

INSTALLATION INSTRUCTIONS

Trans4mer Grille Guard/Winch Mount Kit 60097 (Black) & 60098 (Chrome) For Toyota Tundra

As you read these instructions, you may see NOTES, CAUTIONS and WARNINGS. Each message has a specific purpose. NOTES are additional information to help you complete a procedure. CAUTIONS are safety messages that indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. A CAUTION may also be used to alert against unsafe practice. WARNINGS are safety messages that indicate a potentially hazardous situation, which, if not avoided could result in serious injury. CAUTIONS and WARNINGS identify the hazard, indicate how to avoid the hazard, and advise of the probable consequence of not avoiding the hazard. PLEASE WORK SAFELY!

<u>NOTE</u>: This installation requires hole drilling. Make sure you have a drill motor and sharp 7/16" and 1/2" drill bits available. The installation also requires trimming or grinding away a lip on the vehicle's stamped metal splash pan. Wear safety goggles.

PARTS LIST:

PART NO.	QUANTITY	DESCRIPTION
60094	2	Side Member, Black
or 60095	2	Side Member, Chrome
29365	1	Tube, 1-1/2", Black
or 29398	1	Tube, 1-1/2", Chrome
29366	1	Tube, 2-1/2", Black
or 29399	1	Tube, 2-1/2", Chrome
60092	1	Frame Extension, RH
60091	1	Frame Extension, LH
60088	1	Strap Assembly, RH
60087	1	Strap Assembly, LH
60353	2	Brush Guard Strap (support bracket)
39202	2	Nut with Handle

WARN 1 60096 Rev A0

TOROUE SPECIFICATIONS:

BOLT SIZE3/8 inch

TORQUE
30 lb. ft (40.7 N-m)

7/16 inch 50 lb. ft. (67.8 N-m) 1/2 inch 75 lb. ft. (101.7 N-m)

This WARN Trans4mer system can be customized to give your Toyota Tundra 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 9500 lb 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 large size 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, a draw bar or any other accessory that fits the standard 2 inch receiver tube. Finally, brush guards that protect the headlights and front corners of the truck can be easily added to any of the options above.

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

- 1. Unplug the wiring from the back of the driving/fog lights. These are the lights located in the bumper.
- 2. Remove the stamped metal splash pan/air deflector from below the engine. The rolled lip at the top edges of the sides of the pan, must be trimmed or ground away. This is necessary so that the pan can be reinstalled after the Trans4mer is in place. An option to trimming or grinding, is to take a pair of channel locks or pliars and bend the lip up and out of the way. This is somewhat time consuming.
- 3. Remove the plastic splash shields that surround the tow hook and tow tabs. Disconnect the shields from both the bumper and the vehicle.
- 4. Remove the tow hook and both tabs from the frame.
- 5. Remove the bumper. See photos 1 & 2 for the locations of the fasteners. NOTE: The bumper brackets and frame have features that keep the bumper from falling off when all the fasteners are removed. To remove the bumper, first lift it upward, then pull it away from the truck.

PHOTO 1 – inside of front fender well (Notice the round access hole for the fastener)



PHOTO 2 – bumper bracket attachment at frame



6. Attach the frame extensions to the frame where the tow hook and tabs had been. The rectangular tab should run up the inside of the frame rail. Use the factory fasteners that had previously held the tow hook and tow tabs to the frame. Reinstall the tow hook with the passenger side frame extension. **Do not reinstall the tow tabs. Fasteners have been provided and can be used in the event that the driver side fasteners are too short.** See photo 3 for reference. Set the frame extensions so that the distance between them is slightly less than 32 inches (outside edge to outside edge). Check this measurement at both the front and back. Make sure that they are squared-up with the vehicle. **SECURELY TIGHTEN THE FASTENERS.**

PHOTO 3 – frame extensions



- 7. As shown in photo 3, mark the location of the rectangular tabs (the part of the frame extension running up the inside of the frame) on the outside of the frame rails. Mark the center of the frame for drilling.
- 8. Drill completely through the frame rails and rectangular tabs. Start with a pilot hole and then drill for the $1/2 \times 4-1/2$ inch bolts.



WARNING



Drilling operations can cause flying metal chips. **WEAR SAFETY GOGGLES.** Flying metal chips can cause eye injury.

- 9. Install the fasteners. Use the provided 1/4" thick washers against the side of the frame rails. This will spread the clamping force over a greater area. Leave the nuts hand-tight. Slightly loosen the other frame extension bolts.
- 10. **If you plan to install brush guards now or in the near future,** it will be easier to attach the support brackets to the vehicle at this time. The attachment points are on the sheet metal tabs (factory provided hole) located below the corner lights. The passenger side tab can be seen in photo 3. **See photo 4 for orientation of the support brackets**. The brackets can be installed after the bumper is in place, but a little more effort will be required to tighten the fasteners. To install brackets after the bumper is in place, start out at the end of the bumper and slide the bracket inboard to the mounting position. Once the brackets are in place, position and attach the clamps to the brush guards.





- 11. Install the bumper. Be sure to plug in the wiring to the driving/fog lights.
- 12. Attach the side members to the outsides of the frame extensions, and install the 2 1/2 inch tube at the top of the side members. Place the plastic washers between the tube ends and the side members. Leave the fasteners hand-tight.
- 13. Now is the time to install either the winch carrier or front receiver. Leave the fasteners hand-tight.

CAUTION: IF YOU HAVE INSTALLED A WINCH CARRIER OR FRONT RECEIVER, YOU MUST INSTALL THE TWO PROVIDED STRAP ASSEMBLIES. WINCHING WITHOUT THESE COMPONENTS IN PLACE WILL DAMAGE THE REST OF THE KIT.

14. As shown in **photo 5**, the tab at the back of the strap assembly should be positioned along the outside of the frame rail. To install the strap assemblies, go to the fender wells and feed the flat ends between the body and frame. Feed them through the center opening in the bumper. The straps will be lying below the winch carrier (or receiver). Line up the forward ends with the front winch mounting holes on the carrier (on the receiver, you will need to drill holes through the lip at the back, and through the straps). **To get the strap assemblies into position, it may be necessary to slide the assembly part way, rotate it 90 degrees, slide further and then rotate it back to the original position. This is especially true of the passenger side. Turning the front wheels to one side or the other can help provide clearance for positioning the parts.**

PHOTO 5 – strap assembly attached to frame



- 15. Attach the winch (see instructions) and straps to the winch carrier (or attach straps to receiver). SECURELY TIGHTEN THE FASTENERS. NOTE: Longer bolts are provided for attaching the straps and winch to the carrier.
- 16. Use the hole in the tab of the strap assembly as a drilling guide. **Drill through the outside wall of the frame rail only**.
- 17. Use the windows in the frame to get the 7/16" nuts with handles positioned inside the frame rails. Bend the handles as necessary to align the nuts with the bolts. SECURELY TIGHTEN THE FASTENERS.
- 18. Install the 1-1/2 inch tube between the side members. **SECURELY TIGHTEN THESE FASTENERS AS WELL AS THE ONES HOLDING THE 2-1/2 INCH TUBE AND WINCH CARRIER IN PLACE.**
- 19. SECURELY TIGHTEN THE FASTENERS THAT ATTACH THE SIDE MEMBERS TO THE FRAME EXTENSIONS. SECURELY TIGHTEN THE FASTENERS THAT ATTACH THE FRAME EXTENSIONS TO THE VEHICLE'S FRAME.
- 20. Install your stamped metal splash pan/air deflector.
- 21. If you wish to install your plastic splash shields, they will need to be trimmed to accommodate the frame extensions. **See photo 6 for reference.**

PHOTO 6 – trimmed splash shields

