

THANK YOU FOR ORDERING

# 3<sup>RD</sup> GEN 4RUNNER ALPHA BUMPER - DIY KIT WELDING INSTRUCTIONS -

## DISCLAIMER

- This is a weld together / Do It Yourself (DIY) kit. You should have the correct tools and basic metal fabrication knowledge and skills before attempting to assemble this bumper. You are responsible for the weld quality and durability of finish you apply to the bumper. True North Fabrications LLC, or any affiliated companies, are not responsible for any injuries or damage that may occur during the assembly process of this bumper.
- All the parts are shipped as uncoated raw steel. There may be small imperfections on the surfaces of the parts such as burred edges, small areas of surface rust, or shallow scratches caused during the manufacturing and shipping processes.
- This bumper kit was designed specifically for 1996 to 2002 Toyota 4runners. It will also fit 01 -04 Tacomas with spacer plates and different hardware. There is no guarantee in fitment on any other Year/Make/Model of vehicle.
- This bumper requires modification to the front of the vehicle's frame rails.
- Any grille guard tubing will not be pre notched/coped. This gives the customer the ability to cut and position it to their preference.

## **DETAILS**

- Most DIY bumper kits include dozens of small flat pieces of metal and require hours of lining up, welding, and grinding, which can be incredibly frustrating and time consuming. We set out to design a DIY bumper kit unlike any other. All the parts are laser cut and press bent with slotted and tabbed edges. This means it requires a fraction of the welding and grinding compared to other kits. With the built-in tabs, the bumper pieces line up perfectly and don't require you to consistently be checking measurements. You don't even need to have the bumper on the 4runner to be able to tack it together.
- We wanted to be able to offer the best fitment possible so we took our designing a step above all the other fabrication companies out there and had the front of the truck laser scanned! This allows us to model the bumper within our cad programs using a virtual representation of the truck that is accurate to within .005 inches!
- The frame mounting plate, inner support plate, skid support plate, and inner and outer wings are all 3/16" HRPO steel. The inner main vertical plates are 1/4" thick steel. The wing support brackets with incorporated shackle mounts are 3/8" steel with 1.5 OD .250 wall DOM tubing welded in. All other sheetmetal parts are made of 11 gauge HRPO steel. All tubing is 1.75 OD 11 gauge ERW steel.
- The bumper was modeled around an Extreme LED 22" X6 10W lightbar. There is a chinese version of the same bar available on amazon for a third of the price. Fog light holes are 2.5" projected straight forward, so they're actually a slight oval.
- We realized that these bumpers are going to be mounted on 20ish year old vehicles and the chances of each and every one of them having a perfect frame with no previous front end damage are slim. So in order to offer the best fitment possible we made all the mounting points slightly oversized. This will give you a little adjustability when mounting. Depending on how far you need to adjust you will possibly need to use washers between the bumper and the frame. New bolts and washers are included.
- Weighs roughly 80 lbs without lights. Any grille guard tubing will add to this.

## **INCLUDED HARDWARE**

- 4X M10X1.25 (25MM) FLANGE BOLTS
- 4X M12X1.25 (35MM) HEX BOLTS
- 4X 7/16 ID X 1-1/4 OD GRADE 8 WASHERS
- 8X 1/2 ID X 1-3/8 OD GRADE 8 WASHERS

# WHAT'S INCLUDED

<u>DESCRIPTION</u>	<u>MATERIAL</u>	<u>QUANTITY</u>
WING SUPPORT	3/8" STEEL	2
VERTICAL PLATES	1/4" STEEL	2
BACKING PLATE	3/16" STEEL	1
INNER SUPPORT PLATE	3/16" STEEL	1
MOUNTING BRACKET	3/16" STEEL	1 LEFT & 1 RIGHT
FLANGE FILLER	3/16" STEEL	2
SKID SUPPORT	3/16" STEEL	1
INNER WING	3/16" STEEL	1 LEFT & 1 RIGHT
OUTER WING	3/16" STEEL	1 LEFT & 1 RIGHT
END CAP	3/16" STEEL	2
FOG LIGHT BRACKET	1/8" STEEL	1 LEFT & 1 RIGHT
LIGHTBAR BRACKET	1/8" STEEL	1 LEFT & 1 RIGHT
FRONT FACE	1/8" STEEL	1
LOWER WING TUBING	1/8" STEEL TUBING	1 LEFT & 1 RIGHT
SHACKLE SPACER	1.5" OD 1/4" DOM TUBING	2
OPTIONAL GRILLE GUARD	1/8" STEEL TUBING	1



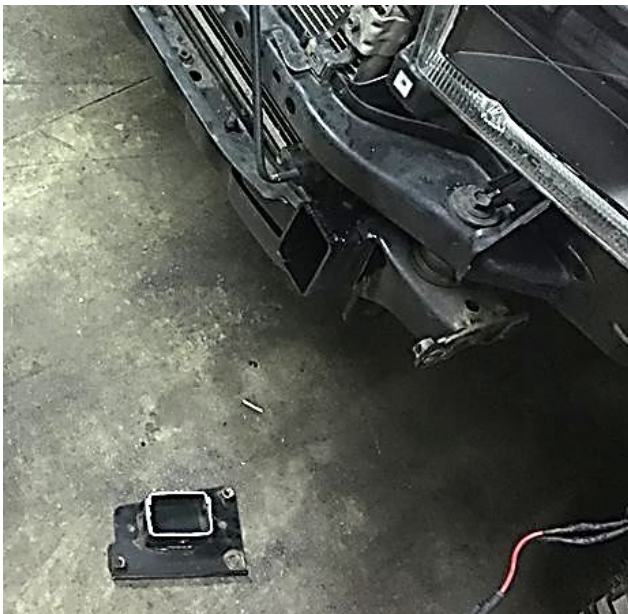
## WHAT YOU WILL NEED

- METAL FABRICATION KNOWLEDGE AND SKILLS
- NECESSARY SAFETY GEAR
- FLAT SURFACE TO WELD ON
- SOMEWHAT DECENT WELDER (RUNS ON 220V)
- ANGLE GRINDER WITH CUTOFF WHEELS AND ABRASIVE FLAP DISCS
- RECIPROCATING SAW (SAWZALL) AND METAL BLADES
- 90 DEGREE WELDING MAGNETS
- C-CLAMPS
- DRILL AND SMALL DRILL BIT (1/16 TO 1/8)
- TOOLS TO REMOVE OLD BUMPER AND INSTALL NEW ONE

## REQUIRED MODIFICATIONS TO VEHICLE

In order to get the tightest fitment and strongest mounting design possible there is some modification required. You will have to trim about 2 inches off the front of the frame rails. This will not reduce the integrity of the frame.

After removing the stock bumper and crash bar (99-02 models) take a sawzall and cut the front of the frame rails off even with the welds on the lower radiator guard. Be very careful not to hit the transmission line coming out of the drivers side of the radiator. Clean and coat the cut area with some spray paint to prevent any rust issues.



## **WELDING INSTRUCTIONS**

Follow this link to watch a video on how to weld the Alpha Bumper kit together.

<https://drive.google.com/open?id=1qvNBwjLCHU6GgLGJcKda6OyTCX3T2BDk>

## **TUBE COPING**

All grille guard tubing and headlight hoops come with a little extra length and are NOT notched/coped. Depending on which tubing options you ordered there should be a coping template sheet included for the recommended cuts. You can use the provided template to mark on the tubing and cut at the recommended location/angle. Or you can disregard the template and set the tubing to your preferred alignment and a trim/cope to fit.

1. Cut out the coping templates for your tubing option.
2. Wrap the template around the ends of the tubing. The text should face outward and the flat edge of the template should rest against the end of the tubing. Tape the ends of the template together.
3. Rotate the template so that the ends are aligned with the weld seam on the tubing.
4. Holding the template in place, use a sharpie and trace the template edge onto the tubing. This is your cut line.
5. Before cutting, hold up the tubing to the bumper and make sure the cut lines are parallel to the faces of the bumper your welding the tubing to.
6. Clamp the tubing in a vice or to a table top and cut along the line with a angle grinder and cut off wheel or with a reciprocating saw. Deburr any sharp edges afterwards.

# **BUMPER INSTALLATION**

- 1) Remove old bumper and make required modifications to the frame rails.
- 2) Remove stock bumper support brackets from below the airbox and battery.
- 3) Remove the front 3 bolts holding up the skid plate and let the skid plate hang there.
- 4) Prewire the front of the truck for any lights.
- 5) Install any lights.
- 6) Lift bumper up and align it on the front of the truck (don't do this by yourself).
- 7) Loosely install the 10mm bolts with smaller washers on the mounting points on the sides of the frame rails.
- 8) Loosely install the front 12mm bolts and larger washers. (Can reinstall factory tow brackets if desired)
- 9) The bumper will be sagging forward slightly because the bottom of the frame is at a slight angle. You will need to take a couple of the larger washers (there are 4 extras) and shim them between the bumper and the underside of the frame where the rear 12mm bolt goes.
- 10) After the bumper is shimmed with the washers, install the rear 12mm bolts and larger washers.
- 11) Tighten down the 12mm bolts first then tighten down the 10mm bolts.
- 12) Trim the wheel well plastic.
- 13) Finish wiring any lights.
- 14) Send in super awesome pics of the bumper installed on your 4runner and we might just use them on our website!
- 15) Enjoy!!!

## **RETURN POLICY**

- Products purchased from True North Fabrications LLC can be returned within 30 days of the original shipping date. All returns are subject to a 15% restocking fee and buyer will pay return shipping unless otherwise discussed prior to return. Any original shipping charges will not be refunded. We will not accept any returns of custom parts or parts that have already been welded, painted, or modified in any way.
- If you purchased one of our products through a different company please contact them to inquire about returns.

**ENJOY!**