



# GX470 HIDDEN SWING OUT

**CONGRATULATIONS ON YOUR JW OFFROAD GX470 HIDDEN SWING OUT PURCHASE.**

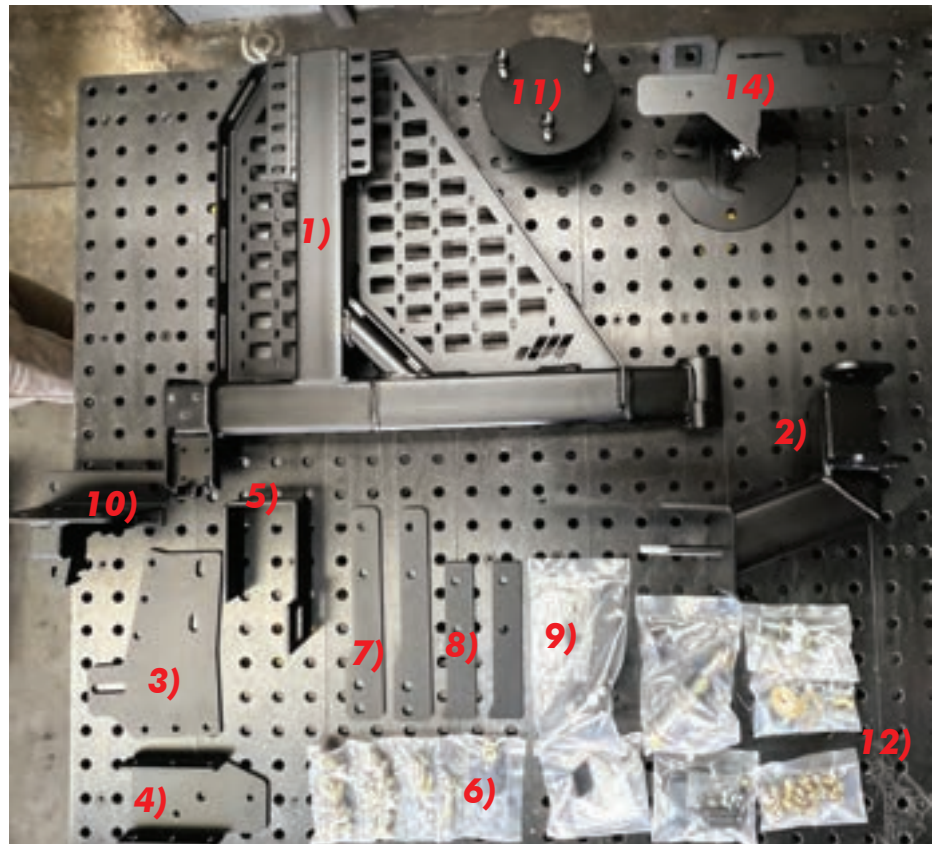
*Our swing out requires no cutting or welding to the frame and utilizes the OEM holes for the best fitment. Our neck is fully adjustable to fit all your needs and all options comes standard with our laser cut molle panels. The swing out was designed to contour the GX body and has an option that still utilizes the OEM hitch so you don't loose any towing capacity making this the best and only bolt on option for this level of carrier.*

## TOOLS NEEDED

**RATCHET, 14MM, 17MM, 19MM, 22MM, 36MM, 1/2", 9/16" SOCKET, EXTENSION, 14MM, 19MM, 21MM, 1/2" WRENCH, MM, 7/32 ALLEN KEY, 9/16" 1/2" DRILL BIT AND DRILL, PANEL PULLER, PHILIPS SCREW DRIVER, T30 BIT, 3/8" NUTCERT, AIR SAW OR DREMEL, GREASE, MASKING TAPE, ANGLE FINDER, RUBBER MALLET, HEAT GUN, WIRE CRIMPER, WIRE CUTTER, NEEDLE NOSE PLIERS**

## INCLUDED HARDWARE

- 1) SWING OUT ARM
- 2) HINGE
- 3) BOTTOM HINGE PLATE
- 4) BACK HINGE PLATE
- 5) C CHANNEL FILLER PLATE
- 6) INNER FRAME WASHER
- 7) HITCH SPACER LONG (DRIVERS SIDE)
- 8) HITCH SPACER SHORT (PASS. SIDE)
- 9) SWING OUT HANDLE
- 10) LATCH BASE (OEM OR NON OEM)
- 11) NECK
- 12) HARDWARE KIT
- 13) BUMPER CUT OUT TEMPLATES
- 14) CENTER PLATE MOUNT (OPTIONAL)



\*INSTALL SKILL LEVEL



3 OUT OF 5

**BEFORE CONTINUING, BE SURE TO KNOW**

**JW OFFROAD IS NOT RESPONSIBLE FOR ANY DAMAGES, MISUSE OF OUR MOUNTS, OR USER ERROR**

## BEFORE YOU GET STARTED

It is recommended that you read through these instructions fully before beginning the installation process. This step will help you understand the entire process beforehand which will make the installation go smoothly. The same process is for the passenger side & drivers side hidden swing out.

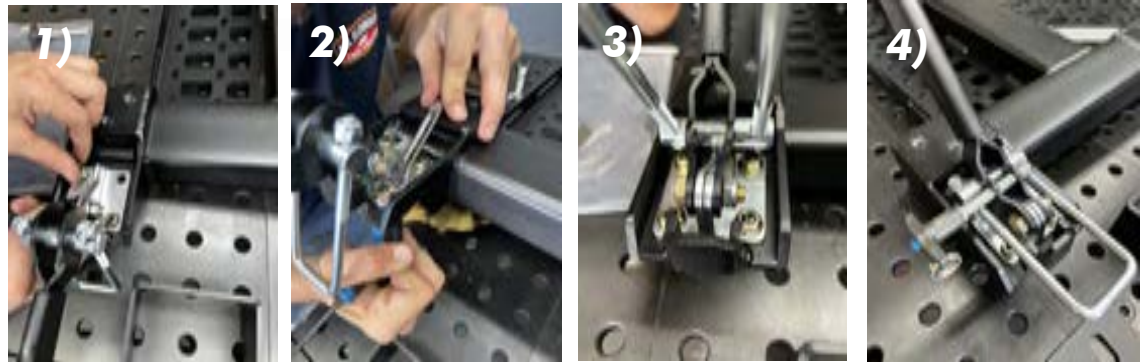
## SUPPLIED HARDWARE

Included in the Swing Away Carrier Kit is a Hardware Package. This Hardware Package is broken up into twelve sections. Each section will be referenced throughout the course of the installation. The separation of hardware will help you with the installation.



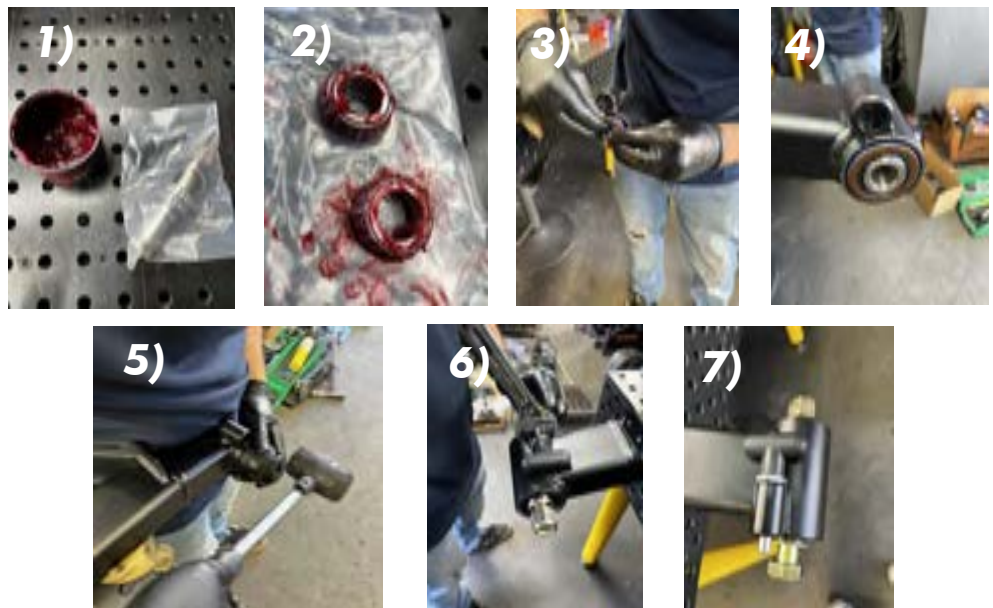
## STEP 1

Prep the swing arm. Need an 11mm wrench and 4mm allen wrench. Grab section 8 from the hardware kit. Grab the 1/4-20 bolts and washers, insert from the bottom of the swing out up through the handle and screw on the nut (figure 1) Tighten with an 11mm wrench and 4mm allen key (figure 2) when finished it should look like figure 3 & 4



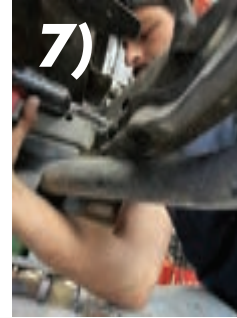
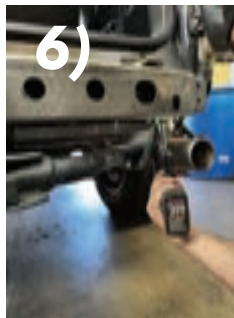
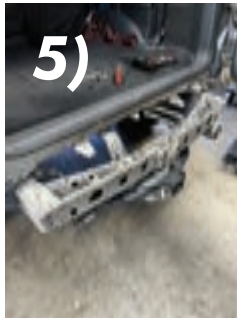
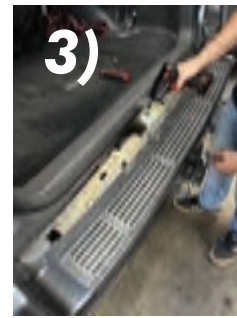
## STEP 2

Greasing the bearings and installing into the swing arm. Need grease and section 11 from the hardware kit (figure 1). Grease the bearings (figure 2). Insert the bearing, alignment bushing then dust cap, should look like figure 4. Hammer in with a rubber mallet but make sure the bearing dust cap is flush with the inside of the bevel. Dont over hammer and push the dust cap too far in. If you knock all the way in, you will have to trim the rubber ring. Grab the locking pin and 22mm wrench. Screw in and tighten locking pin like figure 6. Insert hinge bolt and hand tighten for now to make sure the upper and lower bearings dont fall out. Should look like figure 7.



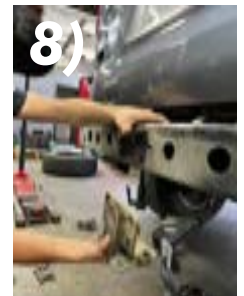
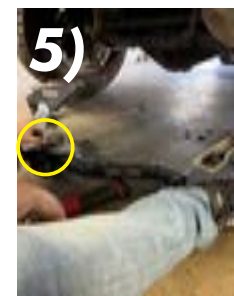
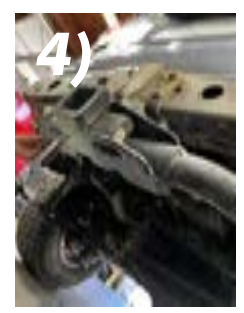
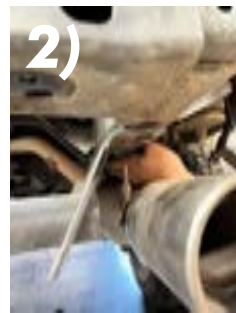
## STEP 3

Remove bumper, foam insert and factory bumper mounting plate. You will need a T30 bit, phillips screw driver, panel puller and a 10mm socket. In the wheel well, unscrew the T30 bolt and phillips screw (figure 1) Open the hatch and remove the 10mm bolt (figure 2). Pull off the plastic cover and remove the 4 bolts. Remove the 2 bolts from under the bumper (figure 4). You can now remove the bumper and foam, it should look like figure 5. Remove factory bumper mounting plate, 1 bolt on the bottom (figure 6) and 2 in the back (figure 7). Figure 8 shows removing the plate.



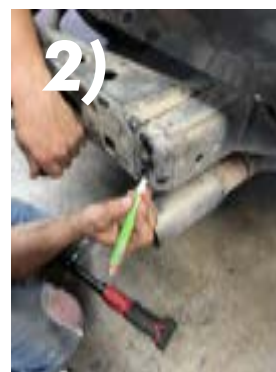
## STEP 4

Removing the OEM hitch and OEM center receiver mounting point (optional). You going to need an extension and a joint socket to get to the bolts by the exhaust (figure 1). It will be easiest to get to the bolts behind those (figure 2) with an open end wrench. Repeat for drivers side (figure 3). From the bottom of the hitch (figure 4) remove 2 bolts. Be careful, this will drop the hitch, you should get a 2nd person to help hold up while removing the last bolts. Save the 2 spacer plates (figure 5). Remove 2 bolts from the bottom (figure 6) and 4 bolts (figure 7). Remove OEM receiver center mounting point (figure 8).



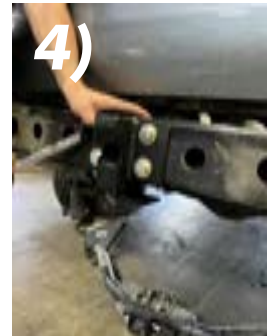
## STEP 5

Nutcutting the frame - You will need section 2 from the hardware kit and a 9/16" drill bit or step bit. If using a step bit, mark the stop point with masking tape so you dont make too big of a hole. Drill out the 2 holes (figure 1) to 9/16". Touch up the holes with a paint marker (figure 2). Nutcert (figure 3). Save the 2 bolts and washers for step 7.



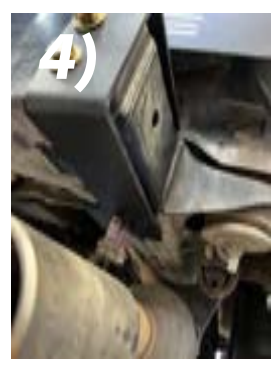
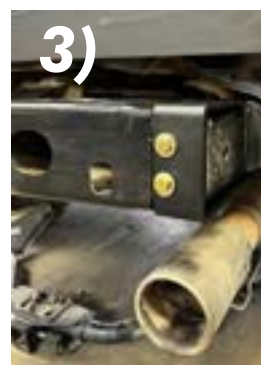
## STEP 6

Mounting the latch base. You will need the Latch base and section 7 from hardware kit. Grab the 6 bolts and place the washers (figure 1). Bolt the 4 bolts to the front of the latch base (figure 2) and the 2 from the bottom (figure 3). Tighten all 6 bolts (figure 4).



## STEP 7

Mounting C Channel Filler Plate. You will need C Channel Filler Plate and the hardware from section 2 that you saved along with the OEM hitch bolts. Slide the C Channel Filler Plate from the side like figure 1 & 2. Bolt on the C Channel and hand tighten for now (figure 3). Grab the OEM hitch bolts and bolt in from the bottom (figure 4), hand tighten for now. These are to make sure everything lines up.



## STEP 8

Mounting Back Hinge Plate. You will need the Back Hinge Plate and section 3 from the hardware kit. Mount the Back Hinge Plate from the rear of the frame. One washer will be used on the bolt side and the inside of the frame. Figure 2 shows the back and figure 3 shows the inside of the frame. You will only need to of the bolt for now. Save the last bolt as you will need to drill the hole after the hinge and bottom plate are on.



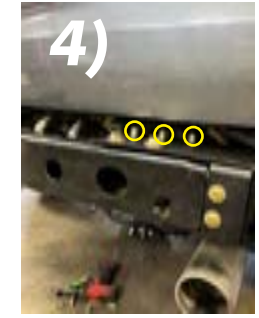
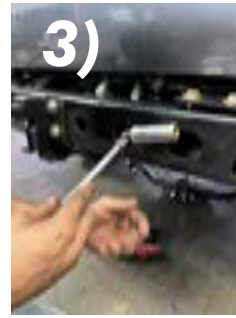
## STEP 9

Mounting the Hinge. You will need the Hinge and section 1, 5 & 9 of the hardware kit. Slide on the hinge to the frame (figure 1). Grab 2 bolts, washers and nuts from section 5 of the hardware kit and bolt the top of the hinge through the top of frame. Bolt and washer go through the top (figure 2) and washer and nut from the bottom inside of the frame (figure 3). Save the other 2 bolts for step 10.



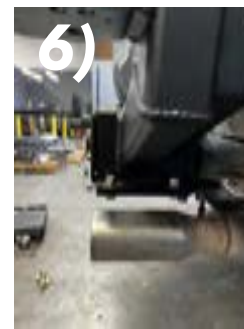
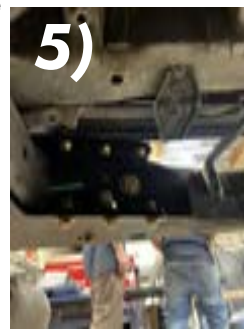
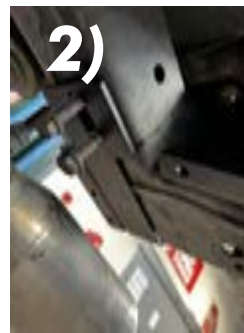
## STEP 9 CONTINUED

Grab the inner frame washer from section 1 of the hardware kit and insert from the hole in the frame like figure 2. Put the washer on the inner hinge bolt. You can use a socket, swivel head and an extension to reach the hinge bolt and put the nut on (figure 3). Grab 3 bolts from section 9 of the hardware kit and bolt the hinge to the back hinge plate (figure 4). Save the 3 left over bolts for the Lower Hinge Plate in the next step. Hand tighten all bolts for now.



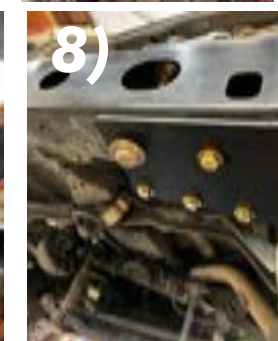
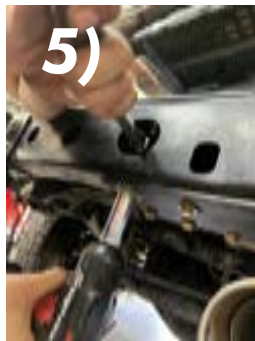
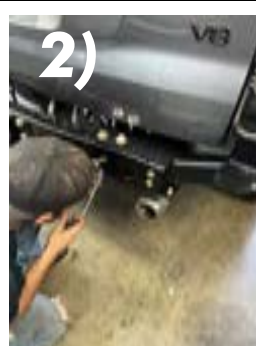
## STEP 10

Mounting Lower Hinge Plate. You will need Lower Hinge Plate and the bolts saved from section 9 and 5 from the previous step. Remove the 2 OEM bolts used to hold in place (figure 2) and place the Lower Hinge Plate and screw in the OEM bolts back in like figure 3 & 4. Bolt in the 3 bolts that hold the lower hinge plate to the back hinge plate (figure 5). Next bolt in the 3 bolts that bolt in the lower hinge plate to the hinge (figure 6 & 7). Bolt the one 3/8" bolt in the lower front of the lower hinge plate (figure 8), if you dont have the hole for the 2nd hole you will drill it out in the next steps.



## STEP 11

Tightening up the hinge, you will need your angle finder or level and 3/8" drill bit, open end wrench, socket and ratchet, extension & swivel head. Get your level or angle finder and see what your angle is on the top of the bumper and match the angle or level on the bottom of the hinge like figure 1. Get your swivel head, extension, socket and ratchet and tighten the inner bolt to the hinge (figure 2). Tighten the upper bolts to the hinge (figure 3). Tighten the lower bolts to the lower hinge plate (figure 4 & 5). Now you will need a 1/2" drill bit to drill out the lower hinge plate hole (figure 6 & 7). After you drill out the hole, get your paint marker and paint the hole. Get the last bolt saved from step 10, washer, nut and tighten. When finished, it will look like figure 8.



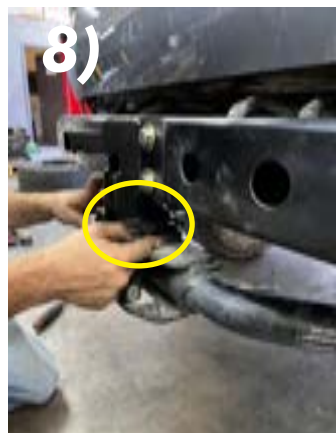
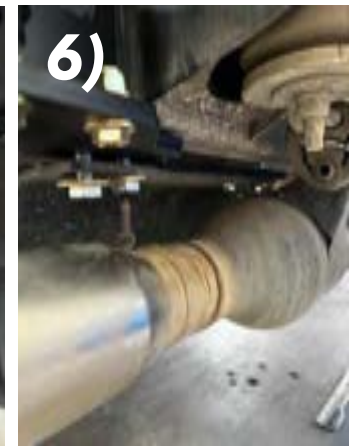
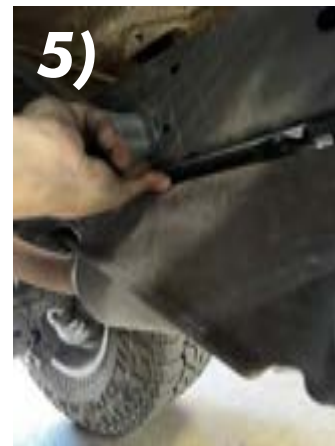
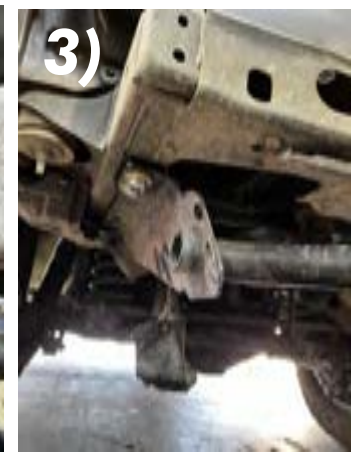
## STEP 12

Drilling the last hole in the back hinge plate. You will need a 3/8" drill bit and drill along with the bolt saved from step 8. Now that everything is tight, drill out the hole in the frame to bolt up the last bolt in the back hinge plate. Once drilled out, get your paint marker and paint the hole. Tighten the bolt and it will look like figure 2 when finished.



## STEP 13 (ONLY if you have an OEM HITCH)

Mounting hitch - Need the 2 long hitch spacers for drivers side and the 2 short hitch spacers for the passenger side and section 7 of the hardware kit. Remove OEM bolts from the bottom of C Channel Filler Plate that were used to keep the plate in place. Lift Hitch up (will need 2 people or something to hold up one side while lifting into place) On the passenger side, use hardware from section \* and hand tighten the hitch just to hold up for now. On the drivers side get the long hitch spacers and slide in between the hitch and the frame (figure 1). Hand tighten the bolts to hold up for now like figure 2. Will look like figure 3 when done. Remove the 2 bolts on the passenger side that were holding the hitch in place and slide in the short hitch spacers (figure 4 & 5). Hand tighten the 4 bolts for now (figure 6 & 7) Get the 2 spacer plates for the OEM center receiver mounting point back from step 4 and slide in between the hitch and our latch base (figure 8). Get the bolts from section 7 of the hardware kit. The bolt and washer goes through the top of the plate through the hitch and the nut goes from the bottom (figure 9). When finished it should look like figure 10.



## STEP 14

Bolt back up the trailer hitch plug to the hitch (figure 1). Get the hinge spacer from section 10 of the hardware kit and screw into the hinge (figure 2). Figure 3 shows what everything should look like.

Figure 4 is the passenger view from the bottom inside of the frame.

Figure 5 is the drivers view from the bottom inside of the frame.

Figure 6 inside of the frame showing the back hinge plate

Figure 7 is the back of the latch base showing the spacer plates. Tighten all of the latch base bolts and hitch bolts.



## STEP 15

Cutting the holes for the latch base and hinge in the bumper. You will need the provided templates to cut the bumper (download online & PRINT AS ACTUAL SIZE) an air saw or dremel, a grinder or sand paper and a drill bit. Line up the provided template with the 2 body lines in figure 1. Trace the cut out and drill 4 holes in each corner like figure 1.

Use your air saw or dremel to cut out the latch base hole (figure 2).

Push out the cut out (figure 3).

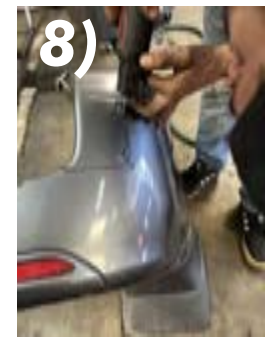
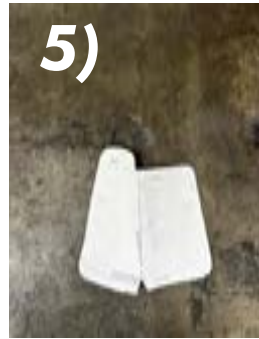
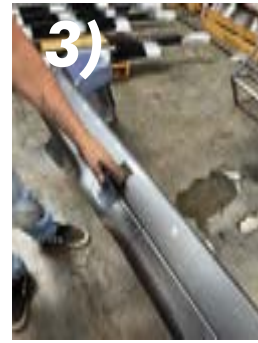
Touch up the cut out with your grinder or dremel to make sure the cut out is smooth (figure 4).

Get your hinge cut out template and cut out (figure 5) and line up the body line and trace (figure 6). It should look like figure 7 when done. Drill out your start point. Get your air saw or dremel and cut out (figure 8).

Get an exacto knife and straighten up any edges needed (figure 9).

Use your grinder or dremel to finish smoothing out the cut out (figure 10).

The final cut out should look like figure 11.



## STEP 16

Cutting the foam. You need your air saw or exacto knife.

Cut off the tab and front lip (figure 1).

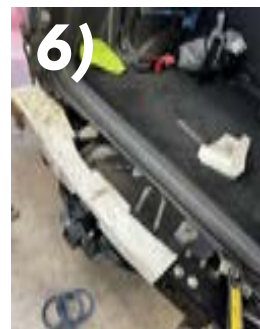
Cut off the front lip (figure 2).

Put back on frame and measure where to cut.

Your going to cut where the edge of the hinge is (figure 3).

Cut off where you marked (figure 4).

Will look like figure 4. Place back on frame (figure 6).





## STEP 18

**Installing the swing arm.**  
Put the bumper back on and leave the bolts out for now (figure 1)  
Attach the swing arm, you will need 2 people for this. One to hold the swing arm up while the other puts the bolt up through the bottom of the arm (figure 2). Put the nut on the top of the hinge before the bolt is put in. Make sure the swing arm is level so the bolt goes in straight. Once the bolt is threaded in, use your impact to tighten up (figure 3). Once it is tightened it will look like figure 4.  
Close the swing arm and adjust the latch so when latched shut, it pulls the swing arm down and doesn't have too much tension (figure 5). Figure 6 & 7 shows how the latch should sit when adjusted and closed. The locking pin goes through the latch (figure 8).  
Get the center mount plate and put on the neck (figure 9).  
Your rig is now complete with the JW Offroad hidden swing out (FIGURE 8 & 9) and is ready to extend the camera and license plate wire harnesses.

