

IRON ROCK OFF ROAD

WJ Winch Mount

Installation Instructions

1-877-919-JEEP www.ironrockoffroad.com

Parts Checklist:

- Iron Rock logo decal (1)
- WJ Winch Mount 92309 (1)
- Hood Latch Support Bracket 92311 (2)
- D-Ring Nut Plate 92329 (2)
- Winch Mount Nut Plate 92330 (2)

#250 – Winch Mount Hardware (1)

- M10 x 40 cl 10.9 Hex Bolt (8)
- 3/8 x 2 gr8 Hex Bolt (4)
- 3/8 x 3/4 gr5 Carriage Bolt (2)
- 3/8 Nylock Flange Nut (6)
- 3/8 USS Hardened Washer (12)

- Optional:** Radiator Skid 92313 (1)

#251 – Radiator Skid Hardware (1)

- 3/8 x 1 Stainless Button Head Bolt (4)
- 3/8 Nylock Flange Nut (4)

- Optional:** DIY Bumper Wings

- Left Wing Plate 92317 (1)
- Right Wing Plate 92318 (1)
- Top Wing Plate 92319 (2)
- Side Wing Plate 92320 (2)
- Bottom Left Wing Plate 92321 (1)
- Bottom Right Wing Plate 92324 (1)

#252 – Bumper Wings Hardware (1)

- 1/2 x 1-1/4 Stainless Button Head Bolt (6)
- 1/2 Nylock Flange Nut (6)
- 3/8 x 1 gr5 Serrated Flange Bolt (4)
- 3/8 Nylock Flange Nut (4)

Safety Warning: *****Important! Read Before Installation. *****

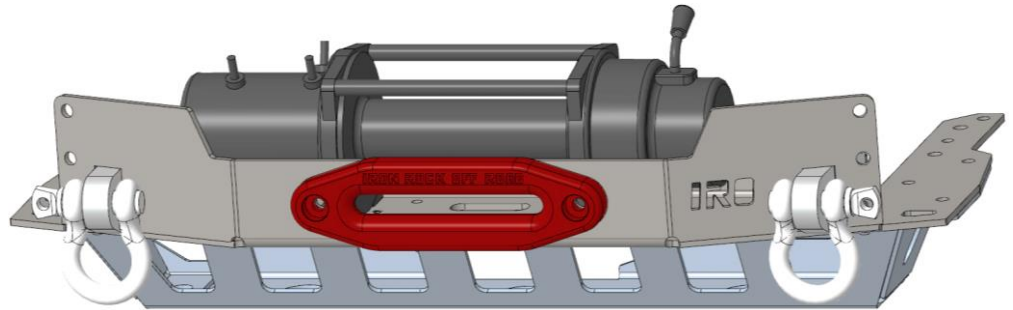
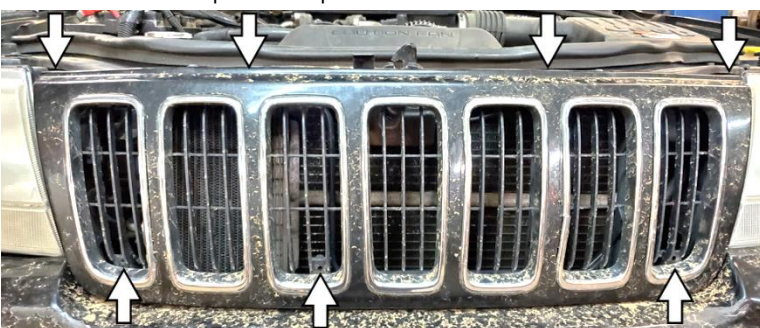
We recommend that this system be installed by a qualified professional. Be sure to re-torque all hardware after the first 100 miles of use, and frequently inspect all safety critical components.

Before you begin:

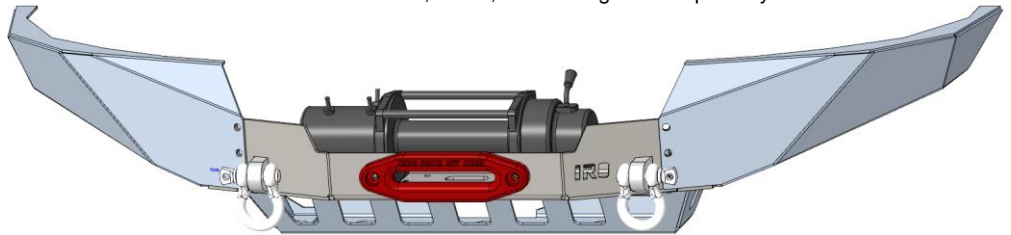
- Read all safety warnings.
- Read and understand installation instructions.
- Check all vehicle components for wear and replace as needed.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- Ensure that all parts are present and in good condition using the included shipping checklist.
- Be sure you have the following tools and supplies:
 - Basic hand tools
 - Paint
 - Drill and drill bits
 - Cutting tools such as Sawzall or angle grinders and cut-off wheels
 - Welder (Only for DIY Bumper Wings)

Removal of factory parts:

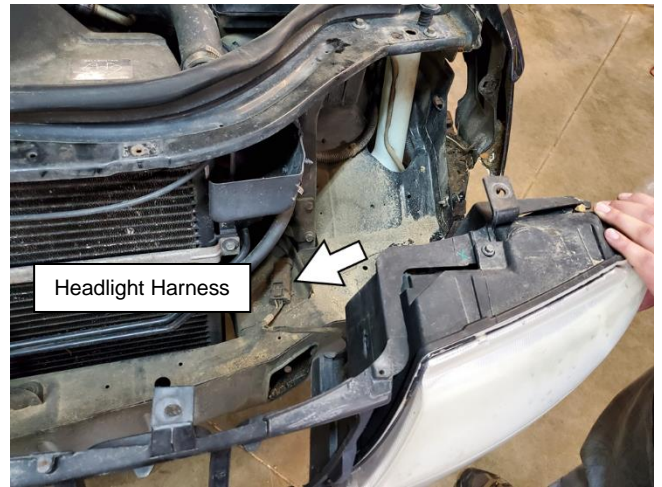
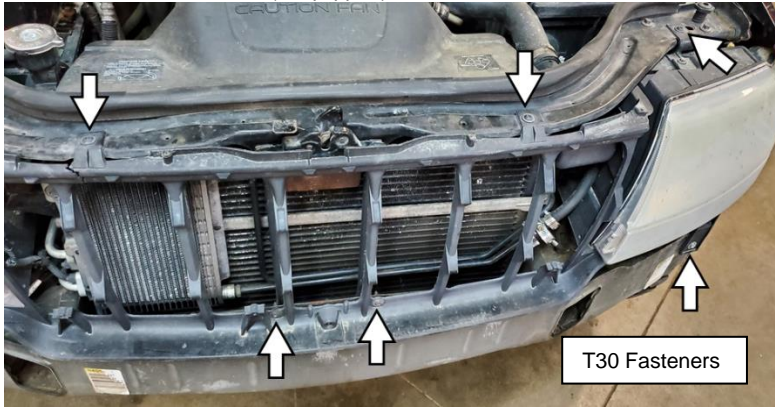
1. Open the hood and remove the screws securing the grille.
2. Remove the grille.
3. Remove the fasteners securing the bumper.
4. Remove the plastic bumper.



Iron Rock Hawse Fairlead, winch, and D-Rings sold separately

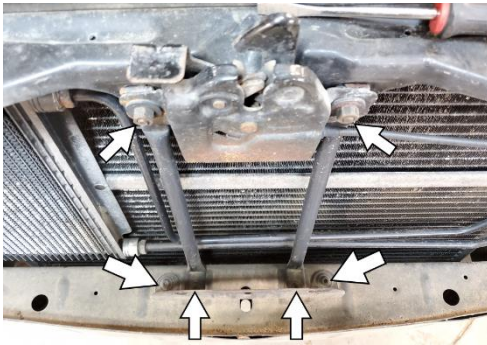


5. Remove factory tow hooks (if equipped)
6. Remove T30 bolts securing grille support.
7. Pull the grille support out slightly and unplug headlight harness and thermometer harness (if equipped).



8. Remove grille support with headlights.
9. Remove the two factory hood latch supports. Save the nuts from the latch for future use.

**Most WJs have a vacuum leak in the vacuum box under the passenger side headlight. Now would be a good time to check the vacuum hoses and replace them as needed. **



Cut out crossmember:

10. Remove crossmember in front of the radiator. IRO recommends using a Sawzall with a long metal-cutting blade. Do not cut into the uniframe. Slip the Sawzall blade between the radiator and the uni-frame and cut straight down. Keep the blade parallel to the uniframe. Leave a little extra material to be safe, it can be smoothed with the grinder afterward. Be very careful to not cut the radiator, hoses, wires, etc.



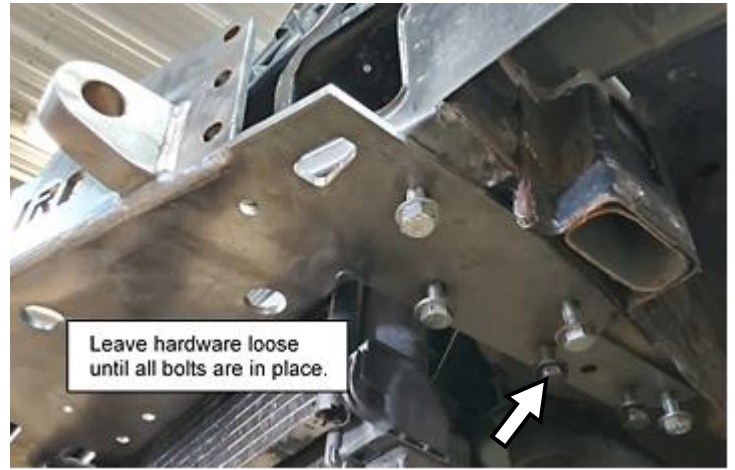
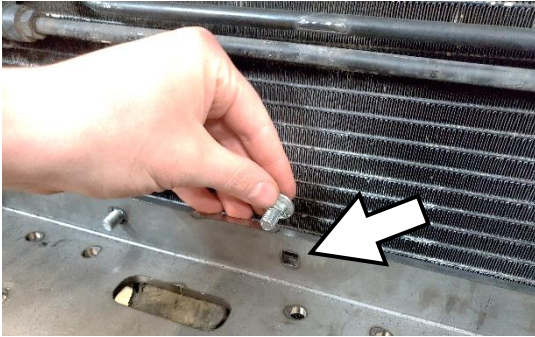
11. Grind down any remaining pieces of the crossmember until the uni-frame is flat.
12. Coat the cut areas with your choice of paint or coating to prevent rust and corrosion.



13. Remove the 4 bolts from the sway bar mounts and rotate the sway bar down, away from the frame. Save bolts for reuse.
14. Check all the bolt holes on the bottom of the uni-frame. Some WJs have plastic plugs in some of the bolt holes that will be used.

Winch Mount Installation:

15. Install the 3/8 x 3/4 carriage bolts from **HK #250** in the square holes in the back of the winch plate, then raise the winch mount in place using a floor jack.



16. Install the factory sway bar bolts temporarily in their mounting holes. Do not tighten at this time.
17. Align the M10 nut plate with the front two holes in the uni-frame.
18. Install M10 x 40 bolts with washers from **HK #250** in the rest of the holes.
19. With all bolts started, reinstall sway bar and tighten all bolts. (**M10: 60 lb-ft.**) (**Sway bar bolts: 80 lb-ft.**)
20. Using a 3/8" drill bit, drill the two holes through the D-Ring mounts into the uni-frame.



21. Install 3/8 x 2" bolts and washers, **HK #250** through the D-Ring mount.
22. Install the two-hole nut plate on the bolts and secure with 3/8 nuts from **HK #250**. Torque 3/8 x 2" bolts to 50 lb-ft.
23. Install the hood latch supports on the 3/8 x 3/4" carriage bolts and the threaded studs on the hood latch bracket using 3/8 nuts from **HK #250**. ****The short bend of the hood latch support goes up; the long bend goes down. **** Torque 3/8 x 3/4" bolts to 40 lb-ft.



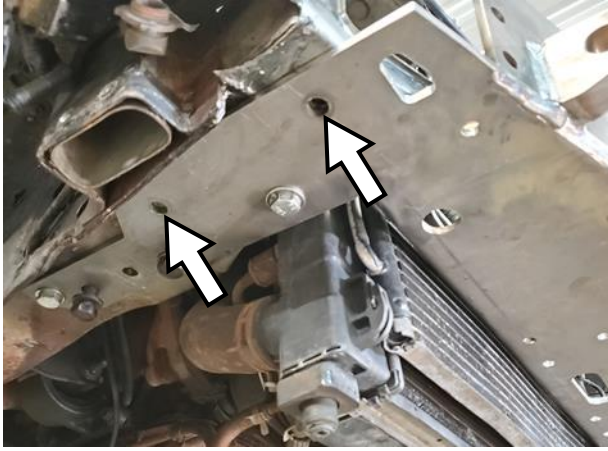
- **If you are installing the radiator skid plate, install the 3/8 x 1" stainless steel button head bolts down through the winch plate at this time.**
24. Install the hood latch mechanism on top of the hood latch supports using the original nuts.
- *If you are not installing the Radiator Skid Plate skip to grille support install.**

Optional Radiator Skid Plate Installation Only:

25. Cut radiator support tube flush with the bracket on both sides using a Sawzall. ***Cut from the inside outward to avoid cutting the radiator, hoses, wires, etc.**
26. Remove any burrs or sharp edges with a grinder.
27. Coat the cut edges with your choice of paint or other coating to prevent rust.



28. Remove the 1st and 3rd M10 x 40 bolts from the winch mount.



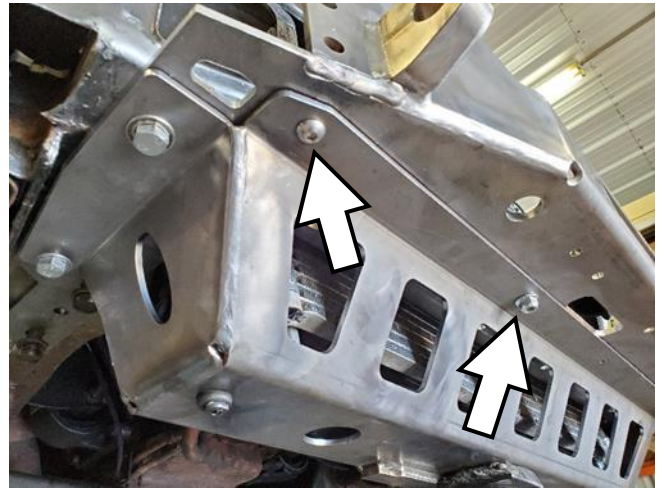
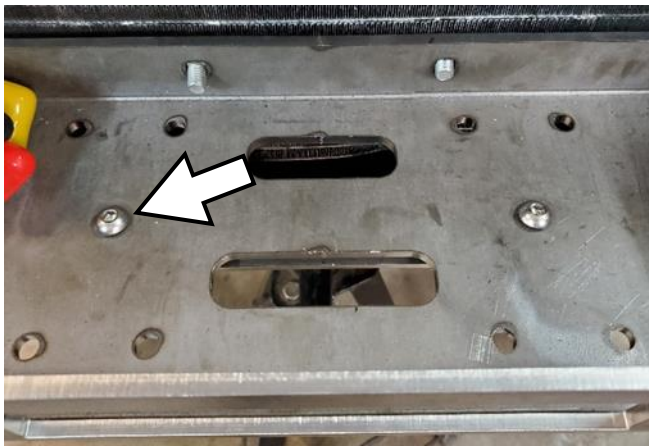
29. Align the radiator mounting pegs with the holes in the radiator skid and lift into place with a floor jack.

30. Secure the radiator skid with 3/8 x 1" stainless steel bolts and nuts from **HK #251** and the M10 x 40 bolts removed from the winch mount.

31. The two middle 3/8 button head bolts point down with the nut underneath the plate, the outer two point up with the nut on top of the plate.

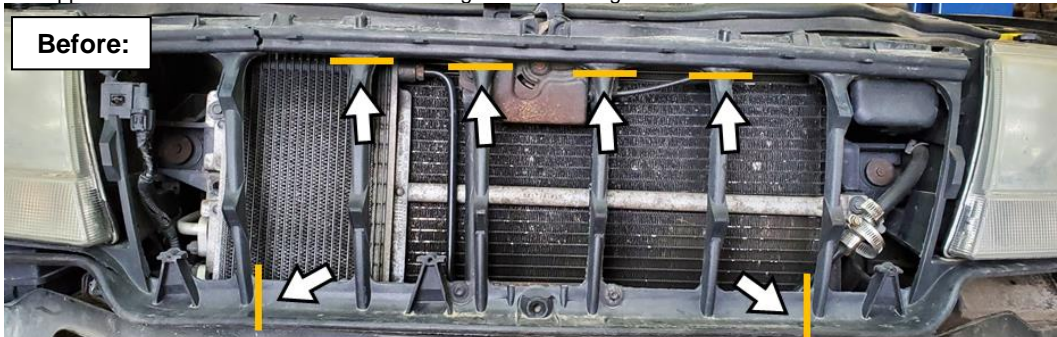
32. Get all the bolts started before tightening. Torque the M10 x 40 bolts to 60 lb-ft. Torque the 3/8 x 1" button heads to 40 lb-ft.

33. Trim off the radiator mounting pegs below the skid to avoid damage to the radiator. A Sawzall, grinder with a flap disk, or sander work well.



Grille support and winch installation:

34. Cut the grille support as shown and install it and the headlights with the original hardware.



35. Install the winch and fairlead at this time. IRO recommends remote mounting the solenoid box off the winch to minimize cutting of the grille. Adjust the clutch and motor housings on the winch to make installation and operation easier. Most winches have the ability to adjust the rotation of the clutch housing and motor housing, see the winch instructions for assistance. Also known as "clocking".
36. Reinstall the grille with original hardware. Some trimming may be needed for winch operation.

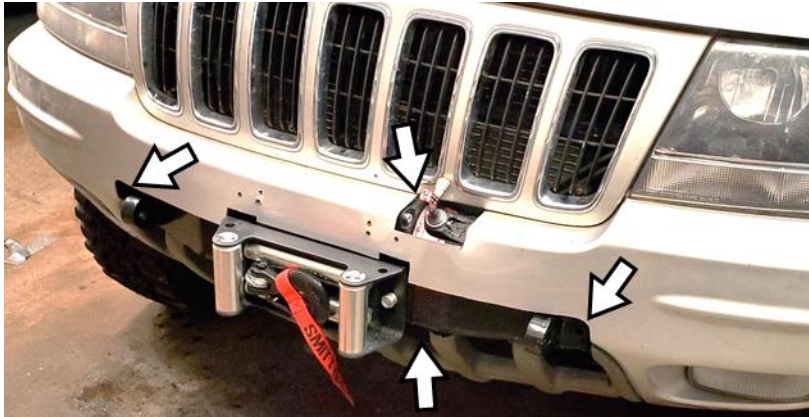


Factory Plastic Bumper Installation:

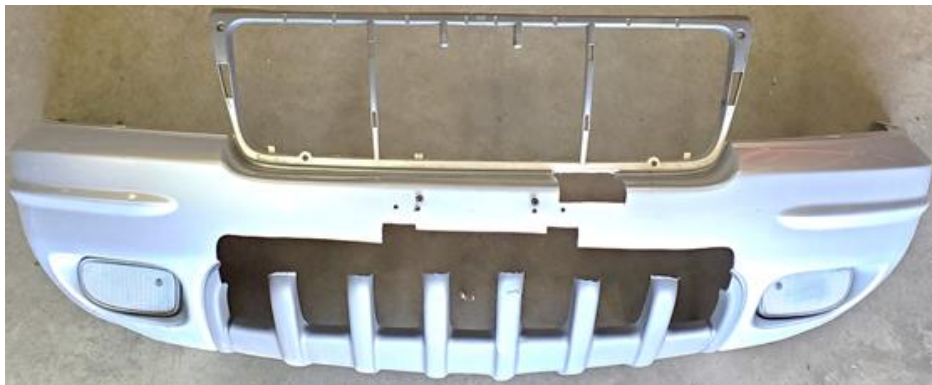
The factory plastic bumper can be installed over the winch mount with trimming and test fitting depending on the winch and solenoid box placement.

Take your time, cut a little then check fitment.

37. Cut the plastic bumper around the D-Ring mounts and clutch lever as shown. A jig saw with variable speed works well for this.



38. Secure the factory plastic bumper with the original hardware. Some modification may be necessary.
**Trimming of the grille may be necessary for operation of the clutch lever.



Optional DIY Bumper Wings Installation:

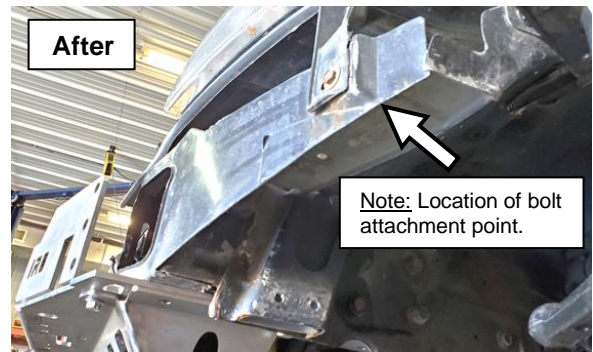
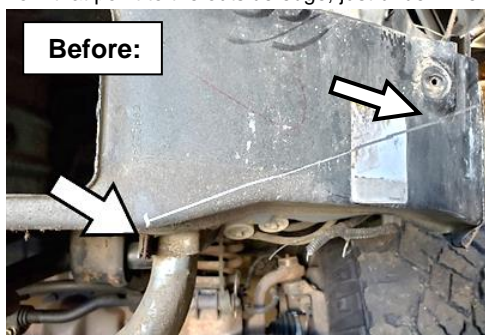
The DIY bumper wings **require windshield washer reservoir relocation and modification to the horn bracket.

The DIY bumper wings **require the WJ Winch Mount and Radiator Skid to be installed prior to building the bumper wings.

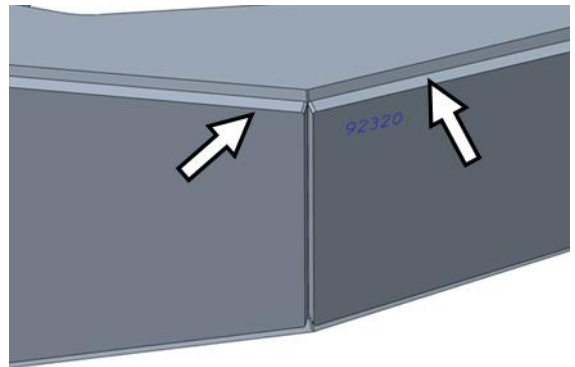
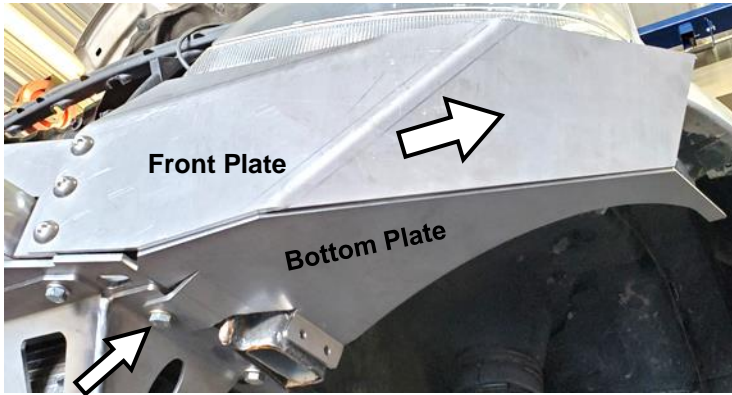
39. Cut the sheet metal as shown below to make clearance for the DIY Bumper Wing plates. Sawzall or grinder with cut-off wheel work well for this.



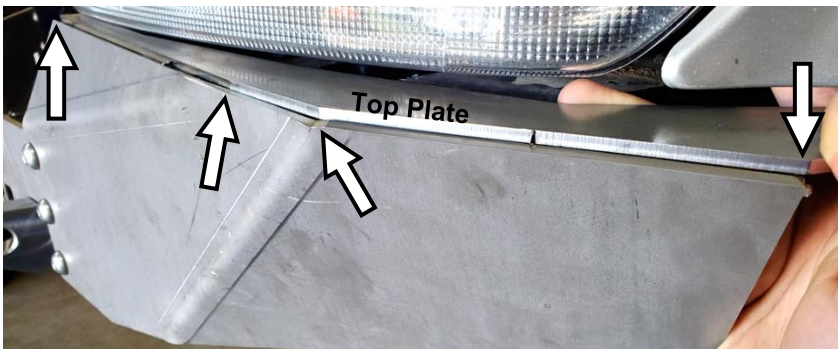
40. On the bottom side of the sheet metal: Draw a straight line out from the pinch weld for the radiator support tube to the front edge. Draw a straight line from that point to the outside edge, just under where the bolt attaches.



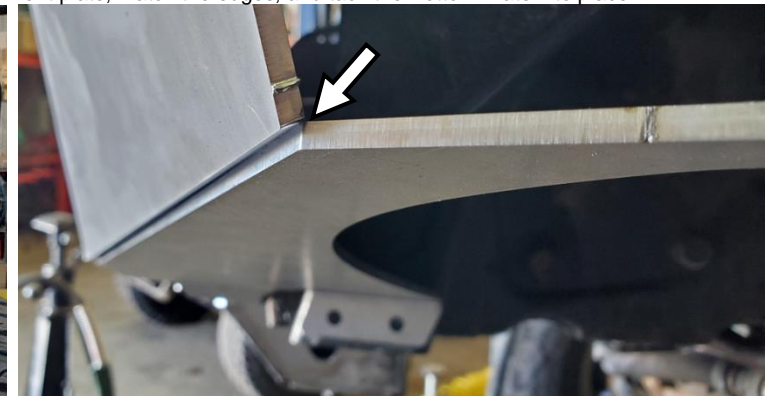
41. Remove the forward-most M10 bolt from the Radiator Skid. Use the bottom plate of the bumper wing to check sheet metal trimming clearance.
42. Attach the front plate of the wing with 1/2 x 1" stainless button head bolts, **HK #252**. Leave the bolts loose for positioning of the bumper plates.
43. All of the bumper plates are designed to fit together with the full edge of each plate showing.



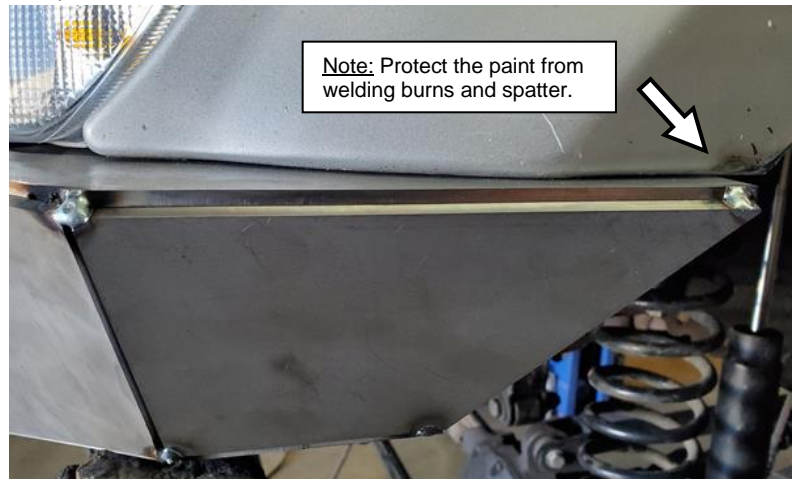
44. Align the top plate on the front plate. The narrow end goes toward the center of the Jeep, the wide end goes out to the fender. The inside edge, near the grille, should be flush with the front plate and each corner should line up, approximately, with a bend in the front plate.
45. Protect the headlight from weld spatter and tack weld the top plate into place in a few spots.



46. With the top plate tacked in place, raise the bumper wing until you are happy with the gap between the bumper and the fender. Tighten the 1/2" button head bolts to hold the wing in place.
47. With the M10 bolt loosely installed in the Bottom Plate, align it to the Front plate, match the edges, and tack the Bottom Plate into place.



48. Support the outside end of the bumper wing with a jack to maintain the bumper to fender gap and tighten the M10 bolt in the bottom plate.
49. Align the Side Plate between the Front Plate, Top Plate, and Bottom Plate by matching all the edges.
50. Protect the paint on the fender from welding spatter and tack weld into place.



51. With all the bolts tight and the bumper to fender gap set, add multiple tack welds to each wing.
52. Using a 3/8" drill bit, drill the two bolt holes through the radiator support tube bracket.



53. Install the 3/8 x 1" bolts with nuts through the drilled holes and tighten.
54. With all the bolts tight and the bumper to fender gap set, put several 1-2" welds along the seams of the bumper. Alternate between the left and right bumper wing. Move to different parts of each bumper wing to minimize heat buildup. Welding large portions of the bumper with it attached to the Jeep will help keep the shape and minimize heat distortion throughout each wing.



55. Remove the wings and finish welding each seam completely. IRO recommends adding a few welds to the inside of the seams if you plan to grind down and shape the edges of the bumper wings.
56. Grind, sand, prime, and paint the bumper wings and reinstall. Torque the 1/2 button head bolts to 60 lb-ft., Torque the M10 bolts to 60 lb-ft., Torque the 3/8 bolts to 50 lb-ft.

