

INSTALLATION INSTRUCTIONS

Trans4mer Grille Guard/Winch Mount For 2007 Toyota Tundra Kit 76380 (Black) and 76381 (Stainless)

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE.
READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE
INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. **WARNING** and **CAUTION** are signal words that identify the level of hazard. These signal words mean:

A WARNING signals a hazard that could cause serious injury or death, if you do not follow recommendations.

A CAUTION signals a hazard that may cause minor to moderate injury, if you do not follow recommendations. This guide uses NOTICE to call attention to important mechanical information, and Note: to emphasize general information worthy of special attention.

WARNING **INJURY HAZARD** Failure to observe these instructions could lead to severe injury or death. Always wear safety glasses when installing this kit. Always use extreme caution when cutting and trimming during fitting. Always remove jewelry and wear eye protection. Never lean over battery while making connections. Always insure components will remain secure during installation and operation. Always tighten all nuts and bolts securely, per the installation instructions. Always replace all worn or damaged parts before operating. **Never** operate this WARN product with damaged or missing parts.

A Caution

Moving Parts Entanglement Hazard

Failure to observe these instructions could lead to minor or moderate injury.

Always take time to fully read and understand the installation Instructions included with this product.

Read installation instructions thoroughly.

Notice

Equipment Damage

Always refer to the Operator's Manual, supplied in the winch kit, for all wiring schematics and specific details on how to wire a WARN winch product to your vehicle.

Read Operating Manual thoroughly.

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This WARN Trans4mer system can be customized to give your vehicle a wide variety of looks, front-end protection and winch mounting capability. The system starts with this strong two-tube grille guard that attaches to the truck's frame with brackets designed to handle up to a 12,000 lb mid-frame winch. It is durable and good looking as a stand-alone grille guard, but can be easily upgraded with some great options! You can add a third tube (light bar) that adds even more protection and includes tabs for mounting auxiliary lights. The tubes can be mounted in a variety of positions to achieve the look and function that you desire. You can mount a winch carrier bracket that provides a permanent mount for a Warn winch. You may also add a receiver bracket that will handle the Warn multi-mount winch system. Finally, brush guards that protect the headlights and front corners of the vehicle can be easily added to any of the options above.

Before You Begin

- Read and understand these Installation Instructions.
- Refer to **Figure A** to become familiar with the components and hardware in this kit.

PARTS LIST

PART NO	QUANTITY	DESCRIPTION
76895/76899	2	Side Member, Black/Stainless
29365/63688	1	1.5" Grille Guard Tube, Black/Stainless
29366/60326	1	2.5" Grille Guard Tube, Black/Stainless
76893	1	Bracket Assy, Bottom, LH
77894	1	Bracket Assy, Bottom, RH
76891	1	Bracket Assy, Outer, LH
76892	1	Bracket Assy, Outer, RH
76889	1	Bracket Assy, Top, LH
76890	1	Bracket Assy, Top, RH
13230/13200	2	Tow Hook, Black/Chrome
77575/77576	1	Hardware Kit, Black/Stainless

TORQUE SPECIFICATIONS

BOLT SIZE	TORQUE
7/16 inch	50 lb. ft. (67.8 N-m)
1/2 & 5/8 inch	75 lb. ft. (101.7 N-m)

TOOLS REQUIRED

10mm socket and wrench	15/16" socket and/or wrench	
12mm socket and wrench	7/32" hex socket wrench	
14mm socket and wrench	flat blade screw driver	
17mm socket and wrench	Phillips screw driver	
5/8" socket and/or wrench	Utility knife, razor saw or side cutters	
11/16" socket and/or wrench	for trimming plastic	
3/4" socket and/or wrench	3 1	

<u>NOTE</u>: Follow the instructions step by step for fastest installation. Do not securely tighten fasteners until directed to do so.

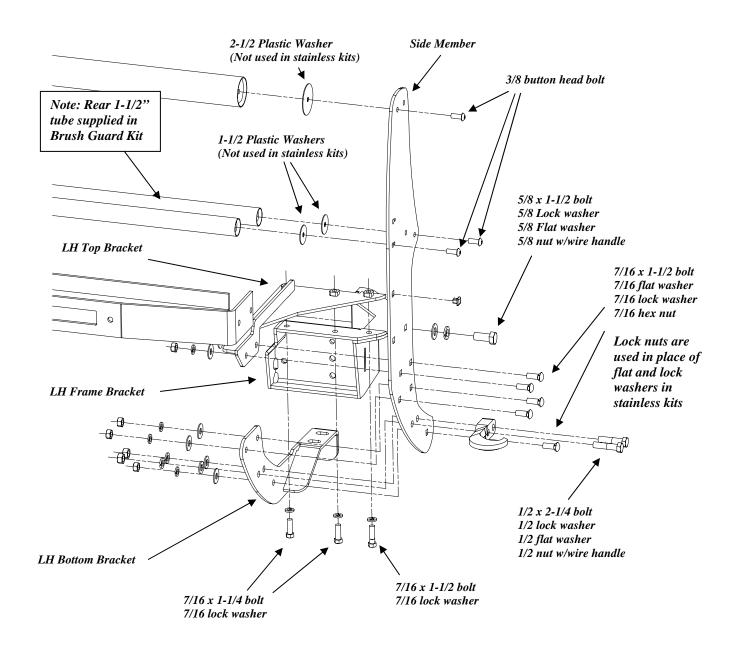


Figure A Exploded view LH

1. Open the vehicle hood. Remove the two(2) plastic pin fasteners from the trim panel below each headlamp. Pull the center of the fastener out part way then lift the entire fastener out. The panels are snapped into place at their outside ends. Support the ends and pull the panel *forward*, not outward. Be careful not to damage the panels. **Figure 1**

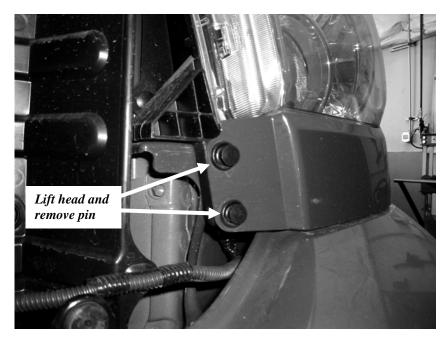


Figure 1 Headlamp trim panel LH

- 2. Remove the plastic pin fasteners from the top of the bumper cap. Two(2) are located under each headlamp and four(4) are located across the center of the cap. Do not confuse these with the fasteners previously removed from the headlamp panels, they are different. **Figures 2-3**
- 3. Remove the 6mm screws from the top of the bumper cap. Two(2) are located under each headlamp towards the front and two(2) more are behind and below these. There are eight(8) across the center. **Figures 2-3**

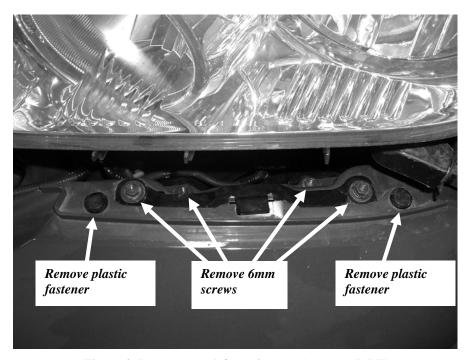


Figure 2 Bumper cap (after trim panel removed) LH

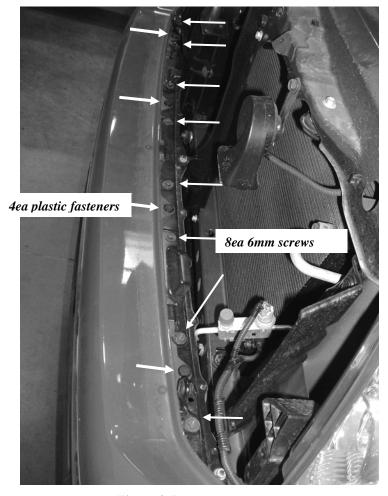


Figure 3 Bumper cap center

4. Remove the self-tapping screw and plastic fastener from each end of the bumper cap. Figure 3

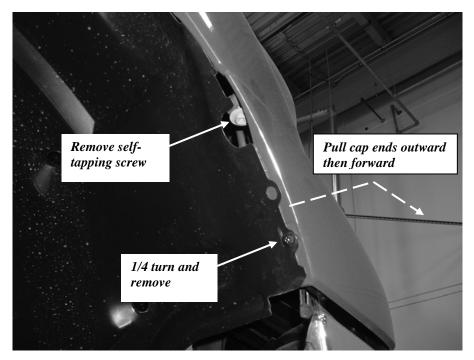


Figure 3 Bumper cap end RH

5. Remove the bumper cap by pulling the ends straight outward. The cap is snapped into plastic brackets and requires a sharp pull to disconnect it. Then pull the cap forward to free the alignment pins in front. **Figure 3**

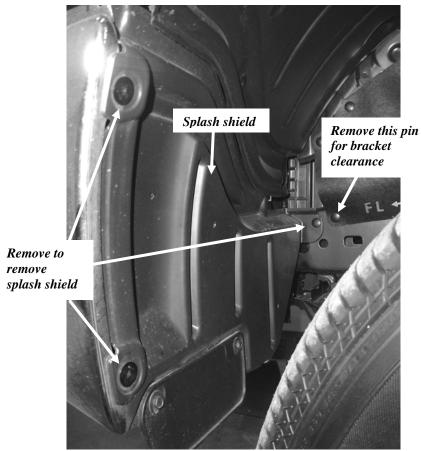


Figure 4 Splash shield LH

6. Remove the splash shields from behind both sides of the bumper. Pry out the two(2) plastic plugs from each bumper end and the plastic push-in fastener securing each shield to the frame. Also remove the plastic push-in fastener securing the rubber flap to the frame. Remove the two(2) 6mm screws securing each shield to the bottom of the bumper.

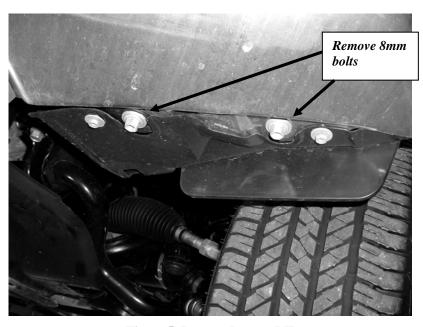


Figure 5 Bumper bottom LH

- 7. Remove two(2) 8mm bolts from the bottom of each end of the bumper and remove the splash shields. Figure 5
- 8. Remove the three(3) self-tapping screws from the bottom of the center bumper insert. **Figure 6**

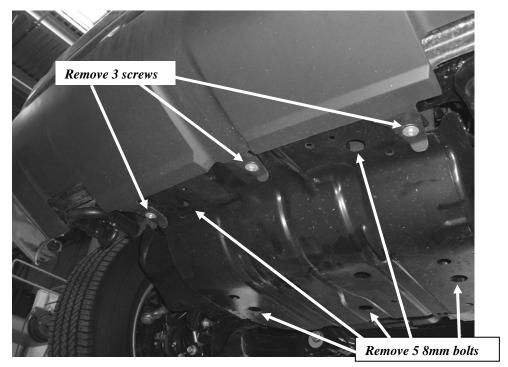


Figure 6 Bumper bottom center and skid pan

- 9. Remove the skid plate by removing five(5) 8mm bolts. **Figure 6 Note: This kit is** *not* **designed to be installed with the optional accessory Toyota skid plate.**
- 10. Disconnect the fog lamps if equipped.

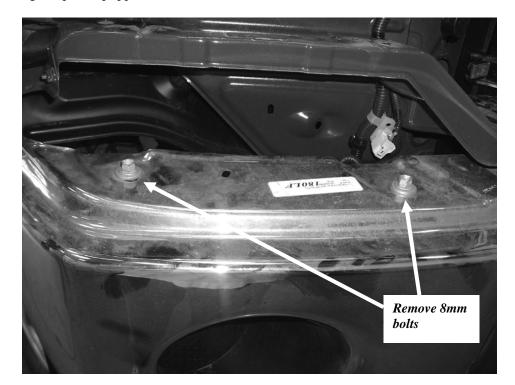


Figure 7 Bumper top RH

11. Remove the two(2) 8mm bolts from the top of each end of the bumper. Remove the bumper. **Figure 7**WARN
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12. Remove the three(3) 12mm nuts from each side of the bumper beam. These are located in the slots in the face of the beam. Pull the driver's side free first. **Figure 8**

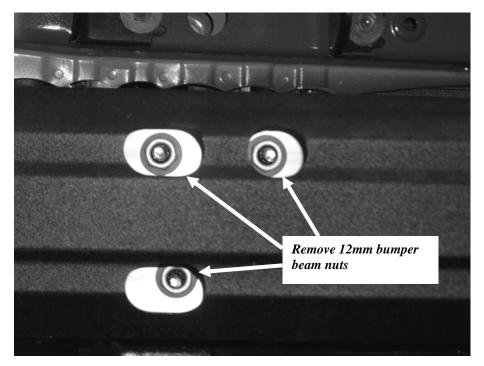


Figure 8 Bumper beam RH

13. Remove the 12mm tow loop bolts and keep for re-use. Discard both tow loops. Warn Tow Hooks are supplied in this kit. **Figure 9**

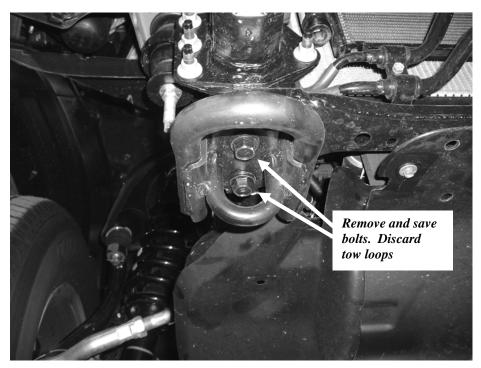


Figure 9 Tow loop RH

14. Remove the four(4) 10mm nuts from each frame extension and remove the extensions. Figure 10

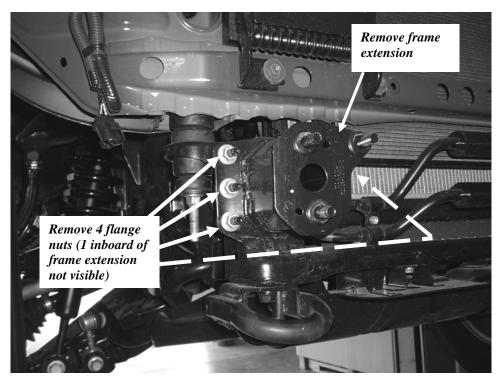


Figure 11 Frame extension RH

15. Slide the LH and RH Frame Brackets over the frame extension studs then install the frame extensions. Use the original 10mm nuts to hold in place. Do not tighten at this time. **Figure 12**

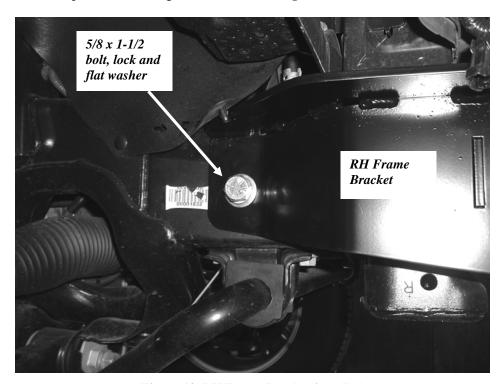


Figure 12 LH Frame Bracket installed

16. Install a 5/8 x 1-1/2" bolt with lock and flat washer into the rear hole of each Frame Bracket and into the frame. Position a flange nut with wire "handle" inside the frame through the square hole in the inboard frame wall, and thread the bolt onto it. **Figures 12-14**

17. The wire handle must be bent to position the nut in the proper location. The rubber flap can be trimmed or tucked around the Frame Bracket. **Figures 13-14**



Figure 13 5/8 flange nut with wire handle bent for installation

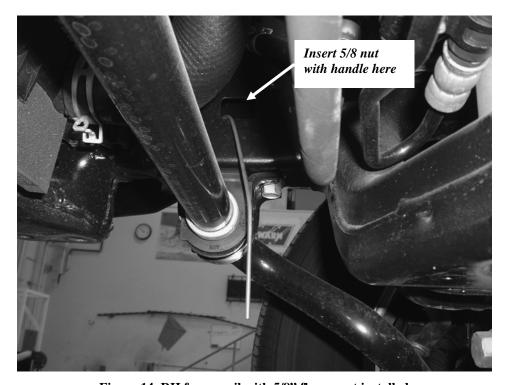


Figure 14 RH frame rail with 5/8" flange nut installed

18. Tighten the eight(8) frame extension nuts then the two(2) 5/8" bolts. Reinstall the bumper beam. Slide the passenger side on first, then the driver side. Install the original 12mm flange nuts and tighten.

19. Remove the center webs from the outboard slots in the center bumper insert. These can be cut with large side cutters, knife or saw. This will make the opening large enough to slide the Top Brackets into. **Figures 15-16**



Figure 15 RH bumper opening before web removal



Figure 16 RH bumper opening after web removal

- 20. Re-install the bumper in the reverse order of disassembly. Use the original hardware. Before tightening the bumper hardware, push the bumper fully rearward. Tighten the hardware.
- 21. Slide the Top Brackets through the outboard bumper slots and above the Frame Brackets. Align the holes with those in top flange of the Frame Brackets. Install 7/16" x 1 1/4 bolts with lock washers into the inner and middle holes. Access is from below the bumper with a long extension. A universal may also be helpful. Install a 7/16 x 1 1/2 bolt and lock washer in the outboard holes. Tighten the hardware. **Figure 17**



Figure 17 RH Top Bracket installed

22. Install the LH and RH Bottom Brackets using the original 12mm tow loop bolts. Bolt the Brackets into the tow loop holes. Do not tighten yet. **Figure 18**

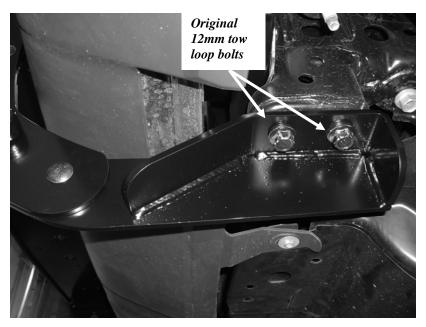


Figure 18 LH Bottom Bracket installed

- 23. Re-install the skid plate using the original bolts. Re-install the three(3) 6mm self tapping screws into the bottom of the center bumper section. Tighten the hardware.
- 24. Reinstall the bumper cap. Align the plastic pins in the front and push into place. Snap the ends back into the plastic brackets. Install the twelve(12) 6mm machine screws along the top of the cap. Insert the eight(8) plastic pin fasteners. Install a self tapping screw through each end into the fenders. Install the plastic fastener in each edge. Tighten all hardware where applicable.
- 25. Re-install the headlamp panels with the original plastic fasteners.
- 26. Trim the inner fender splash shields to clear the Frame Brackets. Figure 19

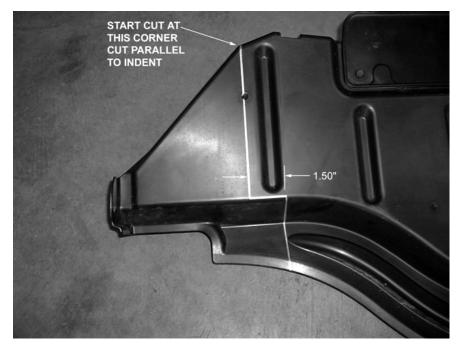


Figure 19 RH inner splash shield before trimming

27. Re-install the splash shields. Use the original hardware where applicable and tighten. Figure 20



Figure 10 RH inner splash shield trimmed and installed

- 28. Install the Side Members to the outsides of the Top and Bottom Brackets. Use the $7/16 \times 1 \frac{1}{4}$ carriage bolts with flat and lock washers and nuts to attach to the Side Members. Note: Stainless kits use 7/16" button socket heads and lock nuts in place of carriage bolts, lock and flat washers. Do not tighten. **Figure 21**
- 29. Install the Warn Tow Hooks using the 1/2 x 2 1/4 bolts, flat and lock washers and hex nuts.
- 30. If a winch is being installed, install the Winch Carrier at this time. Use the hardware provided in the Carrier Kit. Note: Replacement stainless bolts and plated lock nuts are provided in the stainless kits

31. If Brush Guards are *not* being installed, install the center tubes now. Select the mounting holes of your choice. Typically, the top (2-1/2") tube will use the top forward holes and the middle (1-1/2") tube will use the middle holes that allow for best fit and access to the winch model installed. Use 3/8" button head screws and insert a large plastic washer between the tube ends and the Side Members in the black kits. Two sizes of plastic washers are provided for the different tube sizes. Note: Plastic washers are not used in stainless kits



Figure 11 LH Side Member hardware detail

- 32. Tighten the hardware starting with the Winch Carrier, then the Top Brackets, then the Bottom Brackets and finally the hardware attaching the Bottom Bracket to the frame.
- 33. Install the winch per the instructions included with it.
- 34. If Brush Guards and/or a Light Bar are being installed, doing so now along with the center tubes will eliminate some disassembly. Follow the instructions included in the Brush Guard Kit. Use 3/8" button head screws for all the tubes and on black kits insert a special black plastic washer between tube ends and Side Members (these washers are not used in stainless kits). Tighten the 3/8" hardware when the assembly is complete.



Figure 22 Installation complete-Vehicle shown with Brush Guards and Winch Carrier

Warn Industries Stainless Steel Truck Accessories

What to expect:

Polished stainless steel combines the beauty of a chrome-like appearance with extreme durability and corrosion resistance. With a minimum amount of care, the appearance will last almost indefinitely. Unlike platings or coatings, there is nothing to peel off or wear away that would allow corrosion underneath.

The actual appearance may not be not be exactly like new chrome in either the degree of luster or color. There may be fine polishing lines visible up close and small differences between mating parts of an assembly. A grille guard, for instance, may have small differences between the round tubing and the flat plate. The backside of a part may not be as highly polished as the front. However, part of the beauty and appeal of stainless actually lies in the smooth "hand-worked" appearance.

There also is a possibility that small rust spots can appear on stainless products. They are usually due to minor iron contamination on the surface as a result of normal manufacturing and handling processes. This minor rust, if it occurs at all, is easy to remove and will not tend to spread.

Recommended care:

Regular washing with fresh water and mild car wash detergents followed by rinsing and drying with a soft towel is the best minimum care. Beyond that, any cleaner/wax recommended for automotive finishes will work well to remove minor stains and scuffs, enhance the shine and provide protection. Always use clean soft cotton cloths. In most cases, this will be all that is required for many years. For more serious blemishes or a rust spot, use a cream metal polish recommended for stainless, aluminum, etc. Try to rub in the direction of the original polishing lines.

Ultimately, any stainless part can be restored to a brilliant shine with power buffing processes.

Caution:

Do not use steel wool or any type of metal scraper. Do not use "Scotch Brite" pads or abrasive powdered cleaners. Do not try to clean with muriatic acid or any other acid.

Stainless Fasteners

Stainless steel fasteners are included in many of the stainless kits. These fasteners provide similar corrosion resistance and appearance as the rest of the kit. However, stainless fasteners are prone to galling when installed in similar stainless material. It is a good idea to apply a small amount of anti-seize compound to the threads when installing them. Care should also be taken when tightening the fasteners to prevent rounding or deforming the corners of the bolts. Make sure the wrenches are the correct size and fit properly. In the case of socket heads, the wrench should have sharp, un-worn edges. With a few precautions during assembly the products should provide years of service.