

# INSTALLATION GUIDE

Rear Bumper (Includes Swing Out Tire Carrier System)



### Stock Bumper Removal

Unbolt and remove stock bumper from vehicle as shown in photo. Also be sure to remove outer bumper frame reinforcement bracket so that your left with the base frame. (See Fig 1A)

FIG 1A



Next, we'll be taking the drill hole template that's provided with kit and placed onto the frame as shown (Fig 1B). This will allow us to mark where to add your two additional drill points that will provide additional reinforcement for the new bumper.

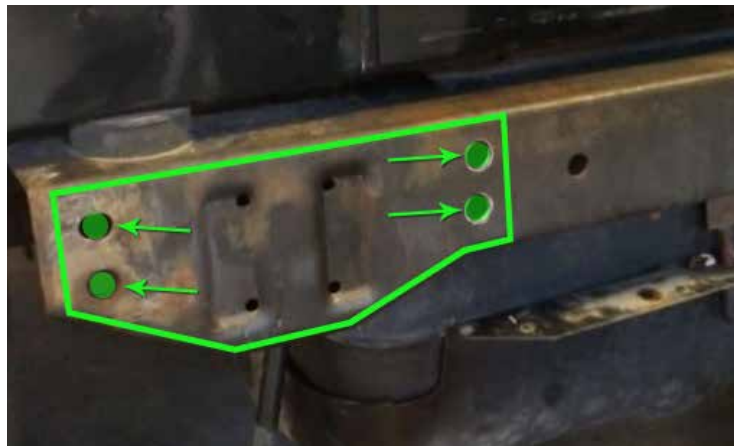
FIG 1B



FIG 1C

(Fig 1C) shows the template outline that is placed onto the frame for each side. Once aligned correctly, mark the drill points and drill roughly 1/2" hole with step bit.

\*NOTICE - gas tank sits directly behind vehicle frame in most cases and is recommended to use a step bit to prevent over-drilling past the frame and into the gas tank.



Shown are the new frame bracket holes on right side of Fig 2A.

Before we place the bumper onto the frame, we recommend inserting two frame bolts into the new holes on each side. This will make things easier once the bumper is carefully placed and aligned with these bolts.

Next, we can now place the new bumper carefully into position. (Fig 2B) Make sure they are aligned with the bolts that were inserted in previous step and then hand tighten.

\*Note - the inside of bumper already has welded nuts ready to receive the bolts placed in previous step. Go ahead and secure these once aligned.

FIG 2A



FIG 2B



FIG 2C





We will help secure the bumper for the next few steps of the alignment install process by tightening down with two of the stock bolts that had been removed earlier when stock bumper was taken off that will help hold the new bumper in place. (Fig 2C)

FIG 3A



FIG 3B



FIG 3C

Next, we'll be placing the new frame reinforcement brackets into position (Fig 3C).



Once frame bracket is aligned correctly and in position, you'll need to mark another drill hole marked in Fig 4A. You'll need to do this for each side of frame.

FIG 4A



With a drill (step bit recommended), drill roughly a 1/2" hole.

\*Notice - be careful when drilling as the gas tank is mounted adjacent to the vehicle frames.

FIG 4B



Secure in place with provided frame bracket hardware. (Fig 4C)

At this stage with all bolts in place and bumper aligned to your liking, you can now tighten up all bolts to secure bumper into its final position.

FIG 4C



## Tire Carrier Install

Next, we'll be mounting the door mount plate (Fig 5A) as shown with provided hardware. You will want to keep this somewhat loose as some adjustments to this plate might need to be made once the tire carrier arm is ready to be mounted to it.

\*Note - some model year TJ's have an additional hole for the bottom left slot that is optional if you'd like to add a bolt here. If you don't have a hole for this slot on your door, you can simply skip this step.

Next, we'll be mounting the inner tire mount bracket to the carrier arm (Fig 5B) with the provided tire mount hardware.

FIG 5A



FIG 5B



FIG 6A



FIG 6B



Next, place the outer tire mount bracket over the inner tire mount we just tightened down but keep fairly loose for next step.

For this step we recommend flipping the tire carrier face down onto the spare tire (Fig 6C). With a white or other light-colored non-permanent marker, mark where you'll need to adjust the outer tire mount. Your tire should rub up against the tire carrier arm so it won't rattle when on the trails.

Once marked, you can now flip your carrier arm back over. When tightening down at the marked location, we recommend adding another 1/8" to 1/4" to keep things snug.

We will mount the tire towards the end of the install.





Next, we will need to remove the passenger side tail light in order to have enough room to place the tire carrier arm onto the spindle.

FIG 7A

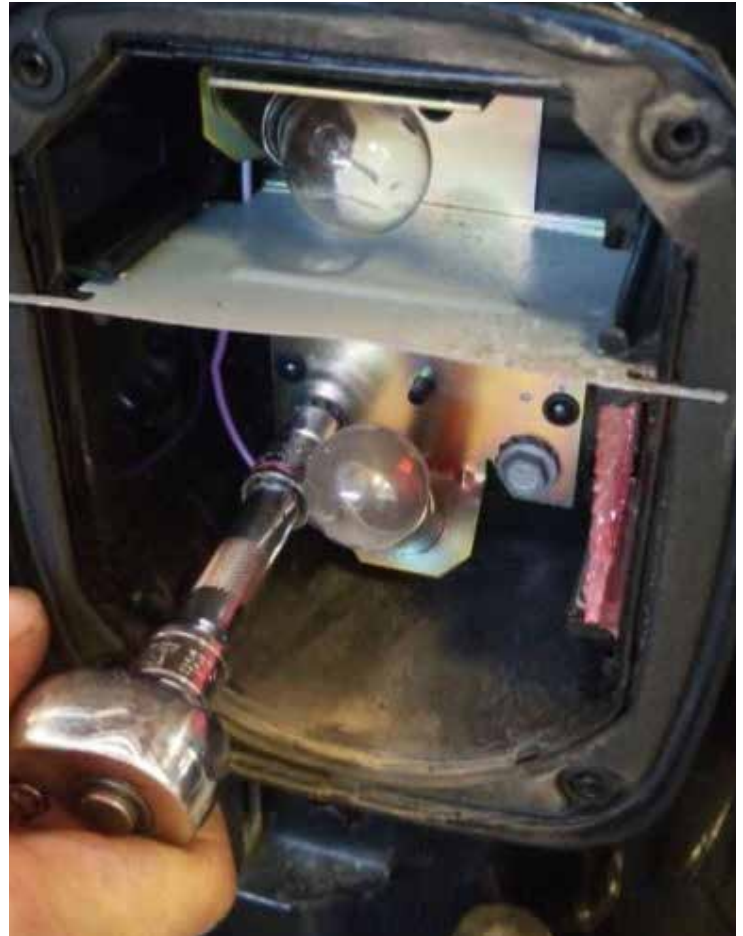


FIG 7B

Once we removed the inside bolts, we let this hang off to the side or have a friend hold it while you place the arm onto the spindle.





For the arm, we'll first need to grease the lower bearing as thoroughly as possible (Fig 8A). This will then be inserted along with the seal ring into the bottom of carrier arm housing. When placing arm onto the spindle, you will need to hold the bearing and seal with fingers until the spindle snugs it into position. You may need to wiggle the carrier arm a little until the bearing is properly set into place.

FIG 8A



FIG 8B



FIG 8C

Next, grease the upper bearing as before and place it onto the spindle (Fig 8C). You may need to wiggle the arm if needed to make sure the bearing is properly seated.



FIG 9A



FIG 9B



FIG 9C



FIG 10A



FIG 10B



FIG 10C

Next, we'll need to grab the adjustable coupling shown in Fig 10C



For this step, you can securely tighten the coupling half that mounts to the back of the tire carrier arm. You will need to use the coupling spacers shown below when mounting it. Once mounted in place behind the arm, you can then bring the arm to a 'closed' position to secure the 2nd half of the coupling.



\*Note - we highly recommend greasing the pass through bolts that go through each coupling end to make it easier to install.

Before you tighten down the large pass through bolt shown in Fig 9A, you'll want to make sure the arm is able to close properly and adjust the tension nut as needed so that the arm is both able to close and also hit the bump stops on the door it self.

See bump stop install steps on next page

FIG 9A



FIG 9B





### Bump Stop Install

We've included bump stop spacers with your hardware kit in situations where the new bump stop does not make contact with the door and swing arm. (Fig 10A)

If the swing arm does not make contact with the bump stop from previous page, you may need to add a few spacers.

Secure bump stop(s) with allen head tool (Fig 10B)

Make sure arm is in contact with bump stop when arm is in the closed position.

FIG 10A



FIG 10B



FIG 10C



Third Brake Light Install (if applicable to your vehicle)

Included with hardware is the 3rd brake light kit. Attach the light through the center opening. See Fig 11A



FIG 11A

You will then need to cut both wires and attach the end caps shown in Fig 11B



FIG 11B

Once completed, you can attach them back to the stock wiring from the door.



FIG 11C



If you have any additional questions or feedback, please feel free to email us at [info@expeditionone.biz](mailto:info@expeditionone.biz)