carpet and find the body plug that runs close to the door sill. Remove this body plug, cut a slit in it with a utility knife, then reinstall the plug. (Fig AE)

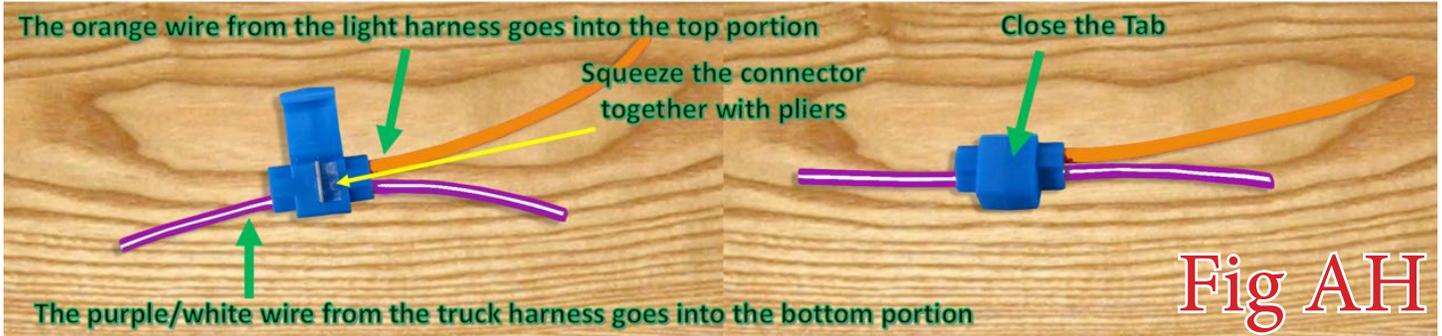


36. Pass the orange wire through the body plug and into the cab. (Fig AF)

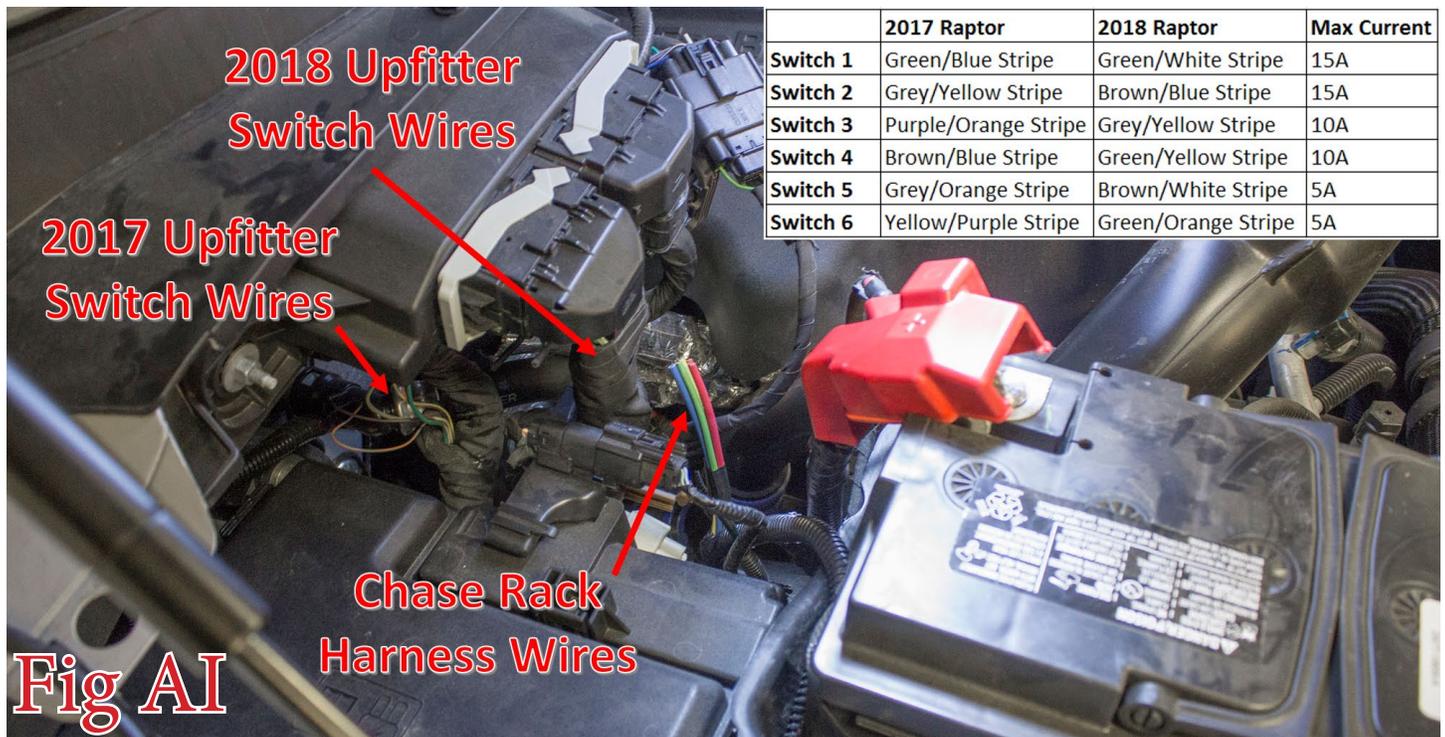
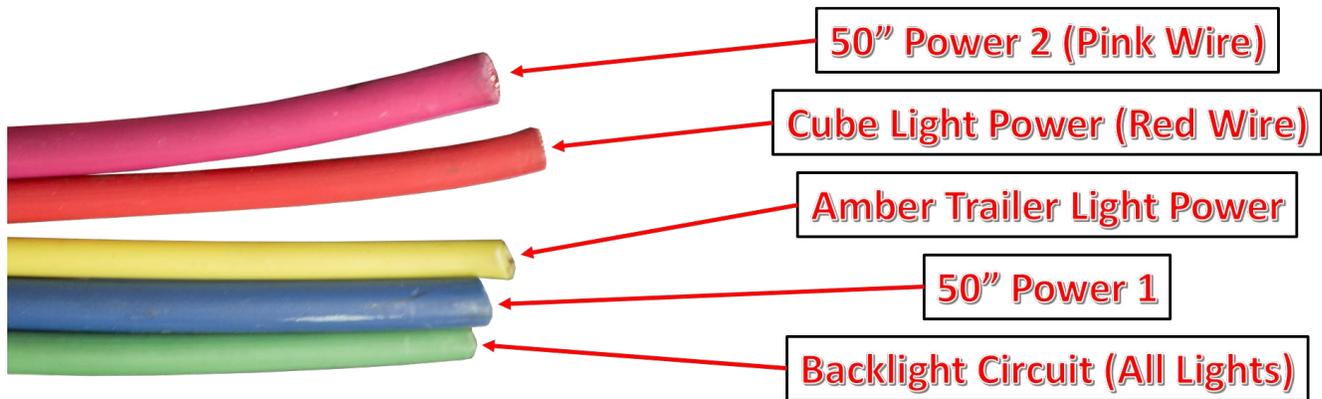


37. Find the purple with a white stripe wire on the gray connector directly above the hood prop lever. Using one of the supplied splice connectors, connect the orange wire from the chase rack harness to this wire. (Fig AG) shows the location of this wire, while (Fig AH) illustrates how the splice connector works.





38. Run the main section of the chase rack harness up into your engine bay and connect the power wires from your lights to the wires going to the desired upfitter switches. Below is a table that shows color and amperage ratings for your upfitter switches as well as the colors for the different circuits in our harness. The 2017 and 2018 Raptor upfitter switch colors and location are different, both are shown in (Fig AI). If the lights you would like to run on a switch draw too many amps to be connected to that switch you will have to use a relay harness (supplied by the light manufacturer). Both 50" lights will need to use a relay harness. Depending on which cube lights and which switch is chosen, the cube lights may not need a relay harness. If you are unsure how much current your lights draw, check the literature sent with your lights or ask the light manufacturer.





39. To hook up your 50" lights, you will need to use the light manufacturer's harness in conjunction with ours. To do this, hook the wire from the truck's upfitter switch to the relay trigger wire on the light harness (color and location vary based on light manufacturer). Ignore the other two switch wires on the light harness. Run power and ground to the light harness from your truck's battery. Then, run the power wire from the light harness that would hook to the power wire on your light bar to the wire from our chase rack harness that corresponds to the 50" light you would like to power (either the blue wire or the pink wire). Do not worry about the ground wire from the light manufacturer's harness as the light bar is already grounded in our harness. (Fig AJ)

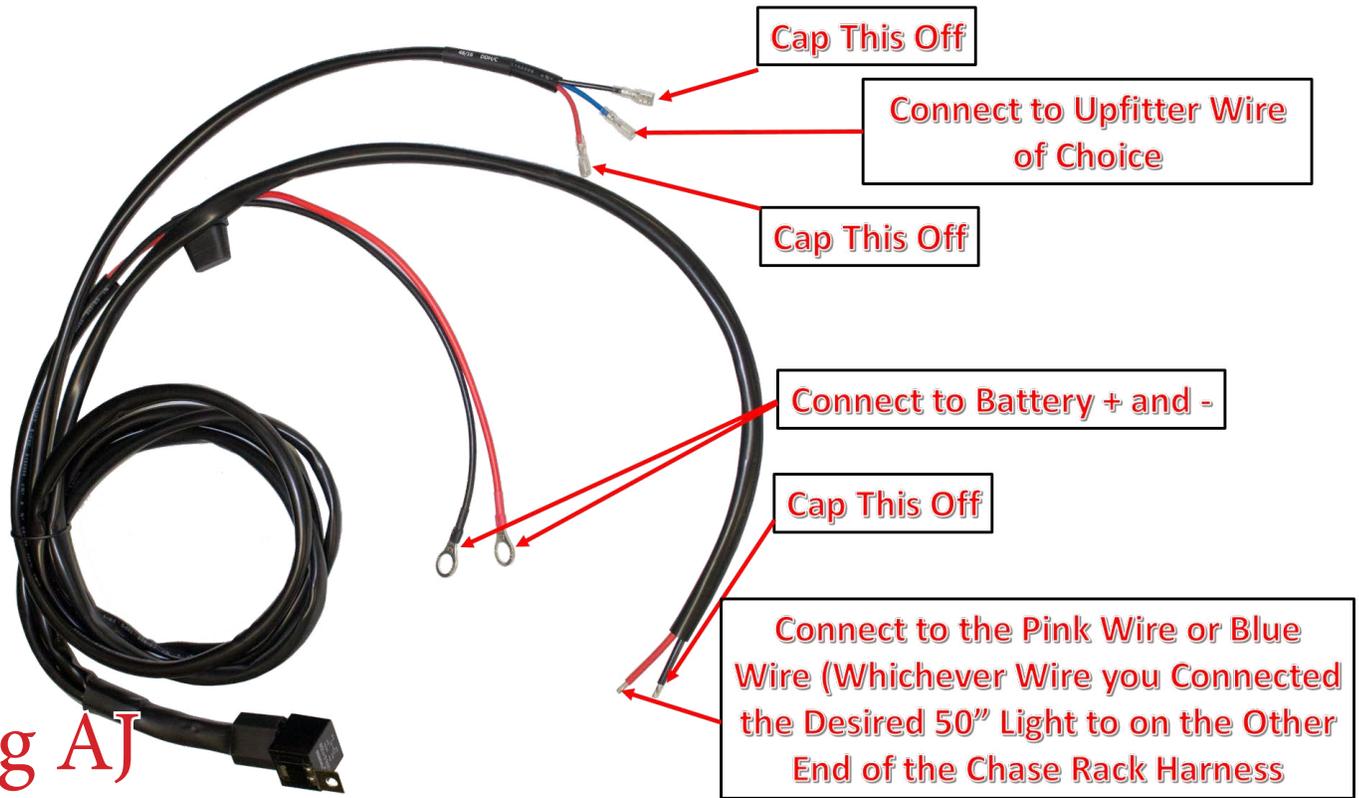


Fig AJ

40. If your cube lights do not need a relay harness, you can hook the power wire for your cube lights (the thinner red wire) directly to the upfitter switch of choice (refer to Fig AI for wire color). If you must use a relay harness, follow Fig AO. If the harness pictured in (Fig AK) is still too low of amperage to run your cube lights (check the fuse rating of your harness against the total amperage rating of all 6 of your cube lights), you will need to use a bigger harness. If you must use a bigger harness, follow (Fig AL) If you have any additional questions about your lights' total amperage draw and the capabilities of the provided harnesses, contact your light manufacturer.

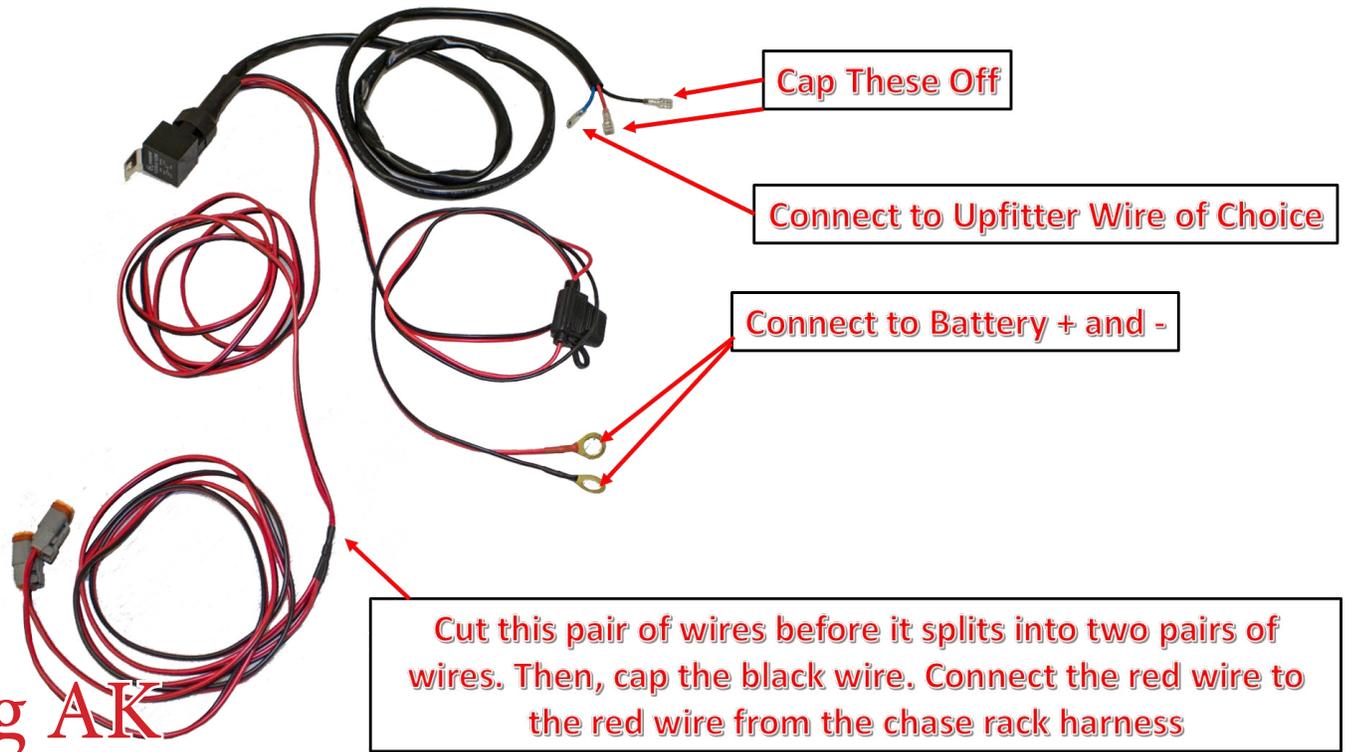


Fig AK

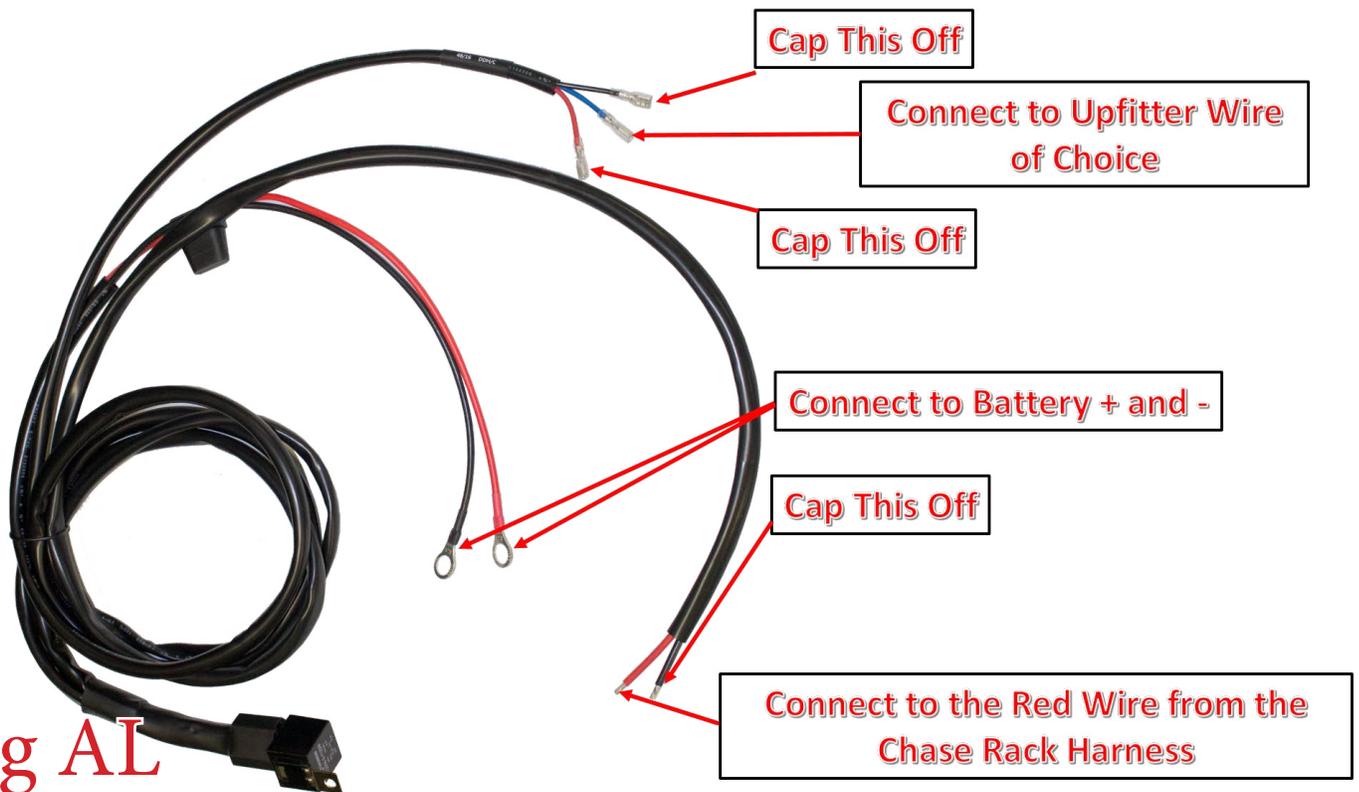
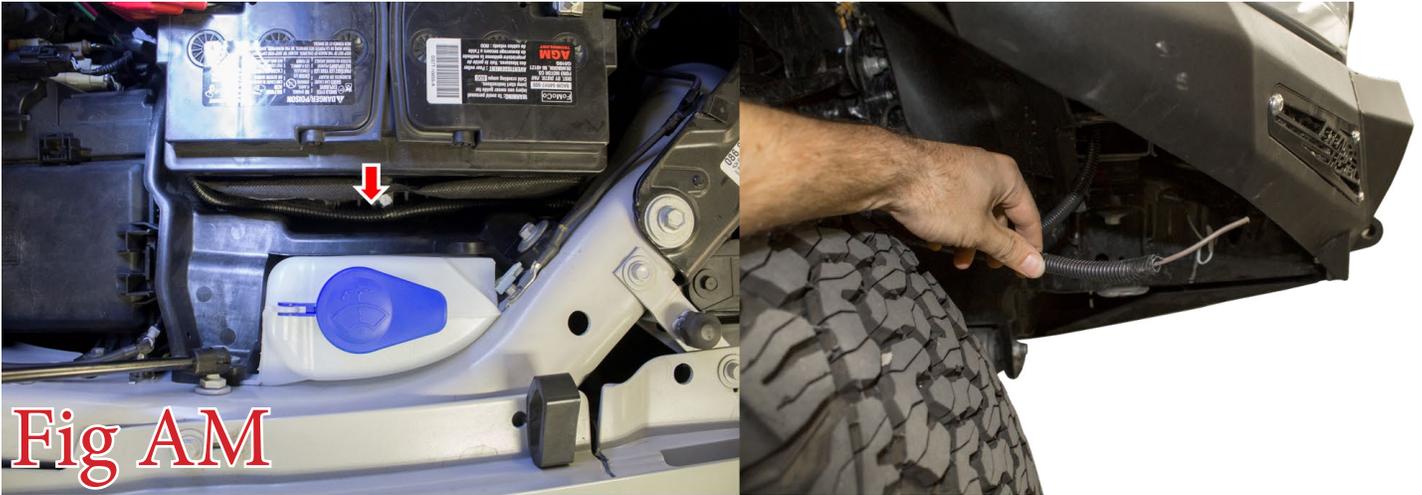


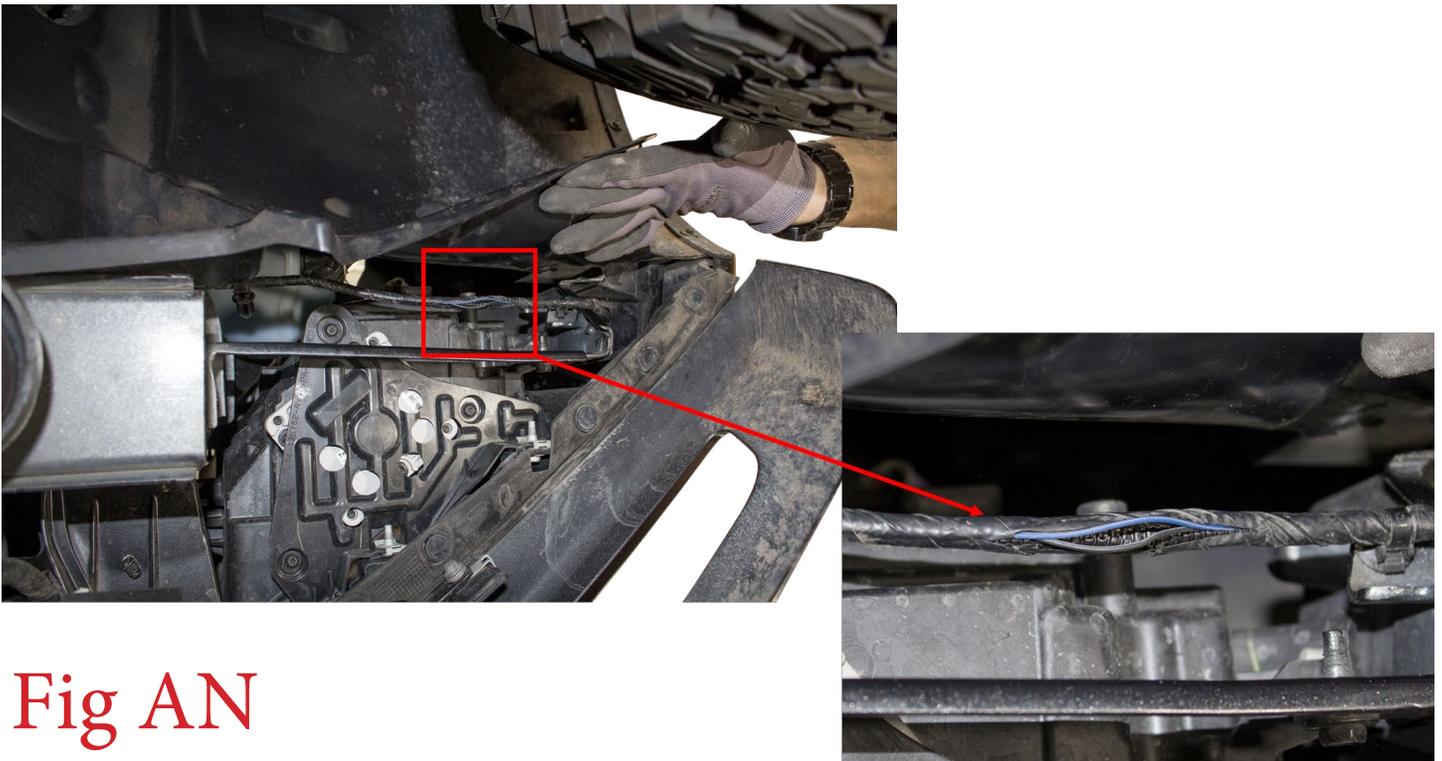
Fig AL



41. Continue running the brown wire up through the engine bay and down underneath the headlight. (Fig AM)



42. Find the wires for the side marker light. Split the conduit to expose the wires. (Fig AN)



43. Using one of the supplied splice connectors, connect the brown wire from the chase rack harness to the blue wire from the marker light harness. Refer back to (Fig AH) for splice connector instructions.

44. Stand back and enjoy your new ADD HoneyBadger® Chase Rack.

45. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.



For Additional Support or Technical Questions,
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