

# **INSTALL INSTRUCTIONS FOR 2016-23 TACOMA HI-PRO HYBRID 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.** Or can be used with the R4T bumper caps to avoid cutting the stock bumper, but you still have to cut the flares.
- 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.
- 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 1-1/4", 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
    - 6X M8\*12MM ZINC FLANGED BUTTON HEAD BOLTS
      - (WILL NOT GET THESE IF ORDERING POWDERCOATED)
    - 6X M8\*12MM BLACK STAINLESS FLANGED BUTTON HEAD BOLTS
    - 6X M10 ZINC FLANGED NUTS
    - 4X M10\*110MM ZINC BOLTS
    - 4X M10 YELLOW ZINC CHROMATED NYLON LOCK-NUTS
    - 6X ZINC WASHERS (1.25 OD X .41 ID)
    - 2X ALUMINUM WASHER PLATES

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

## **WHAT YOU WILL NEED:**

- TAPE MEASURE
- FLAT SURFACE TO PARK VEHICLE ON WHILE WORKING
- WAY TO MARK CUT LINE ON BUMPER
  - LASER LEVEL (RECOMMENDED, MAKES INSTALL 10X EASIER)
- VEHICLE JACK
- CUTTING TOOL FOR TRIMMING STOCK PLASTIC BUMPER
  - (MULTI-TOOL OR SHORT BLADE RECIPROCATING SAW RECOMMENDED)
- 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!**

**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 front bumper.



- 5) Disconnect wiring to any sensors, cameras, and fog lights on the grill and bumper.
- 6) If you have a TRD skid, you will have to remove it.

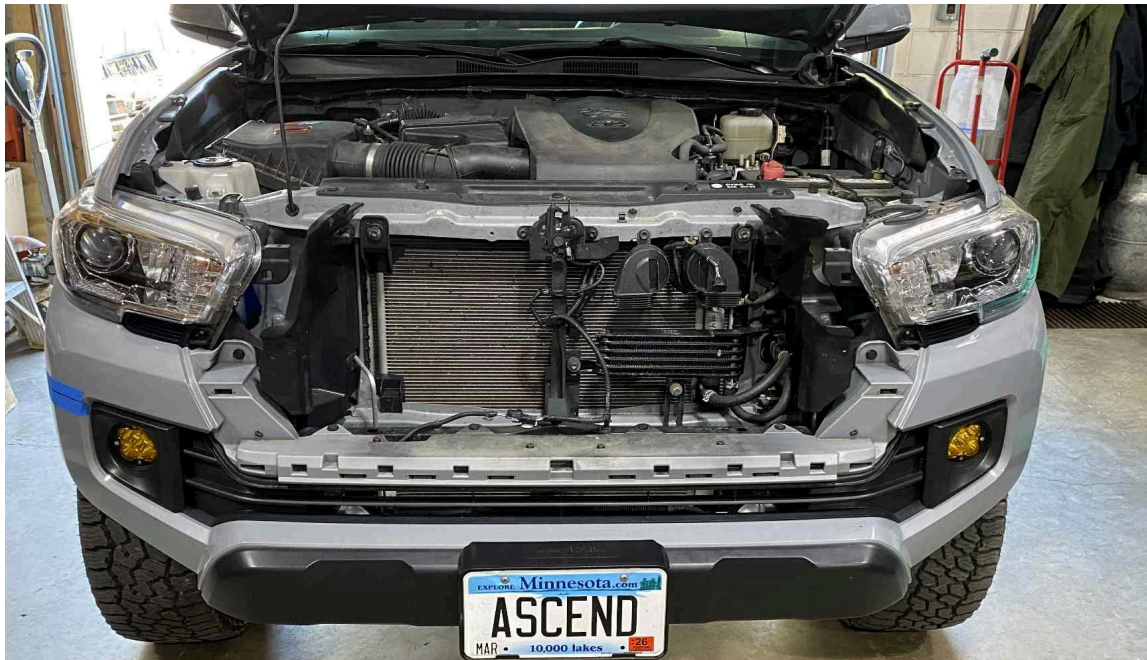
\*If running the R4T bumper caps, skip the following step.

\*Highly recommended to use a lockable laser level on a tripod. Adjust the laser line so it's on the reference points and can trace over with a marker.

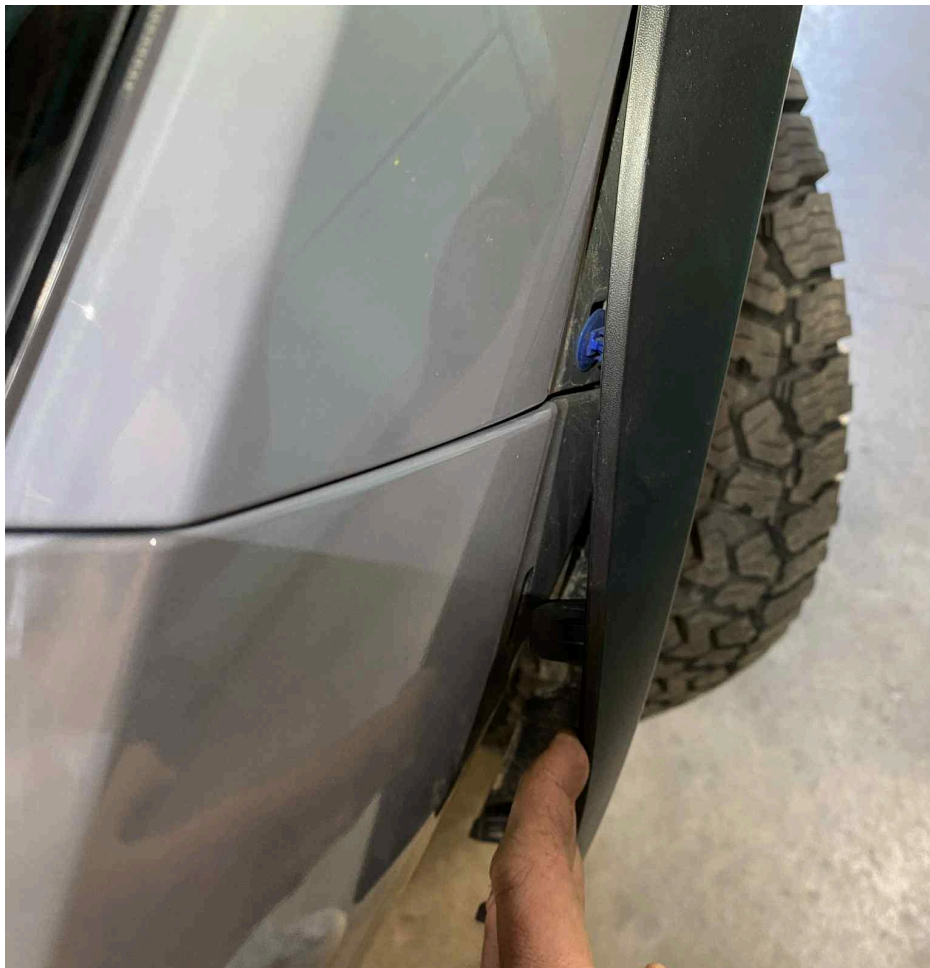
- 7) Apply tape in the general area where you're going to be cutting then mark the cut lines.
  - a) The first point will be where the body line meets the edge of the fender flare. Measure straight down by 2-5/8" and make a mark.
  - b) Using a laser or flexible straight edge, follow the body line along the top of the fog light cutout to the mark on the flare.
  - c) Apply tape to the bumper and flare and trace over with a marker.



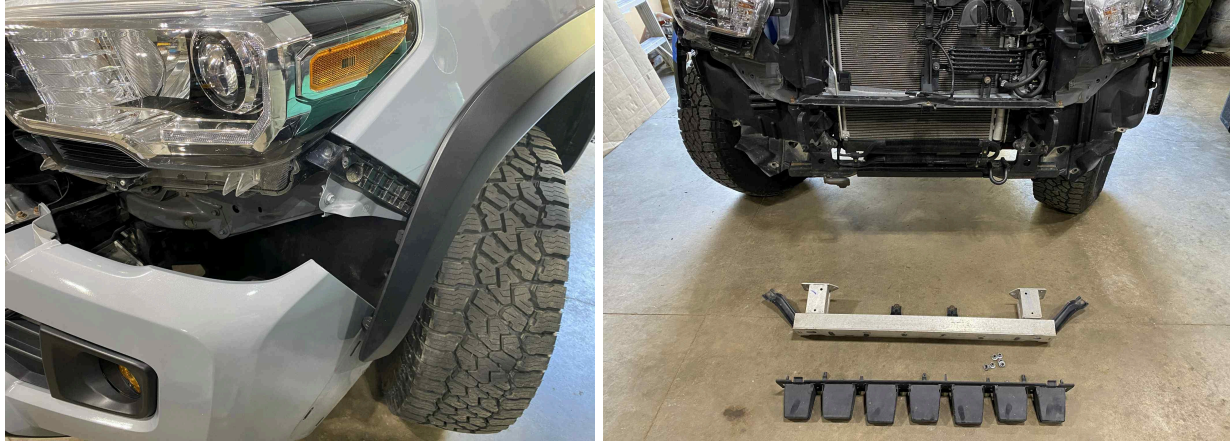
8) Remove the grill.



9) Unclip the ends of the fender flares from the bumper.



10) Remove the stock bumper and aluminum crash bar. Careful to not scratch the bumper when pulling it out from between the body and flare ends.



\*If running the R4T bumper caps, skip the following step.

11) With the bumper off the vehicle CAREFULLY cut along the lines from step 6. Recommended to use a multitool or small reciprocating saw with a short blade. Once cut all the way across, use a sander and/or deburring tool to clean up the cut.

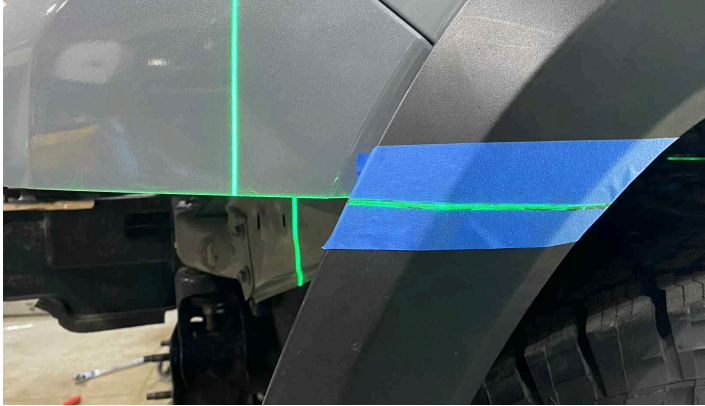
- a) If you decide to leave the bumper on the vehicle while cutting, apply tape to the cut areas of the bumper as you go to prevent it hanging and causing issues. Be careful not to cut too deep and hit any wiring or hard lines.

12) Install R4T bumper caps (if you're using them).

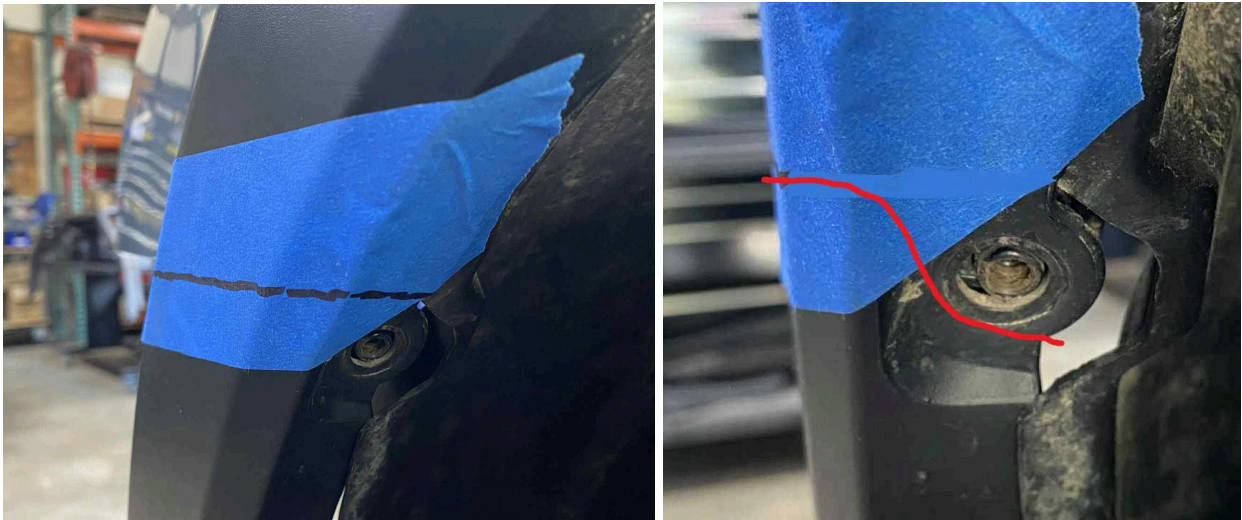


13) Cut fender flares.

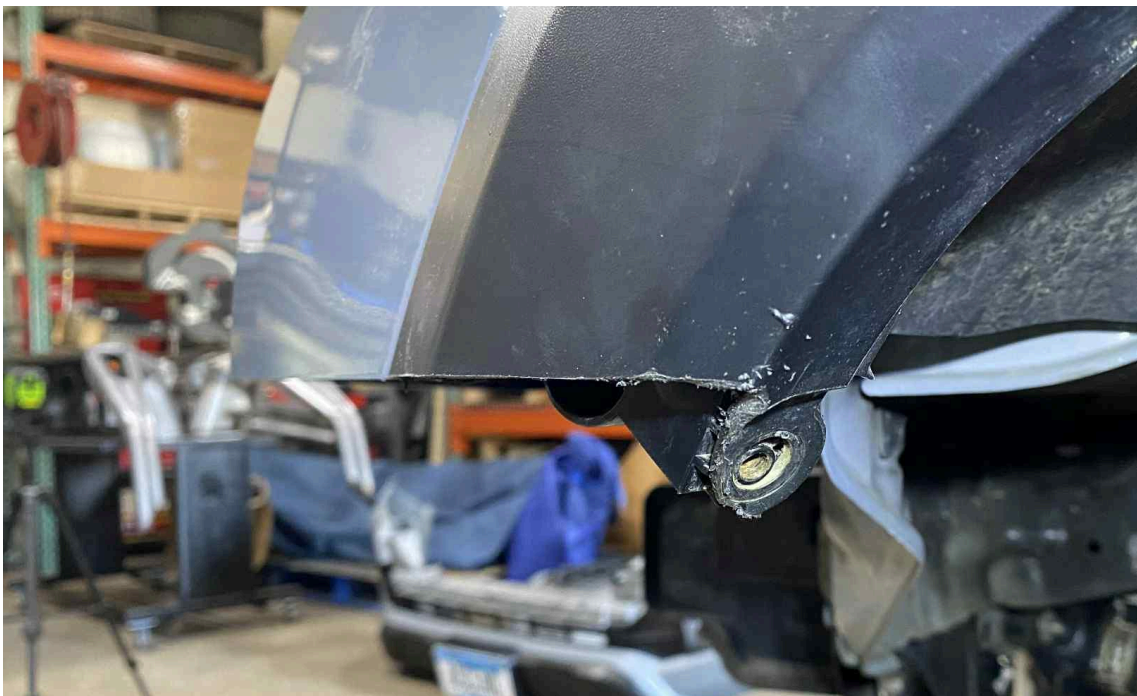
- a) If not running the R4T caps, cut along the lines you previously marked in step 6.
- b) If running the R4T caps, use a laser or straight edge to extend the bottom edge of the caps onto the flares. Mark the line on the flare.



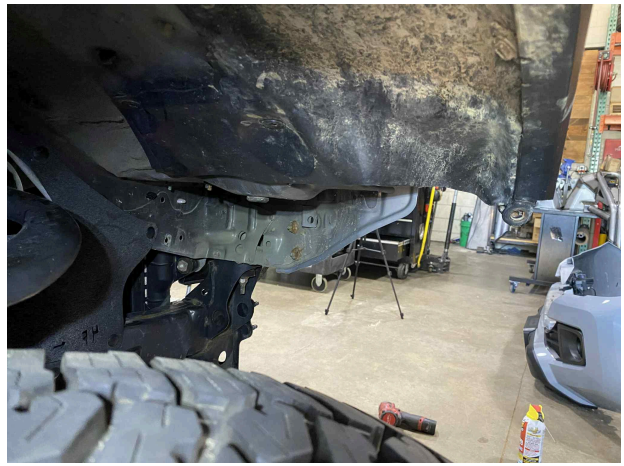
- c) Trace around the back of the flare and down and around the screw.



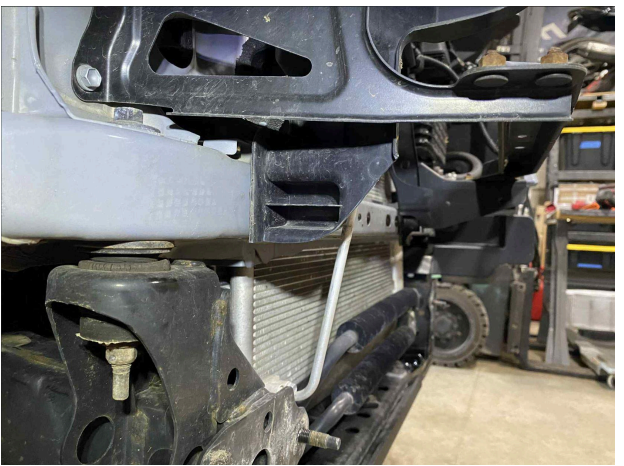
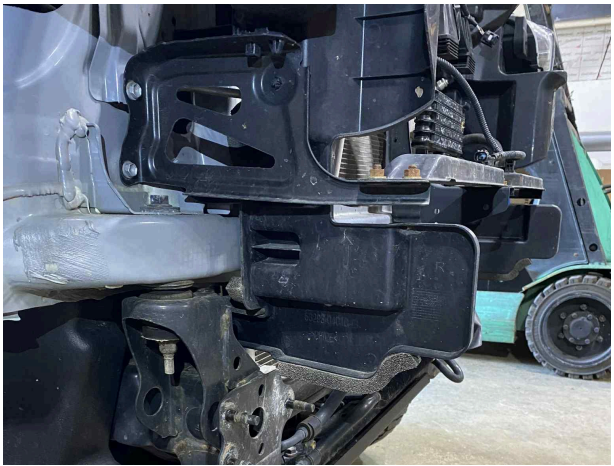
- d) Cut the fender flares. Sand the cut edges smooth after.



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

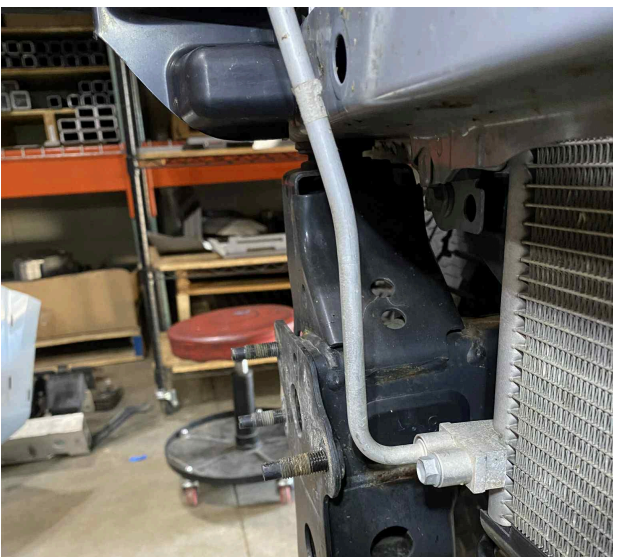
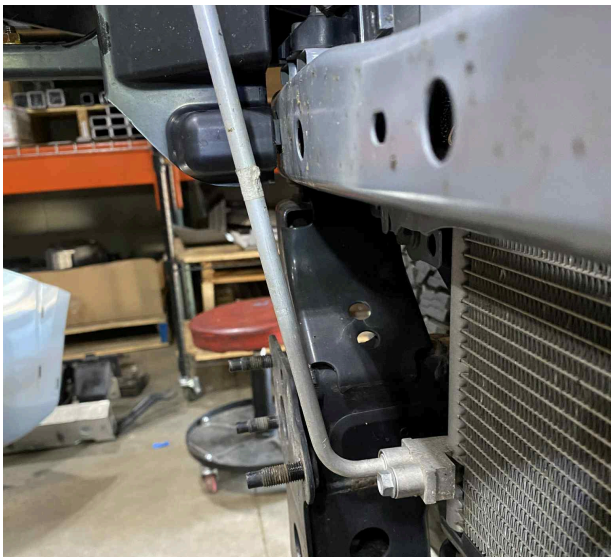


15) Cut the bottoms of the air dams as shown.



16) CAREFULLY bend in the AC line on the radiator.

- a) Bend in the line by hand so the lower section is vertical.
- b) Using a long straight edge, hold it up against the plates on the ends of the frame rails. Make sure the line is not touching the straight edge and has at least 1/8" clearance.
- c) If you have some high-temp rubber hose laying around, cut a small section, slit it, and fit it over the bottom of the line to act as a barrier and prevent rubbing on the bumper.

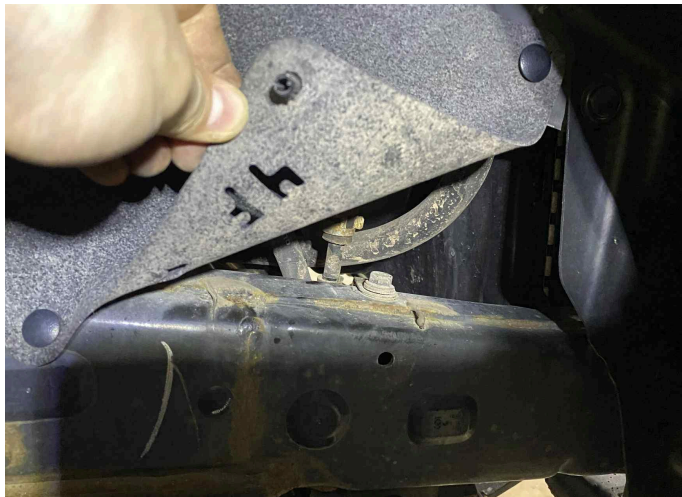


17) Move the trans cooler coils backwards.

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.



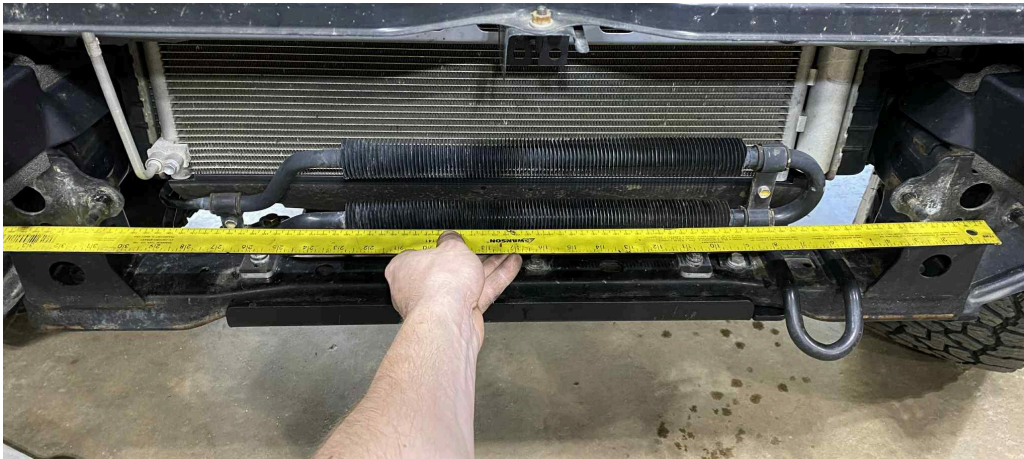
c) Loosely install the provided aluminum offset brackets. The coil feet should attach to the treaded holes on the brackets using the shorter bolts.



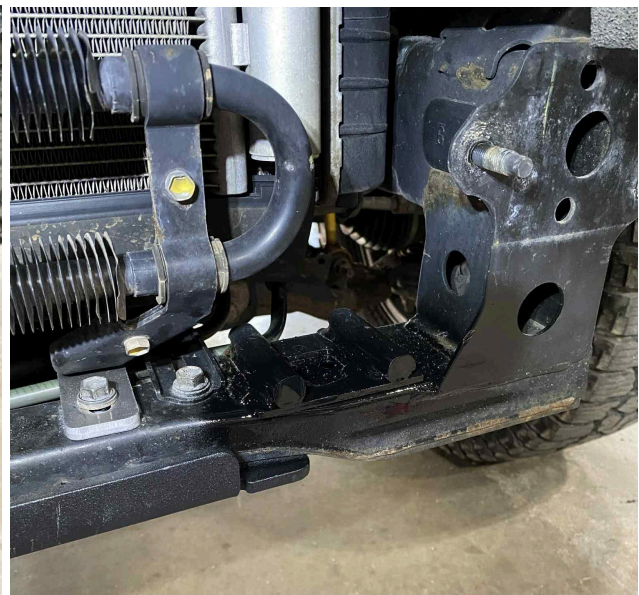
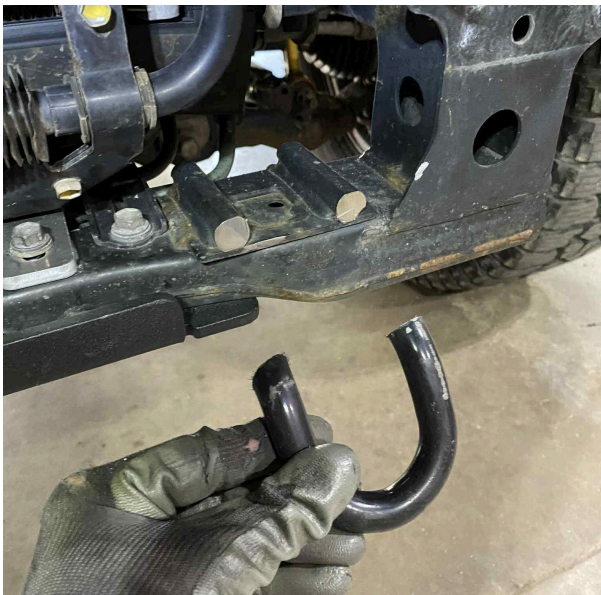
- d) Loosely attach the offset brackets and coil to the crossmember using the longer hardware.



- e) Using a long straight edge, hold it up against the plates on the ends of the frame rails. Make sure the coils are not touching the straight edge. Only need about 1/8" of clearance. Once spacing is set, tighten the hardware on the offset brackets and recheck spacing with the straight edge.



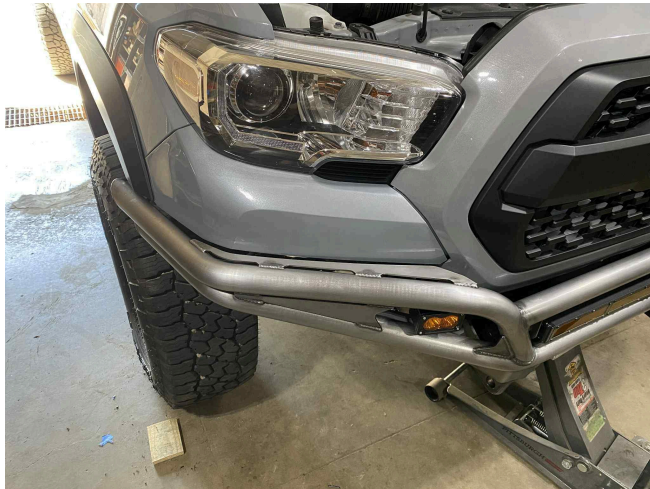
- 18) Cut off the factory tie-down hoop on the driver's side of the crossmember flush with the crossmember. Paint over the cut areas after.
- a) This is a tie-down point for transport, not a recovery point! It should never be used for recovery regardless.



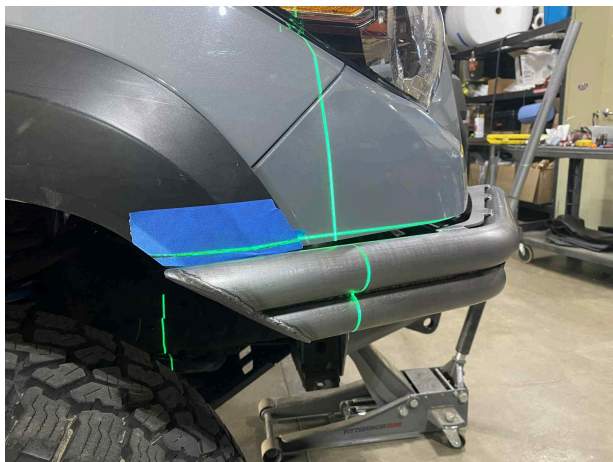
19) Install winch and/or any lights in the bumper.



20) 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. While holding it in place, loosely install the outer M10 nuts with washer plates. Raise the new bumper till it is against the cut edge of the stock bumper. It is recommended to leave at least a 1/4" gap. Tighten the hardware.



21) When the bumper is close to the body, apply more painters tape to areas requiring additional trimming (specifically around the ends of the fender flares) and mark it so it is parallel to the bumper. Lower or remove the bumper before you do any cutting. Raise / reinstall bumper and repeat until you have an even gap and no interference. After you finish trimming it's recommended to install some rubber edge trim (not included) across all cut edges.

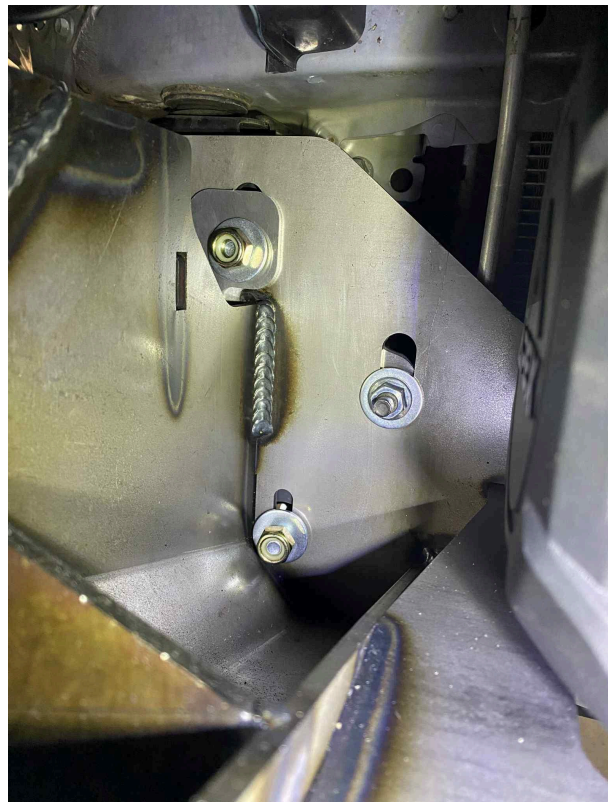
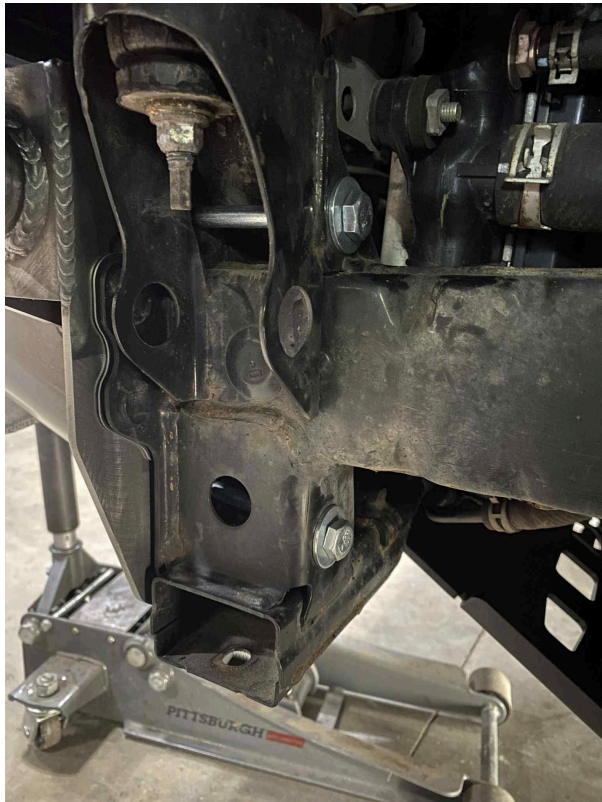


22) Install the inner M10 nuts and washers. Leave loose for now.



23) Install frame bolts.

- a) Take the long M10\*110mm bolts and put a washer on each of them.
- b) Pass the upper bolt through the holes in the body mount bracket and into the bumper through the hole at the top of the aluminum washer plate.
- c) Pass the lower bolt through the holes in the lower crossmember bracket and into the bumper. This bolt will be at a slight angle.
- d) Install a washer and locknut on the bolts. Leave the nuts somewhat loose for now.



24) Adjust the bumper so there is an even gap and side to side spacing. Once height is set, tighten all hardware.



25) Install the lower aluminum cover using the M8 flanged button bolts. On uncoated orders you will receive both zinc plated and black stainless (for if you coat the skid yourself). If you ordered powdercoated you will only receive the black stainless hardware.



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



27) Install is complete. Enjoy!

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