



**Assembly, Installation, Operation and
Maintenance Instructions
3.5" Oval Bull Bar**

**Part Number:
B1614T**

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.



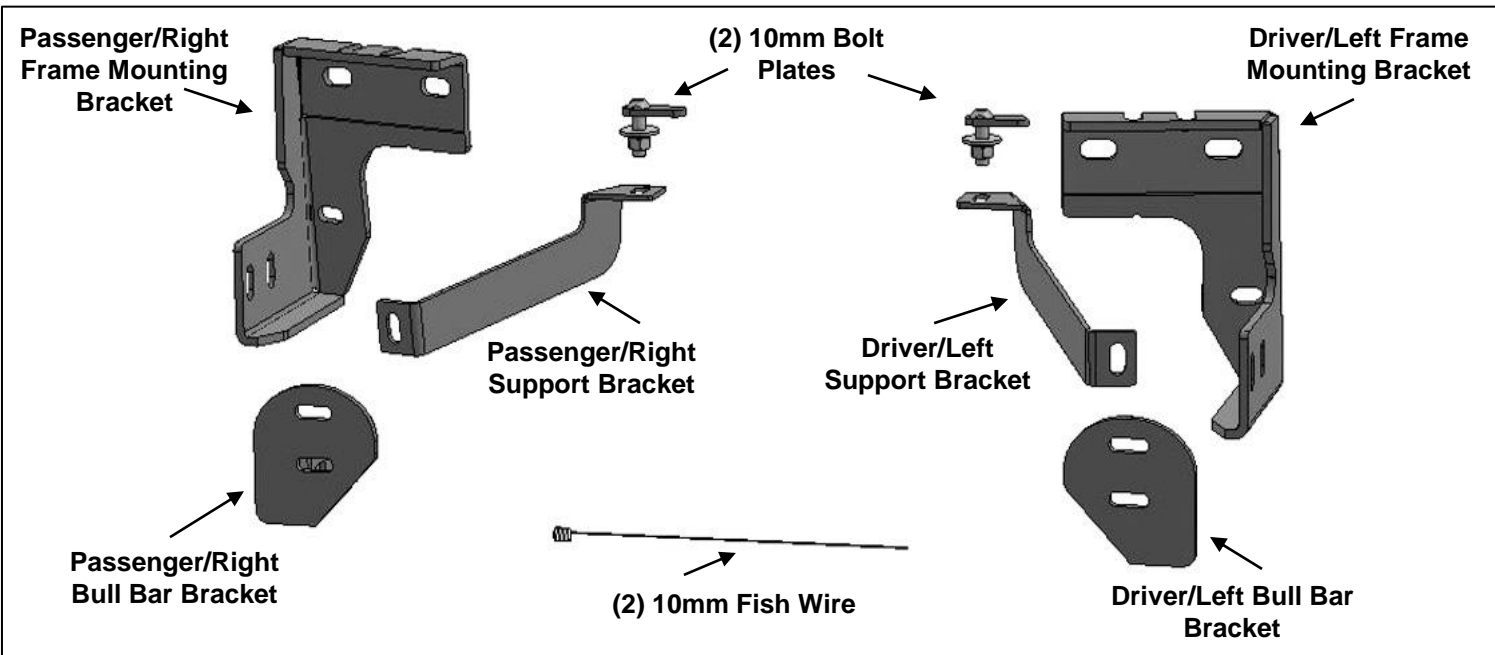
APPLICATION: 2022-2023 TOYOTA TUNDRA

PARTS LIST

| Qty | Part Description | Qty | Part Description |
|-----|--|-----|----------------------------------|
| 1 | 3-1/2" Oval Bull Bar | 2 | 10mm x 35mm Bolt Plates |
| 1 | Driver/Left Frame Mounting Bracket | 6 | 10-1.5mm x 35mm Hex Bolts |
| 1 | Passenger/Right Frame Mounting Bracket | 14 | 10mm x 30mm x 2.5mm Flat Washers |
| 1 | Driver/Left Support Bracket | 8 | 10mm Lock Washers |
| 1 | Passenger/Right Support Bracket | 8 | 10mm Hex Nuts |
| 1 | Driver/Left Bull Bar Bracket | 4 | 8-1.25mm x 35mm Hex Bolts |
| 1 | Passenger/Right Bull Bar Bracket | 2 | 8-1.25mm x 16mm Hex Bolts |
| 2 | 10mm Fish Wires | 6 | 8mm x 24mm x 2mm Flat Washers |
| | | 6 | 8mm Lock Washers |

TORQUE SPECIFICATION

| Size | Torque | Size | Torque |
|-------|-------------|-------|-------------|
| 10 MM | 34.5 ft/lbs | 08 MM | 20.0 ft/lbs |



INSTALLATION PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. INSTALLATION MAY INTERFERE WITH FRONT MOUNTED SENSORS. MODELS WITH “PARKING BRAKE SUPPORT SYSTEM” MUST TURN OFF SYSTEM. ON MODELS WITH ELECTRIC AIR DAM, AIR DAM MUST BE REMOVED FROM ELECTRIC MOTOR AND CANNOT BE REINSTALLED.

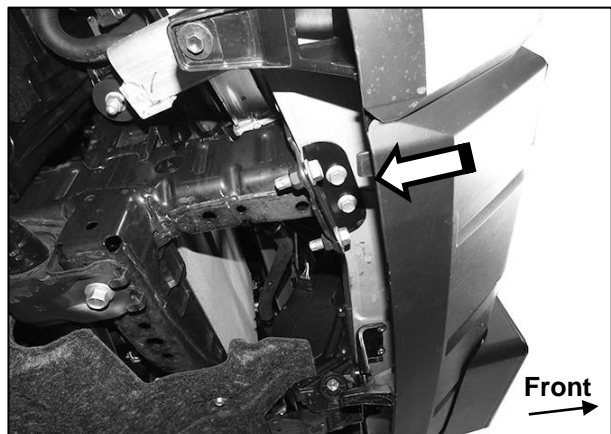
1. Start installation under the Passenger/Right front of the vehicle. Locate the end of the frame and impact bumper just behind the outer bumper cover. Temporarily remove the (4) factory bolts and bent bracket, (Figure 1). NOTE: Bracket will not be reinstalled.
2. Select the Passenger/Right Frame Mounting Bracket. Reuse the factory bolts to attach the Mounting Bracket to the frame and bottom of the impact bumper, (Figures 2 & 3). Do not tighten hardware.
3. Select (1) 10mm Bolt Plate and (1) 10mm Fish Wire. Thread the Fish Wire onto the Bolt Plate, (Figure 4). Bend the straight end of the Fish Wire into a hook, Insert the bent end of the Fish Wire into the large hole in the bottom of the frame crossmember, (Figure 5). Guide the Fish Wire into the large hole and back out the smaller hole toward the outside of the frame. Pull the Fish Wire and Bolt Plate into and down out of the frame, (Figure 6).
4. Select the Passenger/Right Support Bracket. Attach the Support Bracket to the Bolt Plate with (1) 10mm Flat Washer, (1) 10mm Lock Washer and (1) 10mm Hex Nut, (Figure 7). Attach the forward end of the Support Bracket to the back of the Mounting Bracket with (1) 10mm x 35mm Hex Bolt, (2) 10mm Flat Washers, (1) 10mm lock Washer and (1) 10mm Hex Nut, (Figures 8 & 9). Do not tighten hardware.
5. Repeat Steps 1—4 to attach the Driver/Left Frame and Support Bracket to the frame.
6. Select the passenger/right Bull Bar Bracket. Attach the Bracket to the end of the Bull Bar with the included (2) 8mm x 35mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, (Figure 10). Do not fully tighten hardware. Repeat this Step to attach the driver/left Bull Bar Bracket.
7. Center LED Light Installation, (LED Light Bar Included):
8. Attach the LED Light Bar to the back of the Bull Bar using the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm x 24mm Flat Washers, (Figure 11).
9. With assistance, hold the Bull Bar and Brackets up to the inside of the Mounting Bracket. Attach the Bull Bar to the Brackets with the included (4) 10mm x 35mm Hex Bolts, (8) 10mm Flat Washers, (4) 10mm Lock Washers and (4) 10mm Hex Nuts, (Figure 12). Do not tighten hardware.
10. Level and adjust the Bull Bar then fully tighten all hardware.
11. 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.

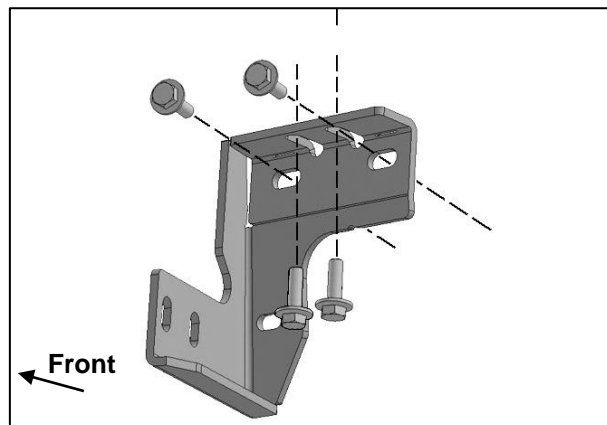
For gloss black finishes: Mild soap may be used to clean the Bull Bar.

INSTALLATION IMAGES:

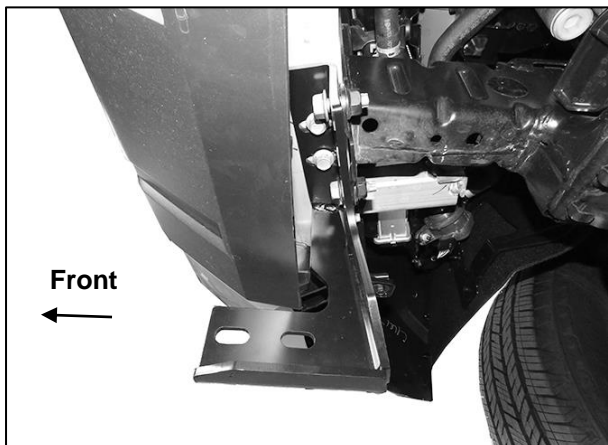
Driver/Left Side Installation Pictured



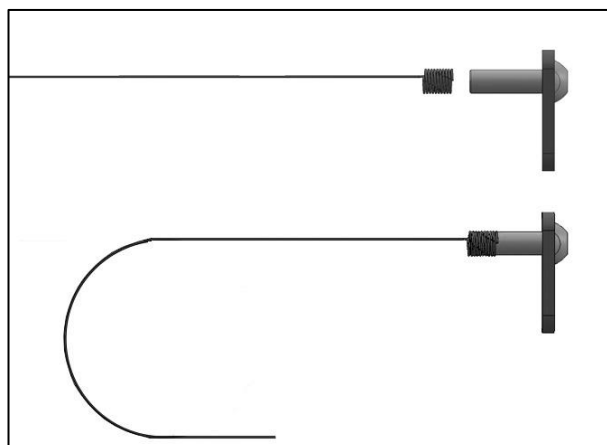
(Fig 1) Temporarily remove the (4) bolts and bent bracket attaching the bottom of the inner impact bumper to the end of the frame (arrow)



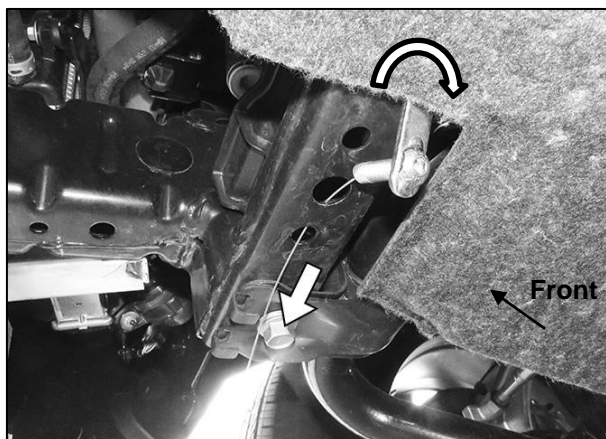
(Fig 2) Reuse the factory hardware to attach the Passenger/Right Mounting Bracket to the frame and inner impact bumper



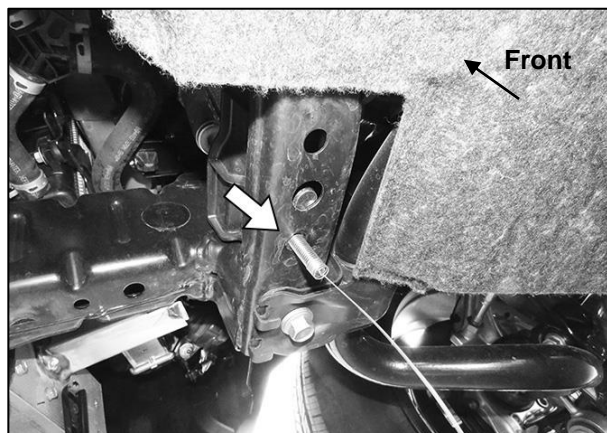
(Fig 3) Passenger/right Frame Mounting Bracket installed



(Fig 4) Thread (1) 10mm Fish Wire onto (1) 10mm Bolt Plate. Bend the straight end of the Fish Wire into a "U"

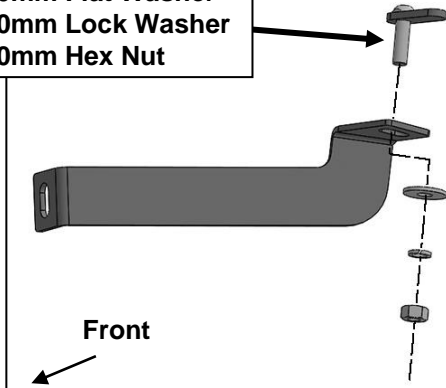


(Fig 5) Insert the U-bent end of the Fish Wire into the large hole and out the outer smaller hole. Pull the Fish Wire with Bolt Plate into and through the hole in the crossmember. NOTE: Bolt Plate as pictured must be rotated 180 degrees to fit into hole



(Fig 6) Pull the Fish Wire with Bolt Plate down and out through the smaller hole in the crossmember then remove Fish Wire

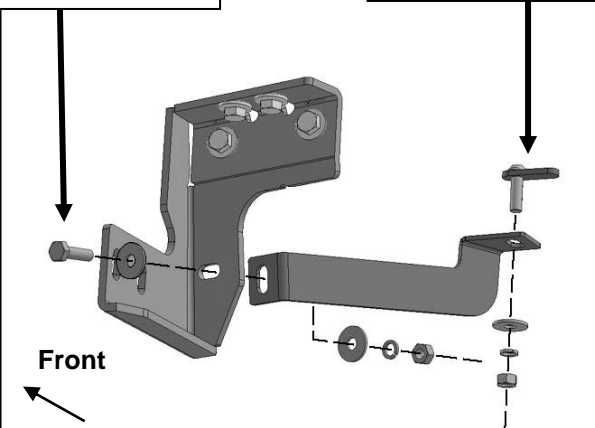
- 10mm Bolt Plate
- 10mm Flat Washer
- 10mm Lock Washer
- 10mm Hex Nut



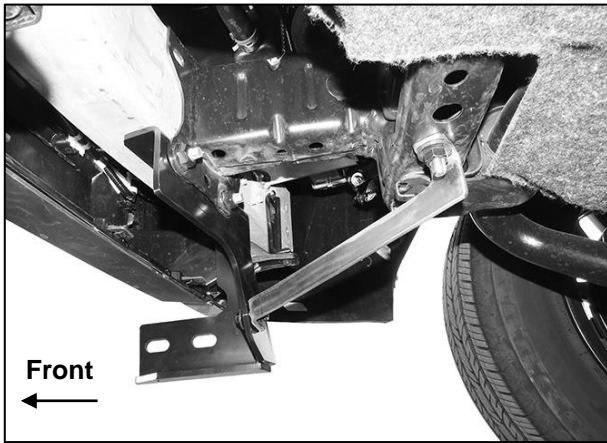
(Fig 7) Attach the Passenger/Right Support Bracket to the Bolt Plate

- 10mm x 35mm Hex Bolt
- (2) 10mm Flat Washers
- 10mm Lock Washer
- 10mm Hex Nut

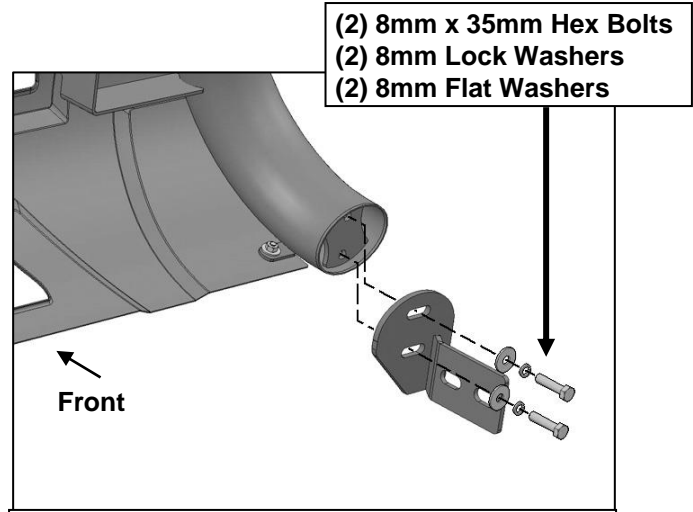
- 10mm Bolt Plate
- 10mm Flat Washer
- 10mm Lock Washer
- 10mm Hex Nut



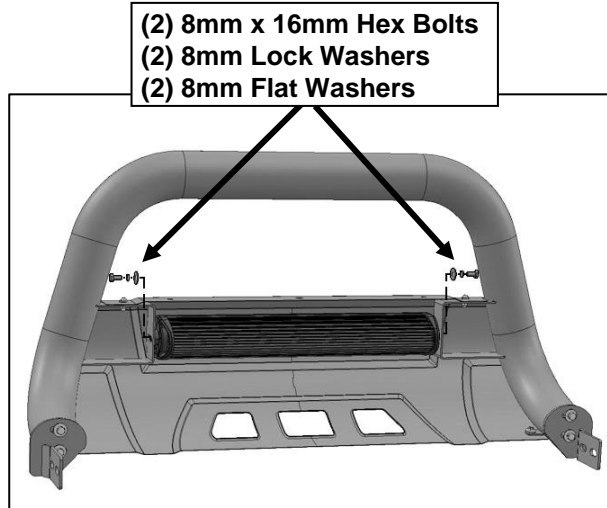
(Fig 8) Attach the Passenger/Right Support Bracket to the back of the Mounting Bracket



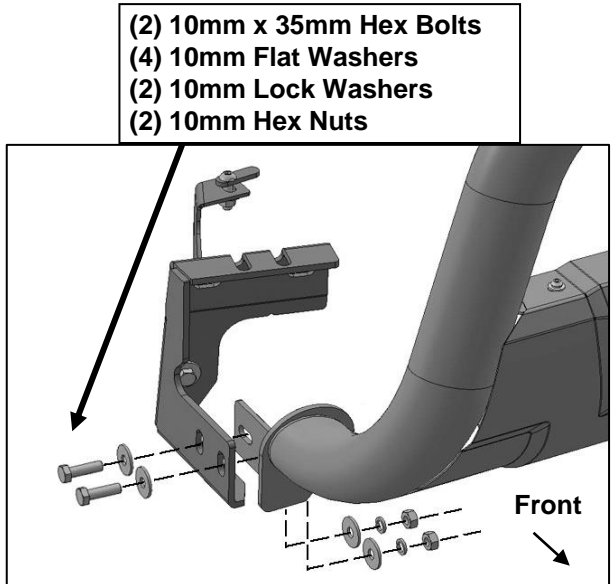
(Fig 9) Passenger/Right Mounting Bracket and Support Bracket installed



(Fig 10) Attach the passenger/right Bull Bar Bracket to the end of the Bull Bar



(Fig 11) Attach LED light to brackets on back of Bull Bar (installation optional)



(Fig 12) Attach the passenger/right side of the Bull Bar to the inside of the Frame Mounting Bracket

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 / support@trailfx.com or 1-(866) 638-4870

Warranty Terms:

Black Powder Coated:

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.