



**Assembly, Installation, Operation and  
Maintenance Instructions  
Extreme Grille Guard**

**Part Number:  
E0520T**

**60 - 180 minutes**

**Dealer / Installer:** Provide a copy of these instructions to the end user of this product. These instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.

**End User:** Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any decals from the product. Failure to follow these instructions can result in injury or death.

**⚠ WARNING ⚠**

**APPLICATION:**

**2007-2021 TOYOTA TUNDRA (INCL. 2018-21 TUNDRA WITH TOYOTA SAFETY SENSE P / EXCL. 19-21 TRD PRO WITH TSS)**

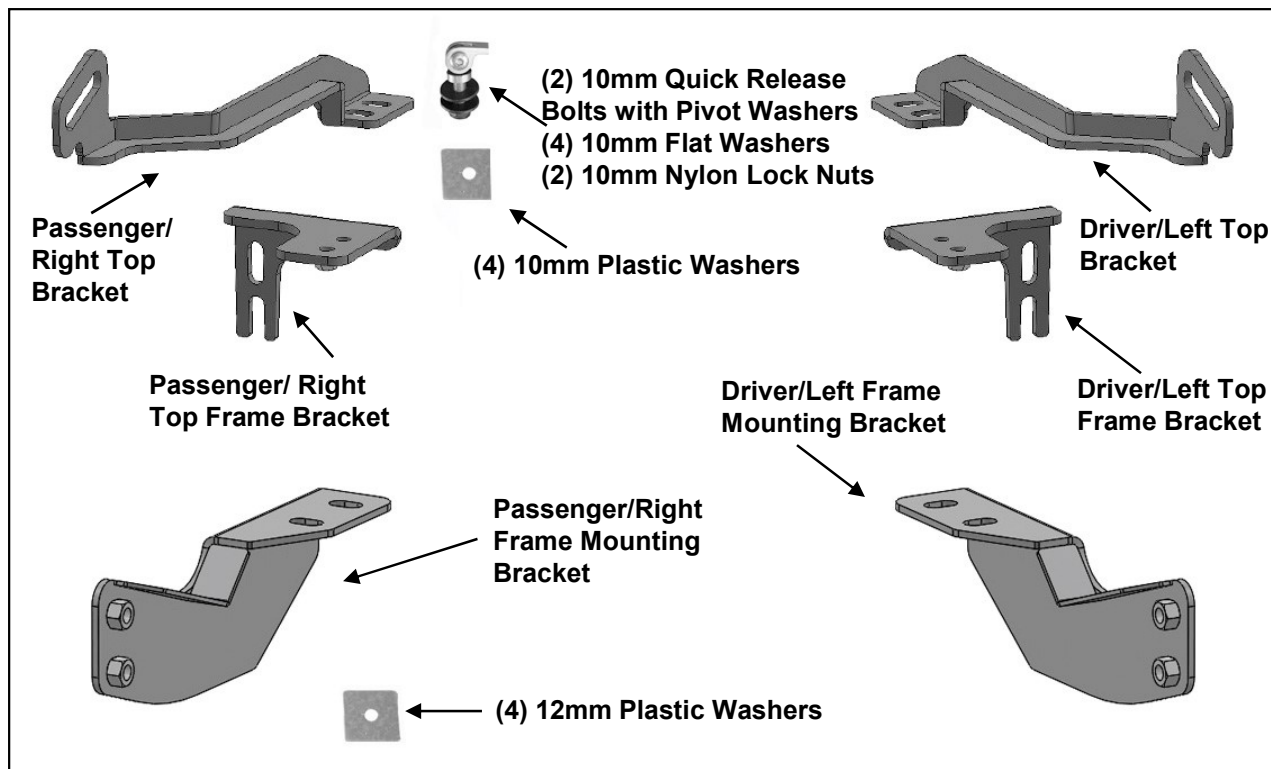
**2008-Current SEQUOIA (EXCL. 08-22 PLATINUM)**

**PARTS LIST**

Qty	Part Description	Qty	Part Description
1	Extreme Heavy Duty Grille Guard	2	10mm Cam Lever Quick Release Bolts with Special Pivot Washer
1	Driver/left Frame Mounting Bracket	4	10mm x 24mm OD x 2.2mm Flat Washers
1	Passenger/right Frame Mounting Bracket	2	10-1.5mm Nylon Lock Nuts
1	Driver/left Top Frame Bracket	4	8-1.25mm x 25mm Hex Bolts
1	Passenger/right Top Frame Bracket	4	8mm Lock Washers
1	Driver/left Top Bracket	4	8mm x 22mm OD x 2mm Flat Washers
1	Passenger/right Top Bracket	4	12mm Plastic Washers
4	12-1.75mm x 35mm Hex Bolts	4	10mm Plastic Washers
4	12mm x 32mm OD x 3mm Flat Washers	2	600mm x 50mm x 1.0mm Adhesive Foam Strips
4	12mm Lock Washers	1	4mm Hex Wrench

**TORQUE SPECIFICATION**

Size	Torque	Size	Torque
12 MM	70 ft/lbs	8 mm	20 ft/lbs
10 MM	34.5 ft/lbs	6 MM	102 in/lbs



**IMPORTANT:** The Grille Guard is designed to tilt forward to clear the attached grille on 2007-13 Tundra, 08-14 Sequoia models. To tilt the Grille Guard, the Quick Release Bolts on the Top Brackets must be released and the upper bolts on both Mounting Brackets may need to be loosened slightly. Make sure that all hardware is fully tightened after closing the hood. Carefully read Page 8, "Opening and Closing of Hood," before installing the Grille Guard.

#### **INSTALLATION PROCEDURE:**

**REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. MAY INTERFERE WITH FRONT MOUNTED SENSORS. NOT RECOMMENDED FOR VEHICLES WITH OPTIONAL "ACTIVE" LASER GUIDED CRUISE CONTROL SYSTEMS. CUTTING MAY BE REQUIRED.**

1. Start installation at the front of the vehicle.

**07-13 Tundra, 08-14 Sequoia models:** Open the hood. Top Brackets can either be installed from above or below front bumper depending on model, accessories and year, (Figure 1A & 1B).

**2014-on Tundra models:** Top Brackets must be installed from below front bumper, (Figure 1B).

2. Locate the passenger side bumper bracket bolted to the end of the frame. Access the bracket through the gap between the front bumper and the radiator or from below the bumper above the tow hook, (Figure 1B). If installing from below, remove the hardware attaching the bumper cover to the cross member to access the end of the frame and bracket, (Figure 2).
3. Select the passenger/right Top Frame Bracket, (Figure 3). Remove the top (2) factory hex nuts on the outside of the frame, attaching the passenger/right factory bumper bracket to the end of the frame, (Figure 4).
4. Slide the L-shaped Bracket over the top of the bumper bracket and down and over the (2) threaded studs, (Figure 4). If installing from below, carefully pull the bottom of the bumper cover outward and slide the Bracket up and in position. Reuse the factory hex nuts to attach the Top Bracket to the bumper bracket. Snug but do not fully tighten the (2) hex nuts at this time.
5. Repeat Steps 2—4 to install the driver/left side Top Frame Bracket. **IMPORTANT:** Installation will require removal or cutting of plastic air deflector, if equipped, attached to the back of the lower grille, (Figures 5 & 6). **NOTE:** Depending year and model, it may be necessary or easier to remove bumper cover to remove the air deflector from the back of lower grille insert.

6. From under the front of the vehicle, remove the (2) factory tow hooks and set aside, (Figures 7 & 8). Select the passenger side Frame Mounting Bracket, (Figure 9).

**Vehicles with small tow hook:** Line up the holes in the tow hook with the slots in the Bracket. Bolt the tow hook and Bracket to the bottom of the frame using the factory tow hook bolts, (Figure 10).

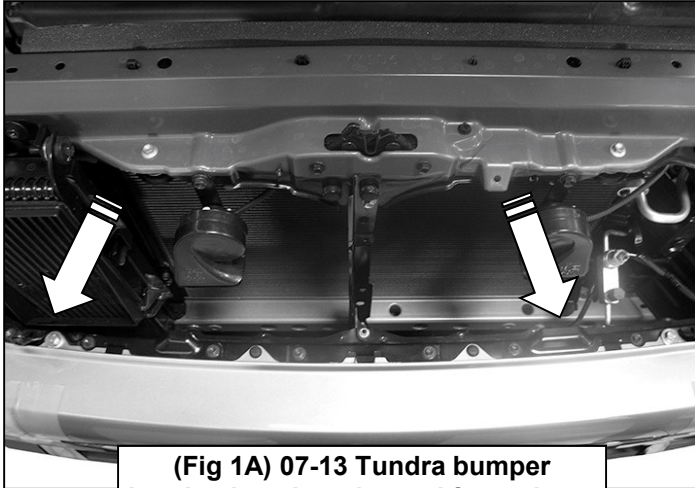
**Vehicles with large tow hooks:** Bolt the passenger/right side Frame Mounting Bracket directly to the bottom of the frame with the two factory hex bolts. NOTE: Large tow hooks cannot be reinstalled, (Figure 8).

7. Repeat Step 6 to install the driver/left side Frame Mounting Bracket. Leave hardware loose at this time.
8. Select the passenger side Top Bracket, (Figure 11). Apply the included Adhesive Backed Foam Tape to the Bracket as needed to protect the grille opening from contact with the Bracket.
9. Slide the Top Bracket in through the opening in the bumper, (Figure 13). Line up the (2) holes in the Bracket with the previously installed Frame Bracket. Bolt the Top Bracket to the top of the Frame Bracket with (2) 8mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, (Figure 12 & 13). Leave hardware loose at this time.
10. Repeat Steps 8 & 9 to install the driver/left side Top Bracket.
11. With assistance, place the Grille Guard face down on a clean surface in front of the vehicle. Position the mounting tabs on the Grille Guard up to the outside of the passenger/right Frame Mounting Bracket. Line up the lower hole in the Bracket with the lower hole in the Grille Guard.
12. Insert (1) 12mm Plastic Washer between the Mounting Bracket and the Grille Guard. Line up the Grille Guard, Washer and Bracket and bolt together with the included (1) 12mm x 35mm Hex Bolt, (1) 12mm Lock Washer and (1) 12mm Flat Washer, (Figure 14).
13. Repeat Steps 11—12 to attach the driver side mounting tab to the Bracket. Leave hardware loose.
14. Use the (2) previously installed 12mm Hex Bolts as a hinge. With assistance, carefully rotate the Grille Guard up to the vehicle. Line up the two remaining holes in the Mounting Brackets with the holes in the Grille Guard. Repeat Steps 12 & 13 to attach the Grille Guard to the Brackets, (Figure 15). Snug but do not tighten hardware at this time.
15. Next, move to the passenger/right Top Bracket installed in Steps 8 & 9. Line up the long slot in the Top Bracket with the slot in the Grille Guard upright, (Figure 16). Insert (1) 10mm Quick Release Bolt with Pivot Washer and (1) 10mm Flat Washer through the Grille Guard. Thread (1) 10mm Plastic Washer part way onto the threads. Slide the Top Bracket over the Quick Release. Thread (1) 10mm Plastic Washer, (to protect the finish on the Top Bracket), (1) 10mm Flat Washer and (1) 10mm Nylon Lock Nut, (Figure 16), onto the Quick Release. Do not fully tighten hardware at this time.
16. Repeat Step 15 to attach the driver/left side Top Bracket to the Grille Guard.
17. Release/loosen the levers on the Quick Release Bolts and pull the Grille Guard away from the vehicle to the "open" position, (Figures 17 & 18). NOTE: It may be necessary to slightly loosen the top (2) 12mm Hex Bolts on the Frame Mounting Brackets to move the Grille Guard, (Figure 19). On models with grille mounted camera, remove the small center screen from the grille guard, (Figure 20). Center and level the Grille Guard and tighten all hardware including the Frame Mounting Brackets.
18. Adjust the Quick Release Bolt clamping pressure by loosening or tightening the 10mm Nylon Lock Nuts. See Steps 22—26 for more information. NOTE: Tilt feature only required on 07-13 Tundra and 08-14 Sequoia models.
19. Slowly close the hood and check for clearance. Release both Quick Release bolts. Push the Grille Guard into the "closed" position. If needed, loosen the upper bolt on each Frame Mounting Bracket, (Figure 16). WARNING! Do not completely loosen bolts or damage to the truck or Grille Guard may occur.
20. Push the Grille Guard back towards the vehicle and fully tighten all hardware, (Figure 21 & 22). Reattach the bottom of the bumper cover with the factory hardware, (Figure 2).
21. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

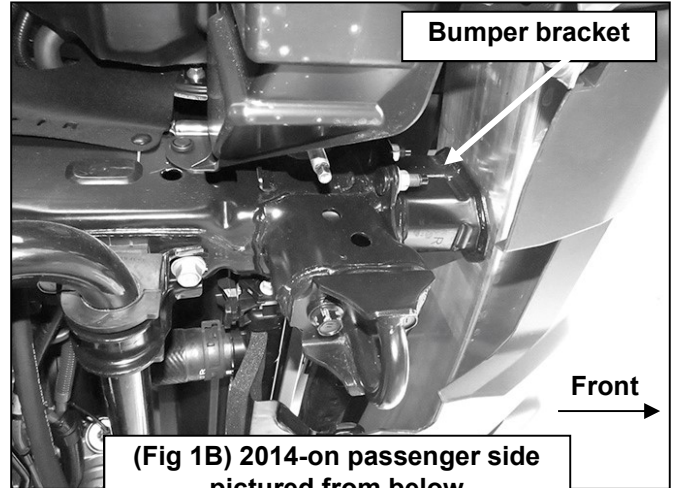
**To protect your investment, wax this product after installing. Regular waxing is recommended to add a protective layer over the finish. Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Grille Guard.**

**INSTALLATION IMAGES:**

**Passenger/right Side Installation Pictured**



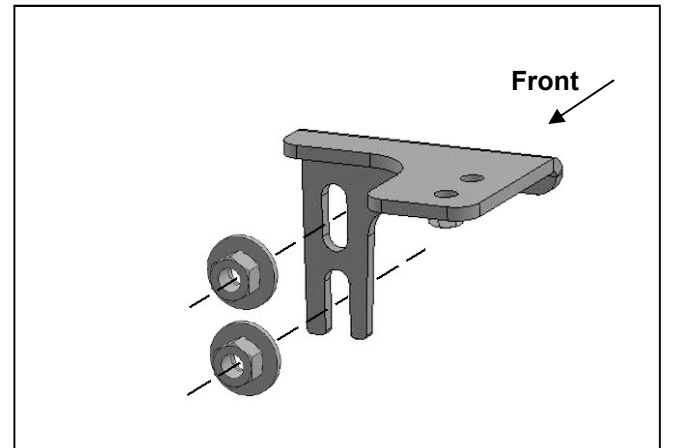
**(Fig 1A) 07-13 Tundra bumper bracket location pictured from above**



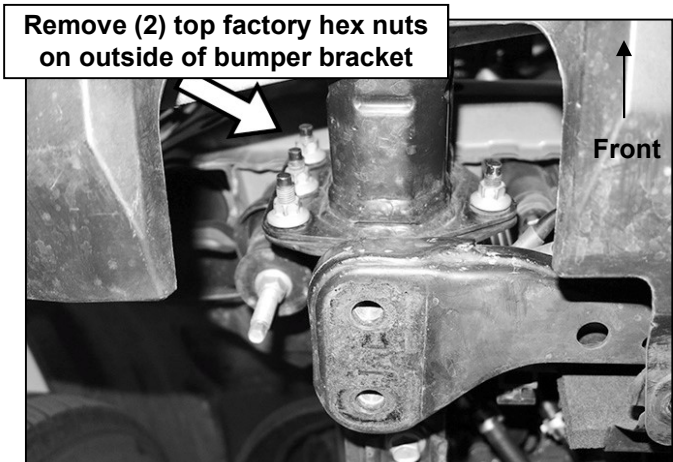
**(Fig 1B) 2014-on passenger side pictured from below**



**(Fig 2) If necessary, temporarily remove bumper cover hardware to access bumper bracket (passenger/right side pictured from below)**



**(Fig 3) Reuse the (2) factory hex nuts to attach the passenger/right Top Bracket to the factory bumper bracket**

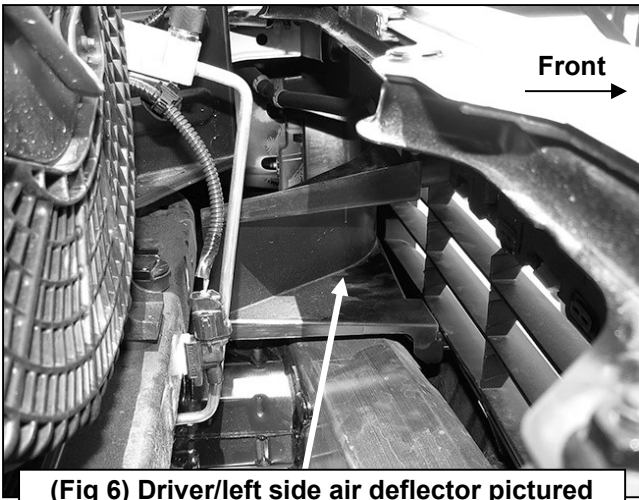


**Remove (2) top factory hex nuts on outside of bumper bracket**

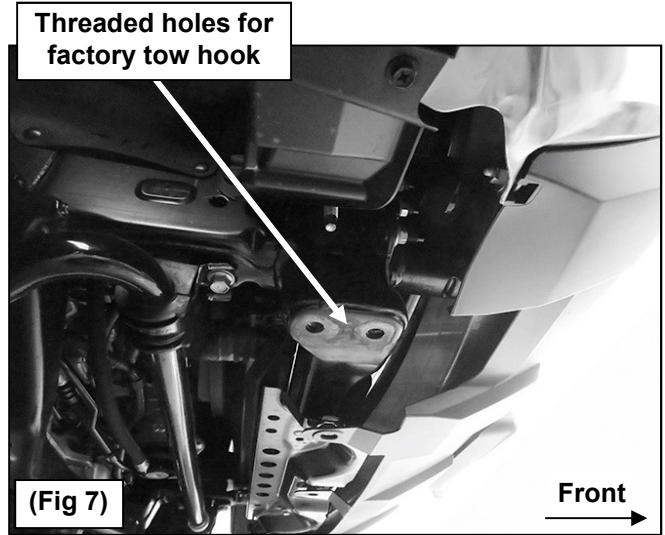
**(Fig 4) Passenger side Top Bracket pictured installed over bumper bracket. Pictured from below**



**(Fig 5) Models equipped with driver/left side air deflector, cut or remove air deflector to clear the Top Brackets**



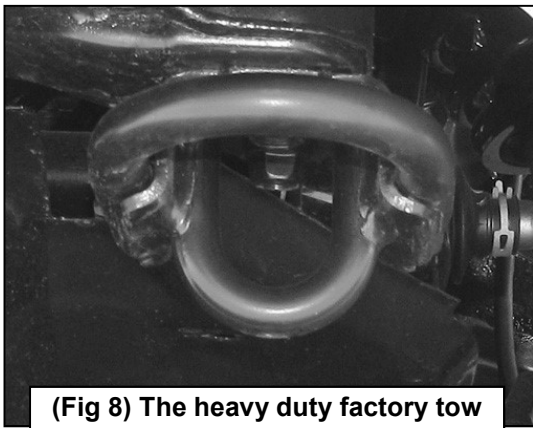
**(Fig 6) Driver/left side air deflector pictured from above. Note: Not included on all models**



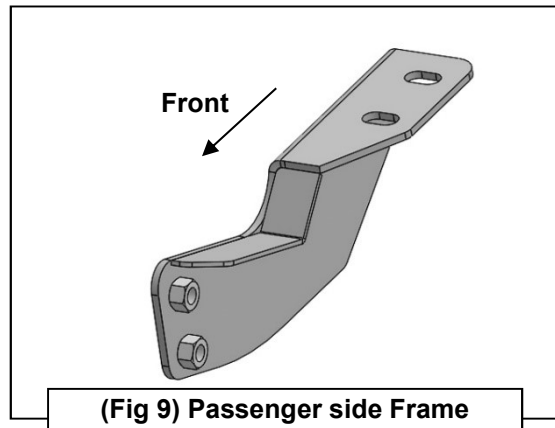
**(Fig 7)**

**Threaded holes for factory tow hook**

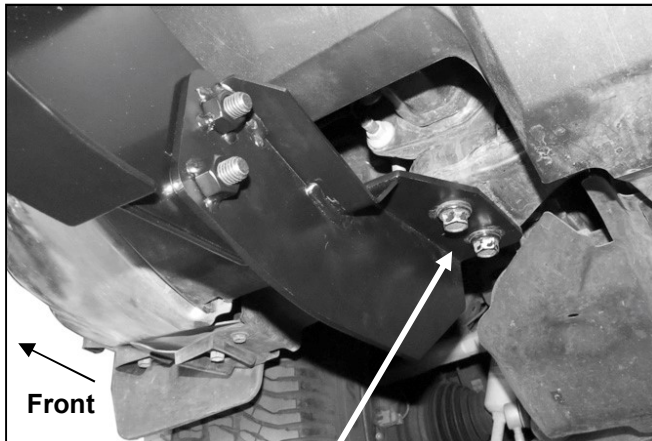
**Front**



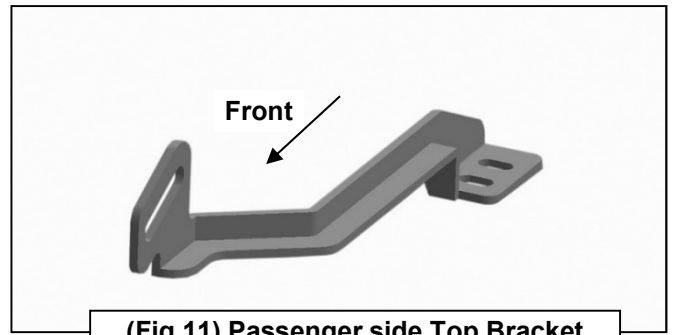
**(Fig 8) The heavy duty factory tow hooks cannot be reinstalled.**



**(Fig 9) Passenger side Frame Mounting Bracket**

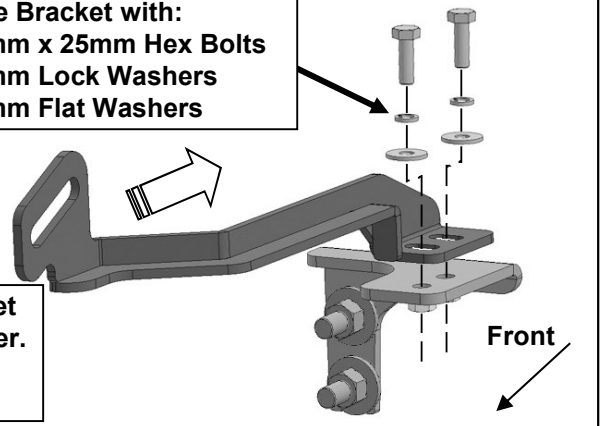


**(Fig 10) Reuse factory hex bolts to attach Frame Bracket to bottom of frame (passenger/right side pictured without tow hook)**

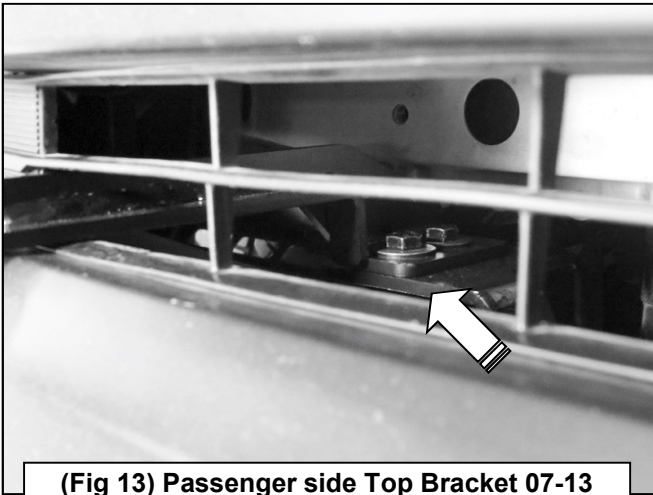


**(Fig 11) Passenger side Top Bracket**

**Attach Top Bracket to Frame Bracket with:**  
 (2) 8mm x 25mm Hex Bolts  
 (2) 8mm Lock Washers  
 (2) 8mm Flat Washers

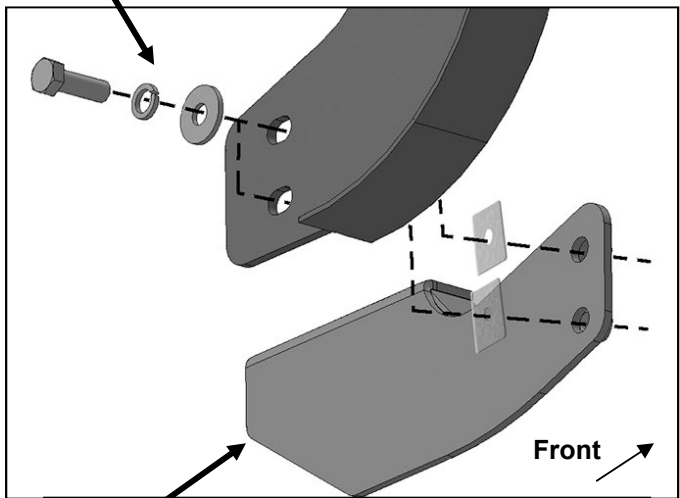


**(Fig 12) Insert Top Bracket through opening in bumper. Passenger/right side Brackets illustrated**

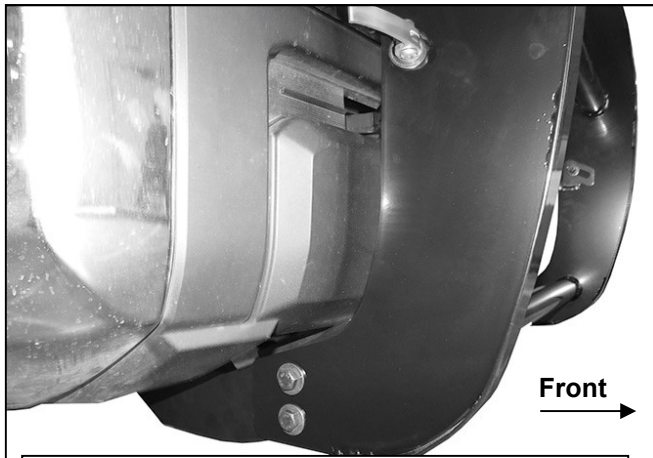


**(Fig 13) Passenger side Top Bracket 07-13 pictured through grille**

- (2) 12mm x 35mm Hex Bolts
- (2) 12mm Lock Washers
- (2) 12mm Flat Washers
- (2) 12mm Plastic Washers (between Grille Guard and Bracket)



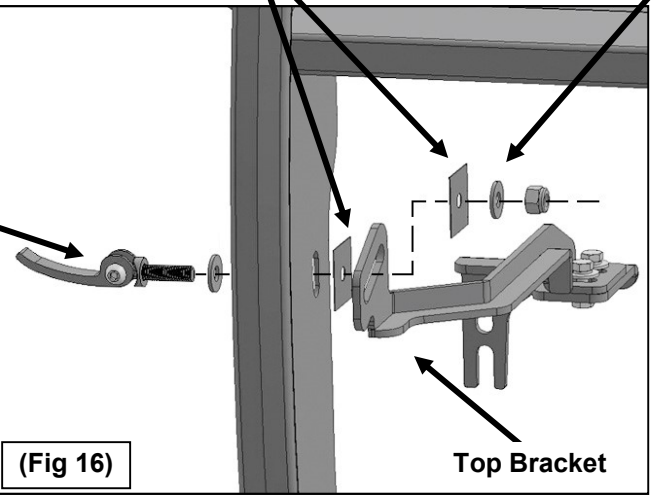
**(Fig 14) Insert a Plastic Washer between the Grille Guard and the Frame Mounting Bracket on each 12mm Hex Bolt**



**(Fig 15) Passenger/right side of Grille Guard attached to lower Frame Bracket**

- (2) 10mm Plastic Washers

- 10mm Flat Washer
- 10mm Nylon Lock Nut



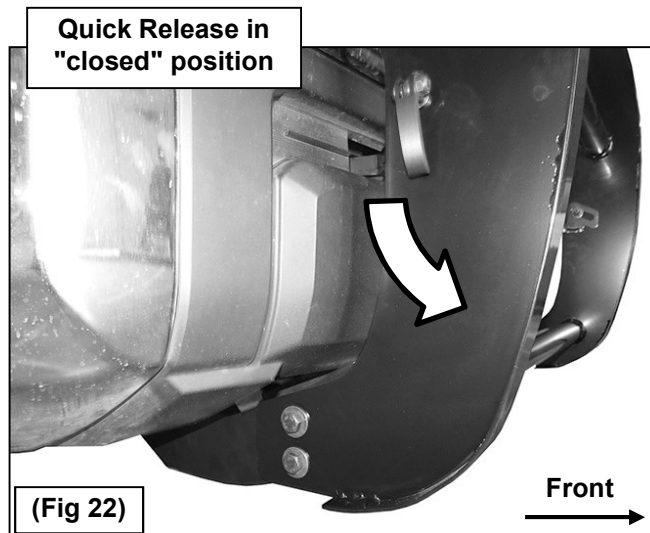
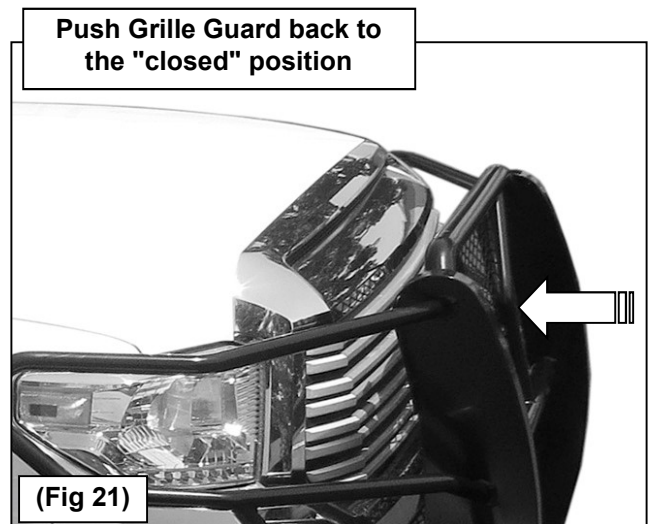
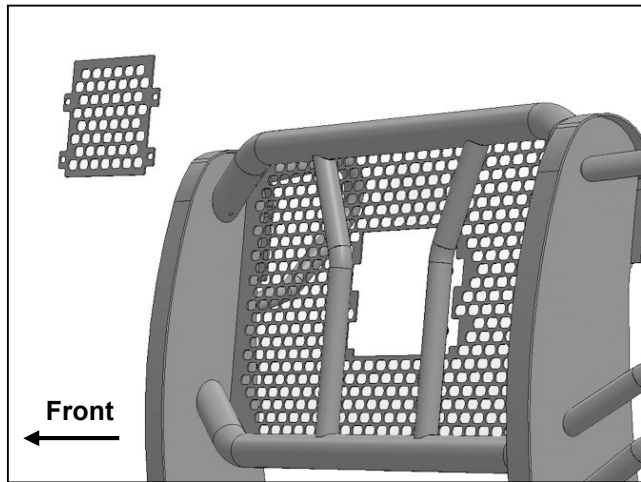
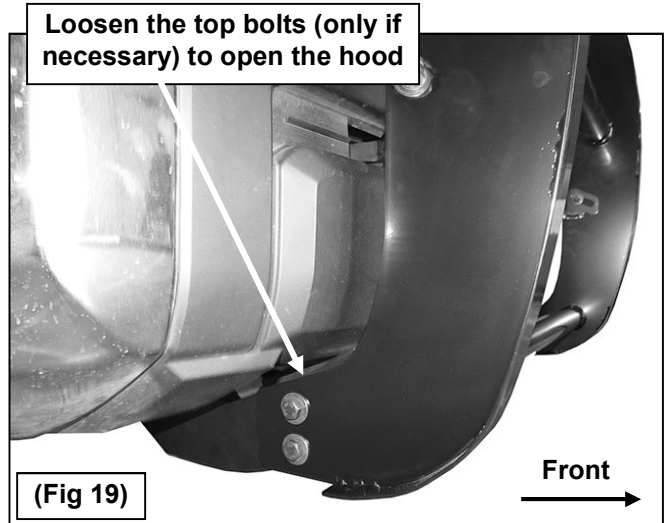
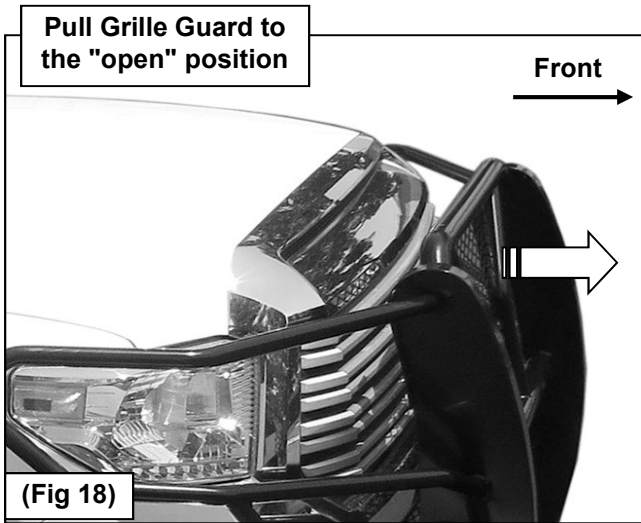
- (1) 10mm Quick Release Bolt with Pivot Washer
- (1) 10mm Flat Washer

**(Fig 16)**

**Insert a 10mm Plastic Washer between the Grille Guard and the Top Bracket and under the Flat Washer on each Quick Release Bolt. (2) Plastic Washers are required for each Quick Release installation**



**(Fig 17) Pull handle to "open" Quick Release**



## **Opening and closing the hood-required for 2007-13 models only**

22. Lift the levers on the Quick Release bolts to release the clamping pressure, (Figure 17). Pull the Grille Guard out and away from the vehicle to the "open" position, (Figure 18). NOTE: If the Grille Guard does not pivot to "open" position, slightly loosen the 12mm upper hex bolt on each Mounting Bracket, (Figure 19). WARNING! Do not completely loosen bolts or damage to the truck may occur.
23. Carefully pull on the Grille Guard until it is fully extended away from the vehicle, (Figure 17).
24. Pull the hood release and slowly open the hood.
25. IMPORTANT! Before closing the hood, always make sure that the Grille Guard is in the full open position and away from the vehicle. Pull on the Grille Guard to verify that it is fully extended away from the vehicle and slowly close the hood, (Figure 21).
26. Once the hood is completely closed, push the Grille Guard back to its "closed," upright position and tighten all hardware on the Grille Guard, (Figure 21). Push down on the Quick Release lever to tighten, (Figure 22). No tools are required to close the Quick Release levers. It will require some effort to open and close by hand when properly adjusted. Loosen or tighten the 10mm Nylon Lock Nut on the Quick Release bolt to adjust the clamping pressure.
27. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

## **PRODUCT CARE**

- Periodically check the product to ensure all fasteners are tight and components are intact.
- Regular waxing is recommended to protect the finish of the product.
- Use ONLY Non-Abrasive automotive wax. Use of any soap, polish or wax that contains an abrasive is detrimental and can scratch the finish leading to corrosion.
- Mild soap may be used to clean the product.

## **FAQ's**

### **1. Hardware and mounting brackets are not aligning properly**

Ensure that hardware is being used on the correct side of vehicle. In some cases, the hardware may appear the same for driver and passenger side but may alter the alignment of mounting location. Check mounting brackets for both sides.

### **2. Products are thumping / rattling after Installation**

Ensure that all required mounting brackets / hardware's are installed & tightened correctly.  
Suggest using white Lithium / regular grease between metal-to-metal contact.

### **3. Missing / Excess Hardware**

Recheck hardware count as per the part list.

### **4. Product not installing properly**

Ensure the Year / Make / Model as well as cab and bed dimensions are correct for the application. Review all steps for installation to ensure they were followed correctly.

### **5. Who should be contacted for questions regarding product / installation assistance?**

[www.trailfx.com](http://www.trailfx.com) / [support@trailfx.com](mailto:support@trailfx.com) or 1-(866) 638-4870

# Warranty Terms:

## 3 Year Limited Warranty:

TrailFX and Keystone Automotive Operations Inc. make no guarantees or warranties for products not manufactured by Keystone Automotive Operations Inc. Such products are covered solely under any applicable warranty of the manufacturer. It is always recommended that the operating instructions and warranty instructions provided by the manufacturer are followed.

Keystone Automotive Operations Inc. warrants its products to be free from manufacturing and material defects to the original purchaser for the length of warranty stated above from the date of retail purchase. If any products are found to have a manufacturing or material defect, the product will be replaced or repaired at the option of TrailFX and Keystone Automotive Operations Inc. with proof of purchase by the original purchaser. The original purchaser shall pay all transportation and shipping costs associated with the return of the defective product and the defective product shall become the property of Keystone Automotive Operations Inc.

The Warranty applies to Keystone Automotive Operations Inc. products used for individual and recreational purposes. Commercial usage of the Keystone Automotive Operations Inc. products limits the warranty to 90-days from date of purchase.

The Warranty applies only to Keystone Automotive Operations Inc. products which are found to be defective in manufacturing or material. This warranty does not apply to normal wear and tear of the finish placed on Keystone Automotive Operations Inc. products.

TrailFX and Keystone Automotive Operations Inc. are not responsible for any labor costs incurred for removal or replacement of the defective product.

TrailFX and Keystone Automotive Operations Inc. are not responsible for repair or replacement of any product under the limited warranty where the product was improperly installed, misapplied, altered, abused, neglected, overloaded, misused or damaged as a result of an accident, including any use of the product not in accordance with all product operating and safety instructions.

Without limiting the generality of the foregoing, TrailFX and Keystone Automotive Operations Inc. shall under no circumstances be liable for any incidental or consequential loss or damage whatsoever arising out of, or in any way relating to any such breach of warranty or claimed defect in, or non-performance of the products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state.