



**BLACK HORSE
OFF ROAD®**

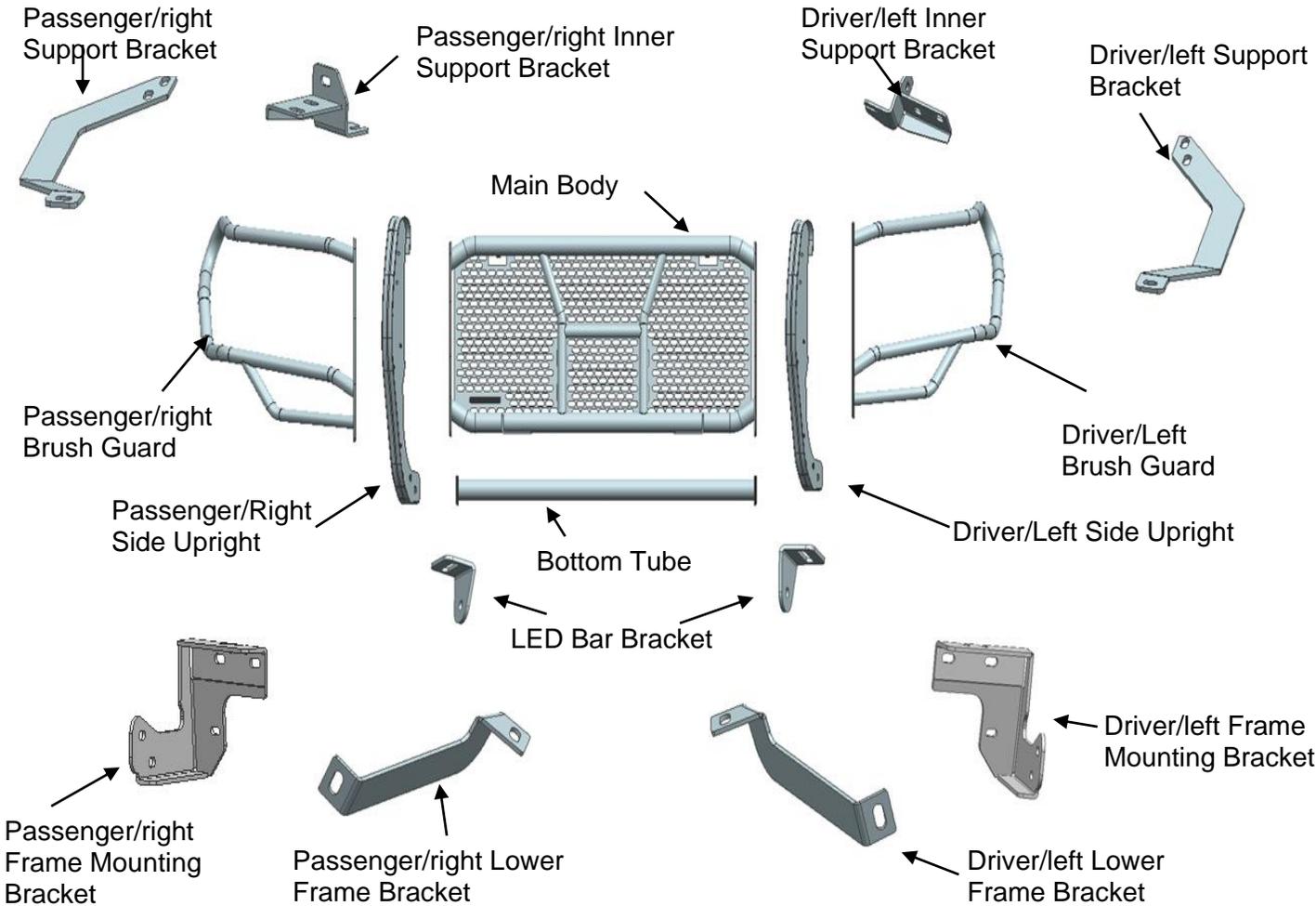
TEL: 1-866-XANATOS

INSTALLATION INSTRUCTIONS

**MODULAR RUGGED GRILLE GUARD
2022-2024 TOYOTA TUNDRA
PART#RU-TOTU22-B**

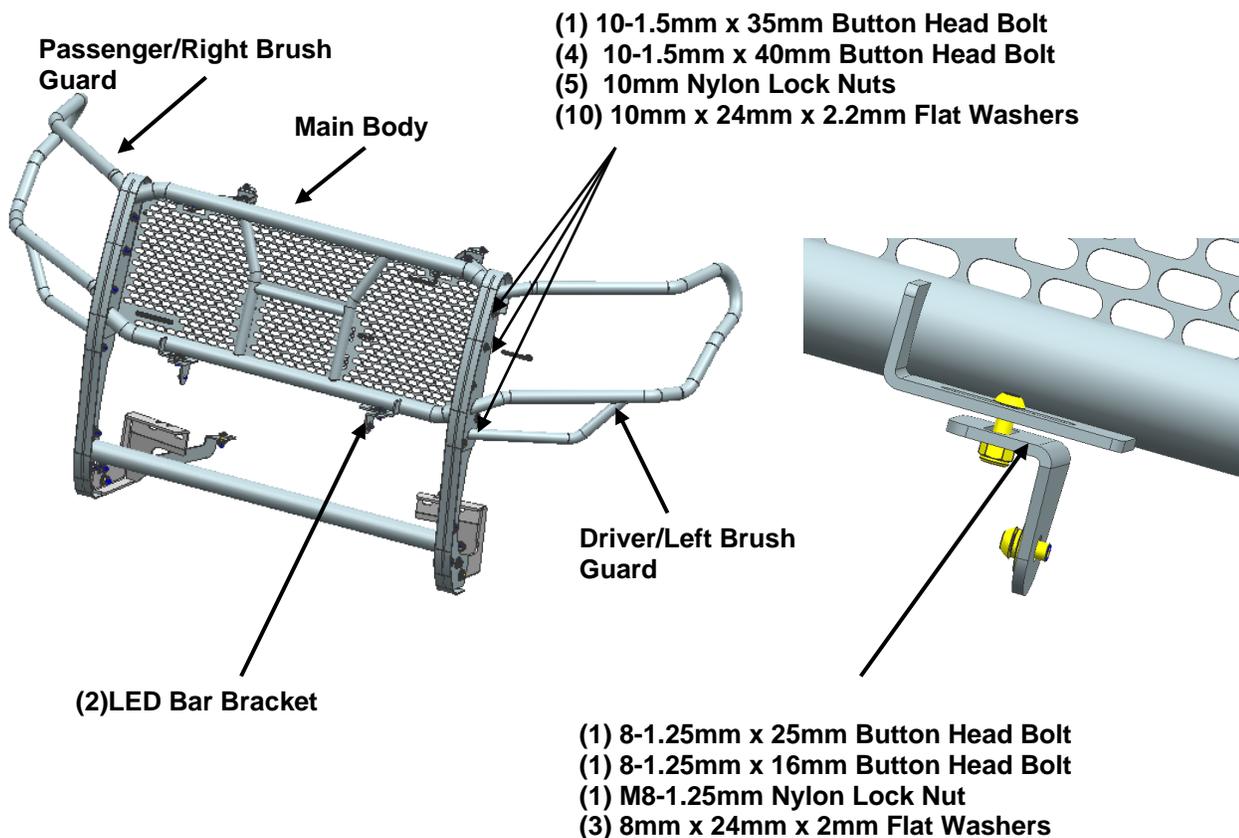
PARTS LIST:

Qty	Description	Qty	Description
1	Grille Guard Main Body	8	8-1.25mm x 25mm Button Head Bolt
1	Driver/left Brush Guard	2	8-1.25mm x 16mm Button Head Bolt
1	Passenger/right Brush Guard	16	8mm x 24mm x 2mm Flat Washer
1	Bottom Tube	4	8mm Lock Washer
2	Uprights	6	8mm Nylon Lock Nut
1	Driver/left Frame Mounting Bracket	8	10-1.5mm x 40mm Button Head Bolt
1	Passenger/right Frame Mounting Bracket	6	10-1.5mm x 35mm Button Head Bolt
1	Driver/left Support Bracket	2	10-1.5mm x 35mm Hex Bolt
1	Passenger/right Support Bracket	6	10mm x 27mm x 3mm Flat Washer
1	Driver/left Inner Support Bracket	28	10mm x 24mm x 2.2mm Flat Washer
1	Passenger/right Inner Support Bracket	18	10mm Nylon Lock Nut
1	Driver/left Lower Frame Bracket	2	10mm Fish Wire
1	Passenger/right Lower Frame Bracket	2	10mm Bolt Plate
2	LED Bar Bracket	4	12mm-1.75 x 40mm Hex Bolt
4	6-1.00mm x 20mm Hex Bolt	8	12mm x 32mm x 3mm Flat Washer
4	6mm x 18mm x 1.6mm Flat Washer	4	12mm Nylon Lock Nut
4	6mm Lock Washer	1	Allen Wrench S=5
4	Adhesive Backed Foam Tape	1	Allen Wrench S=6



Please Noted:

1. Before you install the Grille Guard on the vehicle, please install the Driver/Left Brush Guard and Passenger/Right Brush Guard on the main body first.
2. Before you install the LED Lamp on the main body please install the LED Lamp Bracket first.
3. If you are not going to install a LED Lamp, the LED Lamp Bracket installation is unnecessary. For main body installation follow the instruction as bellow.



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 "L" 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)**.
IMPORTANT: Tighten the lower horizontal hex bolts first, then move to the upper vertical bolts.
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)**. **NOTE:** The 10mm Fish Wire has been provided to help with Bolt Plate installation. Use is optional.

4. Select the Passenger/Right Lower Frame Bracket, **(Figure 7)**. Attach the Lower Frame Bracket to the Bolt Plate with (1) 10mm Bolt Plate (1) 10mm Flat Washer and (1) 10mm Nylon Lock Nut. Attach the forward end of the Lower Frame Bracket to the back of the Frame Mounting Bracket with (1) 10mm x 35mm Hex Bolt, (2) 10mm Flat Washers, and (1) 10mm Nylon Lock Nut, **(Figures 8 & 9)**. Do not tighten hardware.
5. Repeat **Steps 1—4** to attach the Driver/Left Frame Bracket and Lower Support Bracket.
6. Open the hood and locate and remove the (2) hex bolts in the passenger/right side of the radiator core support, **(Figure 10)**. Select the passenger/right Inner Support Mounting Bracket, **(Figure 11)**. Attach the Bracket to the threaded holes in the core support with the included (2) 6mm x 20mm Hex Bolts, (2) 6mm Lock Washer and (2) 6mm Flat Washers, **(Figure 12)**. Do not fully tighten hardware.
7. Next, select the passenger/right Top Support Bracket and (2) Adhesive Backed Foam Pads, **(Figure 13)**. Apply the Foam Pad to the top and bottom of the Top Support Bracket.
8. Insert the flat end of the Support Bracket through the top outer opening in the grille, **(Figure 14)**. **NOTE:** Release the plug on the passenger/right side and move the harness to clear the Support Bracket, if necessary, **(Figure 15)**.
9. Attach the flat end of the Bracket to the top of the Support Bracket with the included (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers and (2) 8mm Nylon Lock Nuts, **(Figures 16 & 17)**. Do not fully tighten hardware at this time.
10. Repeat **Steps 6—9** to install the driver/left Inner Support and Support Brackets.
11. With assistance, hold the Grille Guard up to the outside of the Frame and Support Brackets. Attach the Grille Guard to the passenger/right Frame Bracket with the included (2) 12mm x 40mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, **(Figures 18 & 19)**. Repeat this Step to attach the driver/left side of the Grille Guard. Do not fully tighten hardware.

Attach the passenger/right Support Bracket to the inside of the upright on the bend the pipe in the center net with the included (1)8mm Lock Washer,(1)8-1.25mm x 25mm Button Head Bolt,(1)8mm x 24mm x 2mm Flat Washer**(Figures 20)**

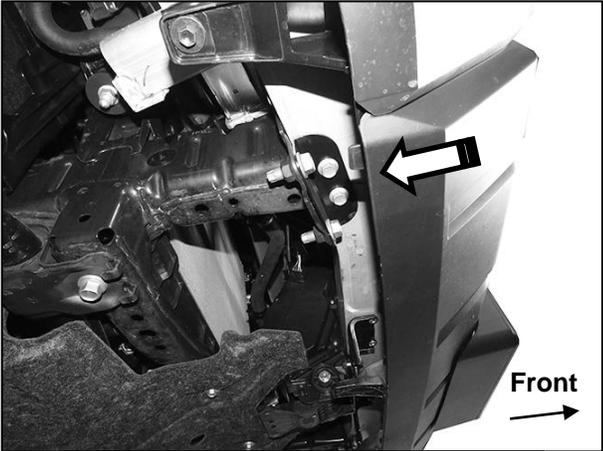
12. Repeat this Step to attach the drive/left Upper Support Bracket to the bend the pipe in the center net.
13. Level and adjust the Grille Guard and fully tighten all hardware.
14. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

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.

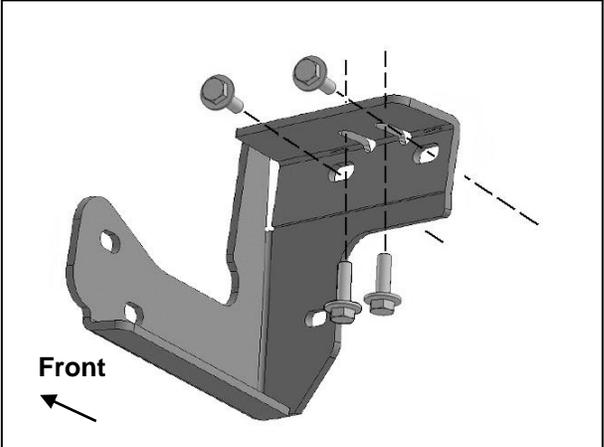
For stainless steel: Aluminum polish may be used to polish small scratches and scuffs on the finish. Mild soap may be used also to clean the Grille Guard.

For gloss black finishes: Mild soap may be used to clean the Grille Guard.

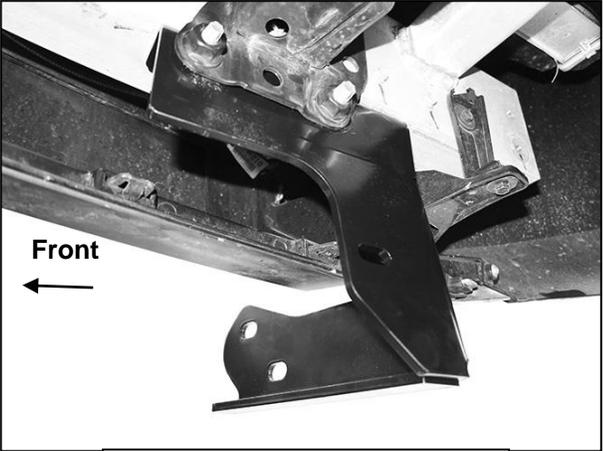
Passenger/right Side Installation Pictured



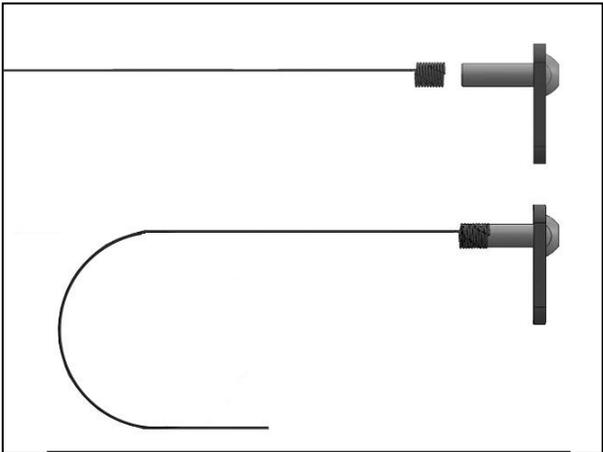
(Fig 1) Temporarily remove the (4) bolts and bent bracket attaching the bottom of the inner impact bumper to the end of the frame (arrow)



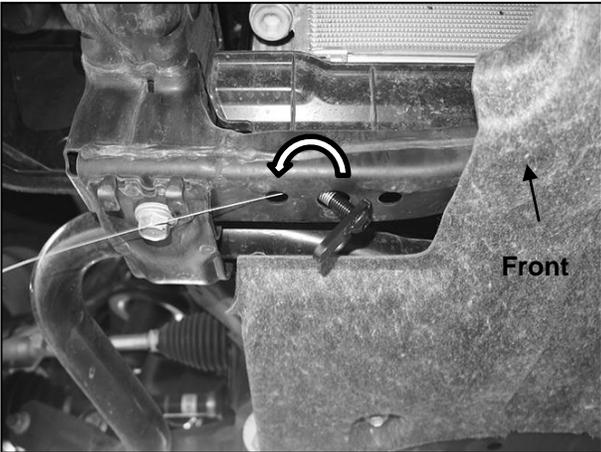
(Fig 2) Reuse the factory hardware to attach the Passenger/Right Mounting Bracket to the frame and inner impact bumper



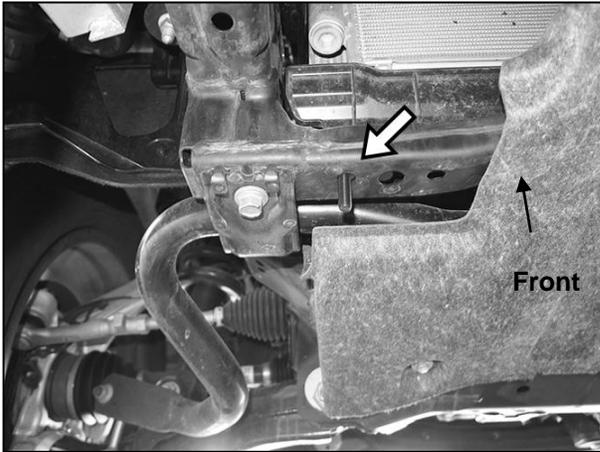
(Fig 3) Passenger/right Frame Mounting Bracket installed



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

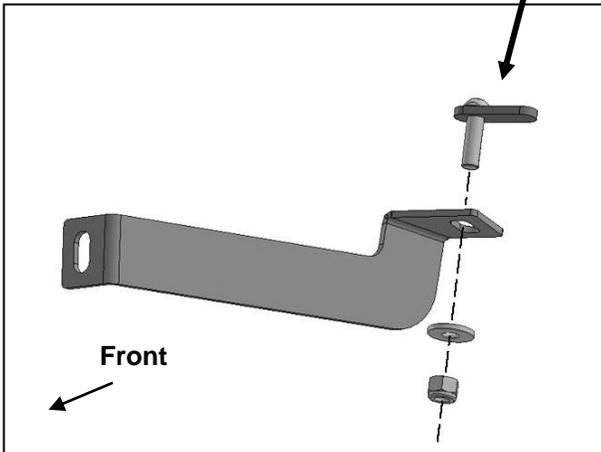


(Fig 5) Insert the U-bent end of the Fish Wire into the large hole and out the outer smaller hole. Pull the Fish Wire with Bolt Plate into and through the hole in the crossmember.



(Fig 6) Pull the Fish Wire with Bolt Plate down and out through the smaller hole in the crossmember then remove Fish Wire. NOTE: Use of Fish Wire to install the Bolt Plate is optional

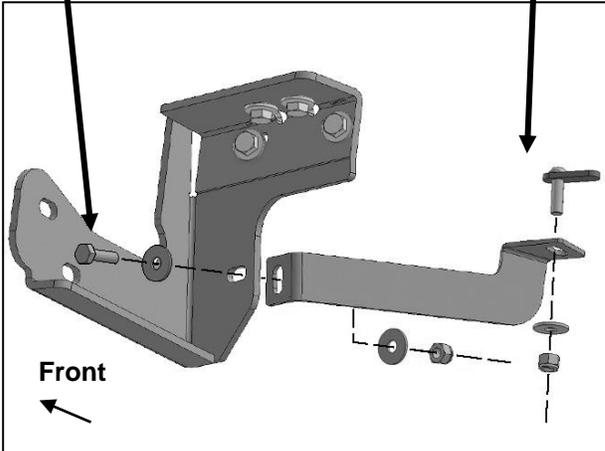
10mm Bolt Plate
 10mm Flat Washer
 10mm Nylon Lock Nut



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

(1) 10mm x 35mm Hex Bolt
 (2) 10mm Flat Washers
 (1) 10mm Nylon Lock Nut

10mm Bolt Plate
 10mm Flat Washer
 10mm Nylon Lock Nut

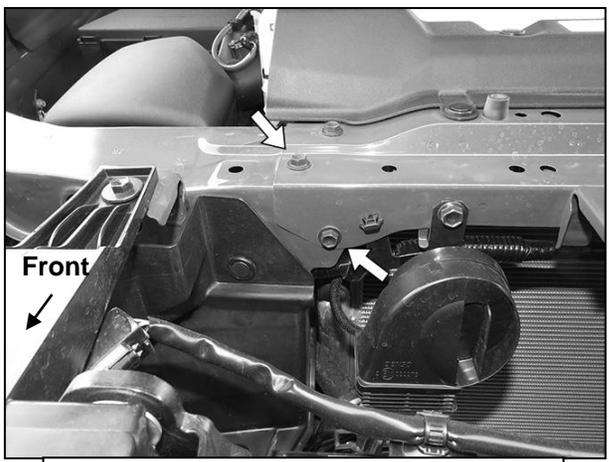


(Fig 8) Attach the Passenger/Right Lower Frame Bracket to the back of the Mounting Bracket

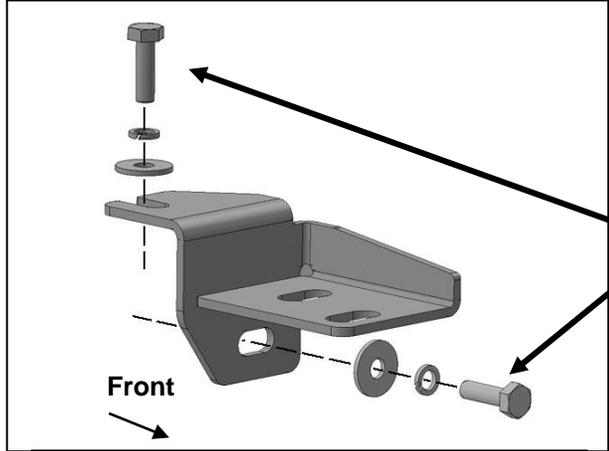
Passenger/Right Side Installation Pictured



(Fig 9) Passenger/Right Frame Mounting Bracket and Lower Frame Bracket installed

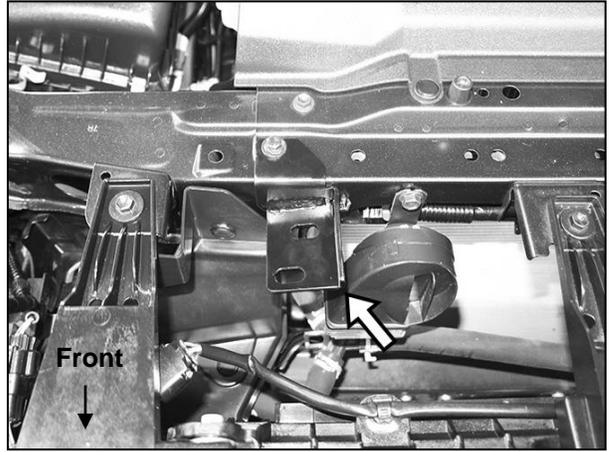


(Fig 10) Remove the (2) hex bolts from the passenger/right side of the radiator core support (arrows)

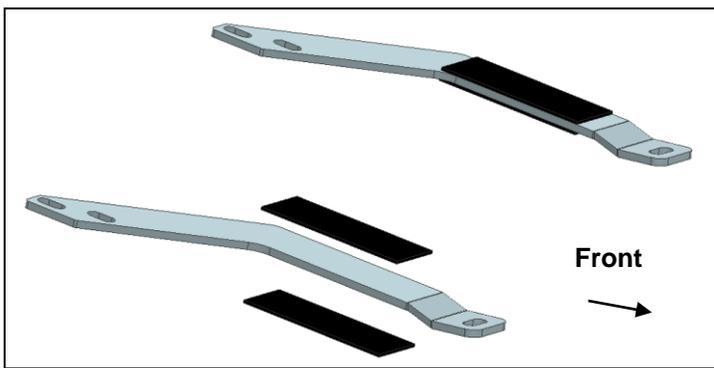


- (2) 6mm x 20mm Hex Bolts
- (2) 6mm Lock Washers
- (2) 6mm Flat Washers

(Fig 11) Attach the passenger/right Inner Support Bracket to the core support

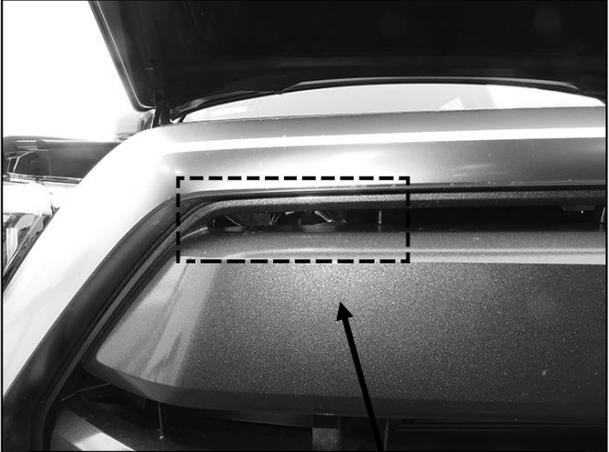


(Fig 12) Attach the passenger/right Inner Support Bracket to the core support

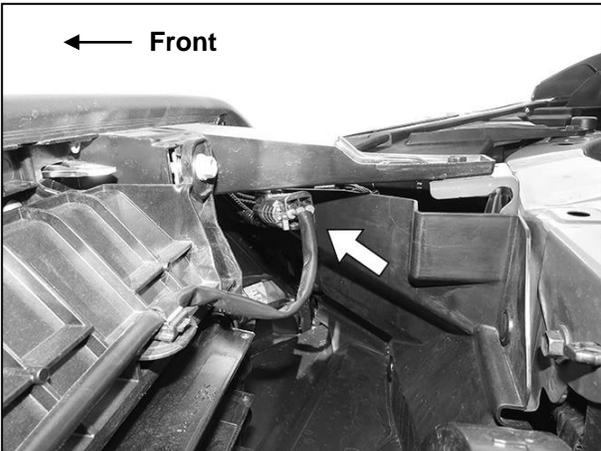


(Fig 13) Apply the Adhesive Backed Foam Pads to the passenger/right Support Bracket

Passenger/Right Side Installation Pictured

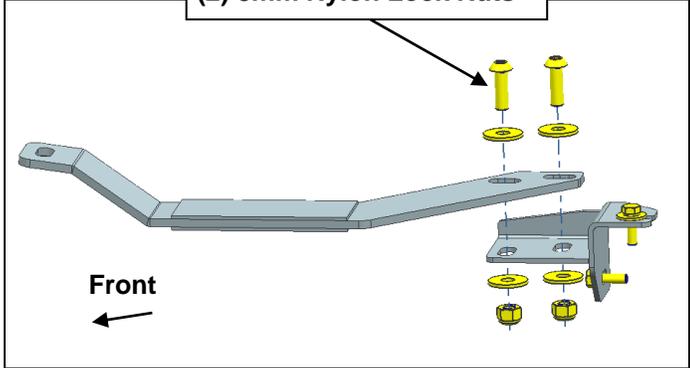


(Fig 14) Insert the flat end of the passenger/right Support Bracket through the top outer opening in the grille

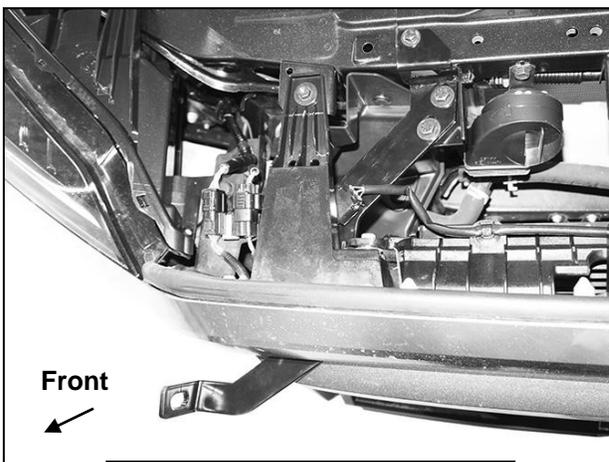


(Fig 15) Relocate the wiring harness on the passenger/right side of the grille to clear the Support Bracket if necessary

- (2) 8mm x 25mm Hex Bolts
- (4) 8mm Flat Washers
- (2) 8mm Nylon Lock Nuts

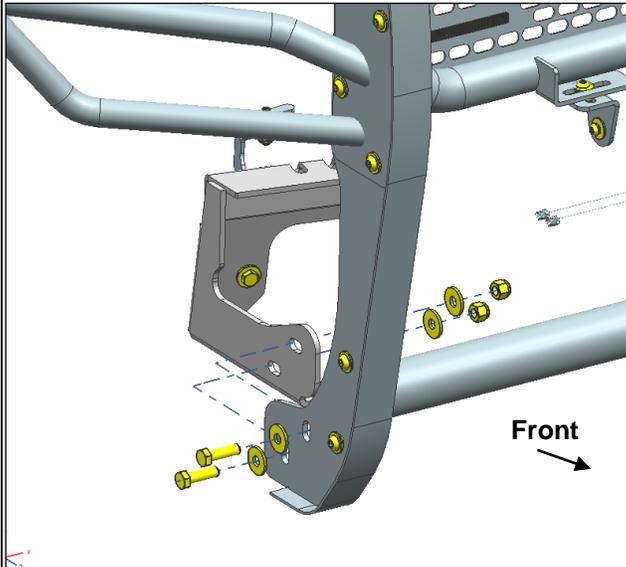


(Fig 16) Attach the passenger/right Support Bracket to the top of the Mounting Bracket



(Fig 17) Passenger/right Support Bracket installed

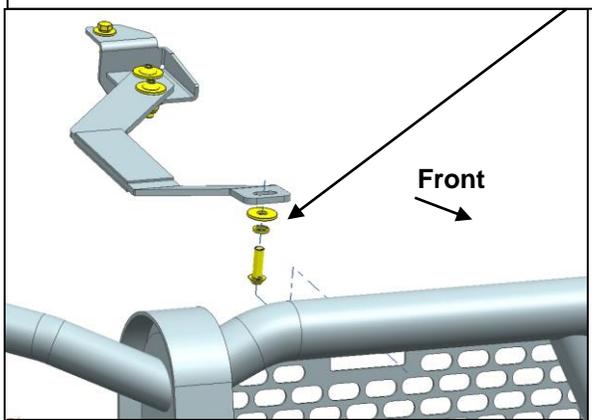
Passenger/Right Side Installation Pictured



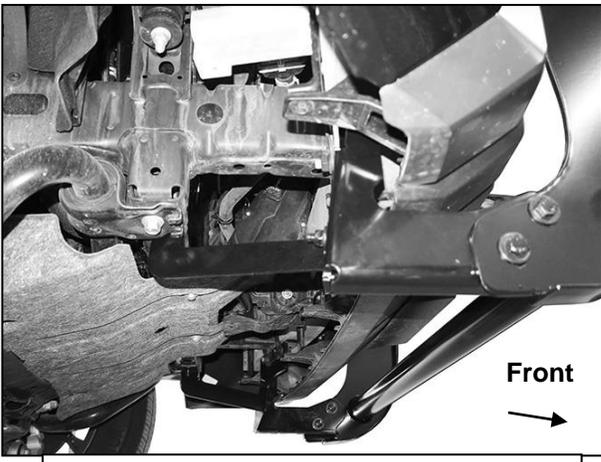
- (2) 12mm x 40mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts

(Fig 18) Attach passenger/right side of Grille Guard to Frame Mounting Bracket

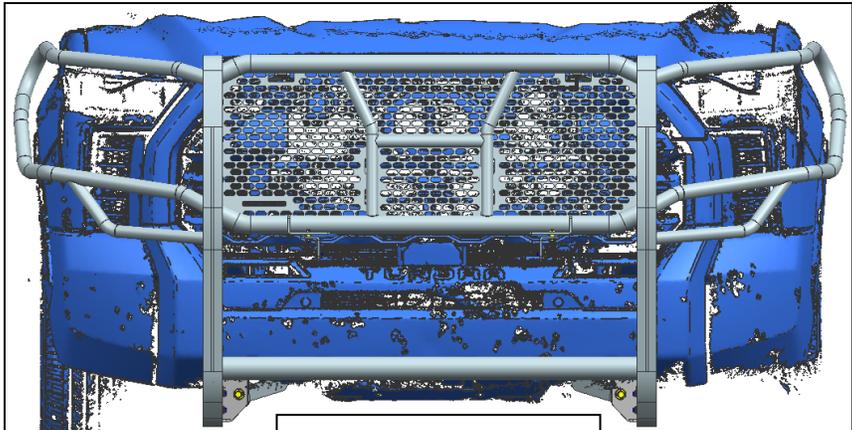
- 8mm Lock Washer
- 8-1.25mm x 25mm Button Head Bolt
- 8mm x 24mm x 2mm Flat Washer



(Fig 20) Attach passenger/right Support Bracket to bend the pipe in the center net



(Fig 19) Attach passenger/right side of Grille Guard to Frame Mounting Bracket



Complete Installation