DIY Tundra PreRunner Bumper

Thank you for choosing Rough Country for all of your suspension needs.

Rough Country recommends that a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle. Please read all the instructions before beginning the installation. Check the kit hardware against the "Kit Contents" list below. If question exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product. Check all fasteners for proper torque. Check to ensure for adequate clearance between all components. Check and retighten wheels at 50 miles and again at 500 miles. Periodically check all hardware for tightness. Be sure you have all the needed parts and understand where they go. Also, please review the "Tools Needed" list to be certain you have the necessary tools to complete the installation.

PRODUCT USE INFORMATION

As a general rule, the taller a vehicle is the easier it will roll. We strongly recommend that seat belts and shoulder harnesses be worn at all times. Braking performance and capabilities are decreased when significantly larger/heavier tires and wheels are used. Do not add, alter, or fabricate any factory or after-market parts which increase vehicle height over the intended height of the Rough Country product purchased. Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

NOTICE TO DEALER AND VEHICLE OWNER

ANOTICE Any vehicle equipped with any Rough country product must have the "Warning to Driver" decal installed on the sun visor or dash. The decal is to act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics. INSTALLING DEALER—It is your responsibility to install the warning decal and to forward these installation instructions on too the vehicle owner for review and to be kept in the vehicle for its service life.



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TOOLS NEEDED:

Jack
Safety Stands
Wheel Chocks
Metric Wrench/Socket

14mm 18mm 19mm

HARDWARE INCLUDED:

12mm x25mm Button Head Bolt (2)
12mm x 35mm Bolt (6)
12mm Raw Weld Nut (2)
12mm Flange Nut (6)
12mm Flat Washer (4)
8mm x 25mm Bolt (2)
8mm Nut (2)
8mm Flat Washer (4)
6mm x 25mm Bolt (4)
6mm Nut (4)
6mm Flat Washer (8)

KIT CONTENTS:

Center Skin Winch Chin Skin Pass Inner Wing (Slotted) **Driver Inner Wing (Slotted)** Pass Wing (Light Opening) Driver Wing (Light Opening) Pass Middle Wing **Driver Middle Wing** Pass Outer Wing (Logo) **Driver Outer Wing (Logo)** Wing End Cap (2) Pass Bottom Wing **Driver Bottom Wing Pass Wing Filler Panel Driver Wing Filler Panel** Pass Light Bucket **Driver Light Bucket**

Skin Support (4)
D-ring Mount (2)
Pass Frame Mount
Driver Frame Mount
Winch Tray
Pass Frame Support
Driver Frame Support
Fairlead Mount Plate
Fairlead Mount Spacer
Winch Block Off Grill
30" Light Bar Mount
6" Light Bar Mount (2)
30" Light Bar Block Off Panel

6" Light Bar Block Off Panel (2)

1/4" Thick Spacer (2)

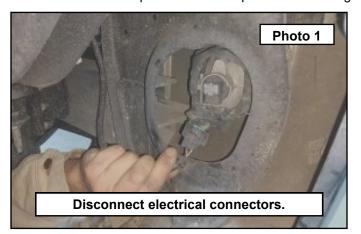
Bolt Tab (2)

KIT CONTENTS:



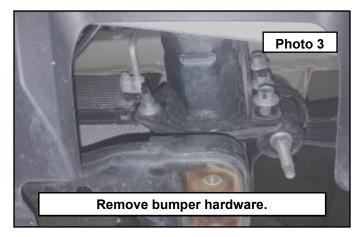


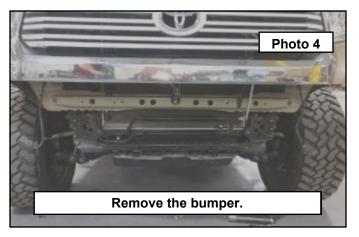
- 1. Park your vehicle on a clean flat surface, engage the parking brake and block the rear tires.
- 2. Save all hardware removed from the vehicle unless otherwise noted.
- 3. Open the hood and disconnect the negative terminal on the battery.
- 4. Disconnect the factory fog light harness. Disconnect the parking sensors if equipped. Photo 1
- 5. Remove the bumper cover to skid plate screws using a 10mm socket. Discard. Photo 2



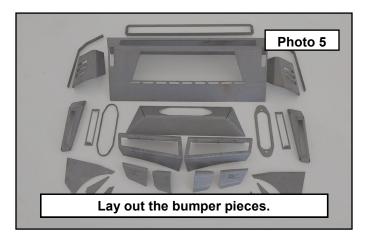


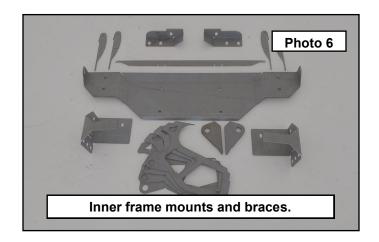
- 6. If you have tow hook brackets or factory tow rings, remove using a 17mm socket. This makes accessing the bumper hardware easier. Remove the 3 outer and 1 inner nuts holding the front bumper to the frame on each side of the frame. Before removing all hardware, have an assistant hold the bumper in place. **Photo 3**
- 7. Have an assistant help remove the bumper. You will have to tilt the top of the bumper towards the engine and pull away from the vehicle. **Photo 4**



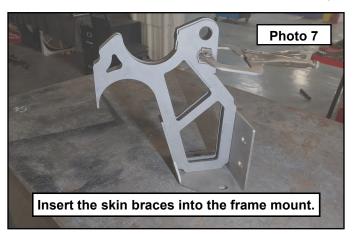


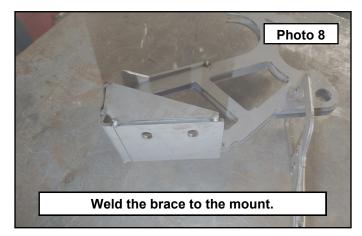
- 8. The instructions from here on out will be more of a guide and proper welding, clamping and measurement techniques are on the assembler for the assembly of the bumper. Lay out all the pieces of the bumper to familiarize your-self with the components. **Photo 5**
- 9. Locate the inner frame and brace pieces. Photo 6



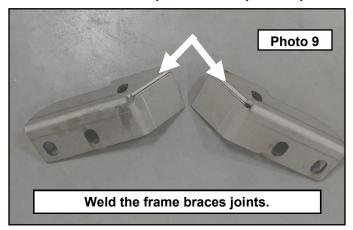


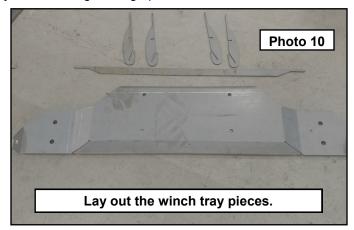
- 10. Assemble the frame mounts by sliding the skin braces into their corresponding keyways. Clamp the d-ring mounts in between the skin braces making sure that the hole is centered as well as an even gap around the outer ring. Use a square to make sure the skin braces are perpendicular to the frame mounting surface. Once is confirmed square, tack weld the braces to the mounts. Finish welding all the corner joints on the frame mounts to the skin braces. Weld the d-ring mounts to the braces using the recesses in the skin braces. DO NOT weld the outer edge of the d-ring mounts yet. Photo 7
- 11. Locate the frame mount brace and tack weld into place as shown. Once satisfied with the fit fully weld. Photo 8





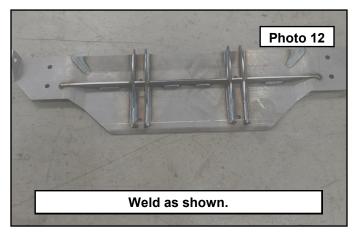
- 12. Weld the frame braces corner joints. Photo 9
- 13. Locate the winch tray and winch tray ribs. Lay the winch tray with the wings facing up. Photo10



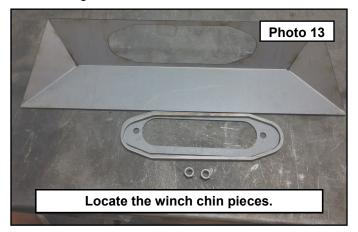


- 14. Slide the 4 ribs over the lip of the winch tray spaced on either side of the winch mounting holes. Slide the main rib down into the slots on the 4 ribs. Square the ribs to the back edge. Make sure they are parallel to each other with an even space between them and the bolt holes. Make the main rib parallel with the back edge of the tray. **Photo 11**
- 15. Once all has been verified, weld the ribs on the opposite side of the winch mounting holes. Stitch weld the main rib on alternating sides as shown. **Photo 12**



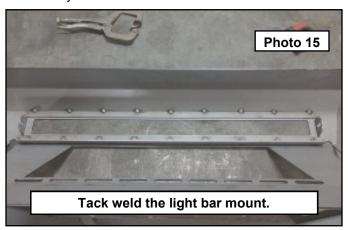


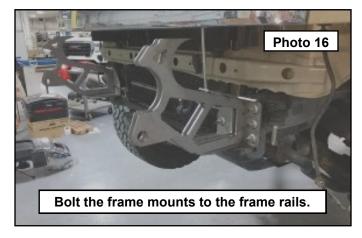
- 16. Locate the fairlead mount pieces and hardware. There are two 12mm raw weld nuts and two button head 12mm bolts in the hardware bag. **Photo 13**
- 17. Use the bolts to hold the nuts in place on the fairlead plate. Center the fairlead plate onto the spacer ring and tack weld together. Center the tack welded fairlead mount onto the winch tray skin and tack weld as shown. **Photo 14**





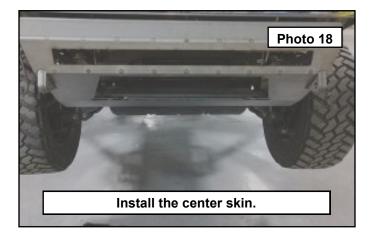
- 18. Locate the center skin and the 30" Light bar mount. Lay the light bar mount into the skin with the bent lip towards the bottom of the bumper. This acts as a brace for the skin. Center the light bar mount in the skin and tack weld as shown using the holes in the mount. Alternate starting from the center out while making sure to keep the mount pressed flat to the skin. **Photo 15**
- 19. Protect the paint and grill by covering all with painters tape. Bolt the welded frame mounts to the frame using the factory hardware. **Photo 16**



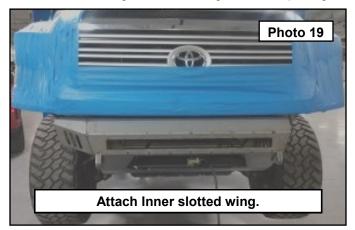


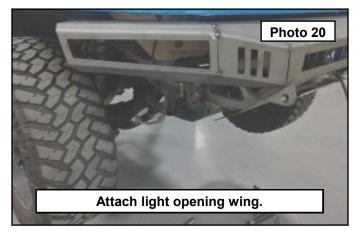
- 20. Bolt the winch tray to the frame mounts using the provided 12mm bolts, washers and flange nuts. Make sure to face the bolts down for disassembly later. This will help to hold the frame mounts when welding the bumper together to keep the proper spacing. If this step is not followed, you could have the mounts draw in when welded and then not fit the vehicle. Photo 17
- 21. Place the center skin onto the frame/skin supports. These will pass through the holes in the center skin. Make sure the skin is resting flush with all the surfaces of the supports. Once this is verified. Weld the skin to the supports on the backside of the skin. **Photo 18**



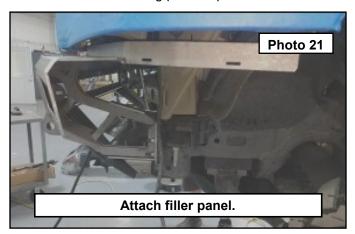


- 22. Now you can start assembling the rest of the bumper. Taking your time, proper clamping and welding skills now will result in a proper fitting and looking bumper in the end. Attach the inner slotted wings. Tack weld all the joints so that if you need to adjust later you can. Line up the main face first and work your way up and down the joint leaving an even gap.. **Photo 19**
- 23. Attach the wing skin with the light bucket opening. Photo 20





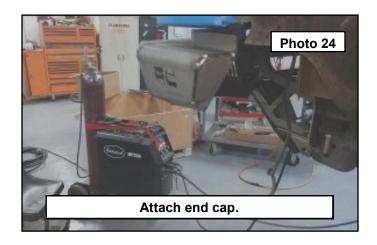
- 24. Attach the filler panel using the tab and slots. This acts as a guide for the remaining wing pieces. Tack weld in place. **Photo 21**
- 25. Attach the small wing piece in place. Photo 22



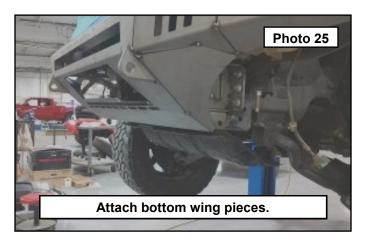


- 26. Attach the wing end with logo. Photo 23
- 27. Attach the wing end cap. Photo 24



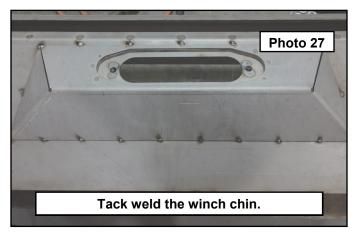


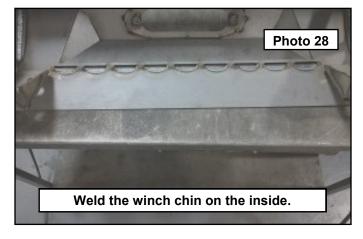
- 28. Attach the bottom wing piece. If there is any need for twisting the wing, do so now. Adding this piece adds the strength to the wing and sets the droop. You may need to have an assistant hold the wing level while this piece is attached. **Photo 25**
- 29. Once all the pieces are installed to taste, remove the bumper and set onto a work bench with the main center skin facing up. Lay the winch chin onto the center skin. This piece will line up with the drain holes in the skin. There should be just enough of the holes flared out to help hold the winch chin in place. You will be able to see the ribs between the holes. **Photo 26**





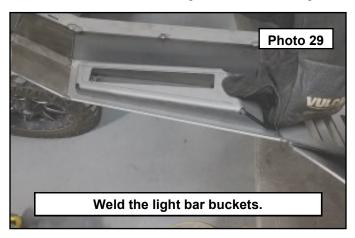
- 30. Tack weld the winch chin in place at each rib and evenly around the perimeter once you have verified it being centered on the main skin. **Photo 27**
- **31.** Flip the bumper over and remove the winch tray. Weld the winch chin along the bottom of each of the drain holes. **Photo 28**

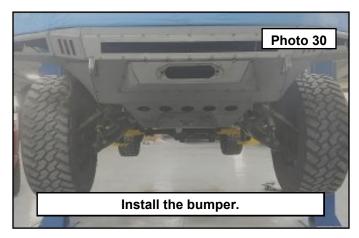




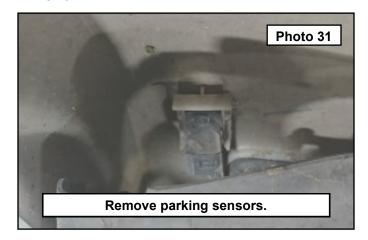
- 32. Locate the light bar buckets. Center the bucket with the hole in the wing. The hole is slightly smaller than the bucket edges and is done on purpose to aid in a clean look after the bumper is assembled. Once the bucket is centered, weld the two smaller leading edges. Leave the corners of the buckets open for proper drainage. **Photo 29**
- 33. Reinstall the winch tray and install the bumper once more to verify everything is where you like it with body gaps.

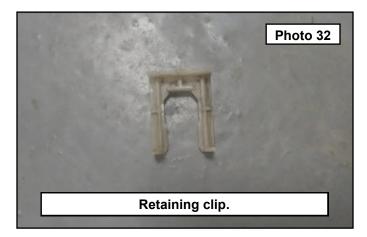
 Adjust as necessary. Remove the bumper and fully weld all the seams alternating from side to side. Allow the bumper to cool between welding to allow for drawing and expansion. **Photo 30**





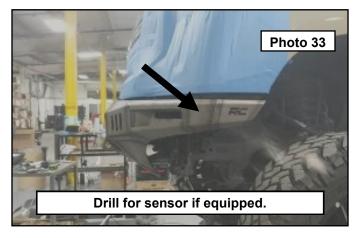
34. If your original bumper is equipped with parking sensors, remove them by pulling the plastic retainer out. Disconnect the electrical connector and push the sensor out of the stock bumper from the backside. You will have to rotate the sensor to remove it. Remove the harness from the bumper using a pry tool to pop the clips out of their holes. **Photo 31/32**

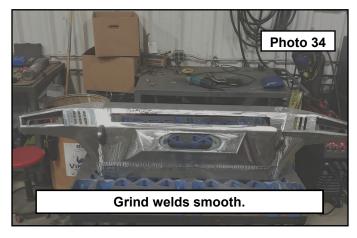




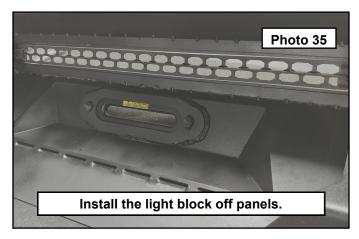
- 35. Mark the center of the wing piece and drill out a .900" hole. Use of a step drill bit is suggested. If your bit will not go all the way to .900", then use a file, sander, or die grinder to open the hole up. This hole size cannot be too tight nor too loose. Too tight will cause the sensor to fail, and too loose will allow the sensor to move which both can cause the warning lights to come on or the sensor to not work properly. Connect the harness and zip tie out of the way.

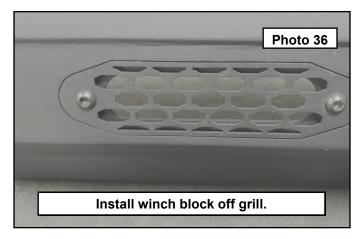
 Photo 33
- 36. Grind smooth all the exposed welds to taste. Have the bumper coated in your choice of paint, powder coat or armor lining. **Photo 34**



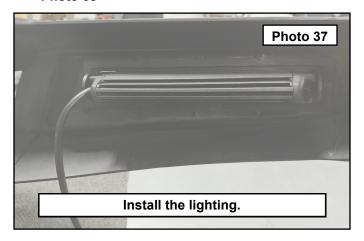


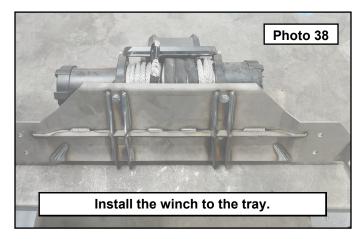
- 37. If you did not purchase the optional lighting or winch, install the side light block off panels and the center light block off grill using the provided 8mm hardware. **Photo 35**
- 38. If you did not purchase the optional winch, install the winch block off grill using the provided 12mm Allen bolts and the 1/4" thick spacers between the grill and bumper. Start the hardware and center the grill. Once you are satisfied with the fit, torque to 5 ft-lbs. **Photo 36**



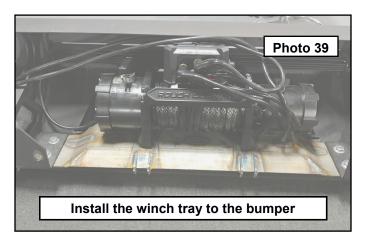


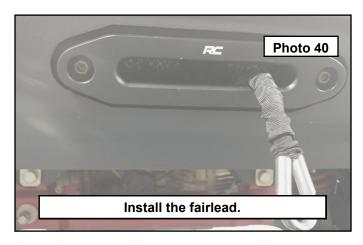
- 39. If you purchased the lighting options, install the lights using the hardware from the light kits. This bumper is designed around the Rough Country 6" slim line and 30" single row LED light bars. **Photo 37**
- 40. If you purchased the winch option, install the winch to the winch tray using the hardware provided with the winch. Start by installing the square nuts into the base of the winch. Set the winch tray into place and torque to 30 ft-lbs. **Photo 38**





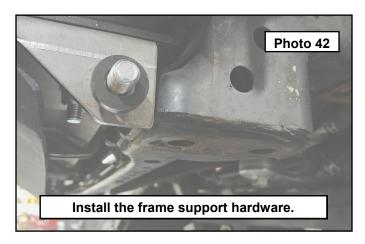
- 41. Install the winch tray to the bumper mounts using the provided 12mm hardware. Center the winch tray before tightening. Torque to 65 ft-lbs. **Photo 39**
- 42. Route the winch rope through the front opening. Install the winch fairlead using the 12mm button head bolts. Torque to 35 ft-lbs. **Photo 40**



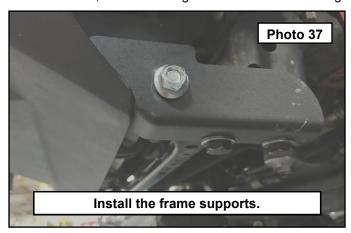


- 43. Install the bumper to the frame using the stock hardware. Adjust until the bumper is a minimum of 1/2" away from the headlight filler panels otherwise the bumper will rub under frame flex. This can happen with as little as a driveway turn in. Torque to 30 ft-lbs. **Photo 41**
- 44. If you have the winch installed, locate the driver and passenger frame support bracket bolt tabs. Install these to the winch tray from the inside out with the 1/4" thick spacer on the outside of the winch tray. **Photo 42**





- 45. Install the frame supports to the frame using the provided 12mm bolts and washers. Snug the mounts to the frame and the winch tray. Once all are snugged into place, torque all to 65 ft-lbs. **Photo 37**
- 46. If installed, route all wiring harnesses inside the engine compartment.



47. If you have the winch installed, attach the hook and pre-stretch the rope before use. Stand back and admire your hard work.



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