

# INSTALL INSTRUCTIONS FOR 2016-23 TACOMA MID-PRO WINCH FRONT BUMPER

**READ THROUGHOUT BEFORE INSTALLING BUMPER!**



## **DETAILS:**

- **REQUIRES TIE DOWN HOOP ON DRIVERS SIDE OF THE LOWER FRONT CROSSMEMBER TO BE REMOVED.** This is not a tow hook and should never be used for recovery anyways.
- **CUTTING OF FACTORY PLASTIC BUMPER AND FLARES IS REQUIRED.**
- Currently designed for stock body height and suspension lifted vehicles only. If you have a body lift you can still run the bumper, you just need to make the cut line lower by the amount of the body lift. However there will be a gap left in the center below the grill.
- On raw steel orders there may be evidence of anti-spatter spray, oils, areas with light surface rust, small amounts of weld splatter, and shallow scratches caused during manufacturing and/or shipping.
- On powdercoated orders, there may be evidence of scratches or rub marks caused during handling and/or shipping. There may also be scratches or weld splatter underneath the coating. Powdercoat is NOT warranted in any way! However we try our best to package appropriately to avoid any damage during transit.
- Not guaranteed to work with all aftermarket skid plates. If the skid ends just under the lower crossmember or sticks past the front surface by less than 1-3/16", it should work.
- Will work with TRD Pro skid plates. However there will be some overlap and you may have to lower the skid plate slightly.
- Winch fitment info
  - The bumper was designed using the Harbor Freight Badlands Apex 12K with synthetic line. Other similar sized or smaller winches may fit.
  - Must have a 4.5"x10" mounting pattern.
  - Depending on winch size you might have to relocate the control box, clock the winch drum, and/or bend/move AC and/or fluid lines.
- **INTENDED FOR OFF-ROAD USE ONLY.**

## WHAT'S INCLUDED:

- BUMPER PARTS
  - 1X BUMPER WELDMENT
  - 1X ALUMINUM COVER
  - HARDWARE
    - 7X M8\*12MM ZINC FLANGED BUTTON HEAD BOLTS
    - 7X M8\*12MM BLACK STAINLESS FLANGED BUTTON HEAD BOLTS
    - 6X M10 ZINC FLANGED NUTS
    - 2X M10\*120MM ZINC BOLTS
    - 2X M10\*25MM ZINC BOLTS
    - 4X M10 YELLOW CHROMATED NYLON LOCK-NUTS
    - 10X ZINC WASHERS (1.25 OD X .41 ID)
    - 2X ZINC WASHERS (1.00 OD X .41 ID)
    - 2X TRANS COOLER BRACKETS
    - 2X M8\*20MM YELLOW CHROMATED FLANGED HEAD BOLTS
    - 2X M8\*10MM ZINC FLANGED BUTTON HEAD BOLTS
    - 2X M10 NUT PLATES
    - 2X ADHESIVE FOAM TAPE

\*Actual hardware provided may be slightly different (color/length) than hardware used in pics.

## WHAT YOU WILL NEED:

- TAPE MEASURE / YARD STICK
- FLAT SURFACE TO PARK VEHICLE ON WHILE WORKING
- WAY TO MARK CUT LINE ON BUMPER
  - LASER LEVEL RECOMMENDED (MAKES INSTALL 100X EASIER)
- VEHICLE JACK
- CUTTING TOOL FOR TRIMMING STOCK PLASTIC BUMPER
  - MULTI-TOOL RECOMMENDED
- CUTTING TOOL FOR REMOVING TIE-DOWN HOOP
- FLEXIBLE STRAIGHT EDGE / GUIDE
- PAINTERS / MASKING TAPE
- SHARPIE / MARKER
- DEBURRING / SANDING TOOL
- PROPER SAFETY GEAR AND EYE PROTECTION
- BASIC MECHANIC / AUTOMOTIVE TOOLS (HAMMERS, WRENCHES, ECT...)

**ALWAYS USE PROPER SAFETY GEAR AND EYE PROTECTION  
WHEN CUTTING STOCK BUMPER / TIE-DOWN HOOP!**

**HAVE ASSISTANCE WHEN LIFTING / INSTALLING AFTERMARKET BUMPER!**

**READ THROUGH ENTIRE INSTRUCTIONS FIRST!**

**IF YOU FEEL YOU ARE NOT CAPABLE TO INSTALL ON YOUR OWN,  
HIRE A PROFESSIONAL!**

## INSTALL STEPS:

- 1) If you ordered the new bumper as raw steel, prep and paint all the parts. Painting any aluminum parts is optional. Allow paint to fully cure before installing.
- 2) Start with a clean front end.



- 3) If you have an aftermarket bumper, remove it.
- 4) Remove any plastic parts from the underside of the stock bumper and any hardware attaching the underside of the stock bumper.



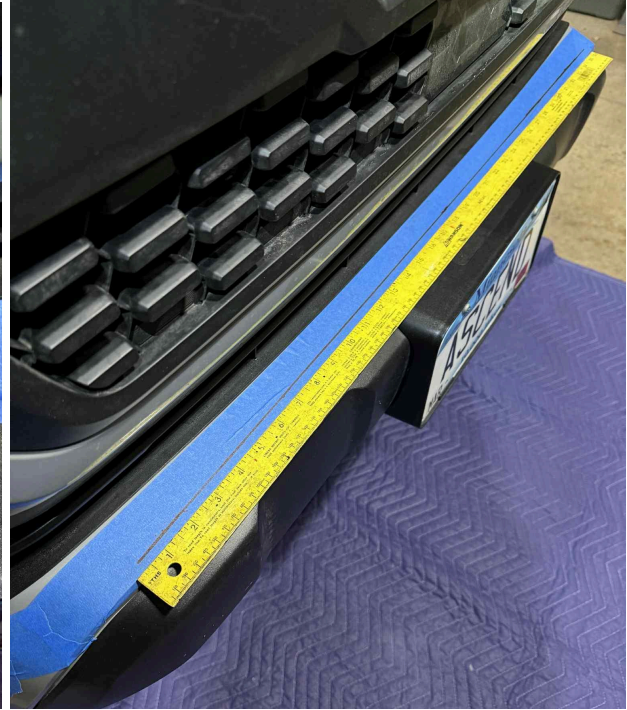
- 5) If you have a TRD skid, you will have to remove it.

**\*For the following steps it's highly recommended to use a lockable laser level on a tripod.**

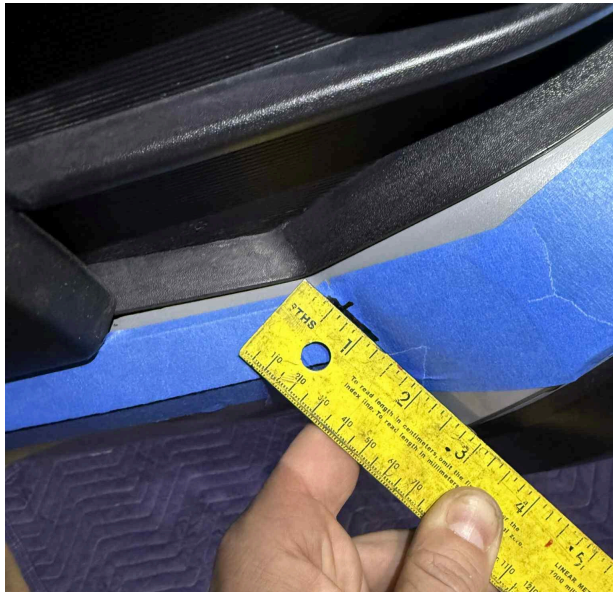
- 6) Apply tape in the general area where you're going to be cutting prior to marking any lines.
  - a) Apply tape following the body line below the fog light cutout around the sides of the bumper and to the wheel wells. Can use a laser or flexible straight edge to get a better idea on where the cut line will be.
  - b) Apply tape across the center top surface of the lip of the bumper.



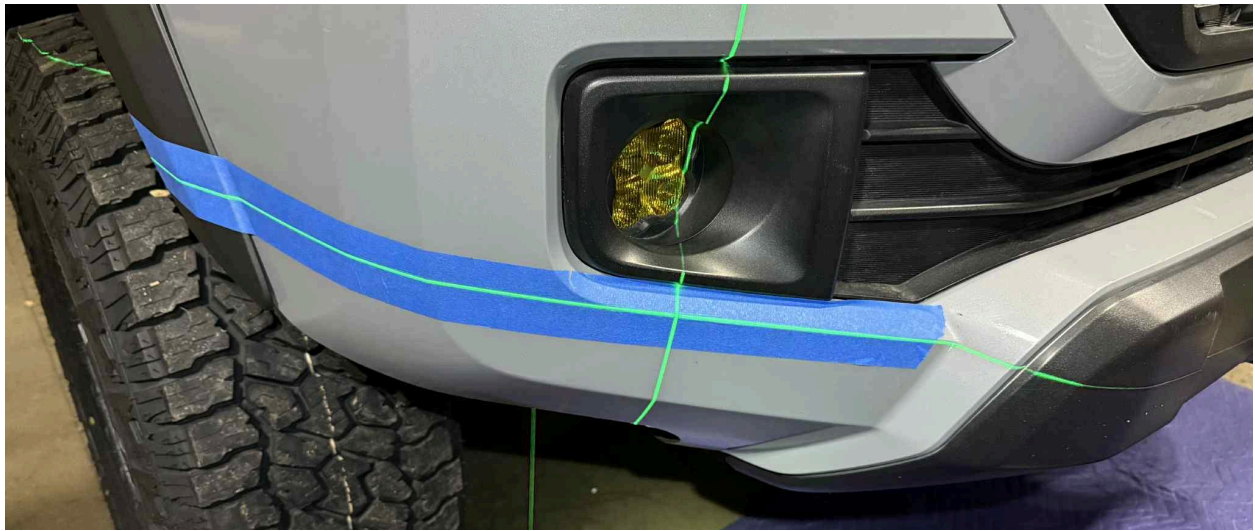
- 7) Measure 1" out from the center of the bottom edge of the valence and mark a line. Then using a straight edge, preferably a yard stick, trace a straight line across the top surface that is centered and 36" long. Make sure either end of the yard stick is the same distance from the bottom of the valence before tracing.



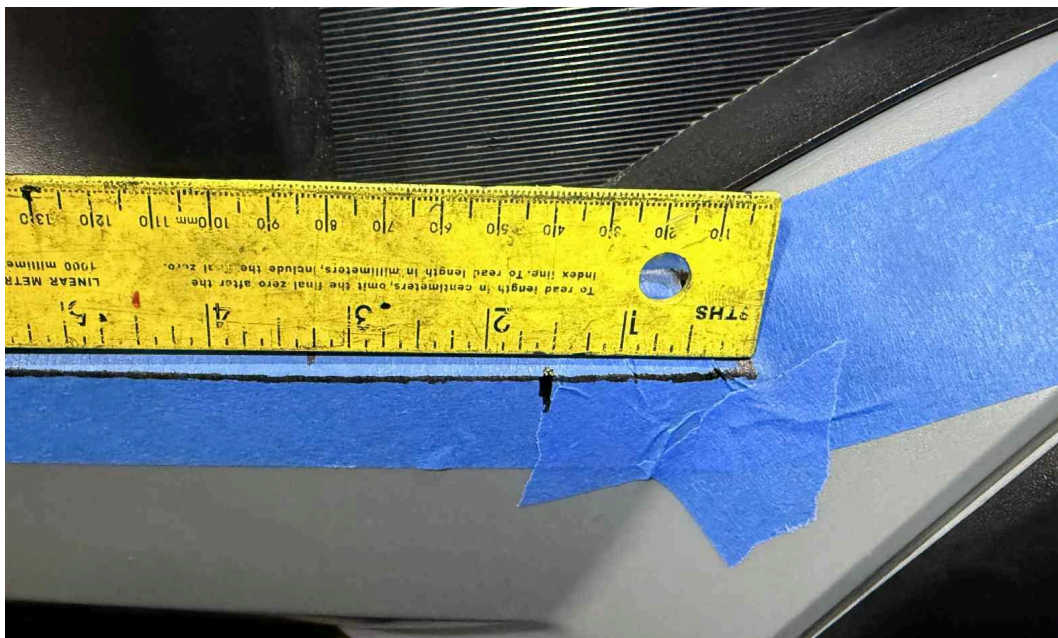
- 8) Trace along the valley where the surface below the fog lights meets the sloped surface at either end of the top center surface. Make a mark on it 5/8" out from the edge of the valence.



- 9) Trace along the body line below the fog light cutout around the sides of the bumper and to the wheel wells. Can use a laser or flexible straight edge for tracing around the sides. Make sure both sides are even by measuring down from a reference point to the line.



10) Measure 1-1/2" out from the line you traced in the valley and mark on the body line below the fog lights.



11) Draw a large arc between the mark on the line in the valley and the end of the straight line on the top center of the lip. This area will be covered so it doesn't have to be perfect. Then

draw a small arc between the mark on the line in the valley and the mark on the body line below the fog lights. The arc should be tangent to the body line.



12) CAREFULLY cut along the lines. Be sure to not cut too deep behind the inner surfaces of the bumper. Recommended to apply tape over the cut areas as you go so the bumper isn't hanging while cutting. Once you finish cutting and remove the lower section of the bumper, sand/deburr the edges. Leave the tape on for now.



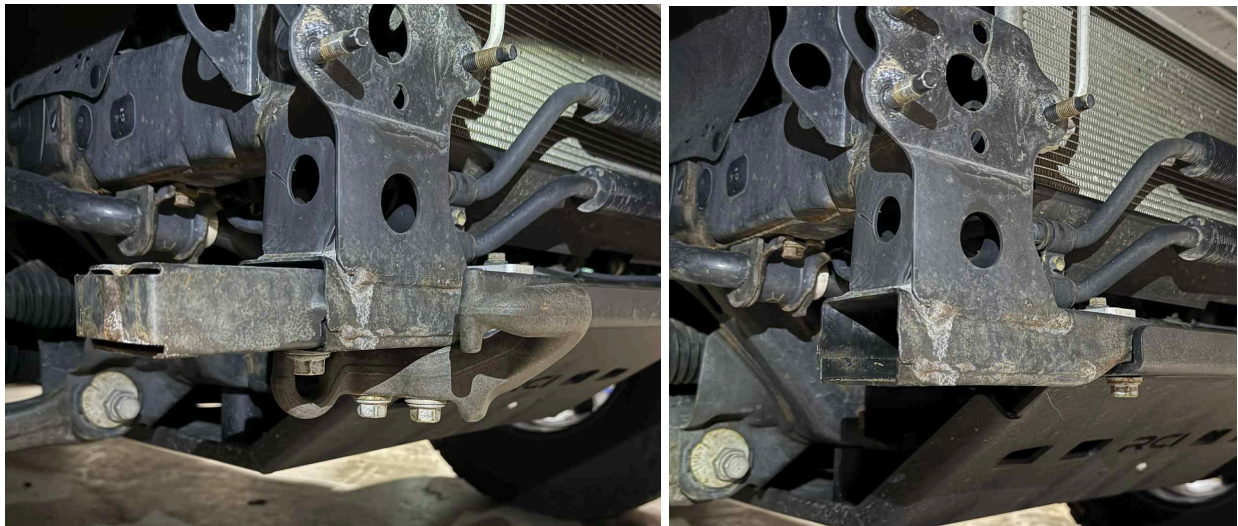
13) If using the slots on top of the bumper for mounting pods/lighbar, trim back the center edge an additional 1/2" along the entire edge or just where you plan on mounting to leave room for the hardware.



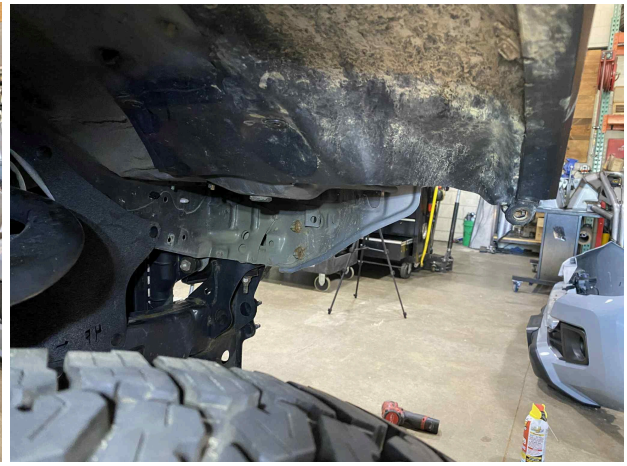
14) Remove the aluminum crash bar and mounts. Save the nuts if you want to reuse them.



15) (OPTIONAL) Remove the hook and frame extension inserts.



16) Cut wheel well liners. Can easily do this with a sharp knife.



17) Move the trans cooler coils backwards.

a) Undo the bolts that hold the coil to the crossmember.



b) In the passenger side wheel well, undo the splash guard and remove the bolt holding the lines to the frame rail.



- c) Loosely install the provided aluminum offset brackets. The coil feet should attach to the threaded holes on the brackets using the shorter bolts. The rest of the bracket with the slotted hole should be facing forward away from the truck.

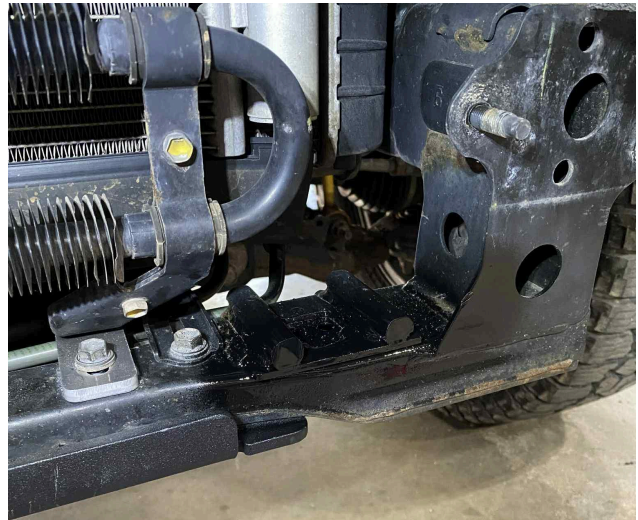
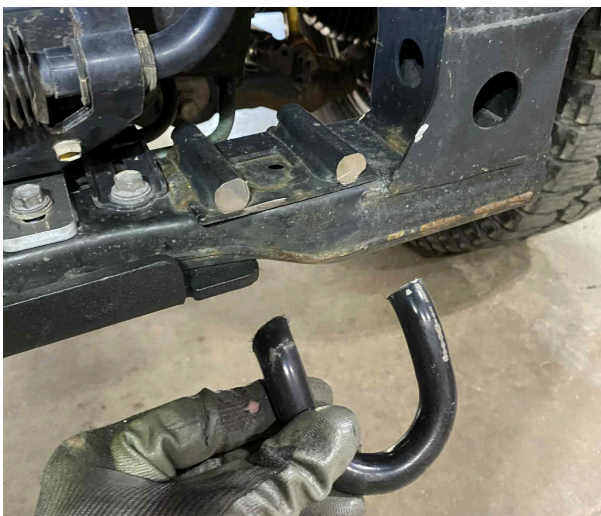


- d) Attach the offset brackets to the crossmember using the longer hardware. Then tighten the shorter hardware.



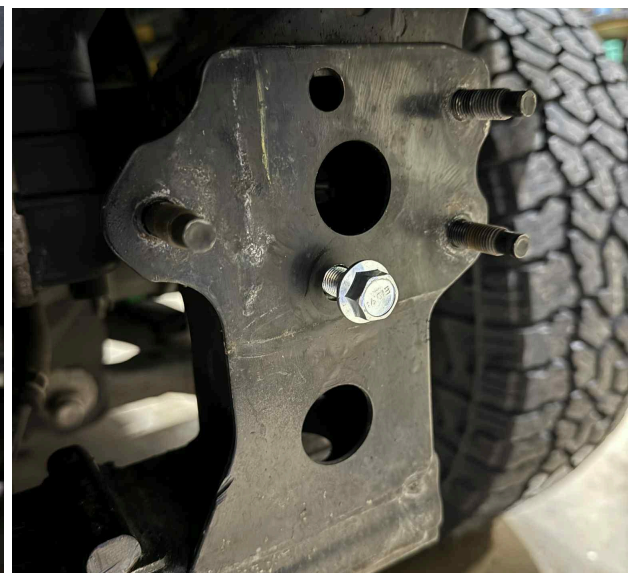
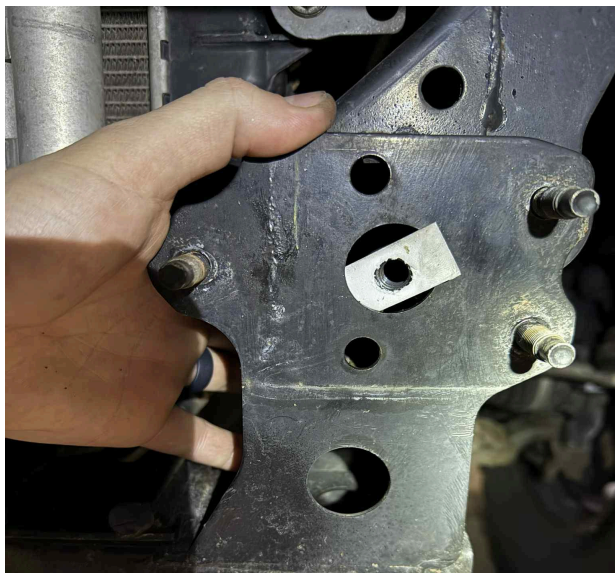
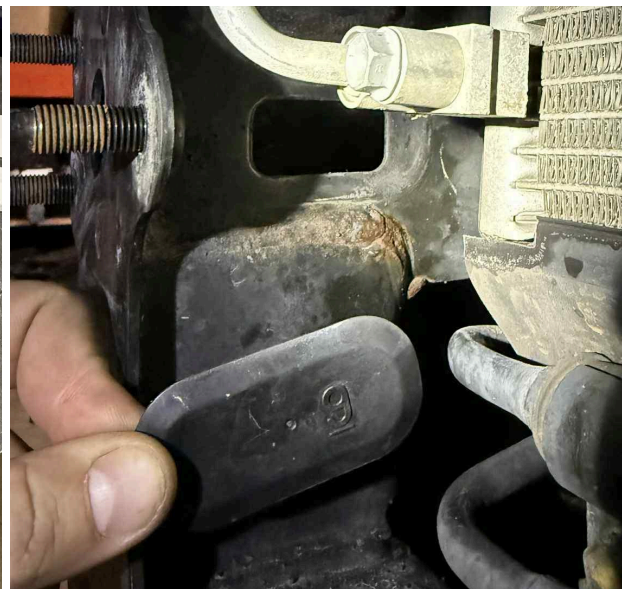
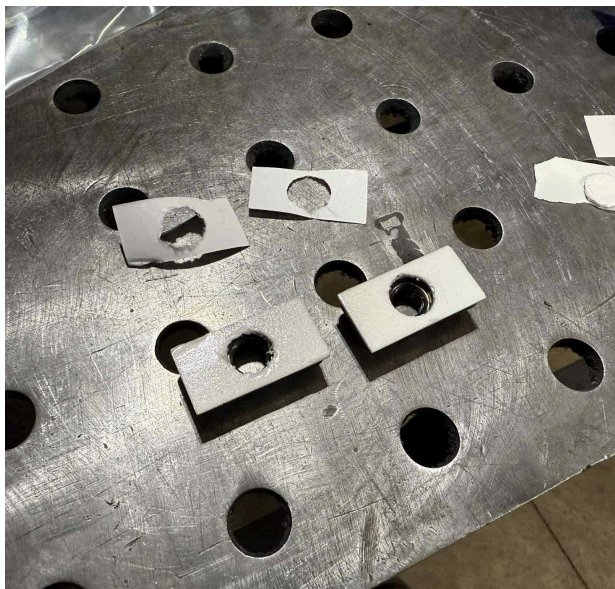
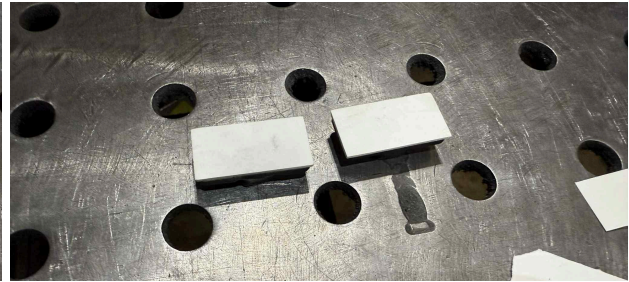
18) Cut off the factory tie-down hoop on the driver's side of the crossmember flush with the crossmember. Paint over the cut areas after.

- a) This is a tie-down point for transport, not a recovery point! It should never be used for recovery regardless.



19) Install M10 nut plates.

- a) Take the provided double sided foam adhesive, remove the film from one side, and apply it to the face of the nut plates.
- b) Cut a hole in the foam over the hole for the nut so a bolt can pass through.
- c) Remove the other layer of film.
- d) Remove the plug cover from the inside of the frame rails behind the mounting surface.
- e) Take a rag with some brake cleaner and attempt to clean the backside of the mounting plate on the end of the frame rails around the bottom smaller hole.
- f) Carefully pass the nut plate through the larger center hole and into the frame rail.
- g) Move it so the nut is centered over the smaller bottom hole. You can use the M10\*25mm bolt and partially thread it in to help align it.
- h) Pull it tightly against the inner surface of the mounting plate so it adheres properly.



20) (OPTIONAL) If running a winch, take a large pliers and bend the lower flange on the grill support brace upwards so it is as high/flat as possible. If needed you can also flatten the vertical flange against the crossmember in front of the radiator.



21) (OPTIONAL) Install any lights. The bumper is EXTREMELY tight to the front of the truck and there isn't a ton of room. You might have to modify/flip the brackets to allow the pods to be mounted lower or more forward. Or if running Diode Dynamics SS3's or Baja Designs Squadrons, it is recommended to pair with our lowering brackets so you don't have to modify the stock ones.

22) (OPTIONAL) Set winch in the bumper. You don't need to bolt the winch to the bumper but just set it in it as far back as you can. This will make install of the bumper easier.



- 23) Using either a jack or two people, carefully lift the new bumper up to the vehicle so it is against the front frame plates and studs are aligned with the mounting holes. It is recommended to leave a small gap between the cut edge of the stock bumper and the wings of the new bumper to decrease rubbing. Make sure it is also spaced evenly side to side.
- When lifting the bumper into place, you will need to first get the mounting surface of the bumper underneath the front end of the truck.
  - Then lift it upwards so the slotted bracket on the top of the bumper is just above the cut center lip of the stock bumper.
  - Then push it backwards so the studs on the ends of the frame rails go through the mounting holes on the bumper.



- 24) While holding the bumper in place, loosely install the outer M10 nuts (can use the new provided ones or reuse the oem ones) with 1-1/4" OD washers. Recheck the bumper alignment then tighten the hardware.



25) Mark areas requiring additional trimming (specifically around the valley below the fog lights) and mark it so it's not rubbing against the bumper. Lower or remove the bumper before you do any cutting. Raise / reinstall bumper and recheck. Repeat until you have an even gap and no major rubbing.



26) (OPTIONAL) If you want, can increase the side “viper” cut to a steeper angle. However it is recommended to not cut above the screw holding the fender flare on.

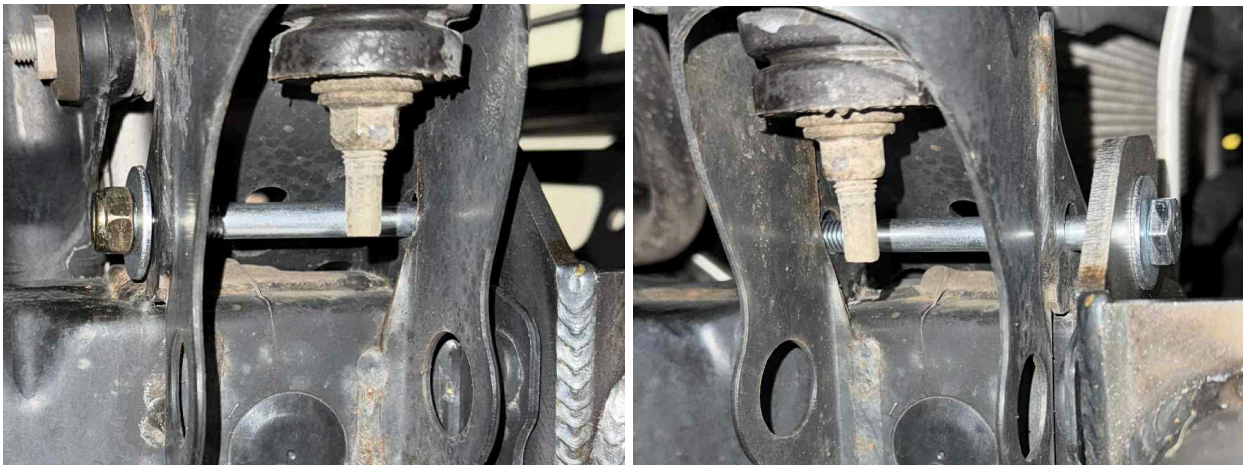


- 27) Install the M10\*25mm bolts with 1" OD washers through the holes and into the nut plates. Don't press too hard when initially threading it in or you might cause the nut plate to separate before you can start the bolt into it. Tighten the bolts.

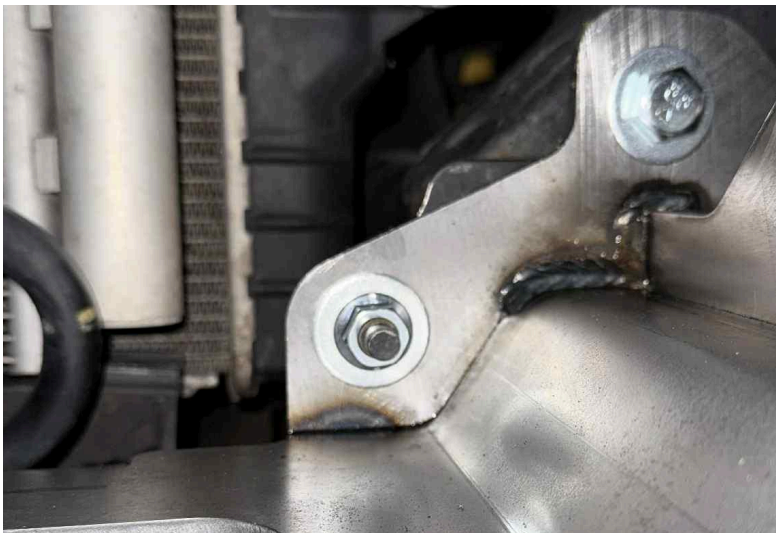


- 28) Install frame bolts.

- Take the long M10\*120mm bolts and put a 1-1/4" OD washer on each of them.
- Pass the bolt through the holes in the body mount bracket and into the bumper.
- Install another washer and locknut on the bolts and tighten.

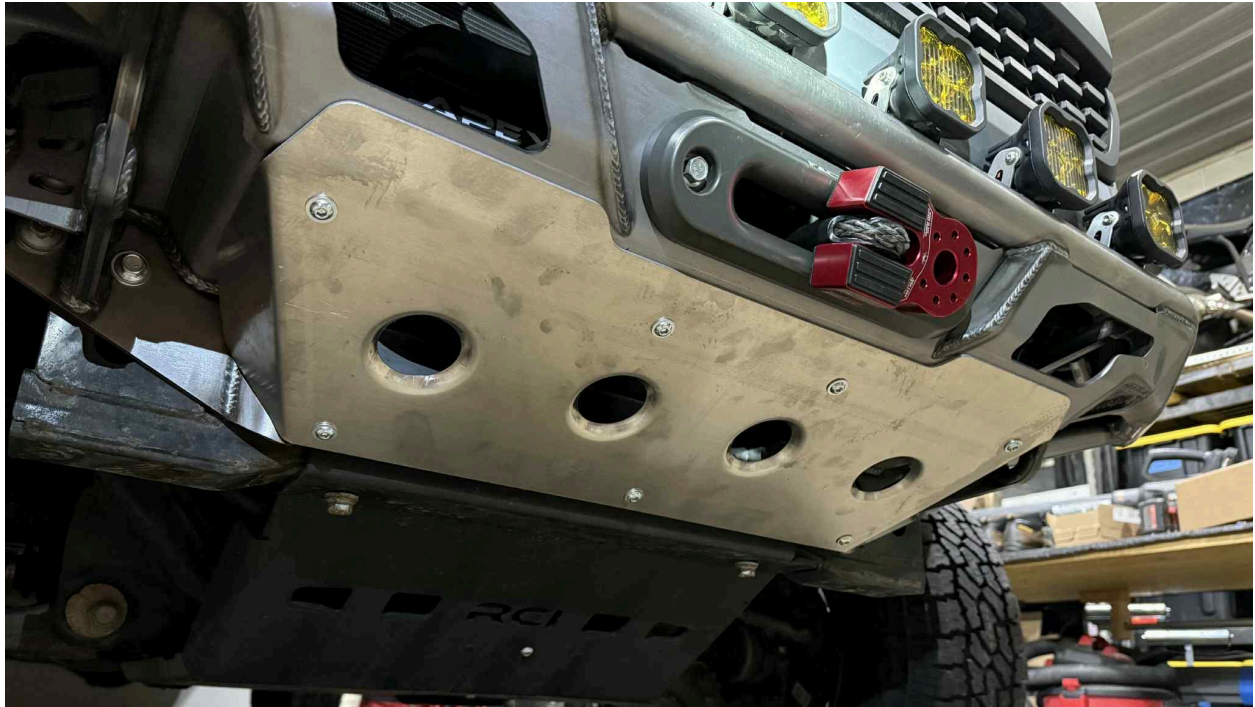


- 29) Put a nut and 1-1/4" OD washer on the inner mounting studs and tighten.



30) Install the lower aluminum cover using the M8 flanged button bolts.

- a) On uncoated orders you will receive both zinc plated and black stainless (for if you coat the skid yourself). If you ordered the cover powdercoated you will only receive the black stainless hardware.
- b) If running a winch, install hardware for that first while you still have access before putting the cover on.



31) If running a TRD skid, can reinstall it. However there will be overlap.



32) Install is complete. Enjoy!

33) Take some cool pics and tag us on instagram! @ascendfabrications