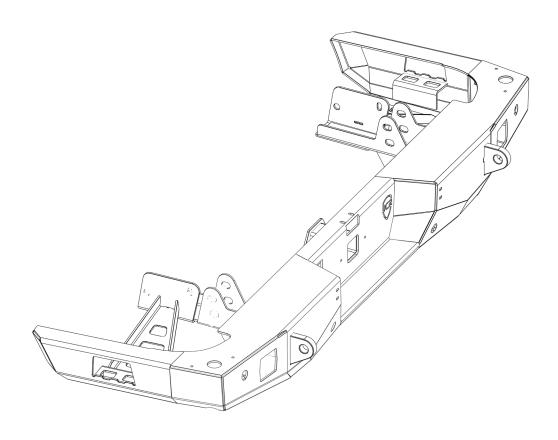


# REAR VANGUARD INSTALL INSTRUCTIONS

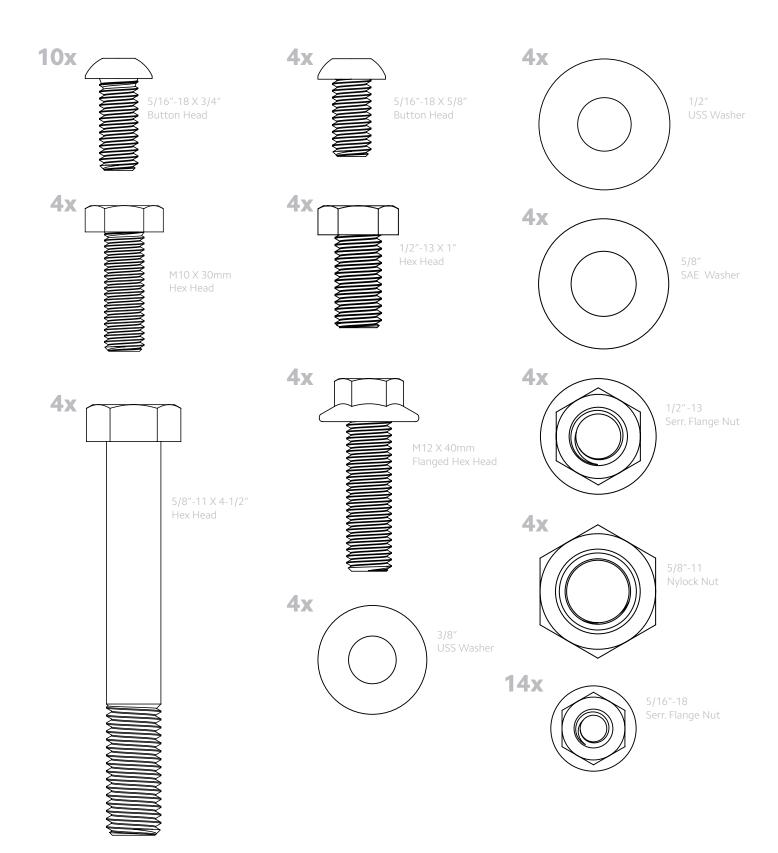


Please read the mounting instructions below carefully before attempting to install.

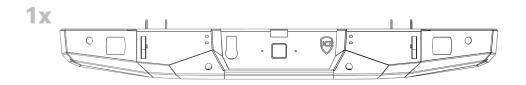
Be sure to check out the install video on the product page, if available.

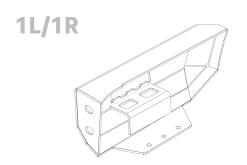
Thank you for purchasing from JcrOffroad! Checkout our website, www.jcroffroad.com for other great off-road products. Be sure to rate and review our product online. If you have any questions or are missing parts, please don't hesitate to call us at 269-353-1184!

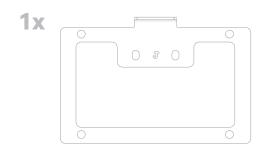
# **INCLUDED HARDWARE**

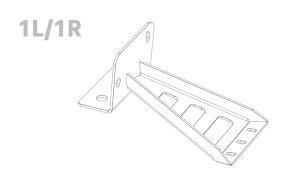


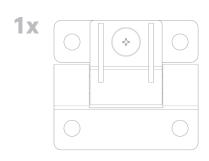
# **INCLUDED PARTS**











1 The first step is to remove the stock bumper. Start by removing your license plate. If you are going to be using our adventure carrier to hold your spare tire, remove that as well. If not, you can just leave it in place.



2 Next, remove the two bolts from behind the license plate and unplug the trailer wires from the inside of the bumper.



3 Next, use a panel tool or something similar to remove all of the little clips fastening the trailer and license plate light harnesses to the frame of the vehicle. Then unplug the license plate light wire as well. If you have the backup sensors, do the same for that wire harness.



4 With the wires out of the way, use a screwdriver or something similar to push in on the clips on the side of the trailer plug and push it through the front of the bumper. Then, remove the eight bolts holding the bumper to the frame and pull it off of the vehicle. Four of the bolts are shown below. The other four are in the same position on the other side of the vehicle.





Next, remove the wiring harness from the inside of the bumper using a panel tool or something similar. If you have the backup sensors, remove those as well. Depending on which bumper you have, you may need to purchase some small grommets to fit the sensors to our bumper. The part number for those grommets can be found on the product page for this bumper.



heads, 1/2" washers, and 1/2" serr. flange nuts. Try to make the top and side faces of the wing flush with the top and side faces of the bumper. If you have lights to mount in the bumper, you can do so now or after the bumper is installed. Once the wings are on, put the bumper on the vehicle. It is helpful to insert a 5/8"-11 X 4-1/2" hex head bolt into one of the side holes in the frame and the bumper to temporarily hold it on. Then once both sides are on, put the other 5/8"-11 X 4-1/2" hex head bolts through the remaining side holes and then loosely fasten them using a the 5/8" washers and 5/8"-11 lock nuts.





7 With the bumper in place, slide the support bracket between the frame and the bumper and bolt it in using the M12 bolts on the bottom and the M10 bolts with 3/8" washers on the side.





Next, finish mounting the supports by bolting them to the wings using the 5/16"-18 X 3/4" button head bolts and 5/16"-18 serr. flange nuts. With everything still loose, there is a little bit of adjustment you can make to the bumpers position forward and back. Position it wherever you would like. Then, once it is in position, go back and tighten and torque all the large bolts. Both sets of bolts holding the bumper to the frame (5/8" and M12 bolts) should be torqued to 120 foot pounds and the bolts on the side of the wing support (M10 bolts) should be torqued to 35 foot pounds.



**9** Next, if you have the backup sensors you will need to insert those into our bumper. Push the outer piece in through outside and then pop the sensor into it on the inside of the bumper. Then you can reattach the safety clips.



10 Next, attach the wiring harness to the sensors. Make sure to put the plug for the harness on the driver's side. If any of the plugs don't quite reach the sensors, take the tape off of the section so you can pull more wire out. Once you have enough to be able to plug it into the sensor, tape it up again.





11 If you do not have the backup sensors, simply plug the holes with the 1" plastic plugs. You can put a little RTV on it to seal the hole if you would like. Then, insert the trailer plug into the cutout in the bumper and plug it back in.





12 If you are not using our carriers at the moment, seal the spindle sleeves using the 1-1/2" plugs and a good amount of RTV. One goes in the top and one goes in the bottom of each. It is important to not let moisture into it in case you want to add carriers in the future.



13 Now you can start to mount the license plate. First, mount the small hinge to the bumper. The thicker side of the hinge should go in through the hole above the hitch receiver and be mounted through the top using the 5/16"-18 X 3/4" button head bolts with a 5/16"-18 serr. flange nut on the other side. You will need to reach around the bottom of the bumper to get the nuts on the bolts. Then, mount the license plate holder to the hinge using the same hardware. Make sure that the small bend points out. Then, simply mount your license plate using the 5/16" hardware.





**14** Next, take the protective tape off of the back of the license plate light and stick it to the bend over the license plate. See the instruction video for instructions on wiring.

