This version of assembly / install instructions are for kits purchased on or after March 1, 2026. If you purchased a kit before this date, please contact us for the correct install instructions.

AFW 81-87 SQUARE BODY TUBE WINCH FRONT BUMPER DIY

ASSEMBLY / INSTALL INSTRUCTIONS

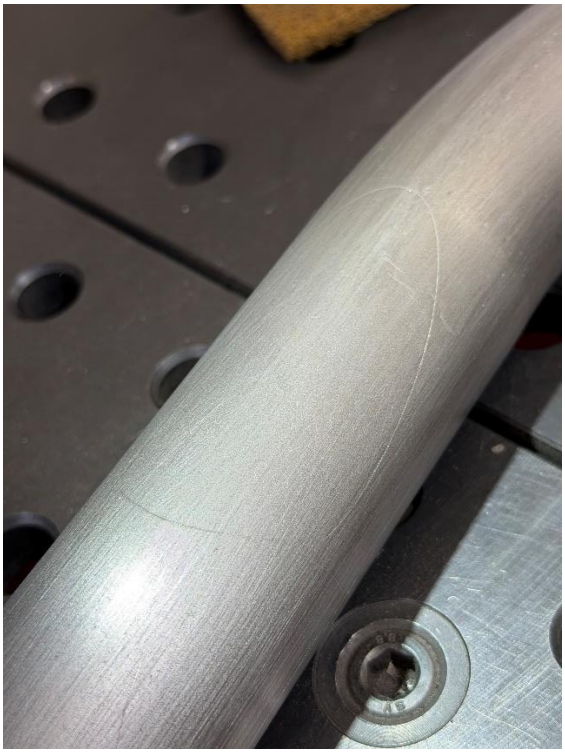
*This bumper kit is for 1981-1987 Chevy Squarebody trucks, Blazers, Suburbans. (As off March 2026 still need to confirm fitment on 1988-1991 years.) This kit is a **DIY UNWELDED** kit and will require prep, assembly, and welding. This kit is made from CNC laser cut 3/16" steel plate for the main center section along with 1/4" thick fairlead mount and 3/4" thick recovery shackle mounts. All round tube is CNC notched and bent 1.75" x .120" wall DOM.*

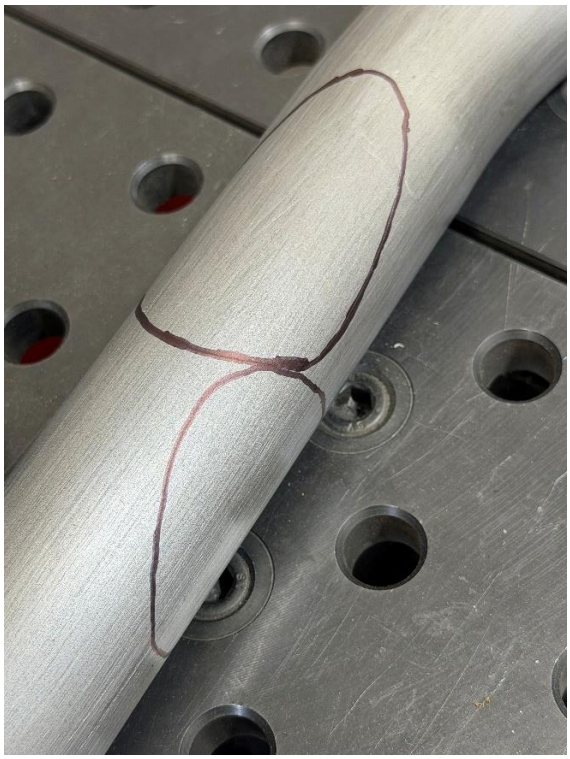
Items Included In Kit

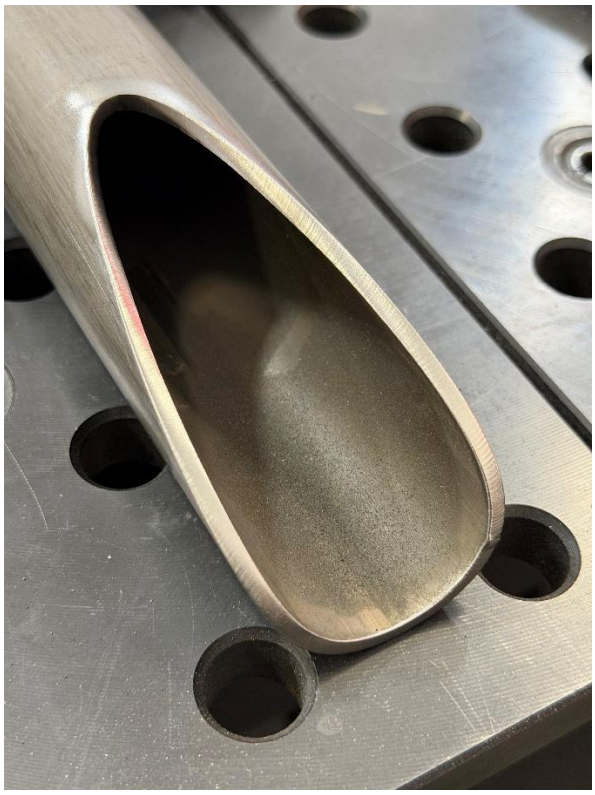
- Fixture Plate 1 (1)
- Fixture Plate 2 (1)
- Frame Side Plate (2)
- Top Winch Plate (1)
- Frame Lower Plate (1)
- Inside Brace (2)
- Inside Brace Dring (2)
- Top Frame Bolt Plate (2)
- Tube Cap (2)
- Fairlead Mount (1)
- Shackle Mount (2)
- DS Rear Tube (1)
- PS Rear Tube (1)
- DS Front Tube (1)
- PS Front Tube (1)
- DS 1 Tube (1)
- PS 1 Tube (1)
- DS 2 Tube (1)
- PS 2 Tube (1)
- Stinger Tube (1)
- Slug Tube (1)
- Jig Hardware Kit (1)
- Bumper Hardware Kit (1)

Plate Prep Recommendations: Wipe all plates clean with preferred choice of solvent and DA sand. Prep all open edges that require welding.

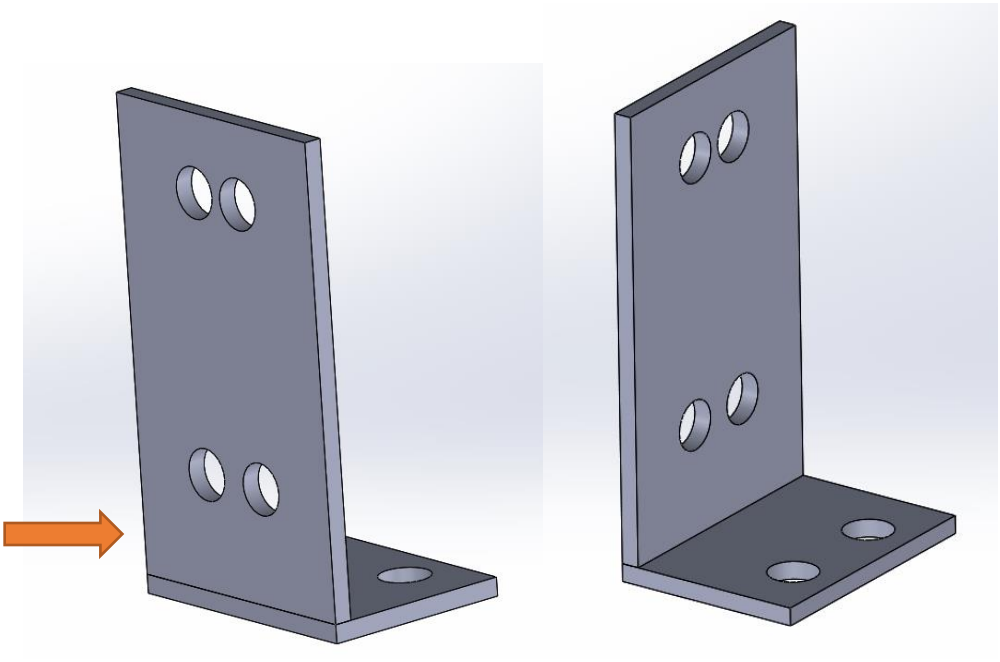
Tube Prep Recommendations: Wipe all tubes clean with preferred choice of solvent. Prep all notches with light grinding or wire wheel. All tube joint intersections are scribed, locate and trace scribe marks with marker so it's easier to see during assembly.



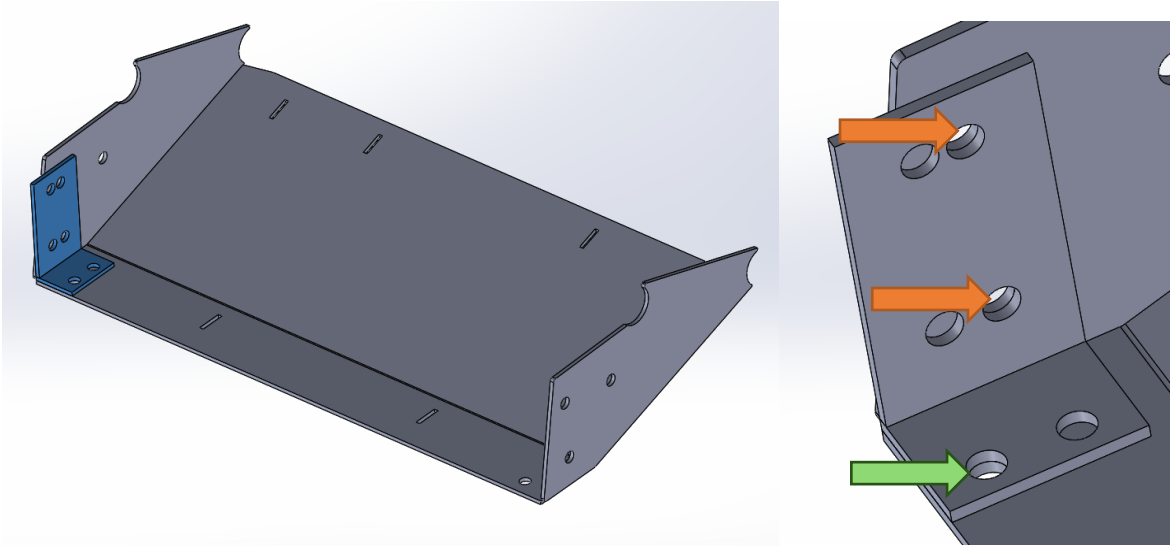




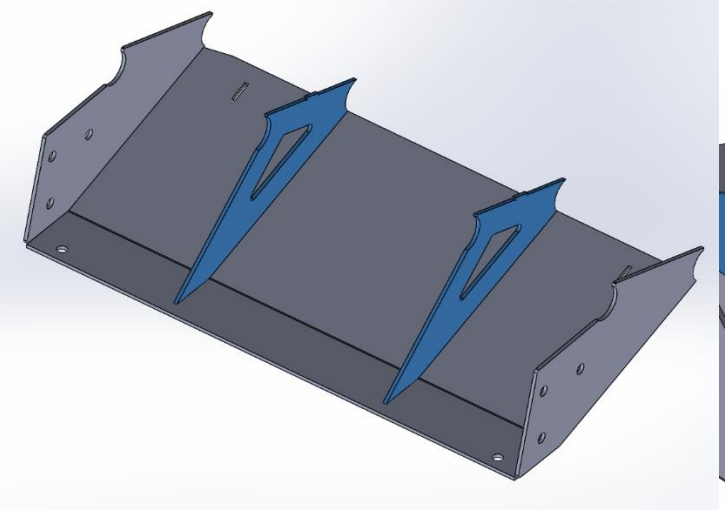
1. Locate the fixture plate 1 (4 holes) and fixture plate 2 (2 holes). Place fixture plate 1 on top of fixture plate 2 flush on the sides and front face, ***tack weld only*** at a 90 degree angle like pictured below. ***NOTE***, make sure on fixture plate 1 the holes with the greater spacing from edge, arrow below, are on the bottom.

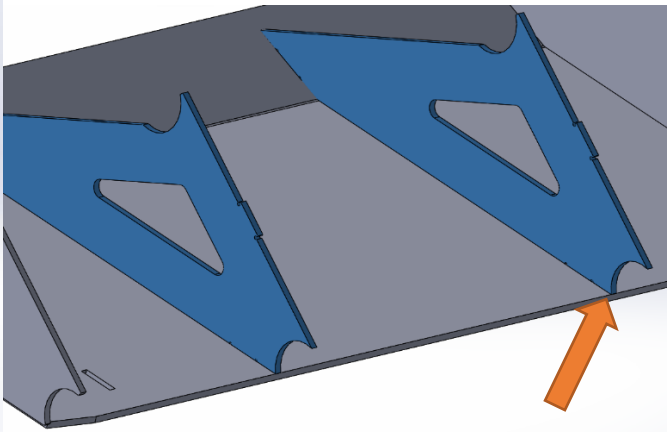


2. Using fixture and the fixture hardware kit (qty4 of ½" nuts and bolts), one side at a time, assemble frame side plates to frame lower plate as pictured below and tack weld in place. Be sure to take notice that both frame side plates have an open corner joint on the outside and are tack welded at a 90-degree angle in relation to the frame lower plate. ***Note*** the 3 holes used in the fixture is the rear most lower hole(green arrow)and forward most upper holes(orange arrows)as pictured below.

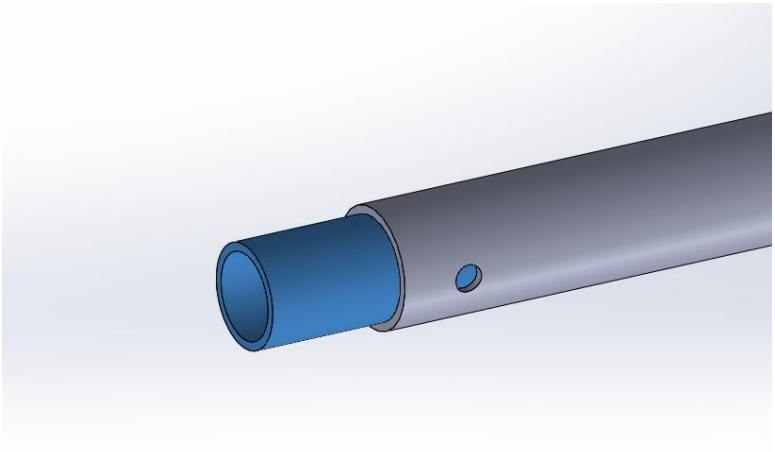


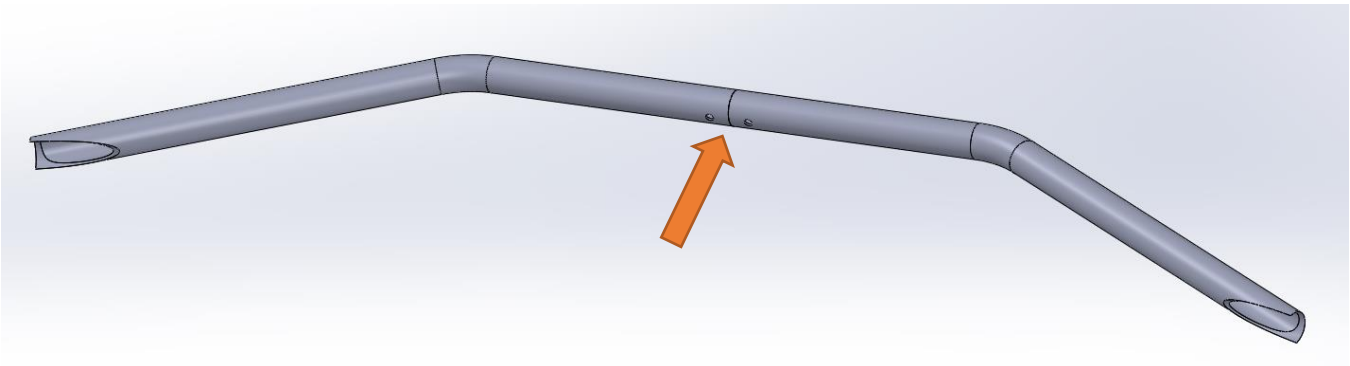
3. Next you will place both inside brace plates (in blue below) into the tab and slot locations of the frame lower plate and tack weld at a 90 degree angle. ***Note*** front edge of braces flush with front lip of frame lower plate (orange arrow below)



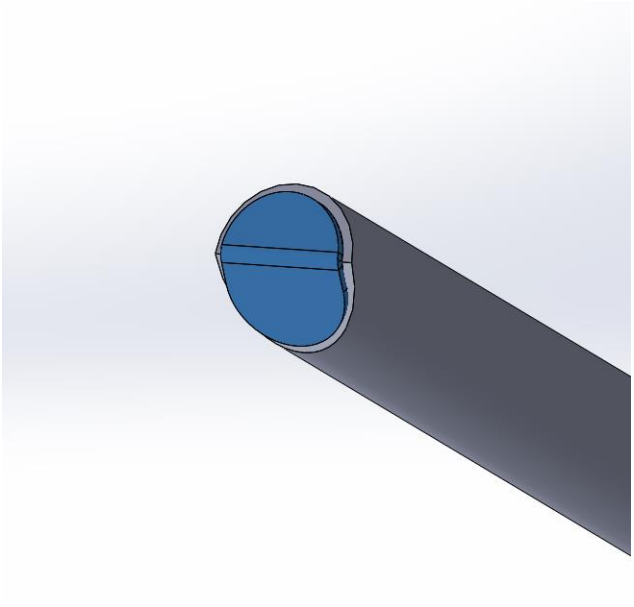


4. Locate both the DS front tube and PS front tube, you will see the part name scribed somewhere on the tube. Note the ends that are cut flat with a hole close to end, bevel end of tube. Locate 1.5” tube slug and insert evenly into both DS and PS front tubes (in blue below). Lay tubes on a flat surface and fully weld center joint and plug weld holes. Grind / sand all welds smooth.

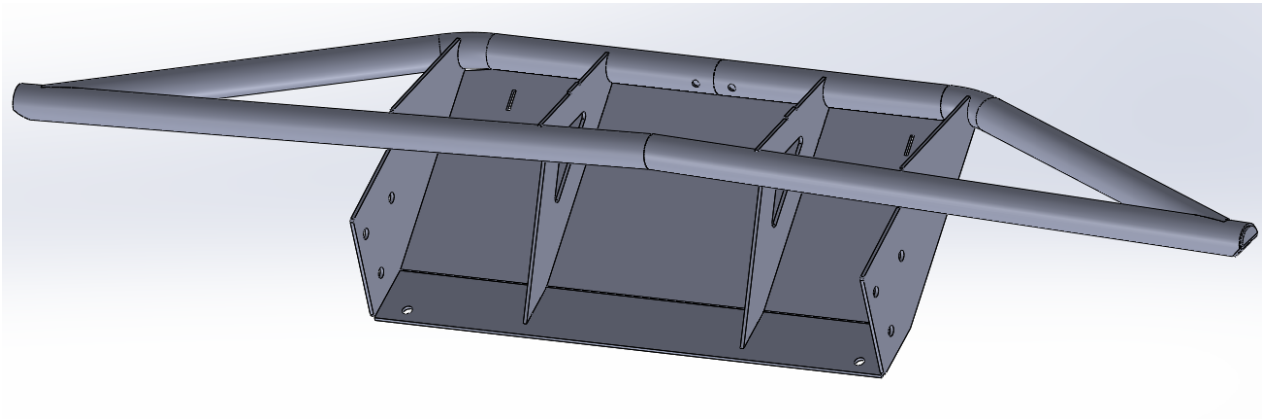




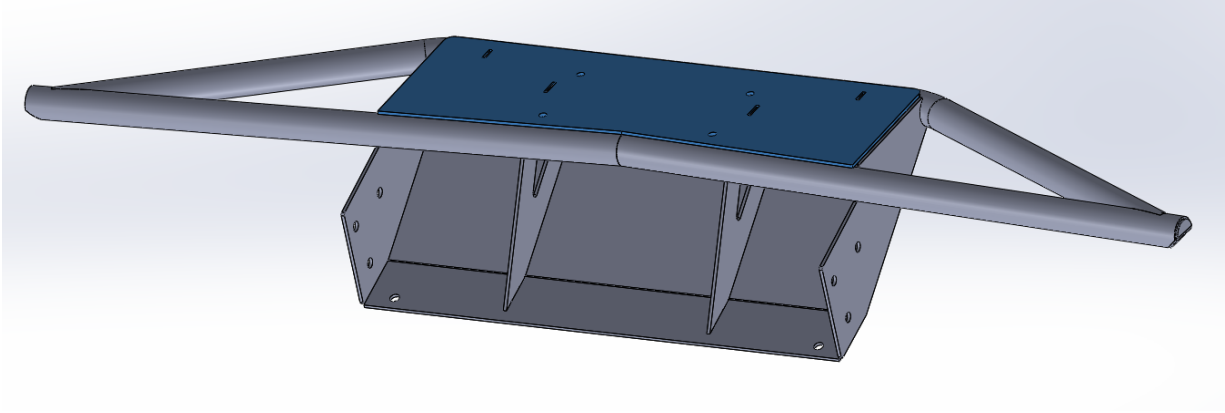
5. Locate tube caps, break tang off and grind the little standoff smooth. Weld caps on ends of DS and PS rear tubes. Grind / sand welds smooth.



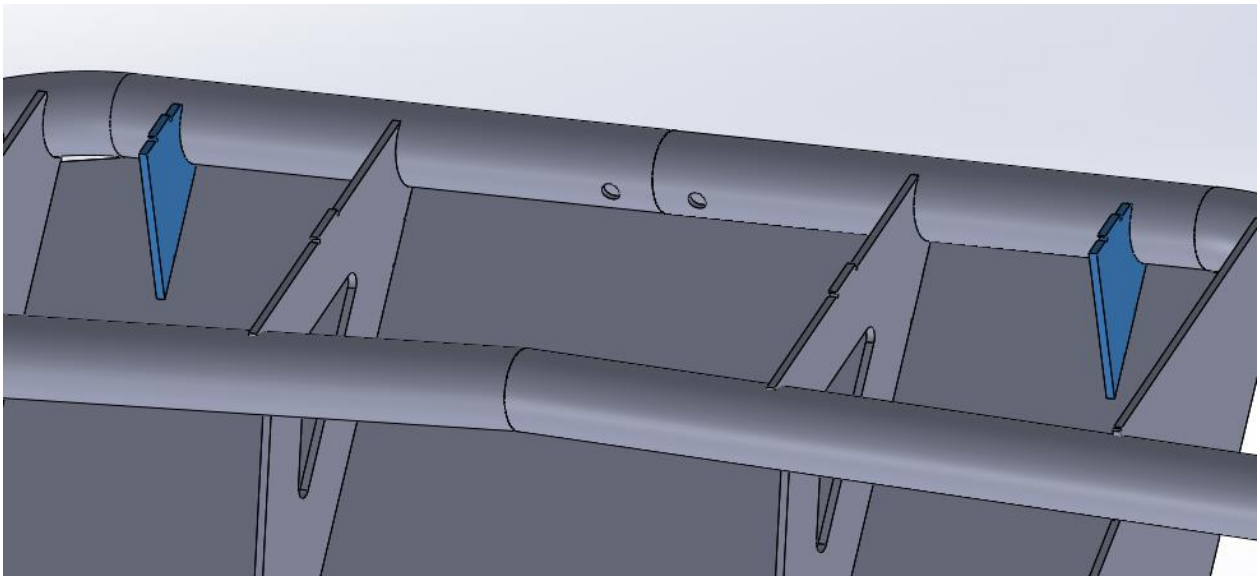
6. This next step is a little tricky, and there are probably a few ways to do it, so if this step doesn't work for you try a different way you may think up. Ultimate goal is to get the front and back tubes tack welded to the center plate section from step 2 and 3 resulting in the top winch plate sitting flat on top of the tubes with no major gaps. So, with that being said, if you already haven't, locate the tube part names scribed on the tubes. Place front and rear tubes upside down on flat surface. Then place the center plate section upside down on top of tubes and tack weld tubes to plates. Once this is done it should look like picture below.



7. After you have tack welded the tubes to the center plates, you can check to make sure the tubes were tack welded correctly by placing the top winch plate on top of the tubes and check to make sure there is equal spacing all the way around the plate in relation to the tubes. If something is off, you will see it and have a chance to correct it now. **DO NOT** tack weld the top winch plate in place at this time.



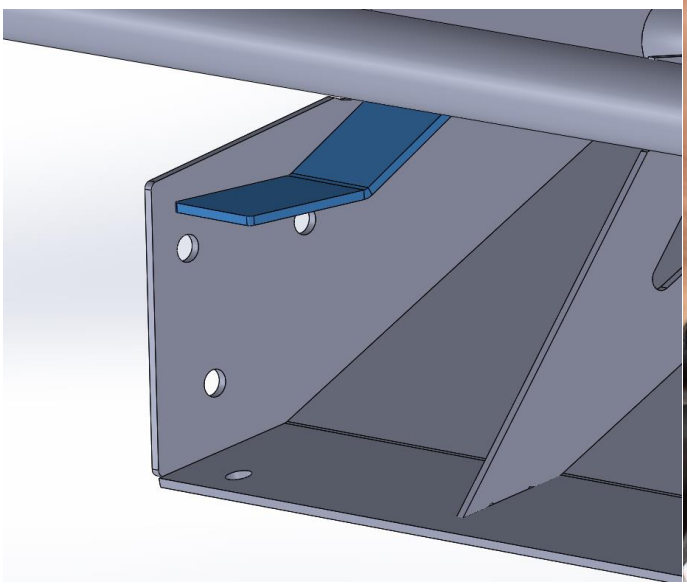
8. Next tack weld inside brace dring in place (in blue below).



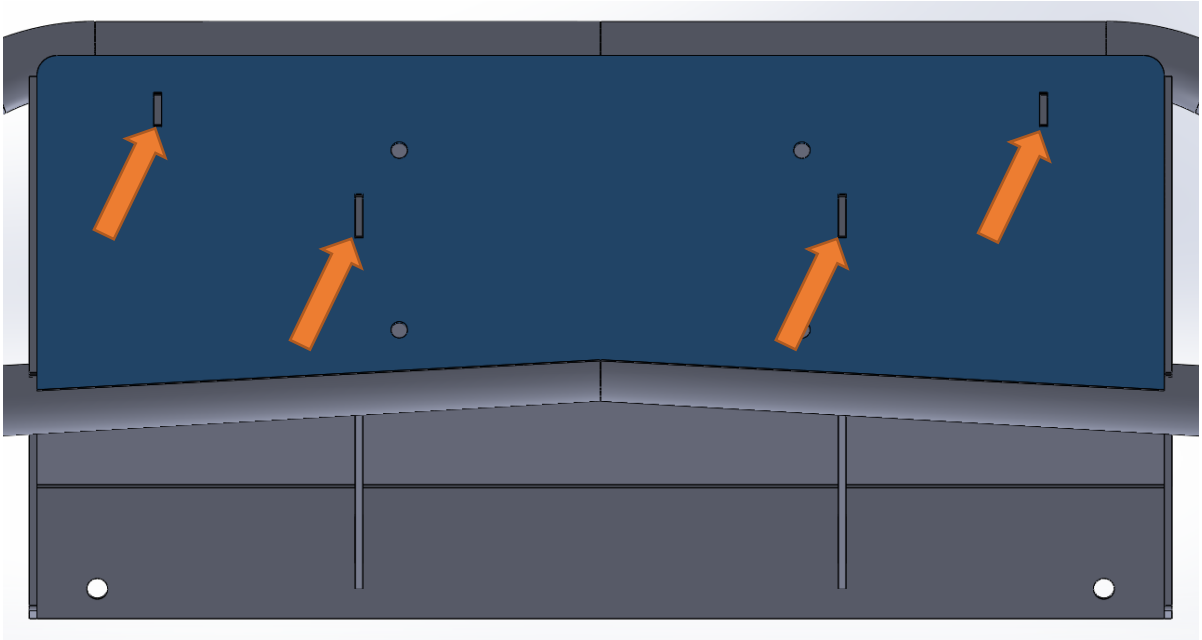
9. Now is the time to test fit the bumper to the frame. Two holes per side should line up with factory holes in the frame, if they don't quiet line up but are close go ahead and adjust holes on the frame to match holes in the bumper. If your bumper is to tight, now is the time to fix it by breaking tack welds on the plate center section on the very ends, bolt bumper to frame, and retack weld in place. Once your bumper is bolted up, note there may be a small gap between bumper and bottom of frame rail. This is normal, there are round spacers in the kit to fill this space during final install.

10. Once you have your bumper bolted in place you will need to locate, drill holes, and tack weld the top frame bolt plates in place (in blue below). Place plates on top of frame touching frame side plate and

touching rear tubes like pictures below. Mark the hole that is on top of the frame rail, drill holes, and bolt in place. Once bolted in place tack weld to bumper. Remove bumper from frame.



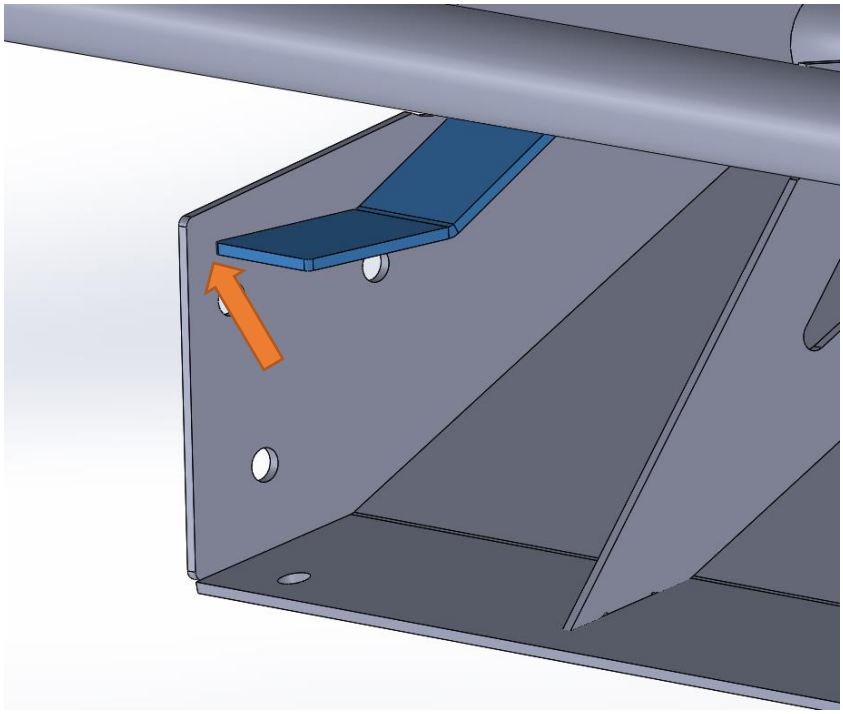
11. Now its time to do some welding. Before doing any welding double check one more time the top winch plate lines up with the tubes and also the slots for the inside braces. **DO NOT** weld top winch plate to bumper yet!



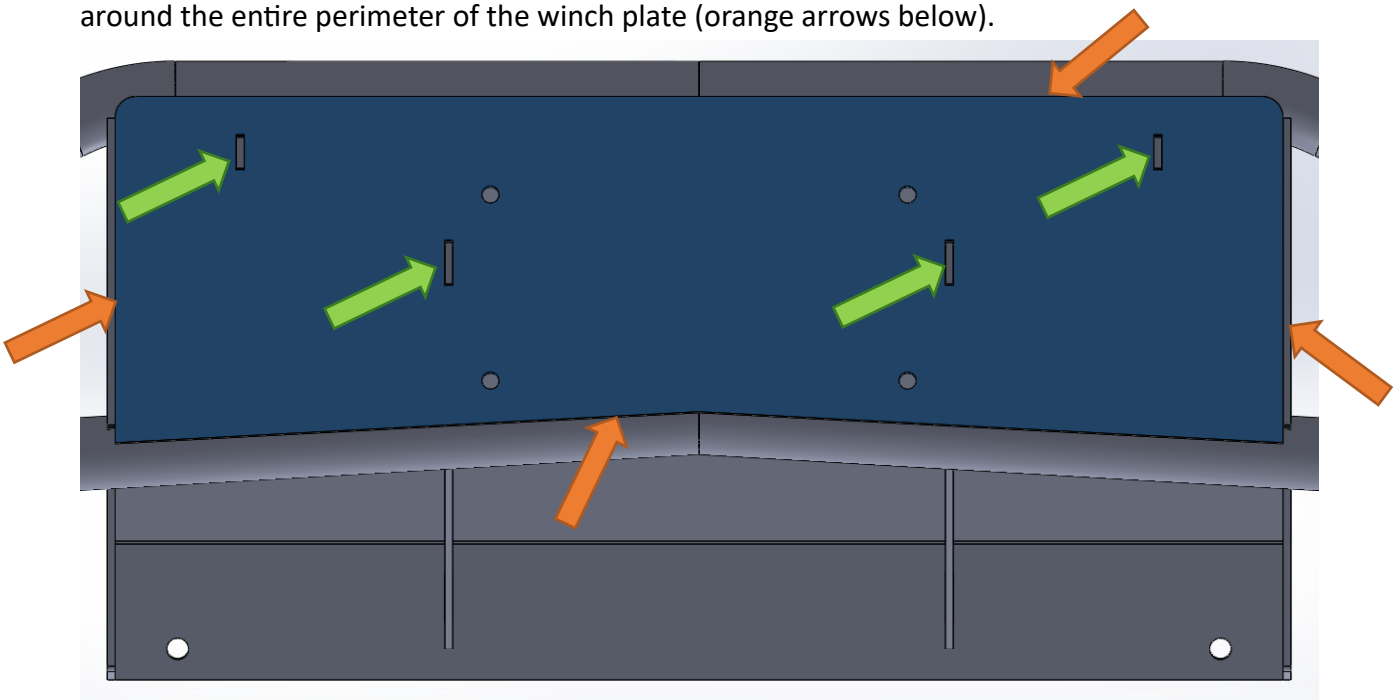
12. Go ahead and weld all inside brace plates to center plate section and the tubes. Weld center plates to tubes as well. There is no need to fully weld everything. Stitch welding is more ideal vs fully welding

everything inside to help minimize warping. Example, weld 2-3 inches then stop, skip 2-3 inches leaving it unwelded, then weld 2-3 inches again, etc. Again, no need to 100% fully weld the inside.

13. Fully weld top frame bolt plate all the way around. Make sure the weld bead on the bottom side (orange arrow below) isn't to big causing interference with the frame when bolted in place.

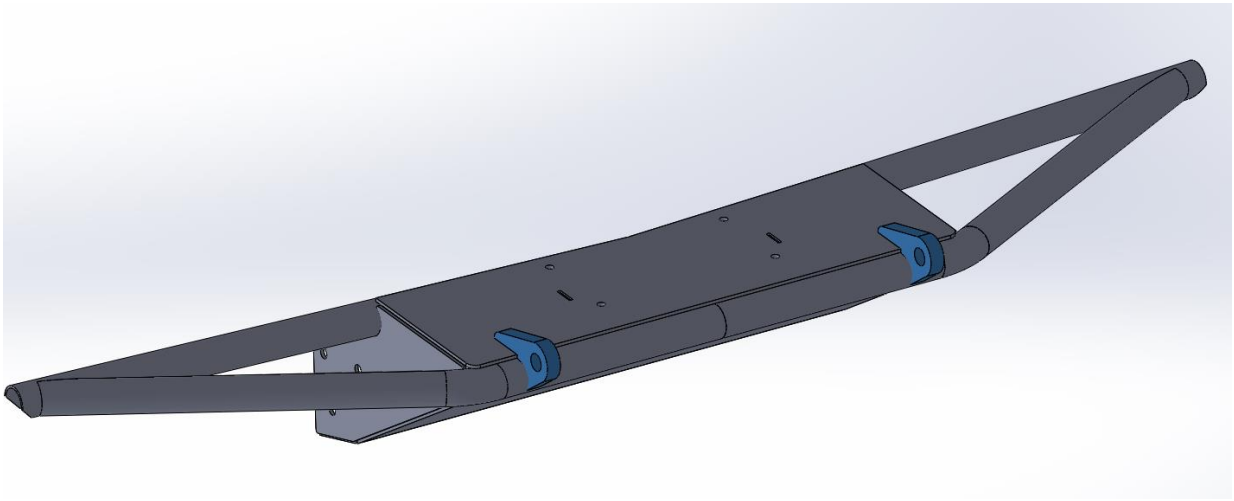


14. Now that the inside areas have been welded you can finally tack weld the top winch plate in place. Once tack welded, start by welding all the slots (green arrows below), then fully weld all the way around the entire perimeter of the winch plate (orange arrows below).

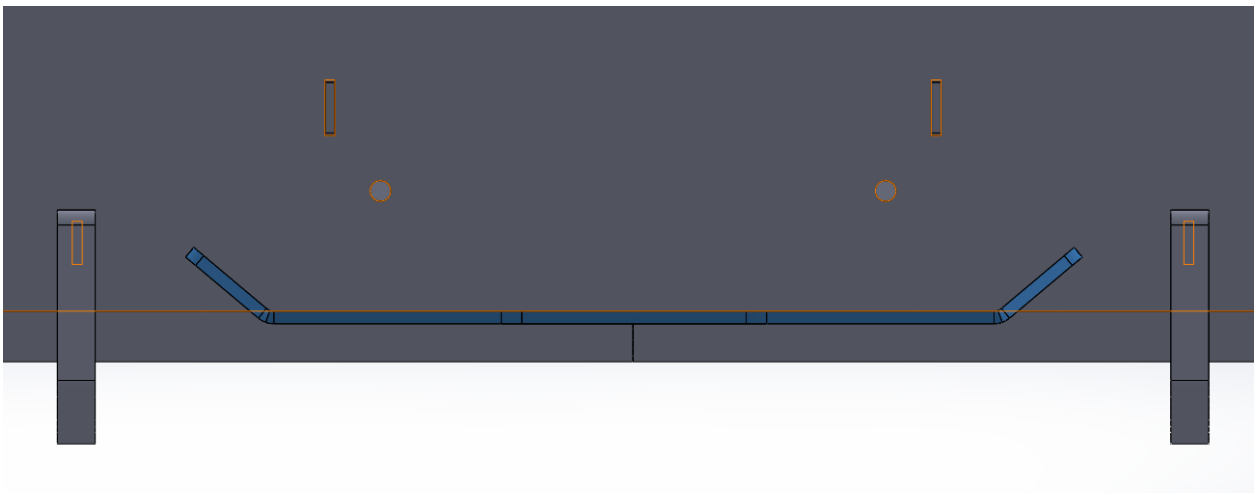


15. After you have welded the top winch plate, flip the bumper over and fully weld all remaining plate and tube joints. All welds on the outside of the plate center section and all tube joints should be a fully welded at this point.

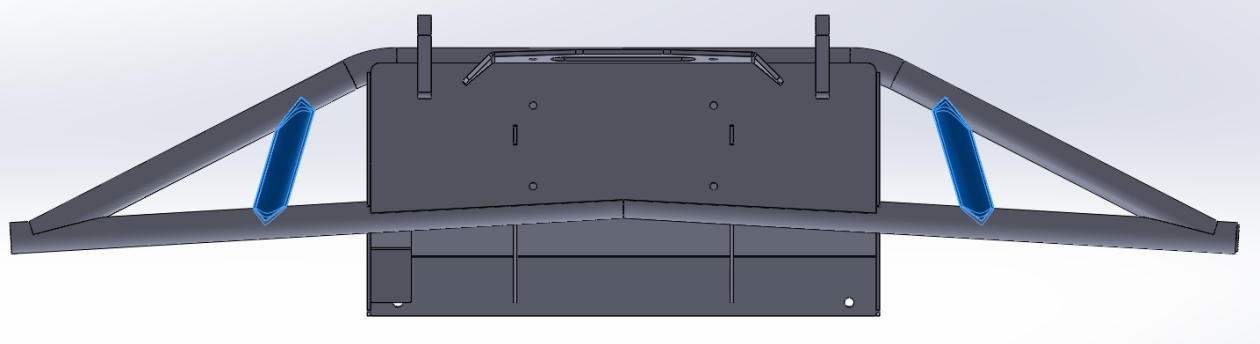
16. Next you will need to prep the shackle mounts, prep by cleaning the mounts along with beveling the edges to be welded for proper weld penetration. It will also be necessary to clearance the mount to clear the weld from top plate to front tube. After the shackle mounts are prepped, center over the weld (you will need to grind this smooth as well) on the top winch plate about 3-3/16” from edge like pictured below. Double check your placement then fully weld mounts.



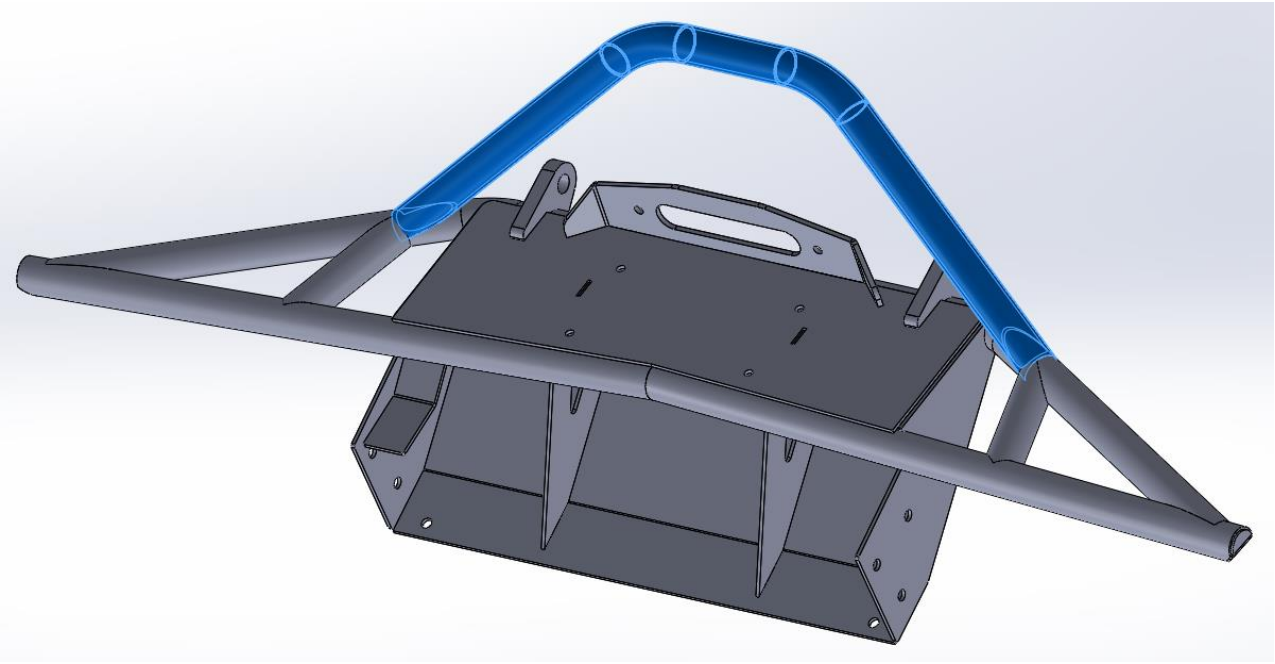
17. After you have fully welded the shackle mounts it’s time to locate the fairlead mount. Center fairlead mount side to side with back edge of the fairlead mount (in blue) lined up with the front edge of the top winch plate (orange outline) like pictured below. Since you have already welded the top winch plate, the fairlead mount will cover that weld. Once fairlead mount is tack welded in place, double check location and fully weld.



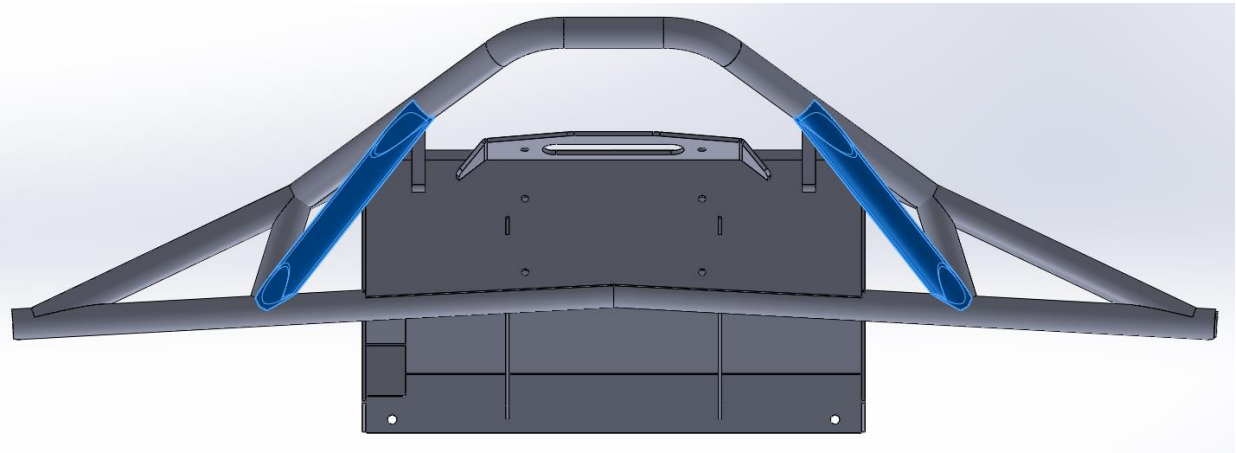
18. Locate DS 1 tube and PS 1 tube (in blue below). Use the scribe marks on the front and back tubes to tack weld in place. Once tack welded in place fully weld both tubes in place.



19. Locate the stinger tube (in blue below). Use the scribe marks on the front tubes to tack weld in place. Once tack welded **DO NOT WELD YET!**



20. Locate both DS 2 tube and PS 2 tube (in blue below). Use scribe marks on stinger tube and the notch on the lower part of the tube to tack weld in place. Once tack welded fully weld both tubes and stinger tube in place.



21. After the bumper is fully welded it is time to finish fitting it to the frame. Go ahead and re-mock up bumper back in place like you did during step 9. Make sure the bumper I level and looks level in relation

to the front body of the truck. Once you're happy with bumper placement locate remaining side and lower mounting holes and drill holes in frame. We find it is easier to leave bumper in place while drilling these holes as the bumper acts as a drill guide. ***NOTE*** There may or may not be a gap between the bottom of the frame and the center plate section of your bumper. Use included 1/8" or 3/16" round metal spacers to fill this space during final install.

22. Final install. Use all included hardware in your kit. As noted above in step 21, use metal spacers if necessary for bottom bolts. Torque all hardware to 110 ft-lbs. *Follow factory installation instructions for the winch of your choice.*