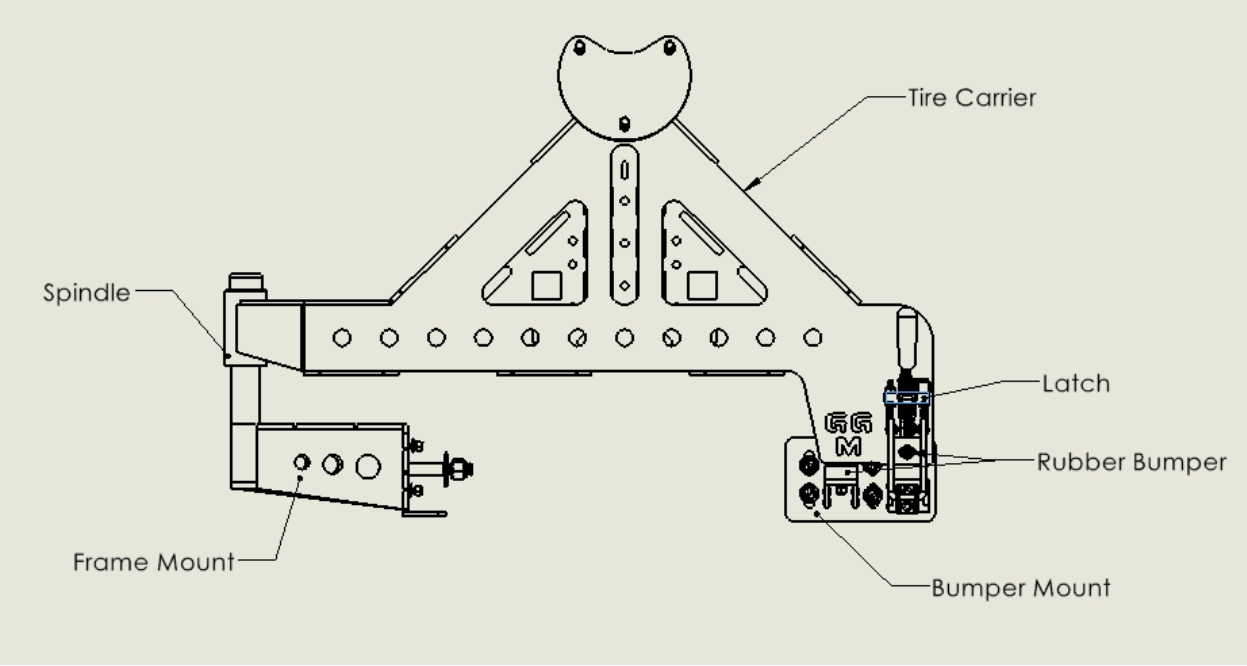
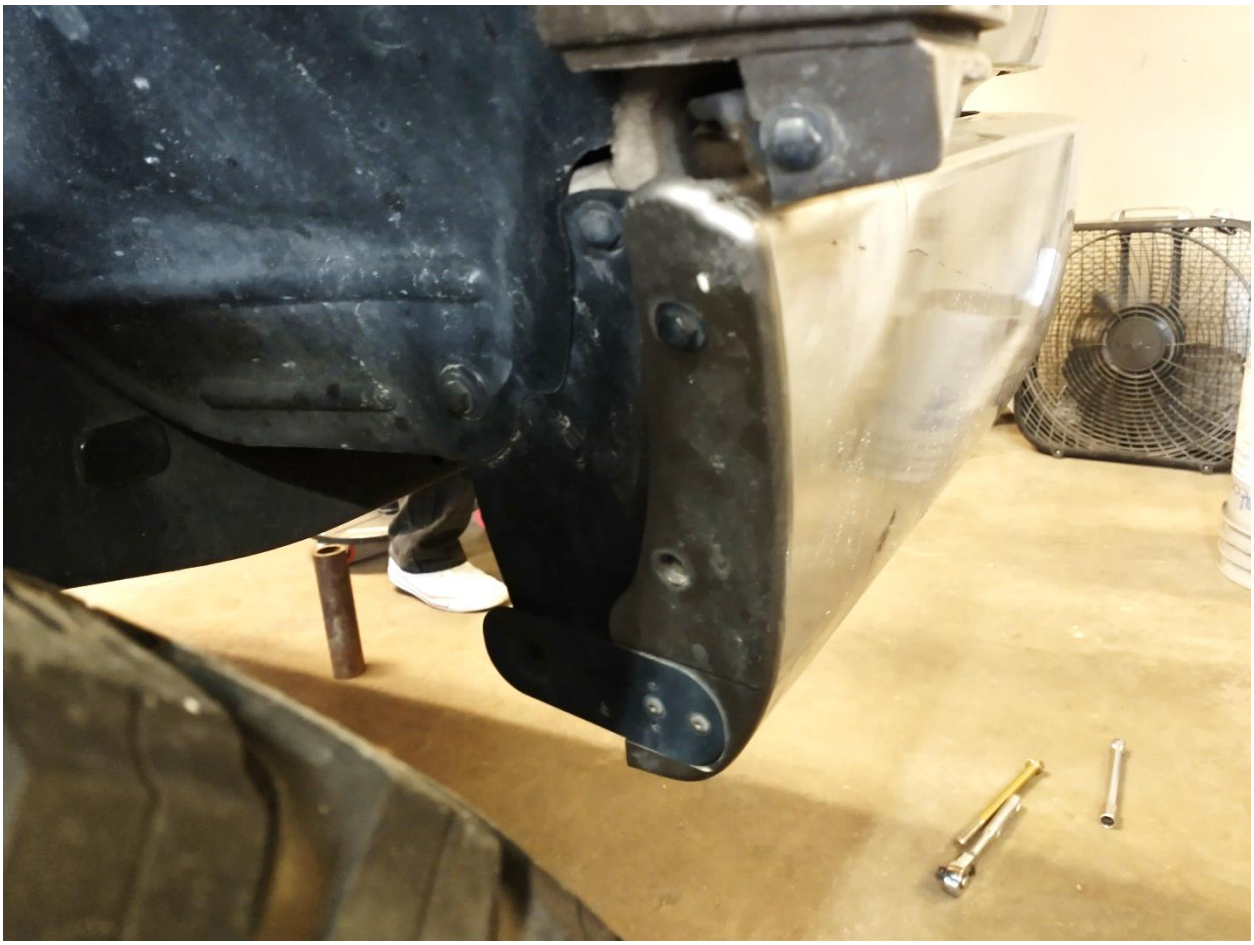
REV 2

Please use caution when handling your tire carrier and parts. We do everything we can to deburr and remove sharp edges but there still may be some present. Some light cutting and drilling is required and should be performed by a confident technician. General Green Manufacturing is not liable for improper installtion, procced at your own risk. Email with any questions at generalgreenmanufacturing@gmail.com.

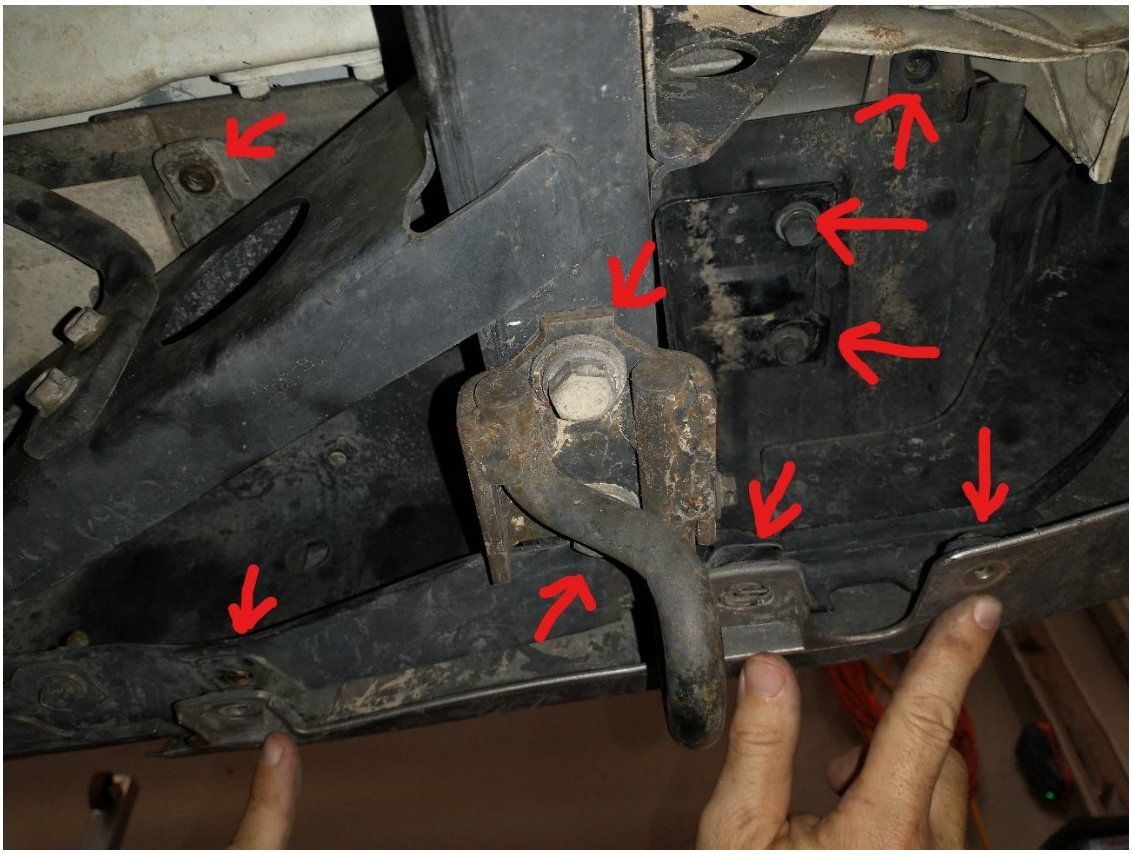


First step, remove platic corner of bumper

There are 3 screws to remove on the front close to the tire

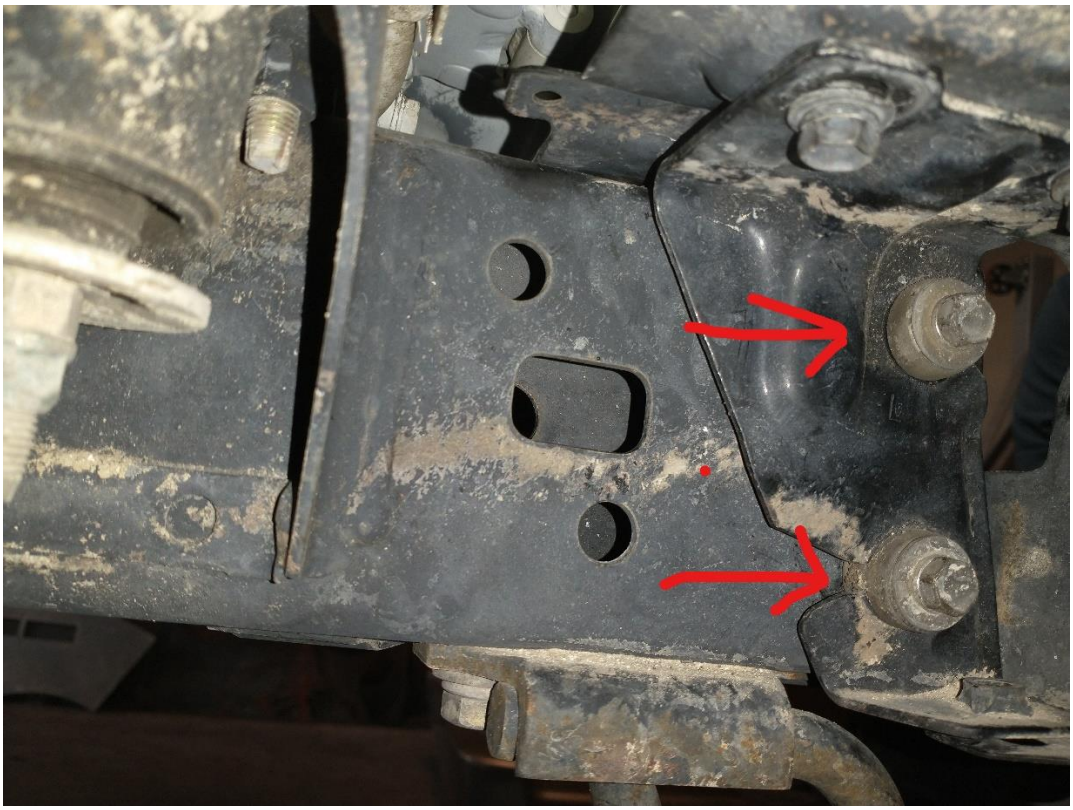


Remove the recovery hook and other bolts shown here. There are many that may be easy to miss, take your time.



There’s a stud with a nut that needs to be removed.

On later models, there are two bolts attaching this bracket to the frame. Remove these 2 bolts. If you do not have these bolts continue to the next step.



Another look at the bolted on bracket for later models. If your bracket is welded to the frame, it will need to be cut off and discarded. It will not be used. Also, if the bracket is not the bolt on version, then holes will need to be drilled into the frame as shown later.

The next step applies only if you are not using the limiting linkage. If you are using the limiting linkage do not use the factory steel bumper bracket and skip this step.

The bracket that the plastic bolts to, will need to be modified. The bracket needs to be cut approximately at the red line shown, the material on the left side of this line can be discarded.

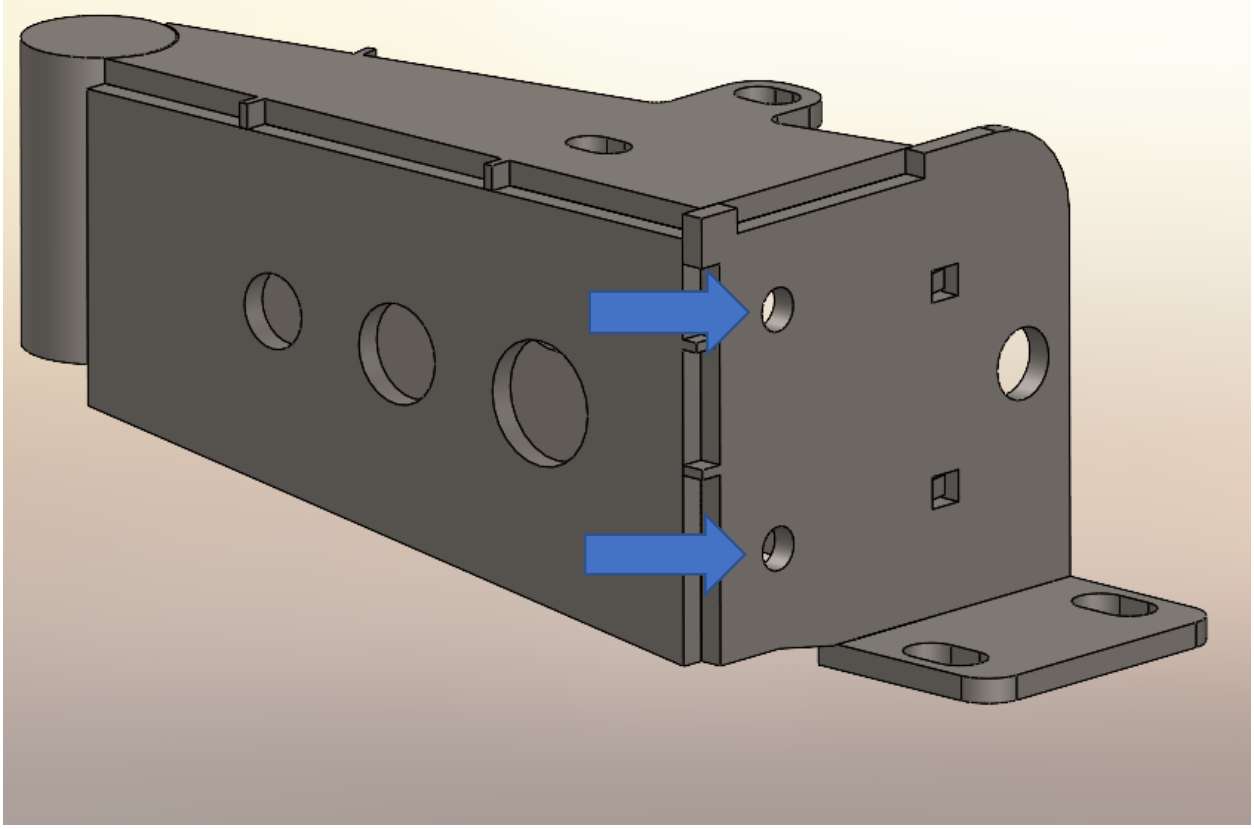
Example of how the bracket can be cut using a angle grinder. This can be accomplished with many different tools.

The now modified bracket will sit against the frame mount of the tire carrier. Ensure the tips of the angled metal are ground down so the bracket can lay flat on the frame mount.

Showing the bracket laying on the tire carrier frame mount

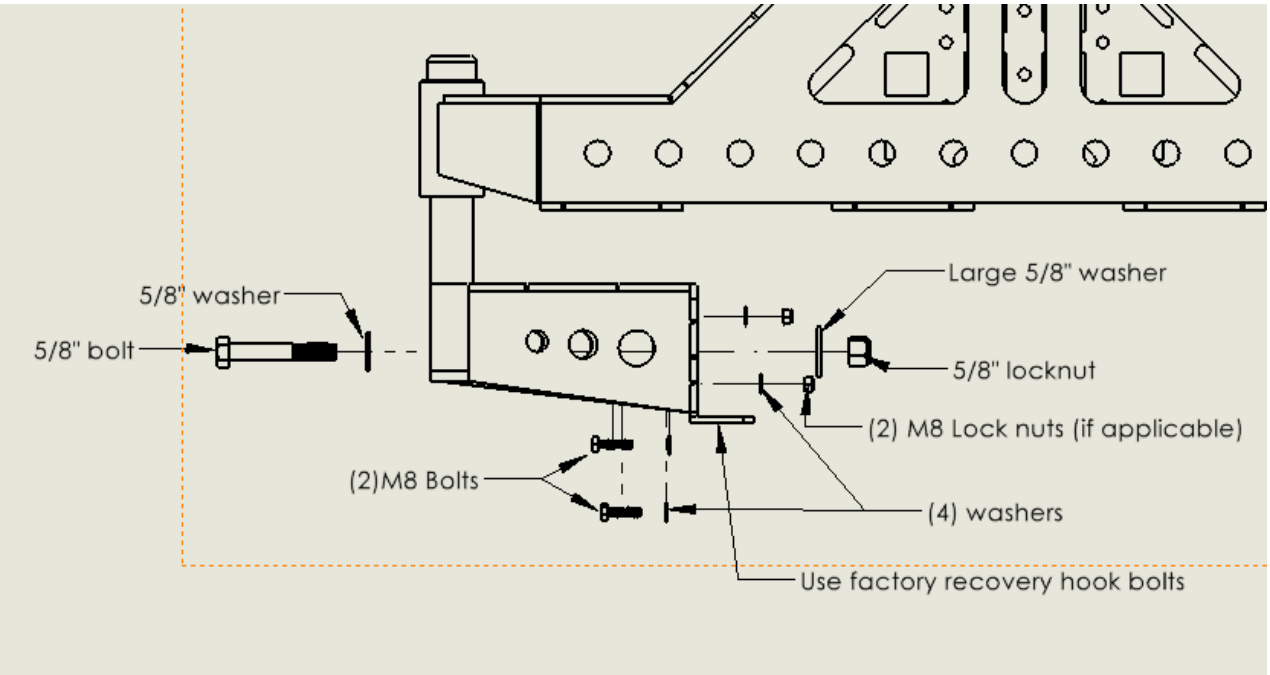
If you did not have holes in the end of the frame and had to cut off the bracket, then two holes will need to be drilled in these locations.

Ensure the side of the frame where the braket was, is clean and flat with no remains of the bracket. Install the frame mount with the provided 5/8” bolt and your existing recovery hook bolts. Ensure the bracket is flush and straight with the end of the frame. Using the frame mount as a guide, mark the hole locations on the side of the frame with a marker. Remove the frame mount, center punch the marked locations and drill a 3/8” hole.

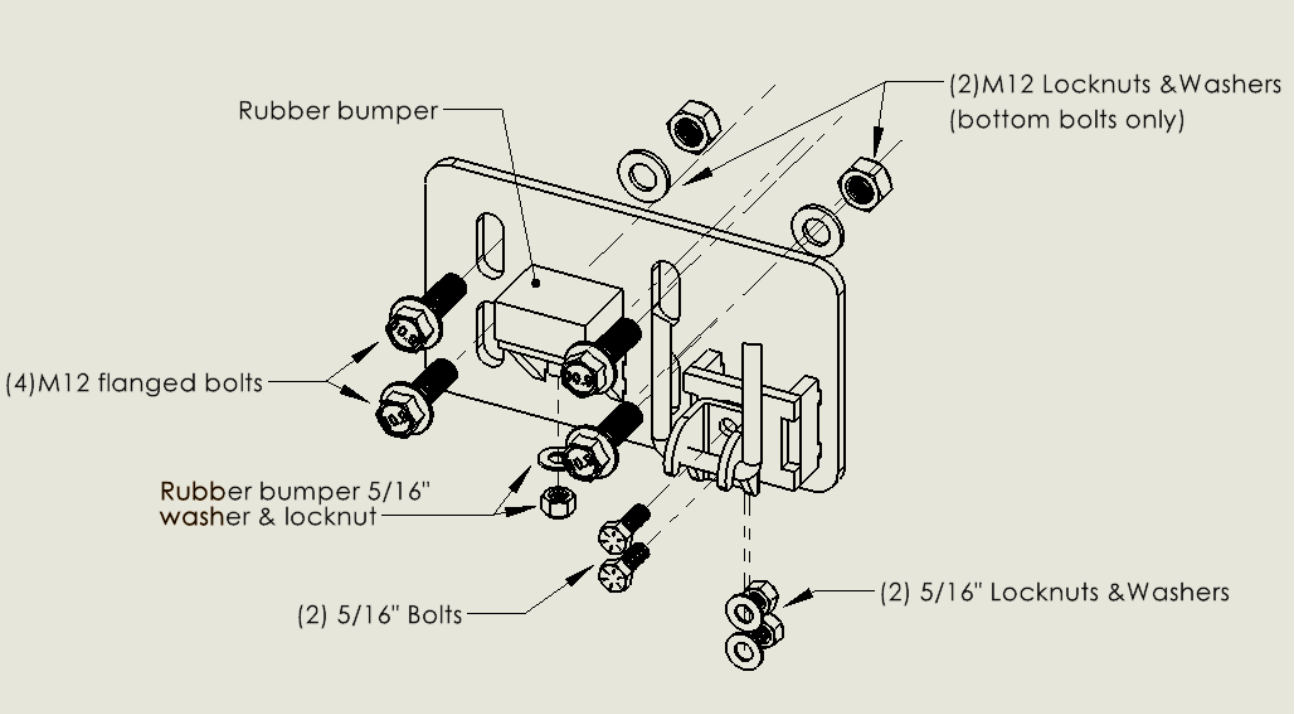


To install the frame mount, ensure the area where the frame mount touches the frame is clean and free of debris. Insert the factory recovery hook bolts on the bottom of the frame through the frame mount bottom slots. Snug these up but not tight to have room for adjustment. The factory recovery hook can be used. Insert the 5/8” bolt with smaller washer through the frame mount. Use the large washer on the inner frame side and locknut. If your bumper bracket was bolted on, use the provided M8 bolts and 1

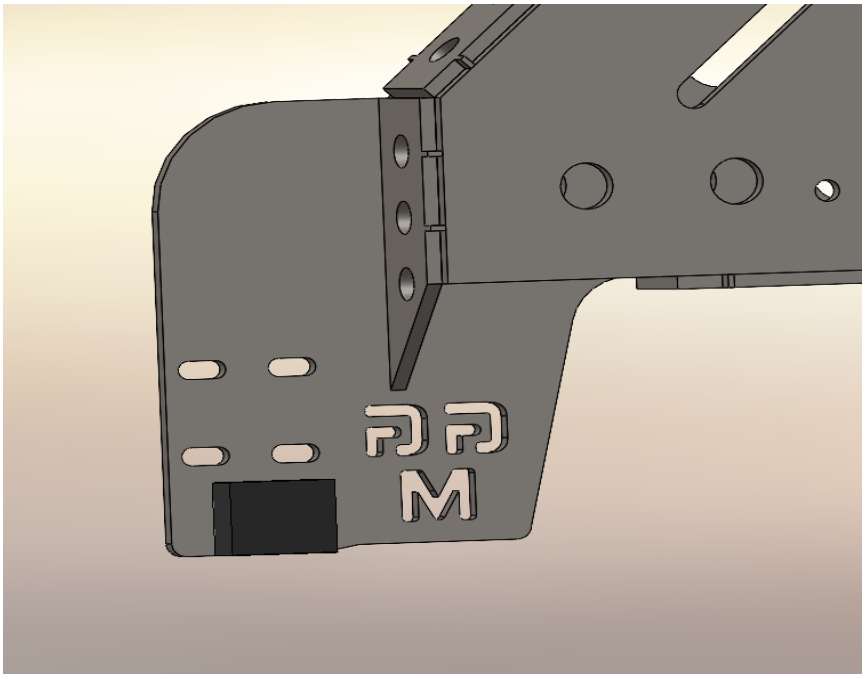
washer each through the holes inside the frame mount and into the frame. If you had to cut the bracket off and drill, use the M8 bolts and locknut with a washer on each side of the frame. Take your time to position the frame mount so that all holes align easily, once aligned, tighten all bolts. Do not over tighten the 5/8” bolt, do not crush the frame. This bolt does not require being torqued to it’s full capacity.

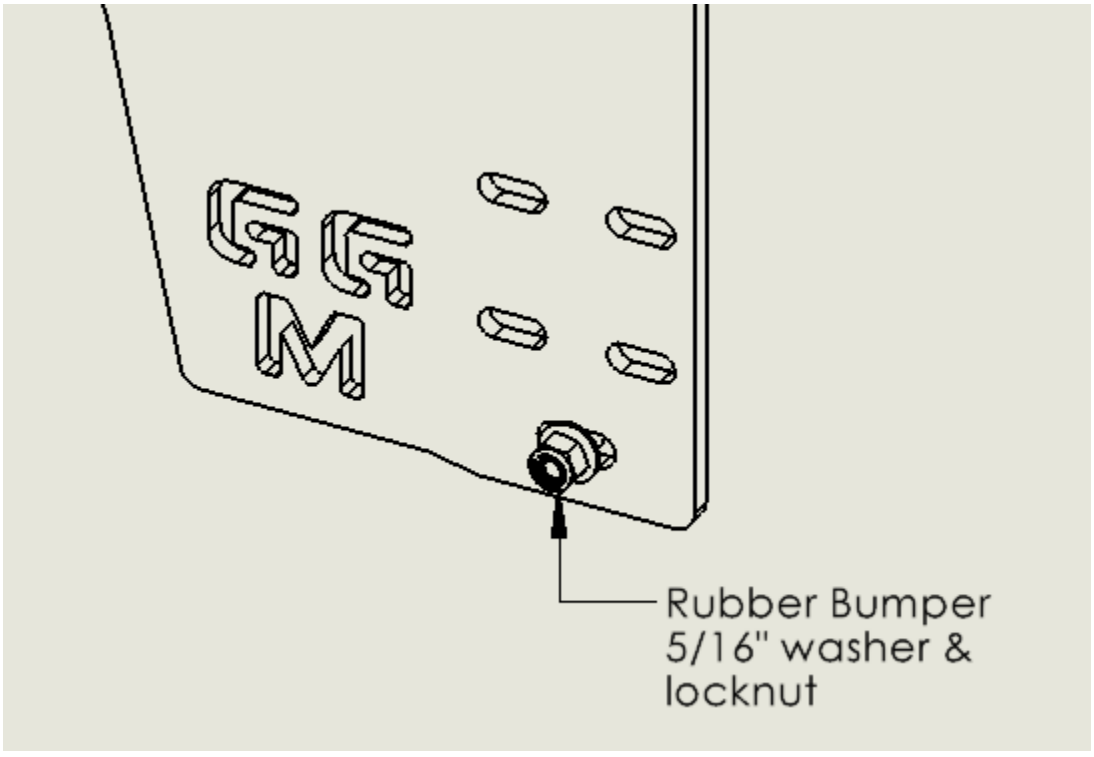


To install the bumper mount. Use the factory threaded holes for the top two mounting holes. Note, these holes may be dirty, try to clean them out and slowly work the bolt in and out to work the threads clean. The bottom two holes are not threaded and will require the provided M12 washer and Locknuts. Snug these bolts, these will be loosened later to adjust the height of the mount. Next install the rubber bumper and latch catch. Do not overtighten the rubber bumper nut.

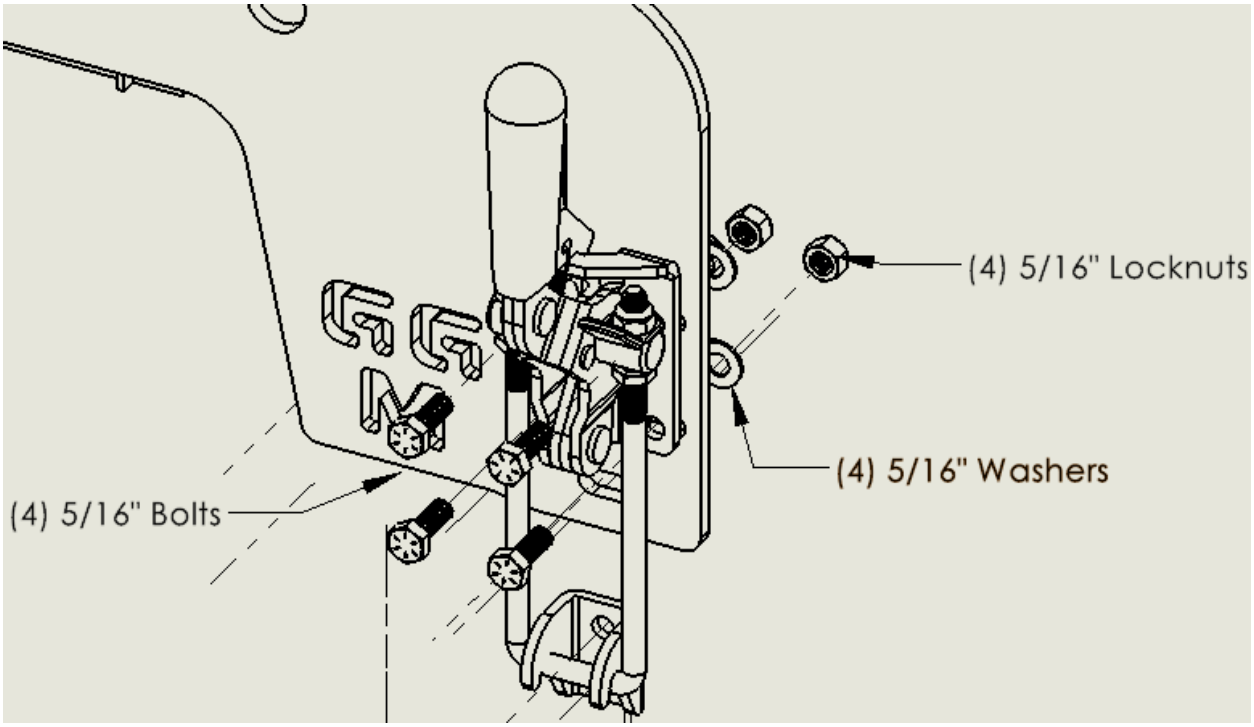


Install the second rubber bumper on the back of the tire carrier ensuring the bottom is parallel with the edge of the tire carrier.

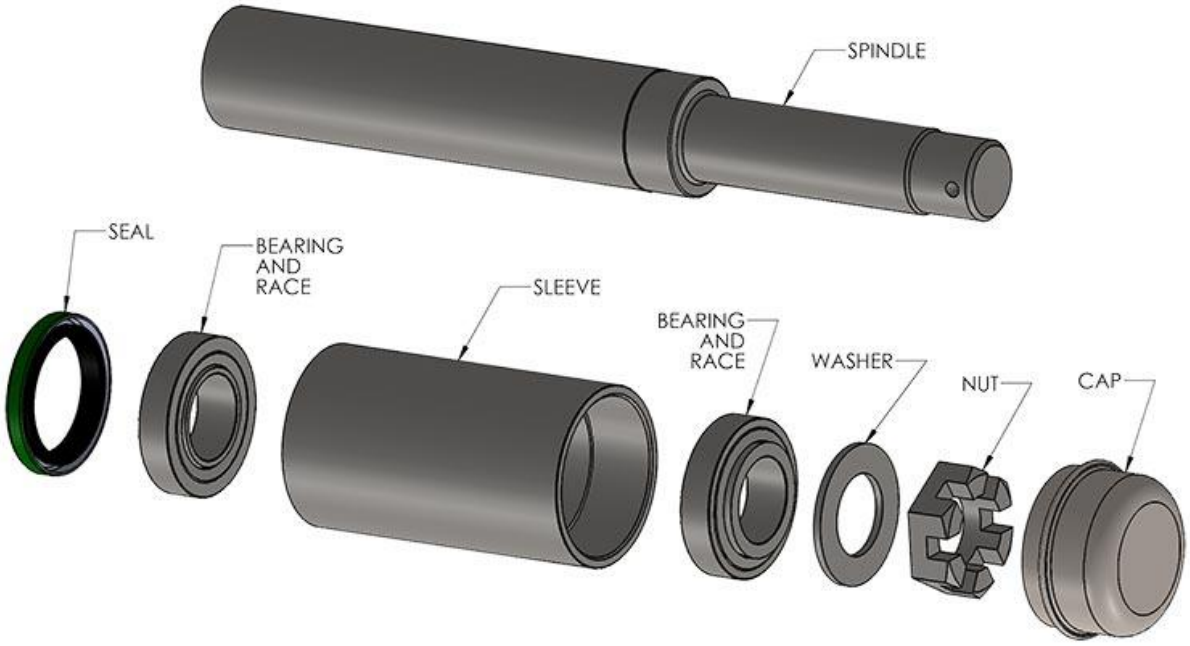




Install the latch, leave loose for alignment later.



Your tire carrier is shipped with the bearing races installed. You will have to install the seal on the bottom of the sleeve. Before you install the seal, it is recommended to hand pack the bearings with wheel bearing grease. To install the seal, first place the bottom bearing into the sleeve. Gently tap the seal into place until it is straight and flush with the sleeve.



To determine hole location for the spindle to pass through the plastic. Install the bumper plastic bracket onto the frame mount using the 2 factory threaded holes and hardware. Use a reference point such as this mounting tab to measure from. This tab lines up with a tab on the plastic so you can measure from both pieces. Measure how far down and over the center of the spindle is to that hole. Draw those measurements of the bumper plastic to find the center point. It is recommended to use at least a 2” hole saw for the spindle hole. The larger size you use, the more room for error in misalignment. We use a 2 1/8”.

Once the hole is drilled in the plastic reinstall the plastic.

You can now gently set the tire carrier onto the spindle. A second set of hands helps a lot here. Once the sleeve is slipped over the spindle set the top bearing in, then washer and nut. Be sure not to let the carrier droop and damage the seal. Tighten the nut until it stops to ensure the bearings are seated, we recommend leaving this nut tight to add some bearing preload to cause a bit of resistance in the swing. Ensure no binding occurs and the carrier swings freely. Insert the supplied cotter pin. Add grease through the zerk fitting and carefully install cap by tapping into place until seated (it’s a snug fit).

Align the latch and latch catch and tighten. The next step should be performed with a tire and all accessories installed to the tire carrier. Adjust the bumper mount up and down until the edge of the tire carrier and the rubber bumper on the bumper mount has a gap of approximately 1/4" when not latched, tighten the bumper mount bolts. Adjust the swinging arm of the latch until when engaged it pulls the tire carrier down **firmly** into the rubber bumper. Test latch engagement and tire carrier swinging. Make sure there is no interference with the bumper.

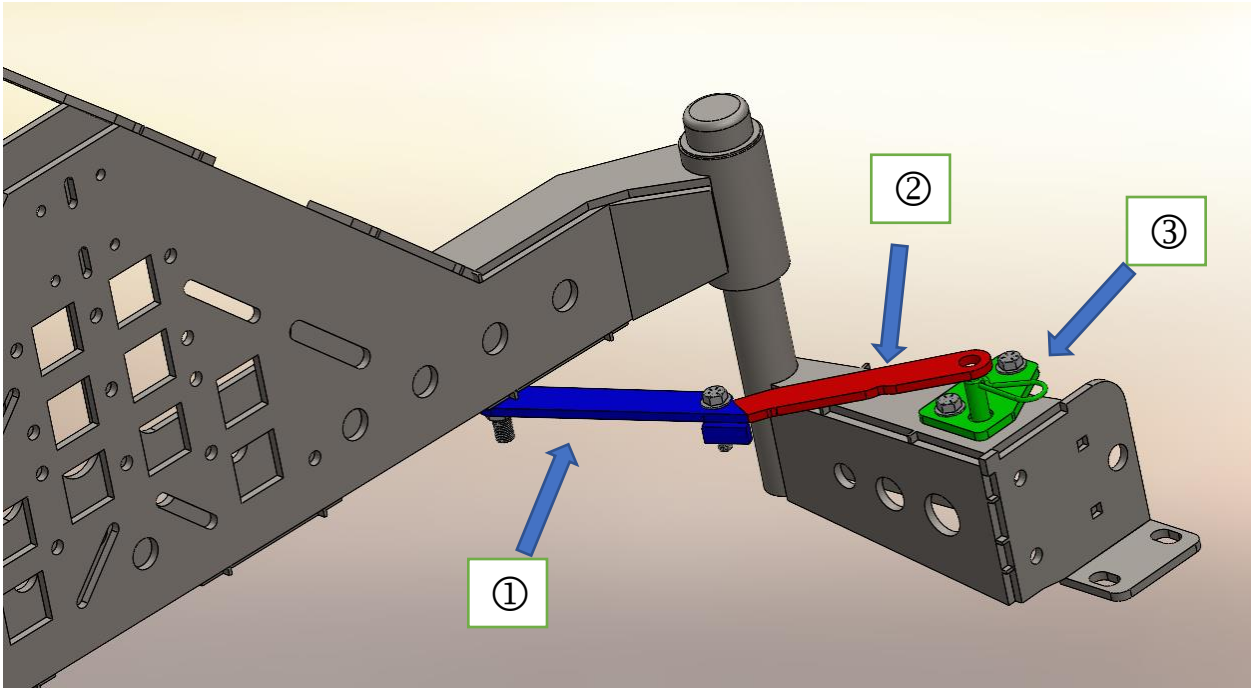
This sections covers the installation of the limiting linkage. The swing out must be installed and operational **without** the plastic installed. Adjustments will be made throughout the installation. **Always open the swing out with caution, do not let the swing out swing freely hitting the stop aggressively!** When opened, the linkage should "lock" by swinging inward on itself, but this is **NOT** guaranteed to happen. To "unlock" pull the linkage towards you and close the swing out. Use with caution!

The parts of the system:

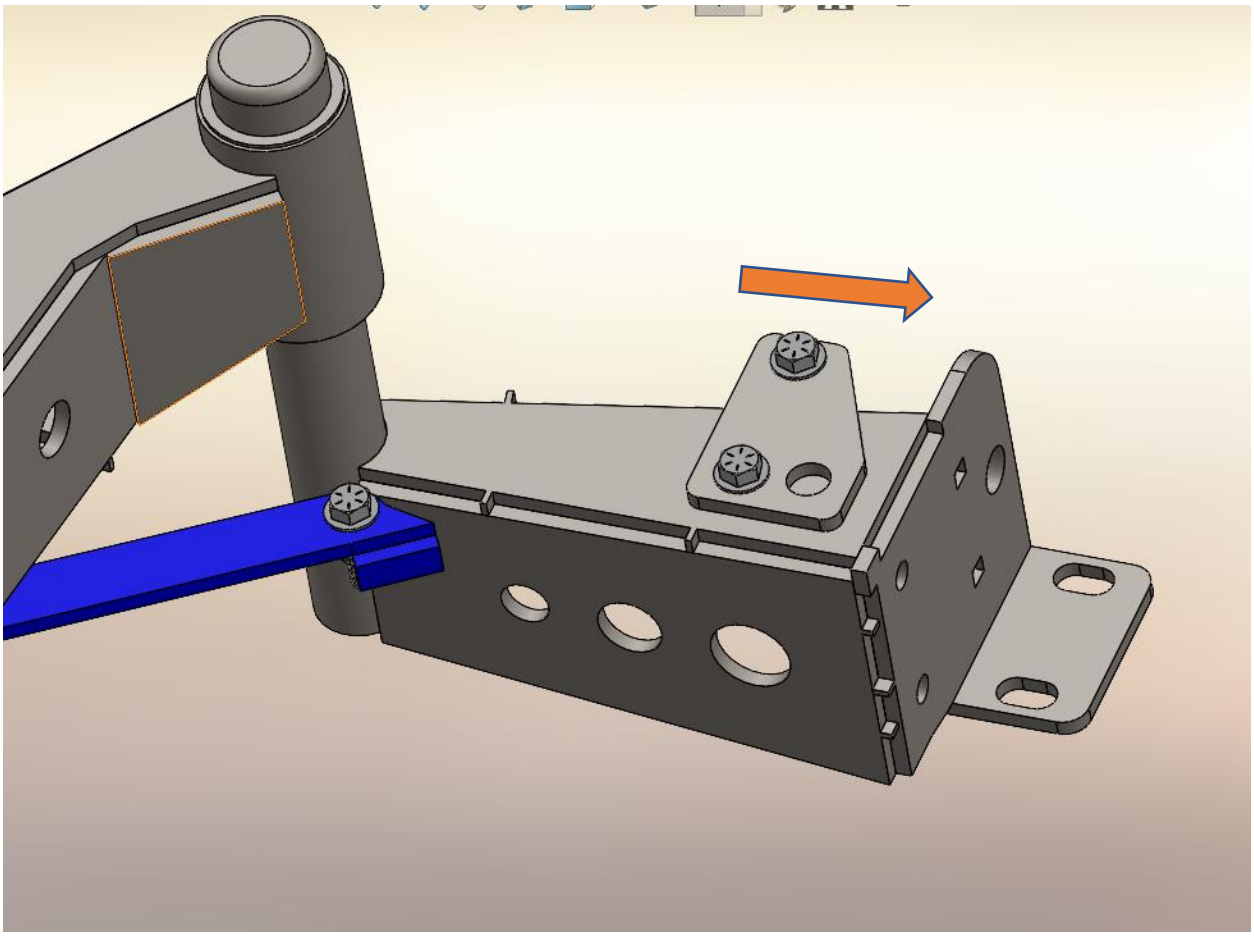
① Tabbed Linkage (in Blue)

② Frame Side Linkage (in Red)

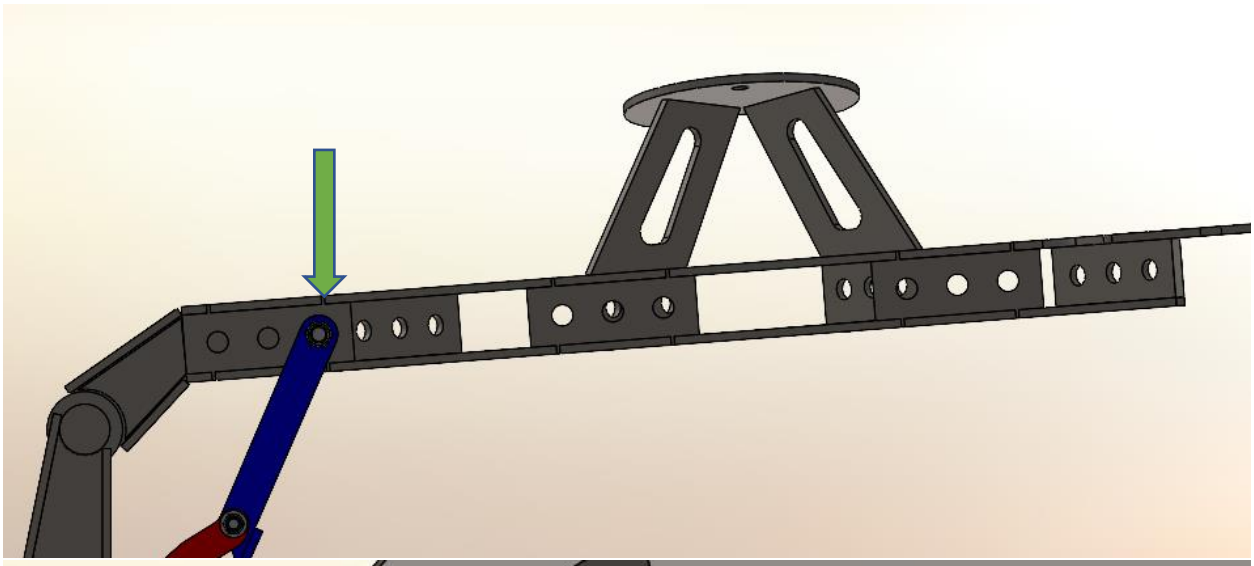
③ Frame Mount Pivot (in Green)

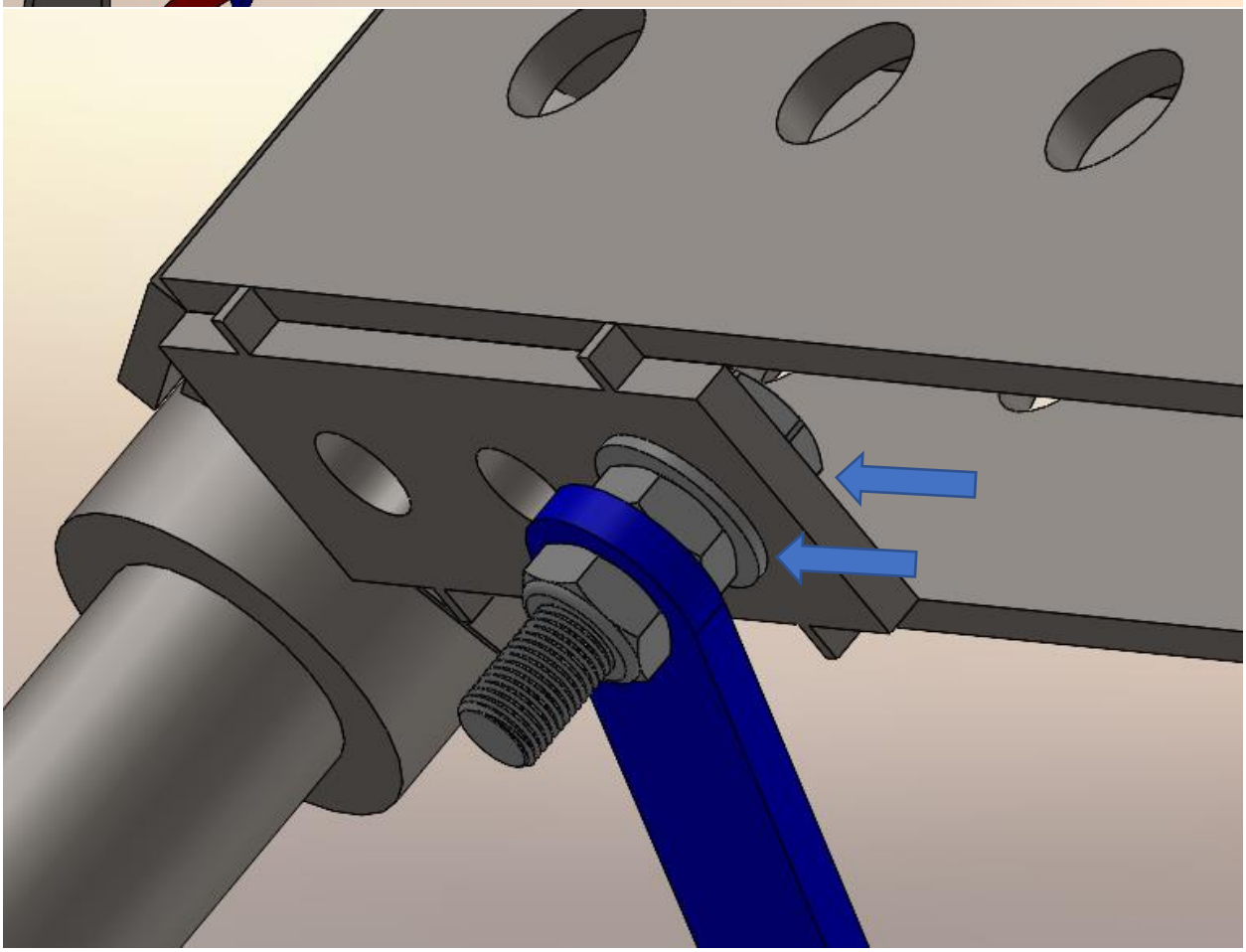


First, start by installing the Frame Pivot to the frame mount using the supplied 3/8” bolts, washers and full sized locknuts. Start by pushing the Frame Pivot towards the center of the vehicle and snug it down.

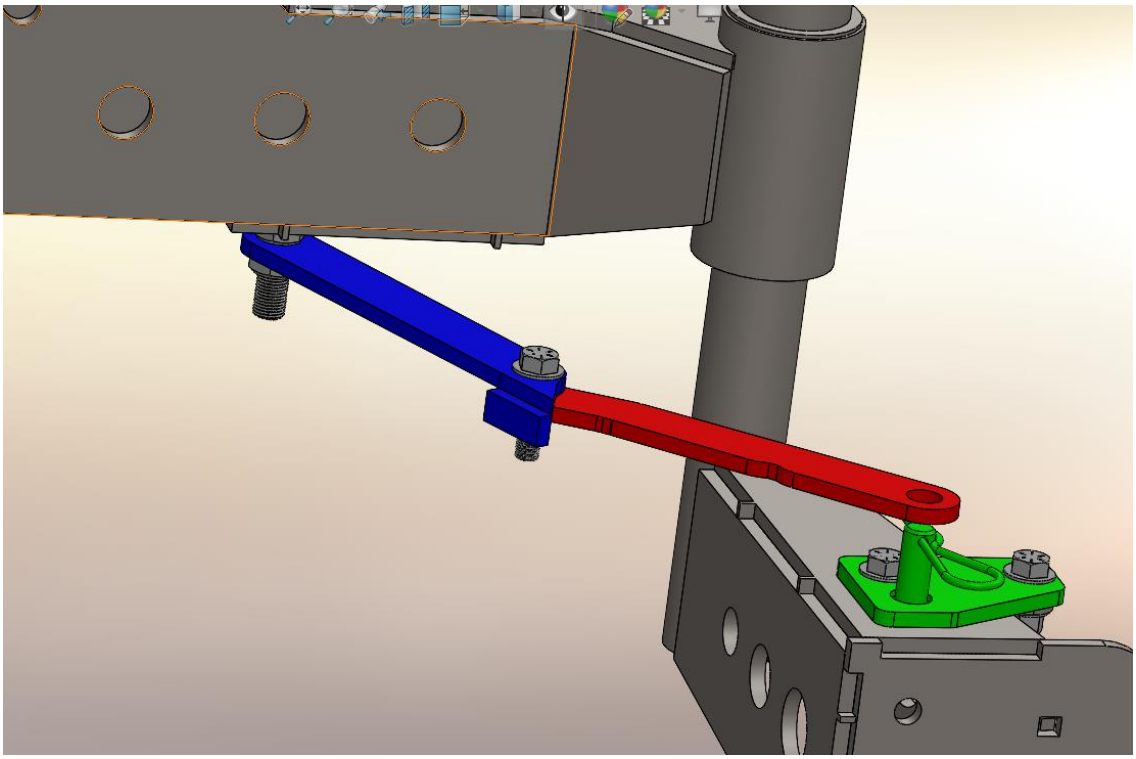


Next, install the ½” bolt into the third hole starting from the inside of the swing out (green arrow). Make sure to use a washer on each side (blue arrow). Tighten.

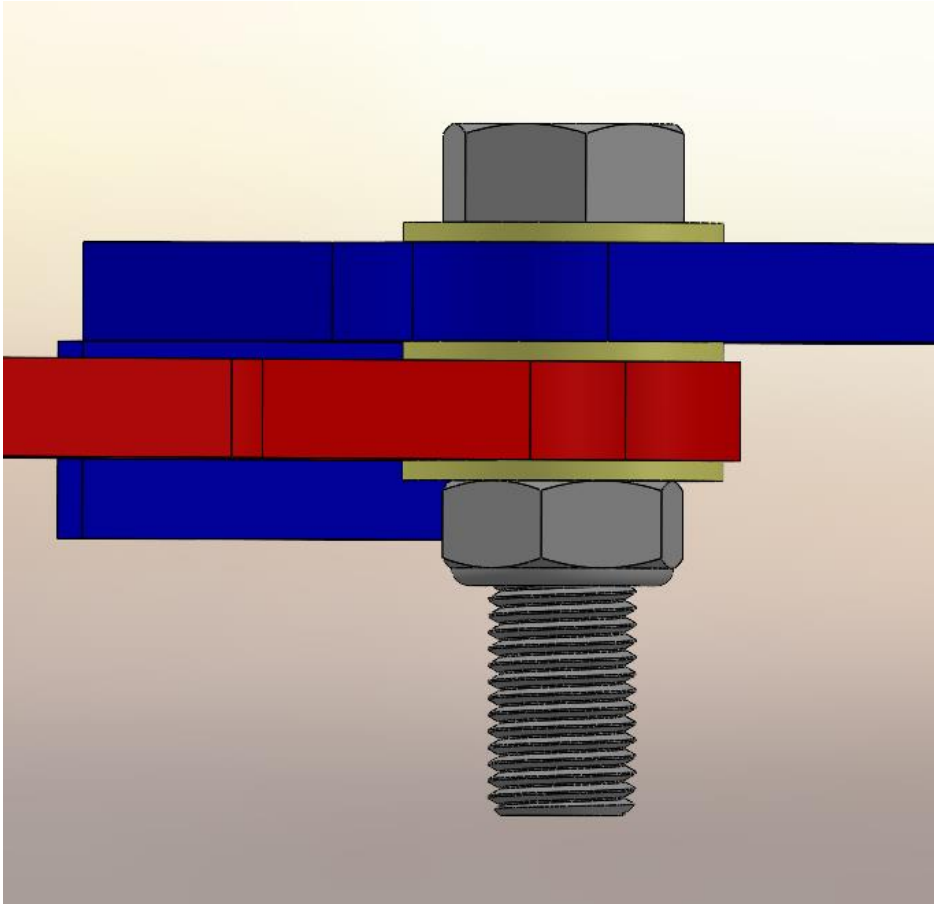




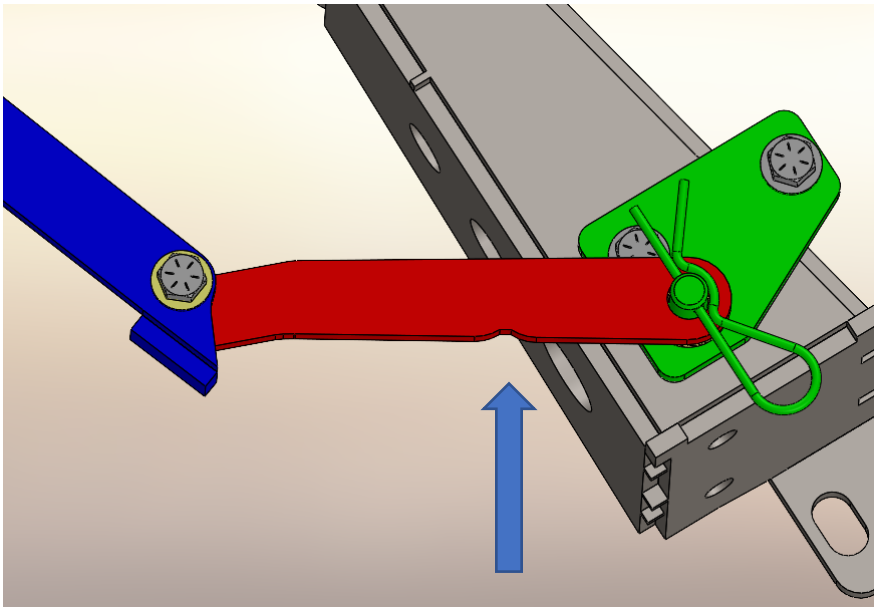
Then add the Tabbed Linkage with the tab facing down and towards you, use the second ½” nut, leave loose. This tab acts as a stop against the Frame Side Linkage.



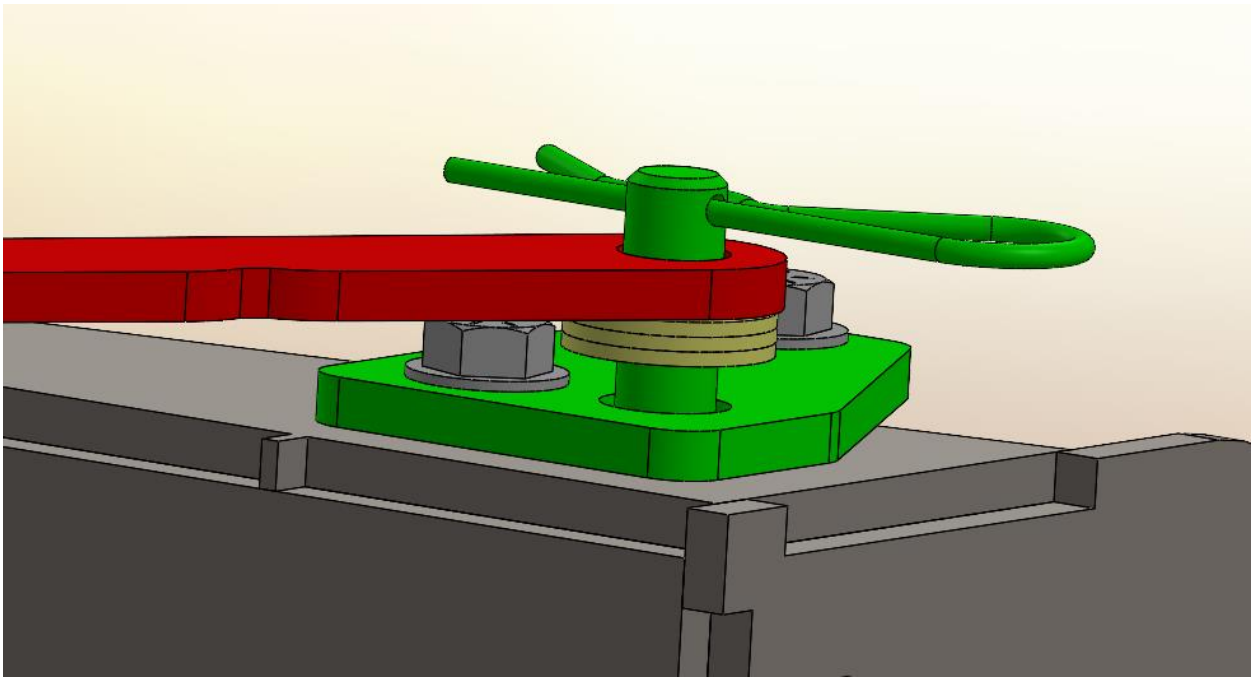
Next, bolt the Frame Side Linkage to the Tabbed Linkage using the shorter 3/8” bolt. Use a washer on the top, in between the linkages and on the bottom. Leave loose.



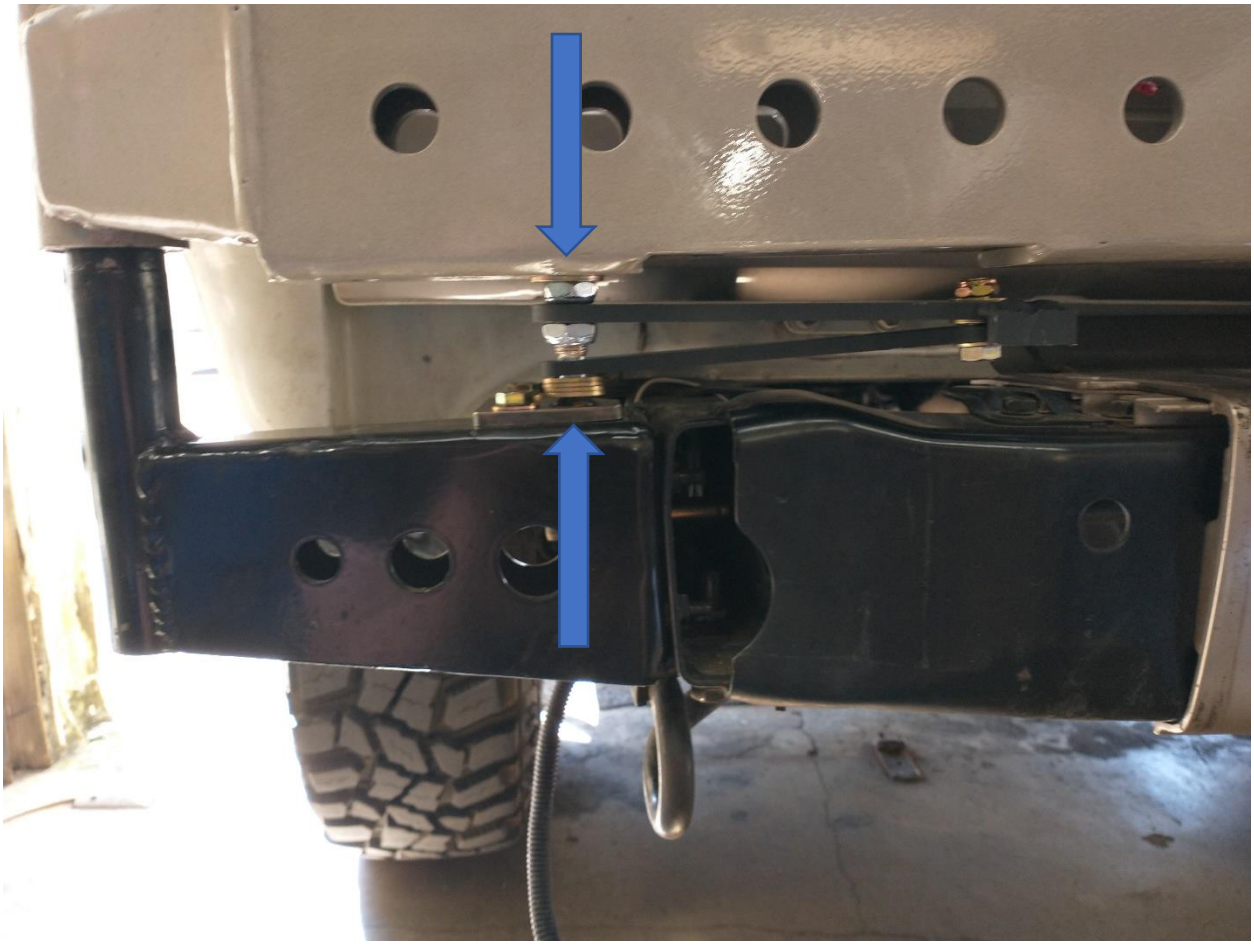
Take note of the orientation of the Frame Side Linkage, there is a small notch indicator. The notch should face you.



Next, place 2 or 3, ½” washers on the pivot point on the frame and attach the Frame Side Linkage.



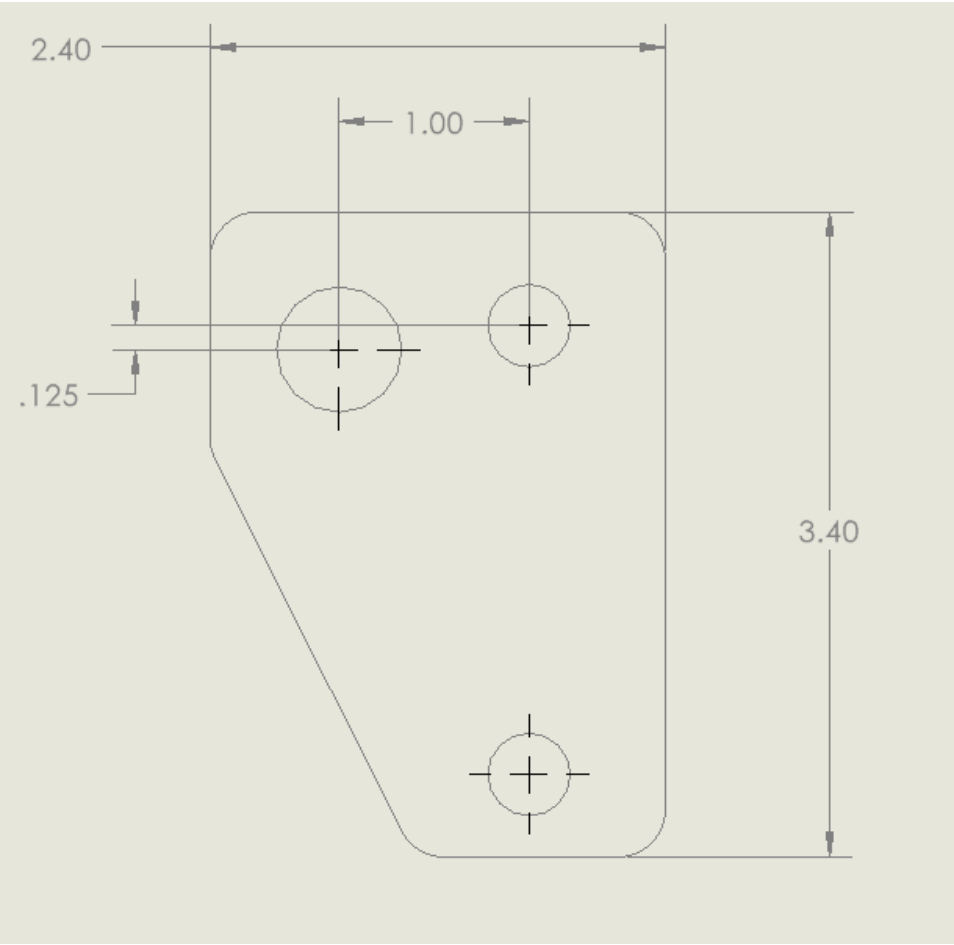
Ensure all pivot points are loose. Now carefully open and close the swing out and check for binding. The linkage should move freely. Ideally, the pivot point on the swing out should align with the pivot point on the frame. When closed the linkage should fit between the swing out and bumper and be close to parallel with the swing out. Some misalignment is acceptable if no binding is present. If needed, the Frame Pivot can be slid over, away from the center of the vehicle. **Warning!** If you do this, the linkage will end up closer to the bumper plastic once installed. Try to keep the Frame Mount Pivot closer to the center of the vehicle if possible.



Once everything is cycling freely, take note of where the Frame Mount Pivot is along the slots and remove. Remove the swing out and reinstall the plastic as best as you can without the factory steel bracket. Using a permanent marker or alike, mark on the plastic where the slots meet from the frame mount.

Remove the plastic and mark the hole for the pivot point. A template can be downloaded from the website to assist in alignment. Otherwise, see the below drawing for layout. Remember the orientation as you flip the plastic over.

Drill a ½" or greater hole, try not to go too oversized because the pivot pin will help hold the plastic in place. **Therefore, be as precise as possible with the placement and drilling of this hole.**



Reassemble following the steps before. Torque the 3/8” bolts on the Frame Mount Pivot to 38 lb-ft. Stack washers on the pivot stud, on top of the plastic until desired linkage height is achieved. Several washers come with the kit to use as adjustment. **REMEMBER to keep the hairpin down flat or it may interfere with the tailgate!** Tighten the nut on the swing out side to bring the linkage upward away from the plastic. The 3/8” bolt at the center pivot should be tightened and then backed off about 1 full turn. Do not over tighten and create drag on the linkage some looseness in the linkage aids with its function.

Ensure all bolts are tight!

Revision History:

Rev 1 Initial release

Rev 2 added limit linkage, note to add bearing preload, note adding tire and accessories when adjusting bumper plate.