



INSTALLATION GUIDE

2021+ BRONCO STC REAR



NOTE

SKILL LEVEL - ★★★

1 STAR ★☆☆☆☆

2 STARS ★★☆☆☆

3 STARS ★★★☆☆

4 STARS ★★★★☆

5 STARS ★★★★★

EASY - No tools required

BASIC - Requires standard tools, basic mechanical knowledge and understanding

MODERATE - Requires standard tools. Some drilling and/or cutting.

ADVANCED - Requires speciality tools. Drilling, cutting, and/or welding

EXPERT - Professional installation recommended.

DISCLAIMER

Expedition One is not responsible for any damages to vehicle or injury.
We always recommend professional assistance when installing our vehicle products.

Always follow safety precautions including the use safety gear and devices.

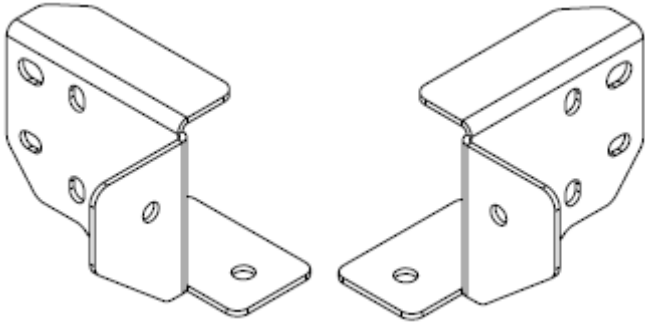
We highly recommend customers wait until they have the product in hand to schedule installations. All cancellations are required in writing and will incur a 10% re-stock fee and any applicable packaging and shipping fees. Please review terms and conditions for details.

* A narrow wheel with an extreme positive offset and a very wide tire may not work with the standard tire mount

***Sensor holes are included however they are not guaranteed to work.**

This product contains chemicals known to the state of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.gov

HARDWARE



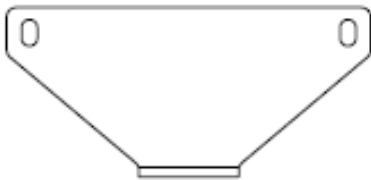
MOUNTNG BRACKETS

REAR BUMPER HARDWARE

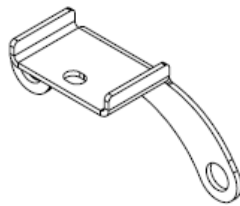
1/2" – 13 X 1 1/4" HEX CAP BOLT	10
1/2" – 13 NYLOC NUT	10
1/2" USS WASHER	20
5/8" – 11 X 1 1/2" HEX CAP BOLT	2
5/8" USS WASHER	2

TREADPLATE & HARDWARE

1/4"-20 X 3/4" BUTTON HEAD	10
1/4"- 20 NYLOC NUT	10



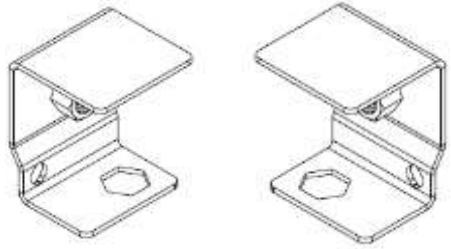
LICENSE PLATE MOUNT



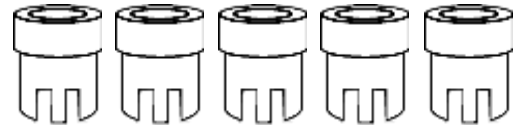
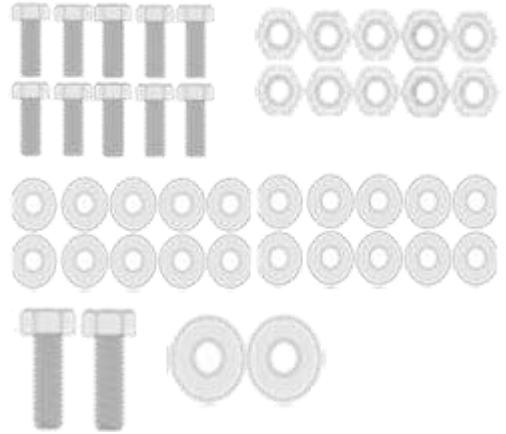
LUG BRACKET

LICENSE PLATE MOUNT HARDWARE

LUG – 12 X 1.5	3
BRONZE BUSHING	4
8 – 32 X 1/2" BUTTON HEAD	2
8 – 32 NYLOC NUT	2
M12 – 1.5 X 45MM HEX CAP	2
M12 – 1.5 X 50MM HEX CAP	2

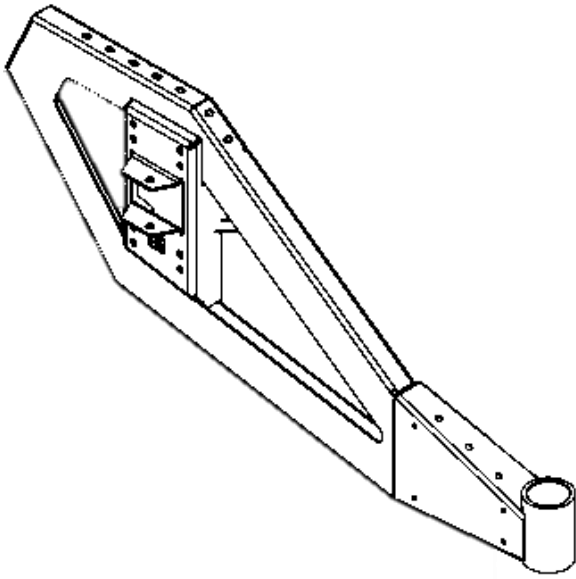


NUT RETAINER BRACKETS

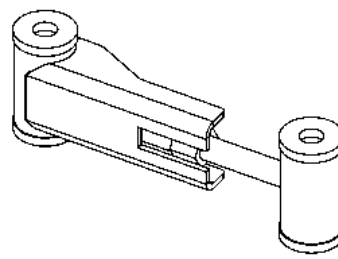


SENSOR BEZELS

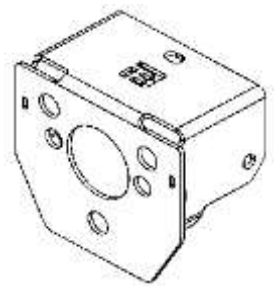
LICENSE PLATE LIGHT	1
1/4"-20 X 3/4" HEX CAP BOLT	2
1/4"- 20 NYLOC NUT	2
1/4" USS WASHER	2
5/16"-18X3/4" CARRIAGE	1
5/16" – 18 NYLOC NUT	1
5/16" USS WASHER	2



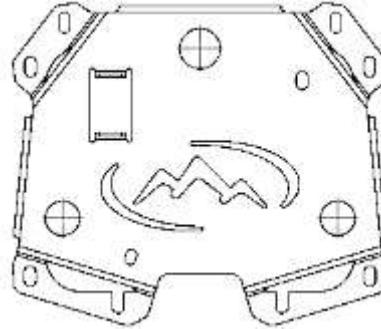
STC SWING ARM + LOGO PLATE



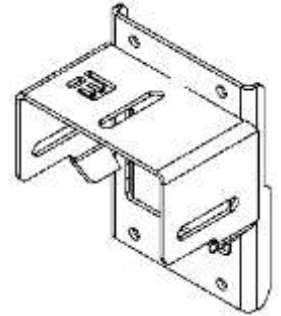
STC COUPLER



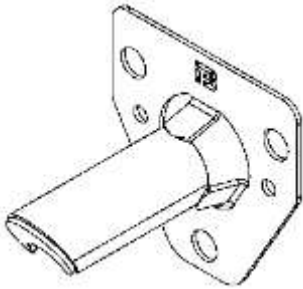
TIRE CARRIER



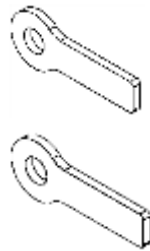
DOOR PLATE



TIRE CARRIER MOUNT



CAMERA BRACKET



KEY HOLE SPACER



ALUMINUM ROUND SPACER

BEARING KIT

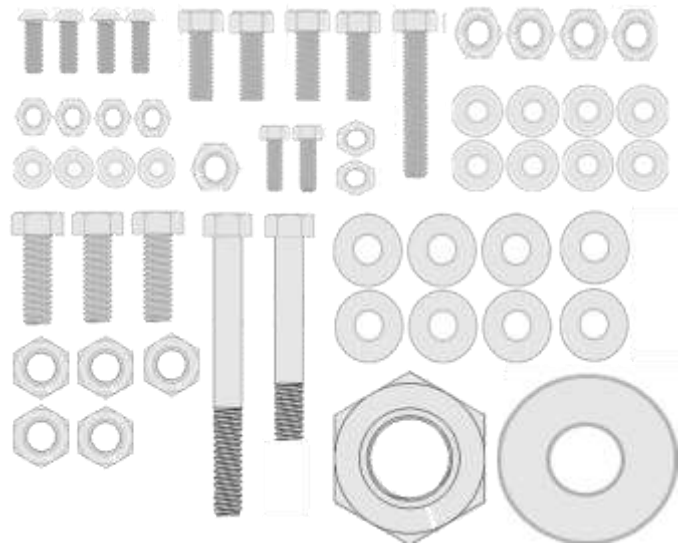
STC HUB COVER	1
STC HUB ORING	1
STC BEARING UPPER	1
STC BEARING LOWER	1
STC GREASE SEAL	1
PACKET ANTI SEIZE	1

BUMPSTOP KIT

BUMP STOP	2
BUMPER STOP SPACER/SHIM	2
M8 – 1.25 X 35 SOCKET CAP	2
M8 – 1.25 NYLOC NUT	2

REAR BUMPER HARDWARE

1/4" – 20 X 3/4" BUTTON HEAD	4
1/4" – 20 NYLOC NUT	4
1/4" X 0.625 SAE WASHER	4
3/8" – 16 X 1/4" HEX CAP BOLT	4
3/8" – 16 X 4" HEX CAP BOLT	1
3/8" – 16 NYLOC NUT	4
3/8" – 16 NYLOC JAM NUT	1
3/8" X 0.812 SAE WASHER	8
1/2" – 13 X 1 1/4" HEX CAP BOLT	3
1/2" – 13 X 3 1/2" HEX CAP BOLT	1
1/2" – 13 X 4 1/2" HEX CAP BOLT	1
1/2" – 13 NYLOC NUT	5
1/2" X 1.125 SAE WASHER	8
1" – 14 NYLOC NUT	1
1" X 2.000 WASHER	1
M6 – 1.00 X 25MM BOLT	2
M6 – 1.00 NYLOC NUT	2



INSTALLATION

1 REMOVE OEM BUMPER

- Disconnect the wiring loom on the drivers side.
- Remove the frame bolts (Circled) to remove the bumper.
- Check for any remaining hardware or connections before removing the bumper.
- Keep OEM hardware for reinstallation on the new bumper
- Remove the spare tire and OEM tire mount.
- Disconnect the camera and other remaining hardware from the rear door.





2 REMOVE THE BUMPER

Remove the bumper from the vehicle.

3 OEM BUMPER HARDWARE REMOVAL

Remove the wiring loom and sensors by removing any clips or mounts located on the inside of the bumper

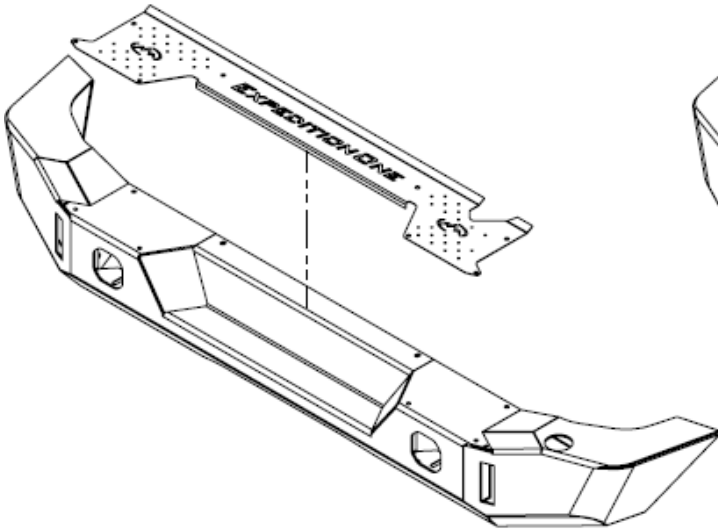
4 PARKING SENSOR INSTALLATION (IF APPLICABLE)

Place the OEM wiring harness into the new bumper, threading the wiring through so that connectors match their respective positions. Make sure the wiring harness connector is located on the correct side of the vehicle. Reattach all 4 parking sensors to the provided sensor bezels. Avoid placing the wiring harness near mounting holes and visible cutouts. Mount any aftermarket lights at this time.

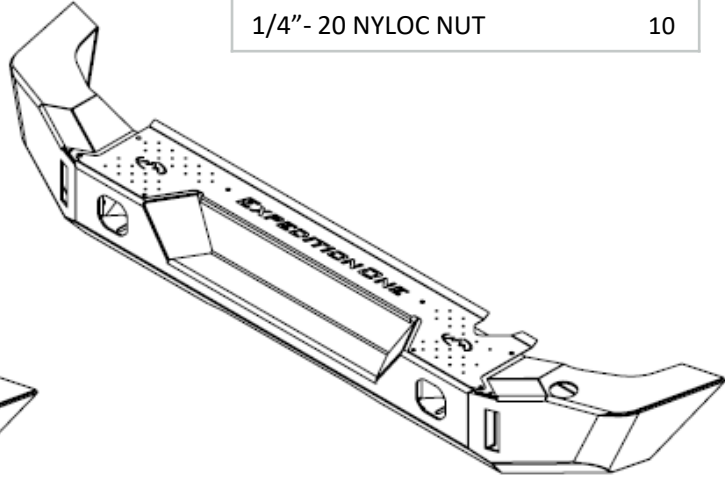
NOTE - The license plate will be relocated to the tire or another place of your choosing. The wiring for this can be extended at this point. We do not provide any hardware or parts for the wiring.

5 TREAD PLATE INSTALLATION

Mount the tread plate as shown using the provided 1/4"



1/4"-20 X 3/4" BUTTON HEAD	10
1/4"- 20 NYLOC NUT	10



6 NUT RETAINER BRACKET LOCATION

Place the provided nut retainer brackets inside the frame as shown.



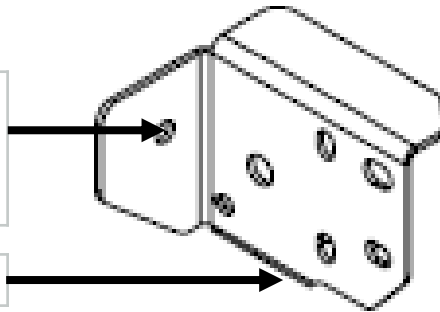
7 MOUNTING BRACKET

Attach the mounting brackets to the vehicle as shown using the provided 1/2" hardware and bottom OEM hardware. Leave all hardware loose for adjustment, this just to hold the bracket in place for mounting the bumper



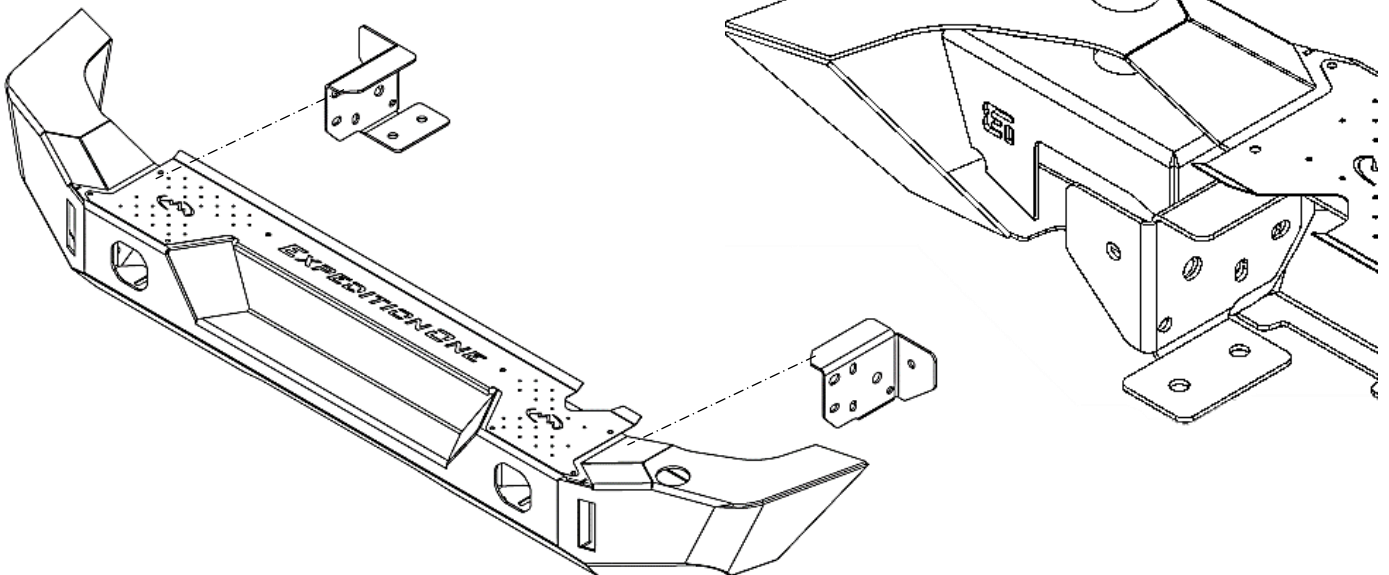
1/2" – 13 X 1 1/4" HEX CAP BOLT	2
1/2" – 13 NYLOC NUT	2
1/2" USS WASHER	4

OEM HARDWARE	4
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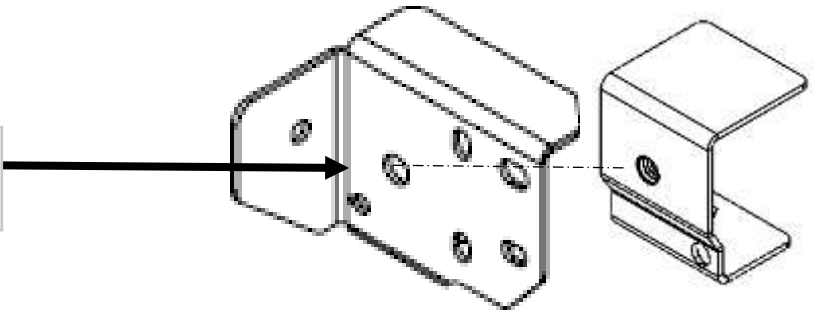
8 INSTALLATION OF THE REAR BUMPER

Mount the bumper as shown.

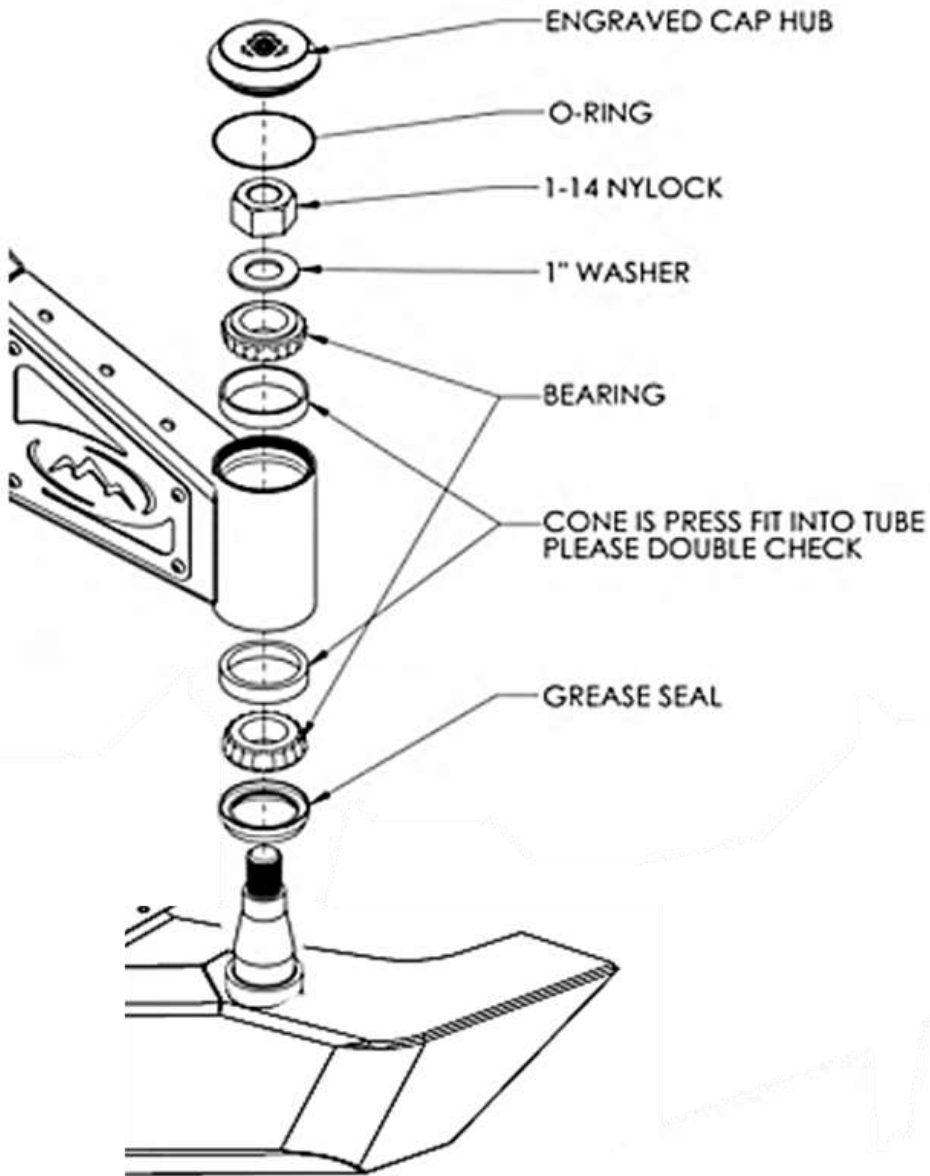


Use the 5/8" hardware to mount the bumper to both the nut retainer and mounting bracket.
Leave all hardware loose for adjustment, this just to hold the bumper in place for mounting
the swing arm. The bumper will rotate on this axis, be mind full it may pitch into the body.

5/8" – 11 X 1 1/2" HEX CAP BOLT	2
5/8" USS WASHER	2



SWING ARM MOUNTING



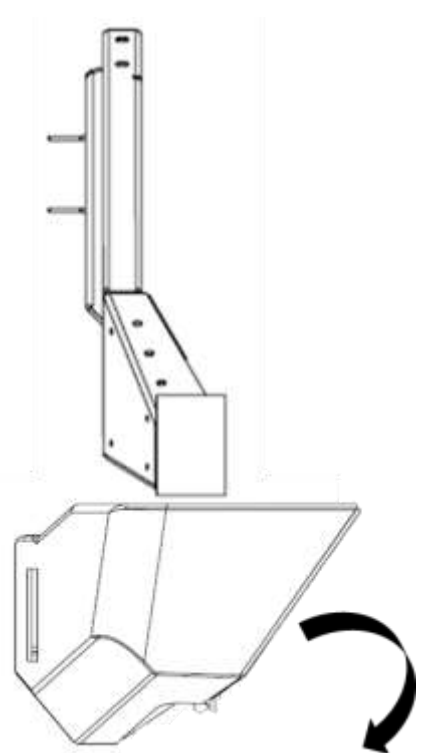
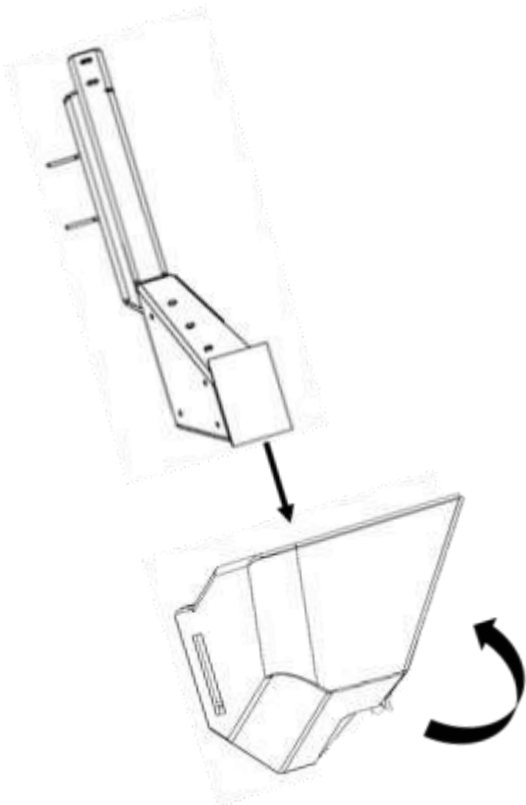
9 BOTTOM BEARING AND GREASE SEAL

Grease Bearings using marine-based lithium grease. Install the first bearing into the bottom of the swing arm. Then place a grease seal inside the bottom of the arm.



10 SWING ARM INSTALLATION

Rotate the bumper up and out to allow clearance for attaching the swing arm. Place the arm on the spindle and move the arm until it falls into place. Once in place, rotate the bumper back into position. Insert the top bearing in the hub.





11 SWING ARM MOUNTING

Place the washer into the swing arm, then insert the nut over the bolt. Tighten the nut using a 36mm socket. Don't over tighten to prevent binding.



12 HUB COVER

Ensure that the inside of the spindle and its contents are coated thoroughly. Check that the hub cap has a O-ring and spread anti-seize around the cap thread before tightening on the arm.

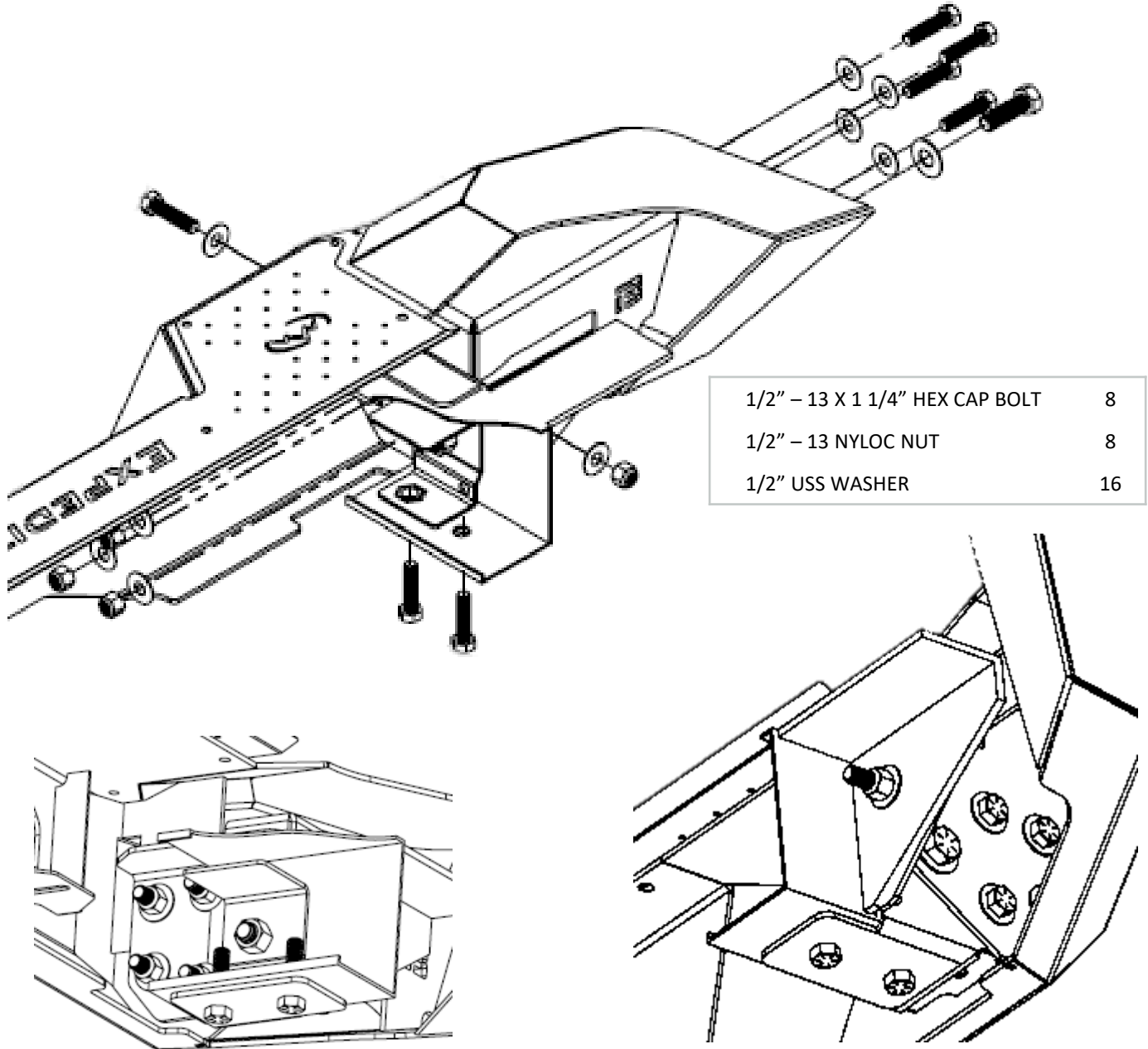


USE 36MM SOCKET FOR NUT

Always be sure to use the anti-seize when installing and re-installing your hub cover, otherwise removal will be very difficult! Remove your hub cover and check inside your hub assembly regularly. If you live in a dry climate and of-road a "standard" amount, we would recommend you check your hub assembly at least once per year. If you live in a wet climate, humid climate, or a climate with extremes, we would recommend you check your hub assembly quarterly or with season changes. Climates with heavy salt content are some the harshest conditions on your components and may need to be checked more frequently. Regrease as needed.

13 INSTALLATION OF REAR BUMPER

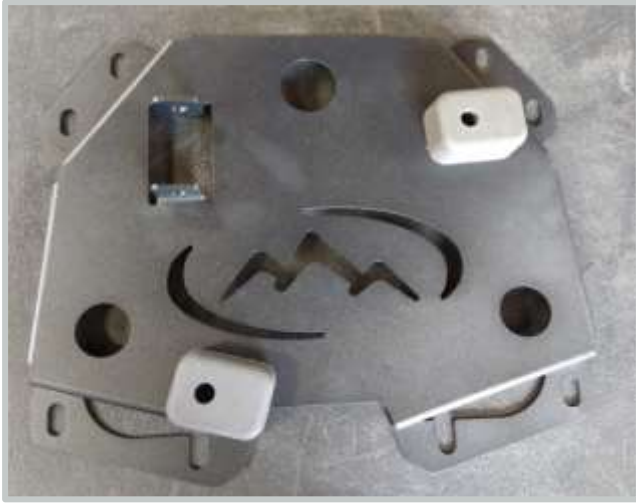
Place the swing arm out of the way or safely place against something while continuing to mount the bumper. Center the bumper with the vehicle and align gaps between the body and bumper to your preference before mounting. Mount the front bumper using the supplied 1/2" hardware as shown below. Use the 5/8" hardware to mount the bumper to both the nut retainer and mounting bracket. Leave all hardware loose for adjustment.



14 DOOR PLATE MOUNTING

Attach the bump stops to door plate locations as shown below using the provided hardware.

Mount the door plate using the original OEM hardware. Leave hardware loose for adjustment.

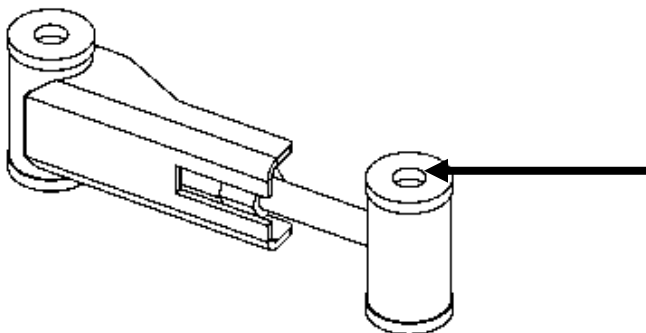


15 SWING ARM ATTACHMENT

Connect the swing arm and door as shown using the provided hardware and coupler with spacers.

Overall, you want the carrier to be snug against the rear door. The coupling joints are the key to this. With the rear gate and carrier in the closed position, you can now start the adjustment of the coupling joints. You may need to adjust the height of the coupling joints with the spacers so it doesn't bottom-out. NOTE: The door and the carrier swing at slightly different angles. With the tire carrier installed and the door in the closed or almost closed position, the bump-stop needs to be making contact with the door. Adjust the coupling so that when the door is open and closed the bump-stop initially contacts the door mount plate on the tail gate (this may need to be adjusted later when the spare tire is mounted to the carrier). The door will naturally want to raise up due to its design and lack of tire mounted on it. Adjust the bumper pitch and height in combination of getting the door to align. You want the carrier to shut and be snug but not overly tight. If the door swings with little or no binding the installation can now be completed. Check the swing of the arm, if there is little or no binding you may finish the install and tighten all hardware.

Recommended: use water resistant grease in fitting the coupler bolts.



1/2" – 13 X 3 1/2" HEX CAP BOLT	1
1/2" – 13 X 4 1/2" HEX CAP BOLT	1
1/2" – 13 NYLOC NUT	2
1/2" X 1.125 SAE WASHER	4
ALUMINUM ROUND SPACERS	2



NOTE – May require the adjustment of the door latch in some cases should the door still lift. Loosen and adjust the latch to as needed. Bumper pitch and height may be a combination in getting the door to align. Retighten once the door properly swings with the arm attached.

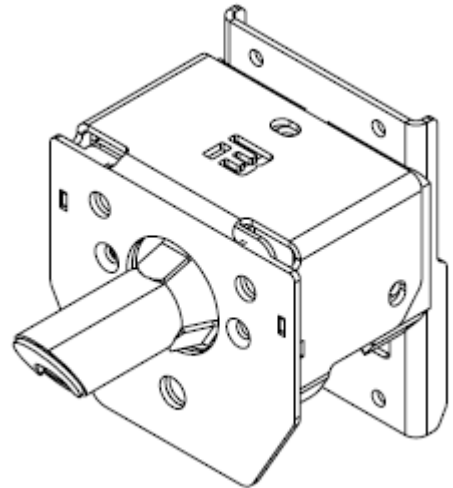
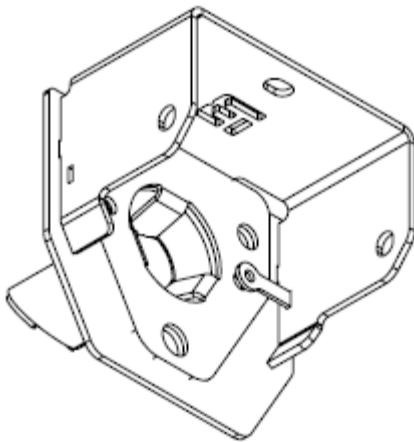
DO NOT OVER TIGHTEN THE COUPLER - Check that the door and swing arm are not binding and are adjusted accordingly. Some movement in the carrier is normal as both the door and swing arm are separate items. Do not over tighten mounts or modify items to compensate for this. Check bearings and seal regularly for maintenance.

16 CAMERA RELOCATION

Remove the OEM plastic camera housing from the original spare tire mount. Once removed, cut or bend the tabs and old mounts from the camera base for install into the new relocation bracket. The top portion will need to be trimmed to fit behind the new bracket

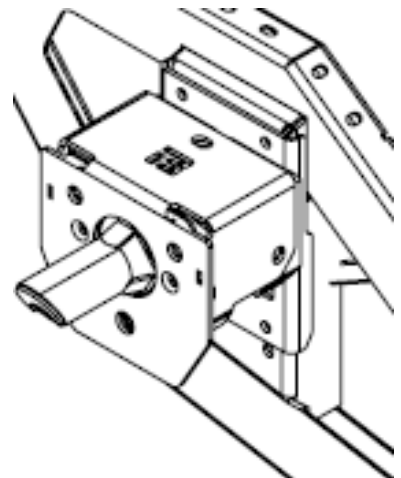
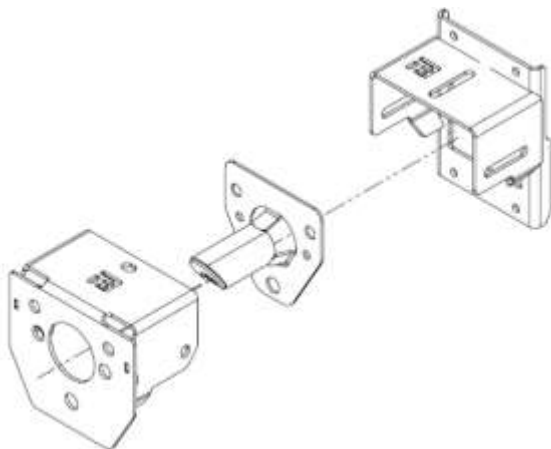


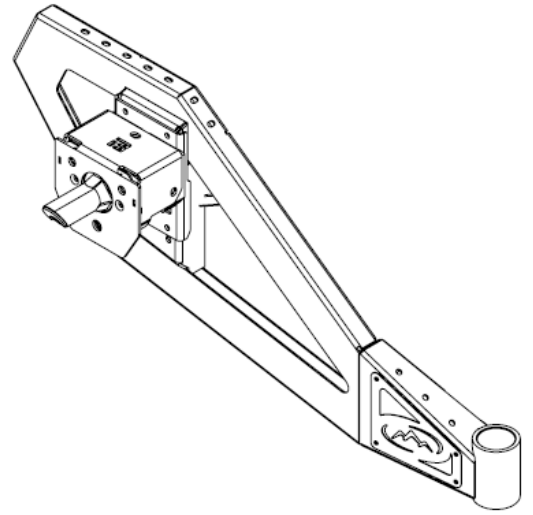
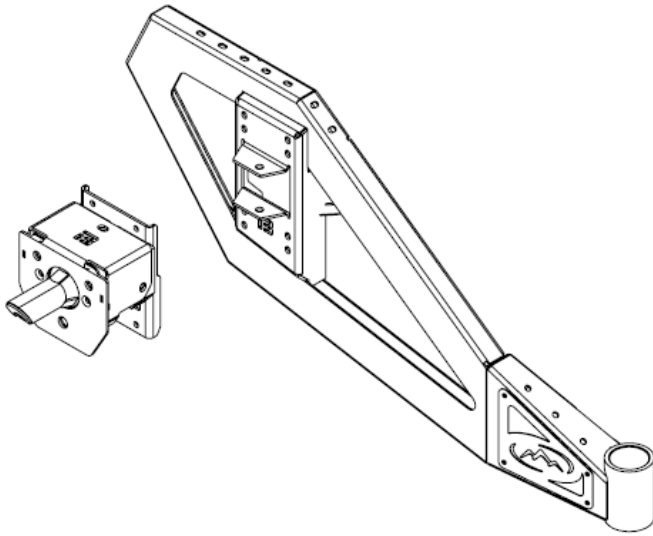
Mount the camera to the plate using the OEM hardware and provided key hole spacers inserted into the tire mount.



17 TIRE MOUNT

Attach the tire mount to the swing arm door as shown below. Mount using the provided 3/8" and 1/2" hardware to the highest mounting position.





18 SPARE TIRE

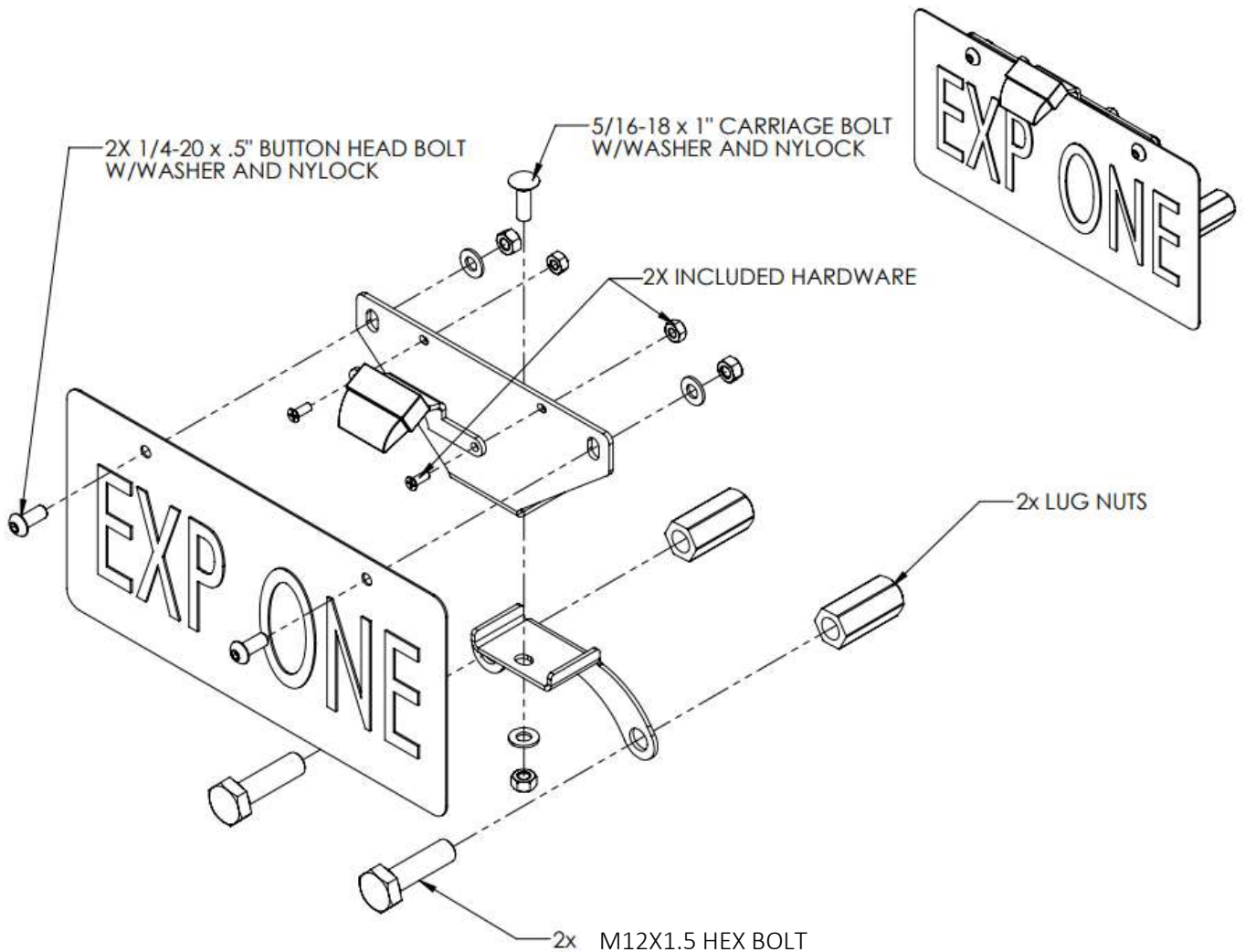
Mount the spare and install the license plate relocation in the next step if desired

NOTE - A narrow wheel with an extreme positive offset or a very wide tire may not work with the standard tire mount. Aftermarket fitments vary and may not match the provided pattern or studs sizes.

19 LICENSE PLATE RELOCATION OPTION

Assemble the license plate relocation as shown using the provided hardware.

NOTE - The license plate can be relocated to the tire or another place of your choosing. We do not provide any hardware or parts for the wiring.



20 TIGHTEN ALL HARDWARE

Check that all hardware is tightened including all brackets and mounting locations.

21 RECONNECT WIRING HARNESS

Reconnect the parking sensor wiring harness to the vehicles electronics and secure all loose wiring. Check that everything is working and adjust if needed before driving on the road.

TIGHTEN ALL HARDWARE AFTER EVERYTHING IS INSTALLED ON THE VEHICLE.

CHECK AND RETIGHTEN ALL HARDWARE AFTER THE FIRST 100 MILES AND AFTER OFF ROADING.

CHECK REGULARLY

ADDITIONAL LINKS

<https://www.exp-one.com/wp-content/uploads/2016/10/Proper-Care-and-Maintenance.pdf>

<https://www.exp-one.com/wp-content/uploads/2016/10/Paint-touch-up-instructions.pdf>

<https://www.exp-one.com/wp-content/uploads/2018/02/Exp-One-2016-TC-word-doc.pdf>