

FJ CRUISER DIY V2 BUMPER

Thank you for purchasing our FJ Cruiser DIY V2 bumper kit! Please take the time to read through the directions to make sure the bumper is welded and fitted properly.



Main Parts List

- [1] **(A)** Main frame piece - formed ¼" thick (red)
- [2] **(B & C)** Side frame pieces - flat ¼" thick (blue)
- [1] **(D)** Frame gusset - flat ¼" thick (green)
- [1] **(E)** Main "shell" - formed ⅛" thick (gray)
- [2] **(F & G)** Shackle mounts - flat 1" thick (yellow)
- [2] **(H & I)** Side "wings" - formed ⅛" thick (green)
- [2] **(J & K)** Side "wing" caps - flat ⅛" thick (gray)
- [2] **(L & M)** Light housings - 4" tube pieces (not pictured)
- [2] **(N & O)** Light mounting tabs - flat ⅛" thick (not pictured)

Additional Hoop Pieces (this will change depending on hoops selected)

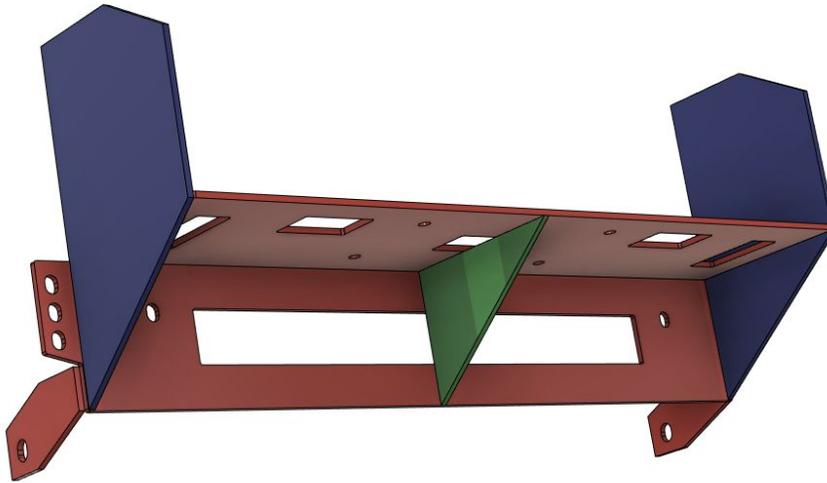
- [1] **(P)** Main center hoop - bent and mitered 1.75" DOM
- [2] **(Q & R)** Main hoop gussets - flat - ⅛" thick (not pictured)
- [2] **(T & U)** Side hoops - bent, mitered, notched 1.75" DOM

Hardware - lower side mounts

- [2] M12 1.25 bolts & washers

Step 1:

Weld Side frame pieces (**B & C**) to main frame piece (**A**). Make sure the side pieces are square with the main piece. This is important for fitment of the side wings later in the process.



Step 2:

Position and weld the frame gusset (**D**) to the main frame piece (**A**). *Reference photo above.*

Step 3:

Place the main shell piece (**E**) over the frame and center it with the side frame piece (**B & C**). You should have about $\frac{1}{8}$ " gap between the edge of the shell and the edge of the frame side pieces. Tack it in place on the bottom edge, then flip it around and run some tacks on the inside between the frame pieces and the shell. **DO NOT** place tacks on the outside edge of the shell on the side frame pieces. Otherwise you'll have to grind them down later to when installing the side wings (**H & I**).



Step 4:

Position shackle mounts (**F & G**) so they sit roughly $\frac{1}{2}$ " below the shell piece and tack into place. If they don't fit inside the slots, you may have to bend the side frame pieces out slightly so there's more room for the shackle mounts to fit. When the frame and shell are fitted correctly, the shackle mounts will fit perfectly.

Step 5:

Fully weld the shackle mounts (**F & G**) and shell (**E**) to the frame on the inside. Don't forget to run a couple of stitch welds between the frame gusset (**D**) and the outer shell. **DO NOT fully weld anything on the OUTSIDE of the bumper yet.**

Step 6:

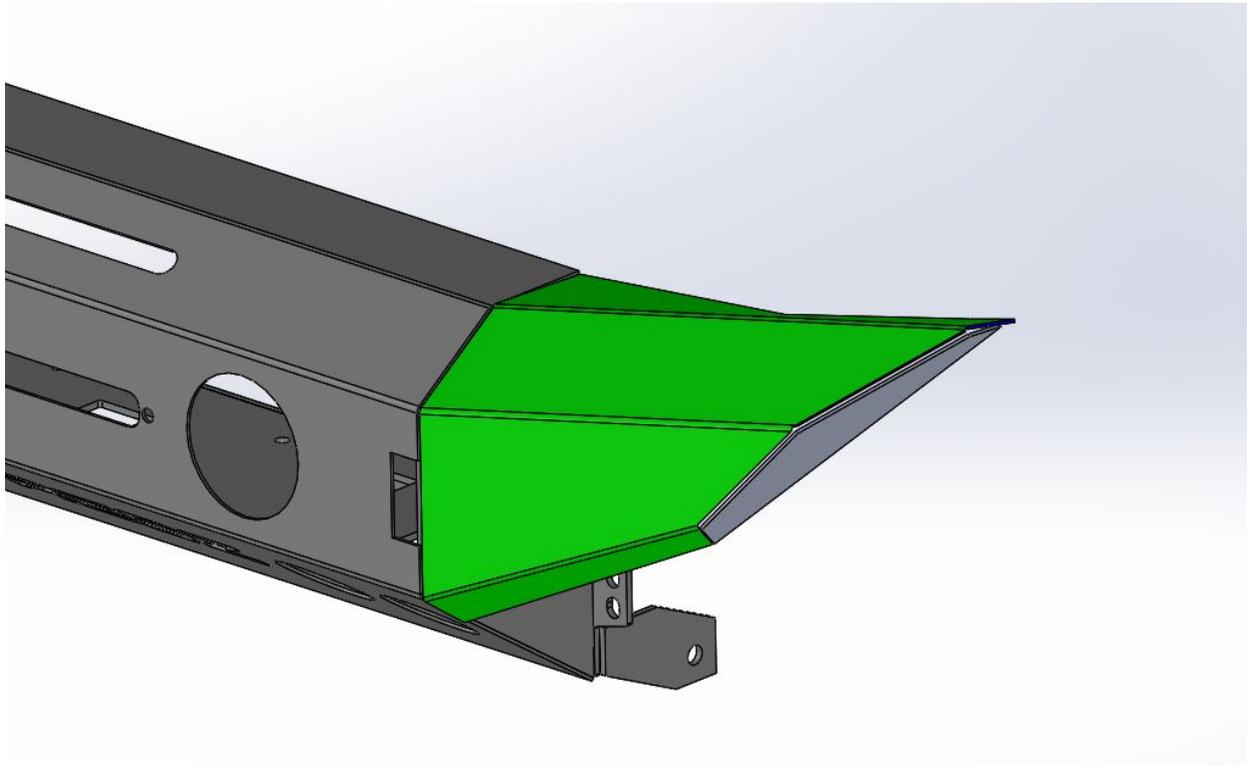
Position the light housings (**L & M**) behind the wings so the cutout in the wing is centered within the housing and weld into place. **Note:** *the longer side of the housing will be closest to the frame of the bumper.*

Step 7:

Center the light mounting tabs (**N & O**) on the bottom of the housing (**L & M**) and weld into place.

Step 8:

Time to install the “wings” (**H & I**). This can be a little tricky at times and may require a little grinding of the edges so it fits better. I typically start by lining up the top straight edges, throw a couple tacks on it, then maneuver the rest of the wing into place and place a few more tack welds. Tacks can be placed on the inside or outside in this case. Once the wings are tacked into place and fitment looks good, go ahead and fully weld the inside AND outside edges.

**Step 9:**

Tack the end caps (**J & K**) onto the wings. Once fitment looks good, fully weld inside and outside edges.

Step 10:

Make sure all seams are welded and then start grinding! It's best to take long straight strokes the full length of the weld when grinding. Then round all the seams nicely.

Step 11:

Weld around the outside of the shackle mounts (**F & G**).

Bumpers with hoops

Step 12:

Position the main hoop (**P**) on the angled surface with the winch viewing slot so it's approximately $\frac{1}{2}$ " - $\frac{3}{4}$ " above the seam and make sure it's centered. Throw a couple of tacks to hold it in place for the next step.

Step 13:

Tack the hoop gussets (**Q & R**) into place then fully weld the main hoop and gussets to the bumper.

Step 14: (3 hoop bumper)

Position the side hoop (**T & U**) on the angled part of the side wing towards the corner (photo coming soon) and tack weld it. Make sure the hoop is angled forward slightly 3-6 degrees to give you some extra room between the tube and the turn signal on the FJ. You may want to place the bumper on the truck at this point to make sure the hoops don't make contact with the turn signal before fully welding. Once you confirm clearances between the outer hoops and turn signals, fully weld the hoops.

Step 15:

Congrats you're done! Now prep it for paint! Clean up any spatter, hit the welds with a wire brush, and wipe down the bumper with some acetone.

Bumper installation Instructions can be found here:

<https://reszfab.com/wp-content/uploads/2017/07/RESZ-Fab-bumper-instructions.pdf>