# INSTALL INSTRUCTIONS FOR 2010-24 4RUNNER HI-PRO FRONT BUMPER

#### READ THROUGHOUT BEFORE INSTALLING BUMPER!

## **DETAILS:**

- REQUIRES TSS / ACC AND CAMERA RELOCATION! Most versions of the Hi-Pro block the adaptive cruise control sensor and front camera and require them to be relocated. The exception to this is the lightbar version will work with TSS on 14+ Limited models where the sensor is DIRECTLY under the upper valence and not spaced a few inches lower.
- Cutting of factory plastic bumper is required.
- Currently designed for stock body height, 1" body lift, and suspension lifted vehicles. If you have a body lift greater than 1" 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 warrantied 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
- 8X M10\*20MM FLANGED HEX HEAD BOLTS
  (WILL ONLY GET 2 IF ORDERING WITH FRAME BRACKETS)
  - 2X ALUMINUM WASHER PLATES
  - 2X WASHERS (1.25 OD X .41 ID)
  - 4X SELF TAPPING SCREWS
- (OPTIONAL) V2 FRAME BRACKETS
  - 1X LEFT FRAME BRACKET
  - 1X RIGHT FRAME BRACKET
  - HARDWARE
    - 2X M12\*30MM HEX HEAD BOLTS
    - 2X WASHERS (1.06 OD X .53 ID)
    - 2X M8\*20MM FLANGED HEX HEAD BOLTS
    - 2X WASHERS (.69 OD X .34 ID)
    - 6X M10\*30MM FLANGED HEX HEAD BOLTS
    - 6X WASHERS (1.00 OD X .41 ID)
    - **6X M10 FLANGE NUTS**

## 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...)

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

# ALWAYS USE PROPER SAFETY GEAR AND EYE PROTECTION WHEN CUTTING STOCK BUMPER!

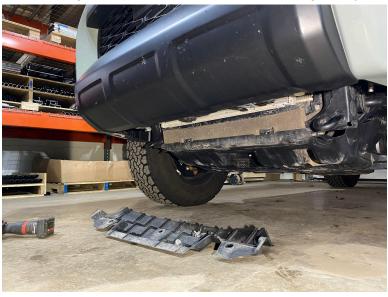
# HAVE ASSISTANCE WHEN LIFTING / INSTALLING AFTERMARKET BUMPER!

# 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. Disconnect wiring to any sensors, cameras, and fog lights.



5) On the 14+ Limited trim, remove the fog light housings and center of the lower valence. Separate the upper portion with the grille mesh from the lower center. Reinstall the grill piece.



6) Apply painter's tape in the general area where you're going to be cutting. See reference dimensions below so you know where to apply it.



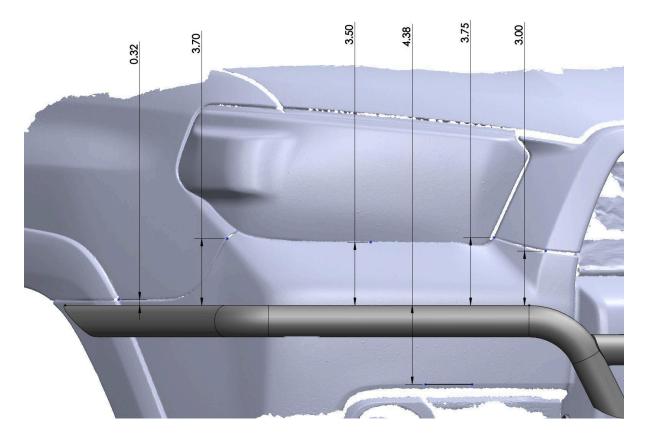
- \*The bumper is not perfectly level to the body line where the bumper meets the fenders. It is at a slight downward slope.
- \*All dimensions shown below are plumb. Do not measure with a tape tight against the body at an angle, you will end up marking too high.
- \*Highly recommended to use a laser level on a tripod. Adjust the laser line so it's on the reference point. Then with the tape measure / ruler vertical, shine the laser on the measurement and mark the end on the painter's tape.



\*After marking the dimensions, use a flexible straight edge that you can bend to around the body while still remaining flat. Use that to trace a straight line across all the marks. Or you can jack up the vehicle and use the laser. You will likely have to average the line between some of the marks.



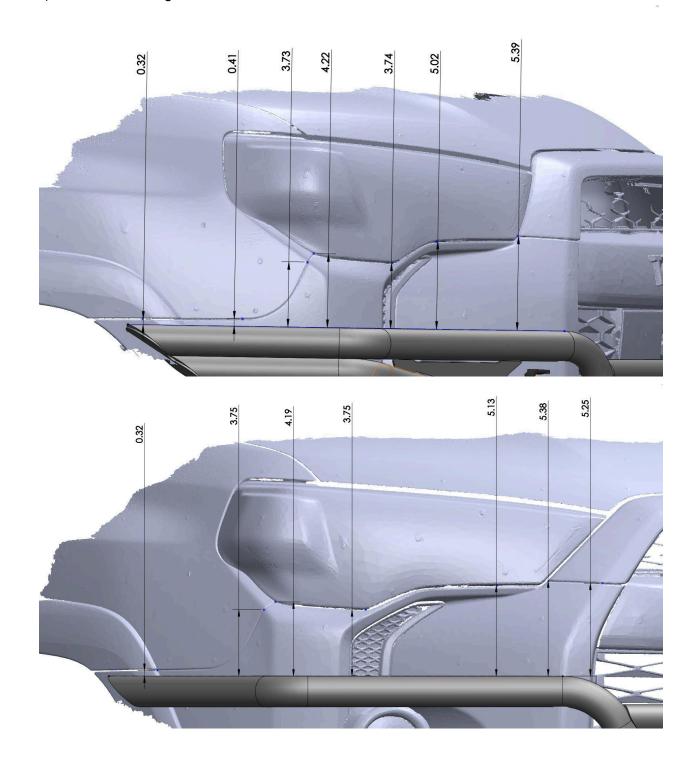
7) Use the following reference dimensions for 10-13 OG 4runners, all trims. For both pod versions of the bumper you will mark straight across the center of the bumper at the same height as the wings. For the lightbar version you will mark a line across the center 1.6" lower than the height of the wings.







8) Use the following reference dimensions for 14-24 NON-LIMITED 4runners.







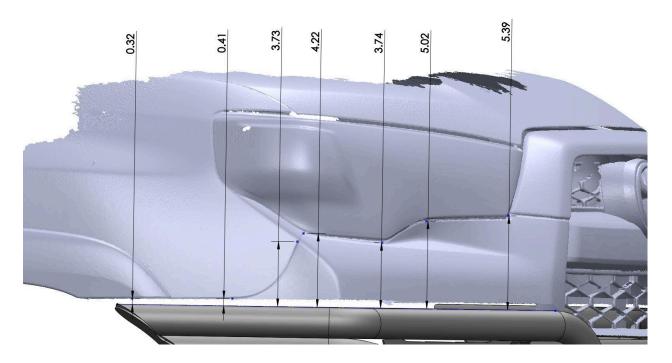


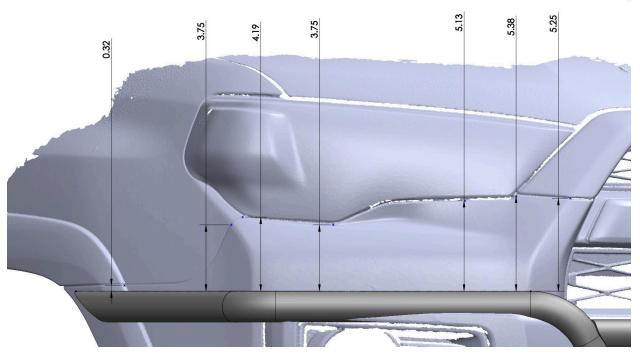


\*This 4runner had a low-pro bumper previously installed and the bumper center was already trimmed, but you would make the same cut along the bottom of the grille. Right where the bottom of the grille mesh meets the rest of the bumper. Apply tape and mark along this.



9) Use the following reference dimensions for 14-24 LIMITED 4runners. For the lightbar version, you will only end up cutting the very outer corners of the upper lip of the lower valence (part of the grille piece). If installing either pod version, you will cut back an inch on the lip. Recommended to wait till you test fit the bumper before marking and cutting the lip so you can be more precise.









\*If desired, can remove the bumper from the vehicle to cut it then reinstall the top half. Or can leave it on the vehicle, just make sure to not cut too deep behind the bumper and accidentally cut any wiring / fluid lines.

10) CAREFULLY cut along the lines. Recommended tool is a multitool or small reciprocating saw with a short blade. If leaving 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. Once cut all the way across, use a sander and/or deburring tool to clean up the cut.









11) Mark along the cut line on the bumper retainers. Carefully unsnap the ends of the bumper from the retainers and remove them. Cut them at or slightly above the marked line. Reinstall the upper portion of the retainer and snap the bumper back into it.





12) Using the provided self tapping screws, drill up through the very ends of the bumper and into the bottom of the fender flares. Make sure the bumper ends are properly aligned before drilling.



13) Cut air dams at the same height or above height of the bumper.





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



15) Remove the foam, crash bar, frame extension brackets, and any other remaining parts.



16) If running the frame brackets, refer to the separate "Frame Brackets V2" install instructions and install them now.



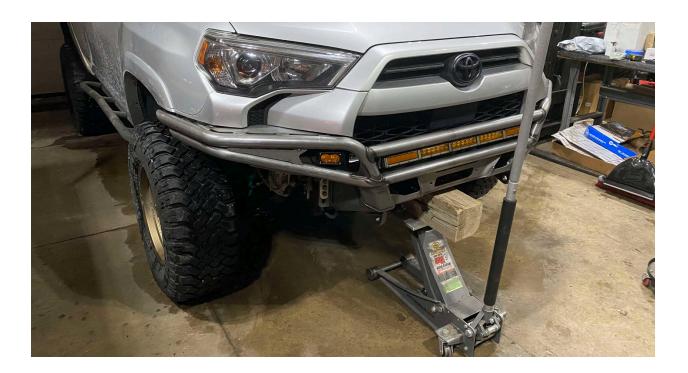
- 17) If running a winch, perform the following:
  - a) Bend in the passenger side AC line.
  - b) Hammer in the bottom of the flange on the center support brace. CAREFUL to not hit the radiator!
  - c) Prep wiring for winch.



- 18) Install winch and/or any lights in the bumper.
- 19) 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 slots are aligned with the mounting holes. While holding it in place, loosely install the outer M10 bolts with washer plates. Raise the new bumper till it is against the cut edge of the stock bumper. It is recommended to leave a 1/8 to 1/4" gap to prevent rubbing. Tighten the hardware.







20) When the bumper is close to the body, apply more painters tape to areas requiring additional trimming (specifically around the inner bends in the wing tubes and across the center) and mark it. 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.



21) Install and tighten the inner M10 bolts and washers.



22) 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.





23) On 10-13 OG 4runners, can install 3/4" flush mount LED marker lights (not included) in the 3 holes in either wing to wire as turn signals.



24) On 14+ LIMITED 4runners, install the parking sensors in the holes in the wings.



- 25) Install is complete. Enjoy!
- 26) Take some cool pics and tag us on instagram! @ascendfabrications