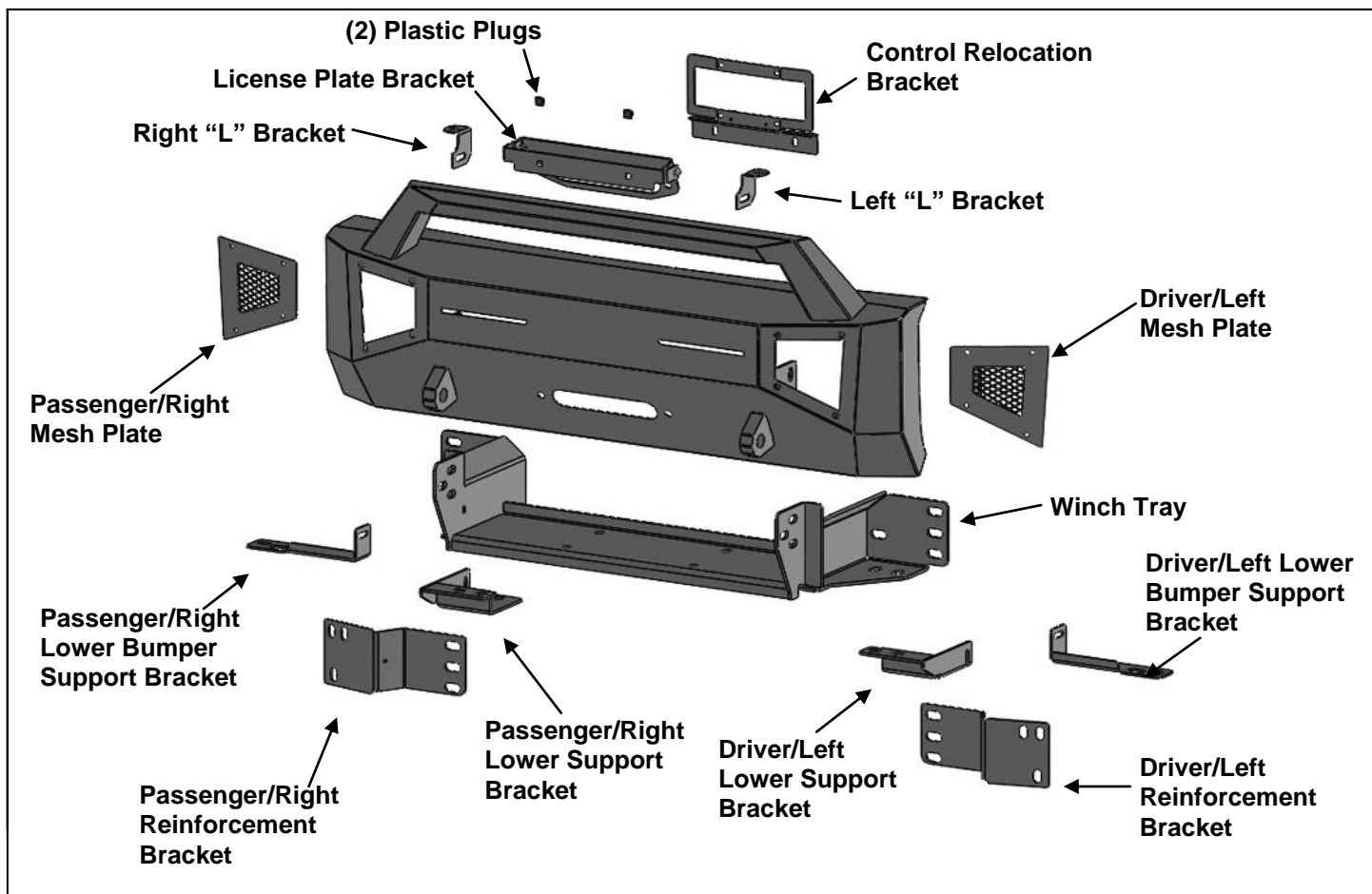




Front Bumper for 14-21 TUNDRA
(Included winch plate, 20" single row LED light bar)

PARTS LIST:

1	CS1 HD Front Bumper	14	12mm x 32mm OD x 3mm Flat Washers
1	Winch Tray	10	12mm Lock Washers
1	Driver/Left Frame Mounting Bracket	10	12mm Hex Nuts
1	Passenger/Right Frame Mounting Bracket	2	10mm x 30mm Button Head Bolts
1	Driver/Left Reinforcement Bracket	2	10mm Nylon Lock Nuts
1	Passenger/Right Reinforcement Bracket	1	8mm Double Bolt Plate
1	Driver/Left Lower Support Bracket	2	8mm x 30mm Hex Bolts
1	Passenger/Right Lower Support Bracket	1	8mm x 25mm Counter Sink Screw
1	Driver/Left Lower Bumper Support Bracket	2	8mm x 25mm Hex Bolts
1	Passenger/Right Lower Bumper Support Bracket	2	8mm x 16mm Hex Bolts
1	Winch Control Pack Relocation Bracket	13	8mm x 24mm OD x 2mm Flat Washers
1	Driver/Left L-Bracket	8	8mm Lock Washers
1	Passenger/Right L-Bracket	6	8mm Hex Nuts
1	Driver/Left Mesh Plate	1	8mm Nylon Lock Nut
1	Passenger/Right Mesh Plate	2	8mm Plastic Retainers
1	Pivoting License Plate Bracket	8	6mm x 20mm Combo Bolts
2	License Plate Plugs	2	Rubber Strips
1	Spacer Plate (For trans. cooler relocation)	1	6mm Hex Wrench
2	12mm Triple Bolt Plates	1	5mm Hex Wrench
4	12mm x 35mm Hex Bolts	1	4mm Hex Wrench



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE. CUTTING IS REQUIRED.

1. Move to the passenger/right wheel opening. Remove the hardware attaching the plastic cover to the back and bottom of the outer end of the front bumper, **(Figures 1 & 2)**. Next, remove the plastic clip attaching the cover to the side of the frame and remove the cover, **(Figure 3)**.
2. Repeat **Step 1** to remove the plastic covers from the driver/left side of the vehicle.
3. On models with factory fog lights and/or bumper mounted sensors, unplug the harness leading to the front bumper, **(Figure 4)**. **NOTE:** Fog lights and sensors will not be reinstalled.
4. Remove the license plate. Remove hardware attaching plastic cover on bottom of bumper to cross member, **(Figure 5)**. Next, remove both tow hooks.
5. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been supported, remove the hex nuts attaching the inner bumper bracket to the end of the frame, **(Figure 6)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling. **NOTE:** For easier access to the top hex nuts attaching the bumper, open the hood and remove the plastic cover from the top of the radiator. Temporarily remove the plastic grille, **(Figure 7)**.
6. With assistance, remove the bumper assembly, **(Figure 8)**.
7. From behind the factory bumper, locate the (2) crossbar brackets. Remove the brackets and crossbar from the bumper by removing the (8) bolts in the top and bottom of the bumper, **(Figure 9)**. Place bolts in a safe location.
8. From the front of the crossbar, remove the (6) nuts attaching the brackets to the crossbar, **(Figure 10)**.
9. From behind the bumper, remove the hardware attaching the center portion to the side panels. Remove the hardware in the top of the bumper to remove the center, **(Figures 11 & 12)**.
10. Remove the upper panel from the top of the bumper. Cover the outer ends of the bumper with removable tape, (masking tape for example). Draw a line from the opening following the edge down through the bottom of the bumper, **(Figure 13A)**. Use a metal cutting saw, (hacksaw for example), to cut out the lower center area of the bumper, **(Figure 13B)**.
11. Remove both tow hooks if equipped.
12. Move to the front of the vehicle. Locate the oil cooler attached to the lower cross member, **(Figure 14)**. Temporarily remove the hardware attaching the cooler to the Drive/Left side of the vehicle. Select the Spacer Plate. With the 8mm Counter Sink Screw attach the Spacer Plate to the welded nut in the cross member, **(Figure 15)**. Attach the oil cooler to the Spacer plate as far back as possible with the factory bolt, (1) 8mm Flat Washer and (1) 8mm Nylon Lock Nut, **(Figures 16 & 17)**.
13. Select the Driver/Left Reinforcement Bracket. Using the factory nuts, attach the Reinforcement Bracket to the Driver/Left crossbar bracket. Repeat this **Step** for the Passenger/Right Reinforcement Bracket. Reattach the crossbar bracket to the side panels on the OE bumper with the factory bolts, **(Figure 18)**.
14. With assistance, reuse the factory nuts attach the Winch Tray and Reinforcement Brackets to the ends of the frame, **(Figures 19 & 20)**. Do not tighten hardware.
15. Select the Driver/Left Lower Support Bracket. Attach the Support Bracket to the bottom of the Winch Tray with (2) 12mm Hex Bolts (4) 12mm Flat Washers, (2) 12mm Lock Washers and (2) 12mm Hex Nuts, **(Figure 21)**. Do not tighten hardware.
16. Select the Driver/Left Bumper Support Bracket. Line up the Bumper Bracket to the Lower Support Bracket and the side of the bumper, **(Figure 23)**. It may be necessary to trim the excess plastic from the bumper to allow the Bumper Bracket to be flush against the bumper. Temporarily remove the bolt indicated in **fig 23**. Attach the Bumper Bracket to the side of the Lower Support Bracket with (1) 8mm x 30mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 22)**. Reuse the factory bolt to attach the Bumper Bracket to the side of the bumper. Do not tighten hardware.
17. Repeat **Steps 15 & 16** to attach the Passenger/Right Lower Support Bracket and Passenger/Right Bumper Support Bracket.
18. Align and center Winch Tray to vehicle. Adjust factory bumper as necessary and fully tighten hardware.
19. If installing winch, (winch not included), attach the winch to the Winch Tray at this time. Winch must be installed before Bumper is placed in position. **NOTE:** Follow manufacturer's instructions to remove the

control assembly from the top of the winch and attach it to the Relocation Bracket, **(Figures 24 & 25)**. Follow manufacturer's instructions to properly attach the winch to the vehicle's electrical system.

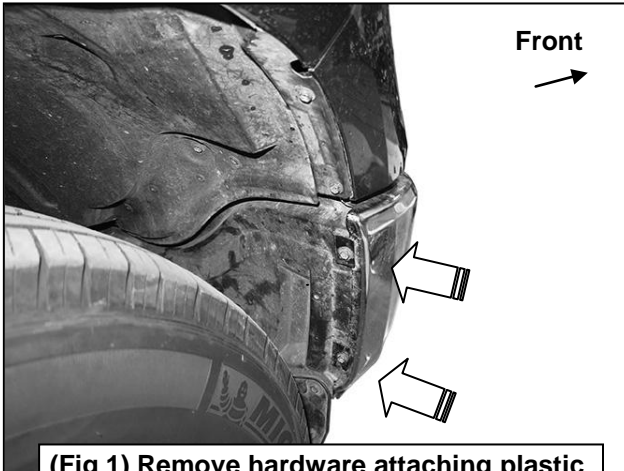
20. Select the 8mm Double Bolt Plate. From below the cross member above the winch, insert the Double Bolt Plate up through the rectangle holes. Thread (2) 8mm Plastic retainers onto the threads to hold the Bolt Plate in place. Attach the winch control pack Relocation Bracket to the Double Bolt Plate with (2) 8mm Flat Washers, (2) 8mm Lock washers and (2) 8mm Hex Nuts, **(Figure 25)**.
21. Reattach the grille. If winch was installed, to access the control pack, remove the small panel in the top of the grille during use, **(Figures 26 & 27)**.
22. Carefully unpack the Bumper. Attach the included long Edge Trim to the sides of the Bumper, **(Figure 28)**. Temporarily place outer Bumper in position to check for clearance.
23. Determine if bar style LED light, (not included), will be installed at this time. **NOTE:** Bull Nose assembly is designed to be compatible with most 20" to 24" Bar Style LED lights.

LED bar style light installation (light not included).

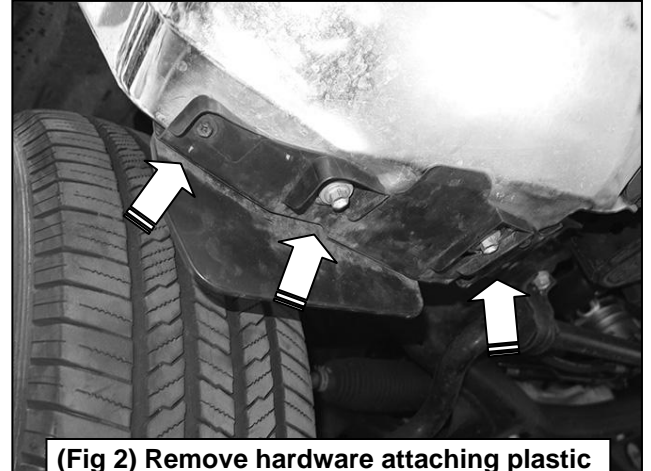
- a. Select the Driver/Left L-Bracket, **(Figure 29)**. **NOTE:** L-Brackets are offset to adjust for different widths of LED Bar Lights and can be installed on either side as needed.
 - b. L-Brackets to the inside will accommodate a light 21-3/8" to 23-3/16" wide.
 - c. L-Brackets to the outside will accommodate a light 24-5/8" to 26-3/8" wide.
 - d. Attach the L-Bracket to the slot on the back of the Bull Nose assembly with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 29)**. Repeat this Step to install the remaining L-Bracket.
 - e. Attach the light to the L-Brackets with the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers or use the hardware included with the light, **(Figures 30)**. Do not fully tighten hardware.
24. Select the Pivoting License Plate Bracket assembly. Attach the assembly to the front of the Bumper with (2) 10mm x 30mm Button Head Bolts and (2) 10mm Nylon Lock Nuts, **(Figure 31)**. Insert the License Plate Plugs into the Bracket assembly to attach license plate, **(Figure 32)**.
 25. With assistance, position the Bumper Assembly up to the inside of the Winch Tray assembly, **(Figure 33)**. Temporarily support the weight of the Bumper. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.
 26. Attach the driver/left side of the Bumper to the inside of the Winch Tray with the included (1) 12mm Triple Bolt Plate, (3) 12mm Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, **(Figure 33)**. Do not fully tighten hardware. Repeat this Step to attach the Passenger/Right side of the Bumper.
 27. Level and adjust the Bumper and fully tighten all hardware.
 28. Select the Driver/Left Mesh Plate. Attach the Mesh Plate to the Bumper with (4) 6mm Combo Bolts, **(Figure 34)**. Repeat this **Step** to attach the Passenger/Right Mesh Plate.
 29. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

To protect your investment, 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 Bumper assembly.

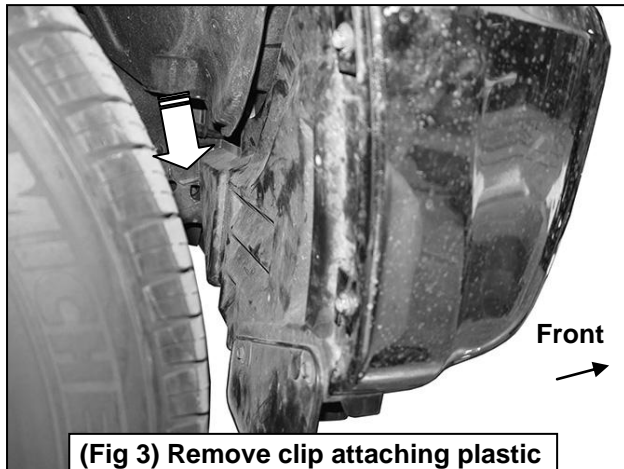
Driver Side Installation Pictured



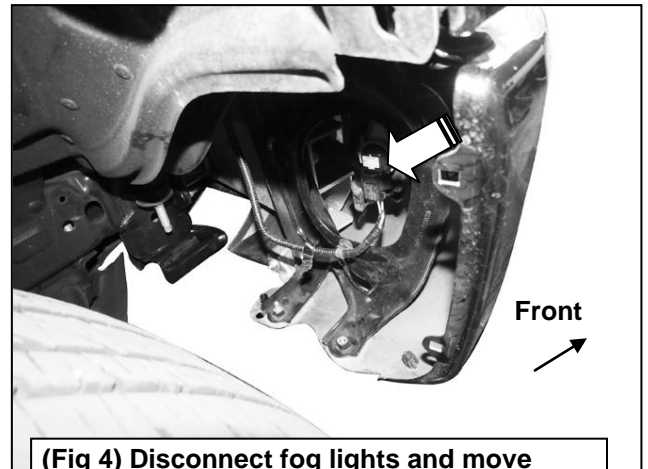
(Fig 1) Remove hardware attaching plastic cover to back of bumper (arrows)



(Fig 2) Remove hardware attaching plastic cover to bottom of bumper (arrows)

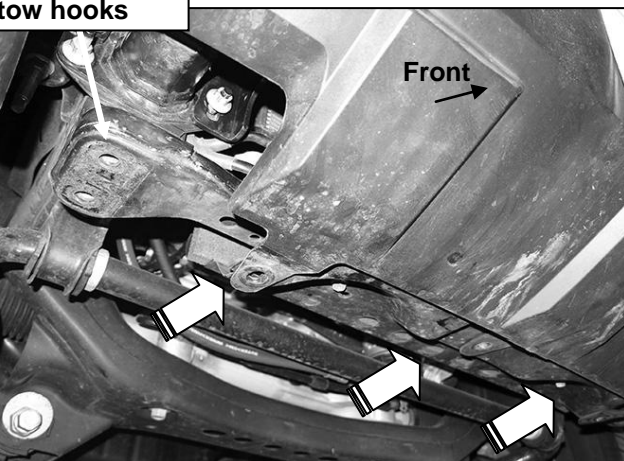


(Fig 3) Remove clip attaching plastic cover to side of frame (arrow)

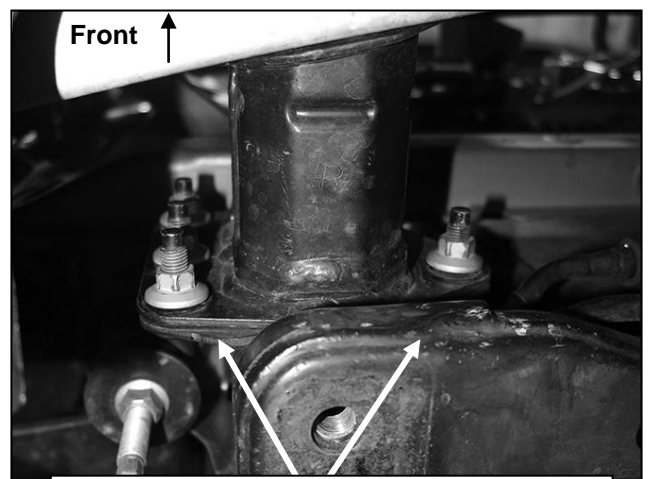


(Fig 4) Disconnect fog lights and move wiring harness away from bumper (arrow)

Remove both tow hooks

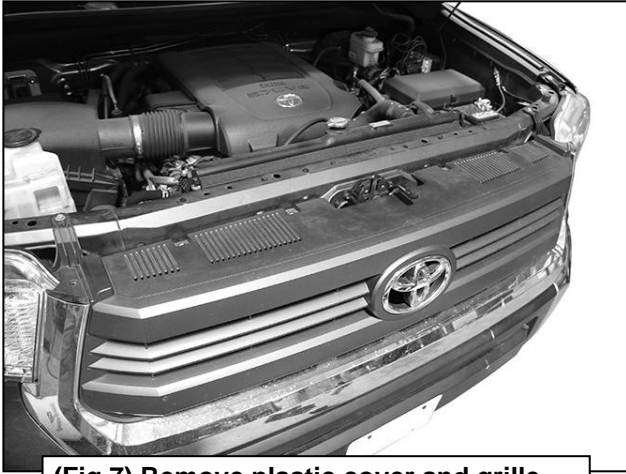


(Fig 5) Remove hardware attaching plastic cover on bottom of bumper to cross member (arrows)



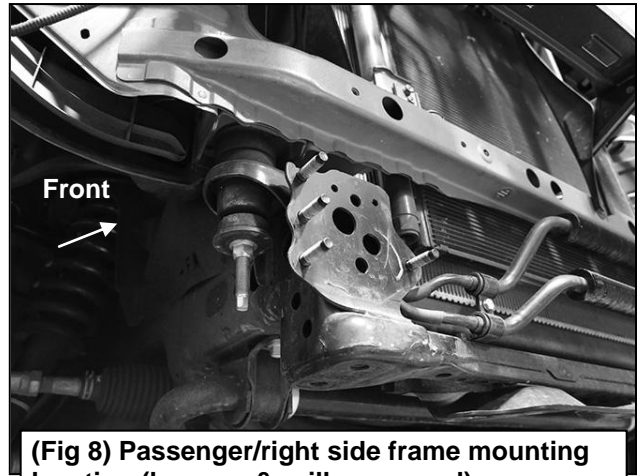
(Fig 6) Remove hex nuts attaching bumper brackets to end of frame. Passenger side bumper bracket pictured from below

Driver Side Installation Pictured

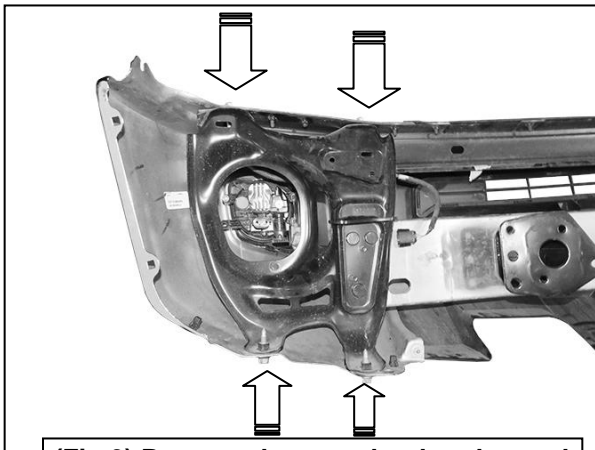


(Fig 7) Remove plastic cover and grille for access to bumper bracket hardware

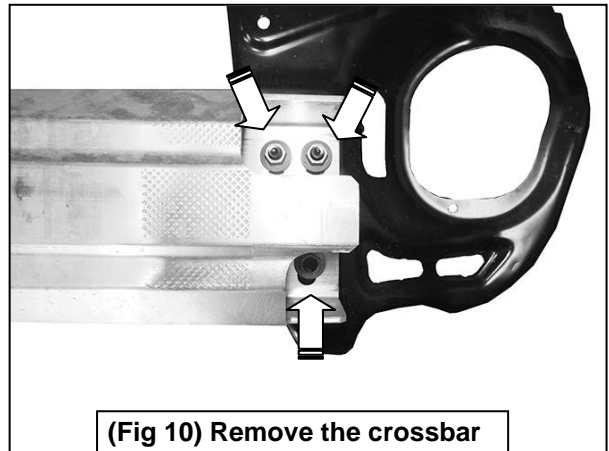
WARNING! Do not remove bumper bolts unless it is properly supported on blocks or stands or the bumper may fall.



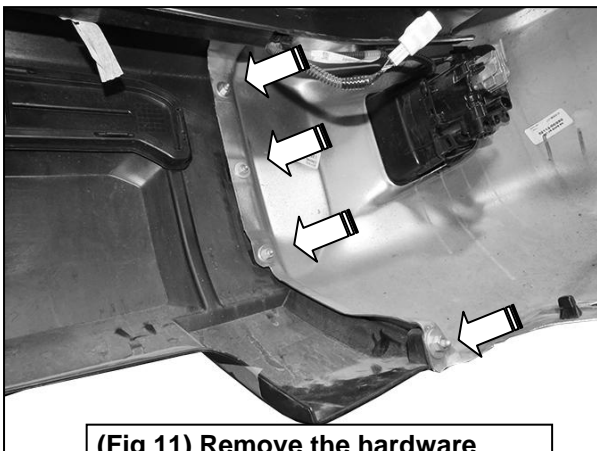
(Fig 8) Passenger/right side frame mounting location (bumper & grille removed)



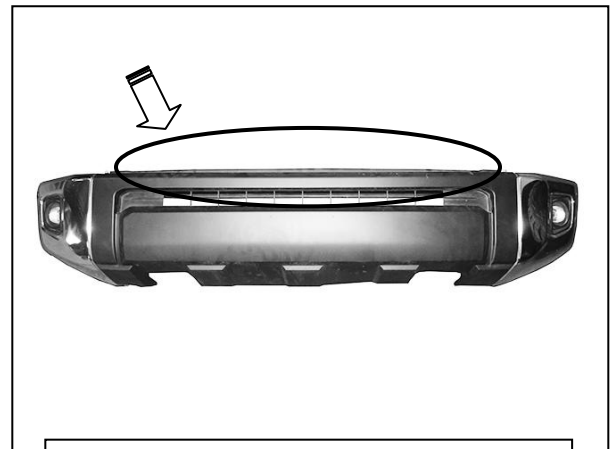
(Fig 9) Remove the crossbar bracket and crossbar from the factory bumper



(Fig 10) Remove the crossbar from the crossbar brackets

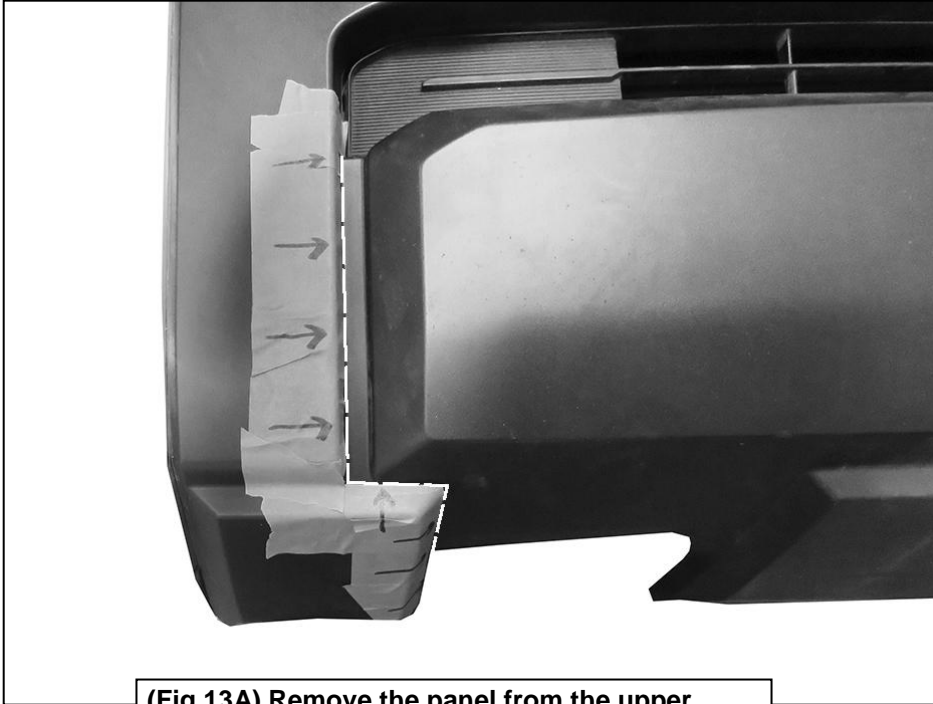


(Fig 11) Remove the hardware attaching the center portion of the factory bumper to the side panels



(Fig 12) Remove the hardware attaching the center portion of the factory bumper to the top of the bumper

Driver Side Installation Pictured

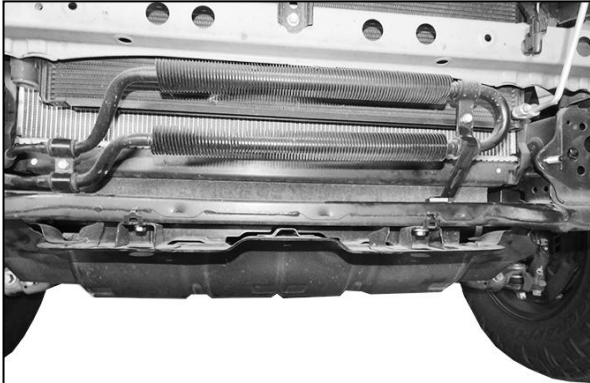


(Fig 13A) Remove the panel from the upper bumper. Cut along marked line to remove lower bumper section (Passenger/Right side pictured)

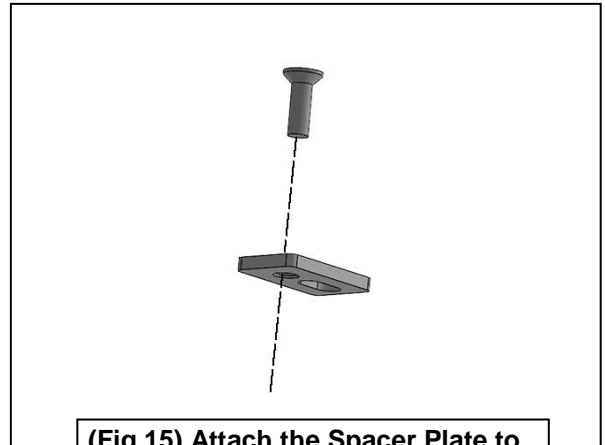


(Fig 13B) Cut along dashed line to remove lower bumper section

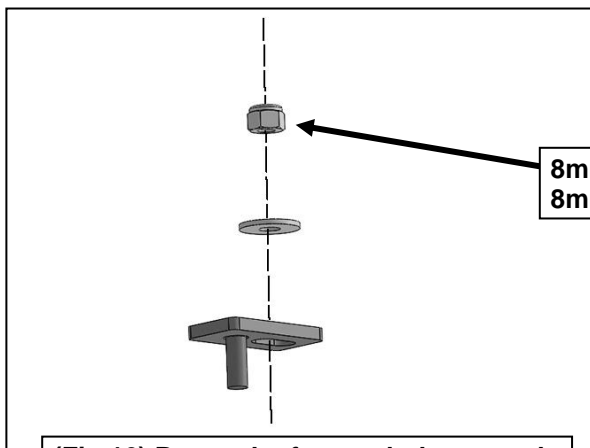
Driver Side Installation Pictured



(Fig 14) Remove the hardware attaching the oil cooler to the front crossbar on the Driver/Left side. If necessary, temporarily remove the skid plate



(Fig 15) Attach the Spacer Plate to the welded nut in the crossbar with (1) 8mm Counter Sink Screw



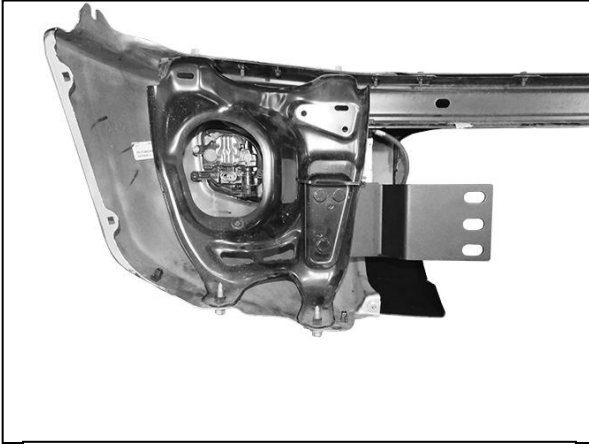
8mm Nylon Lock Nut
8mm Flat Washer

(Fig 16) Reuse the factory bolt to attach the oil cooler to the Spacer Plate

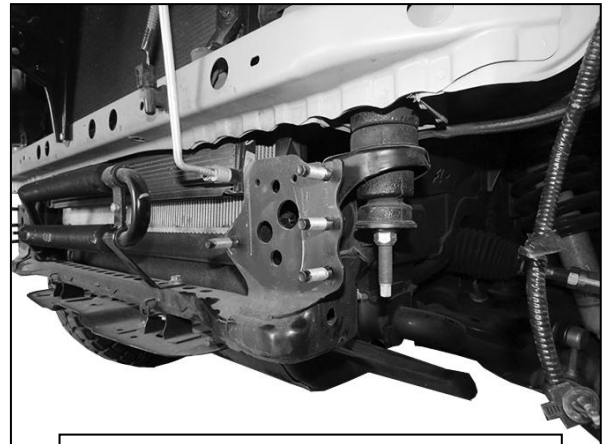


(Fig 17) Oil cooler attached to the Spacer Plate

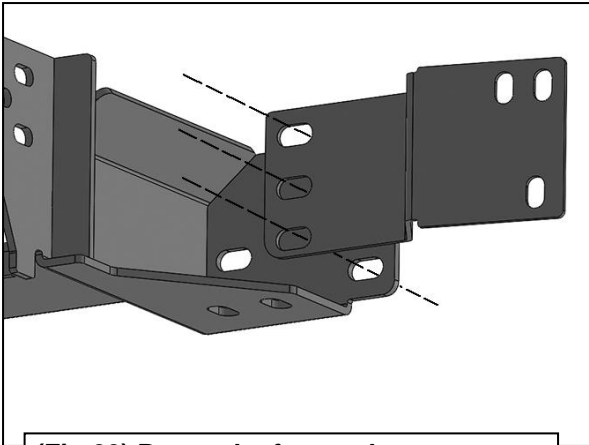
Driver Side Installation Pictured



(Fig 18) Reuse the factory hardware to attach the Reinforcement Brackets to the crossbar brackets. Reattach the crossbar brackets and bumper to the side panels

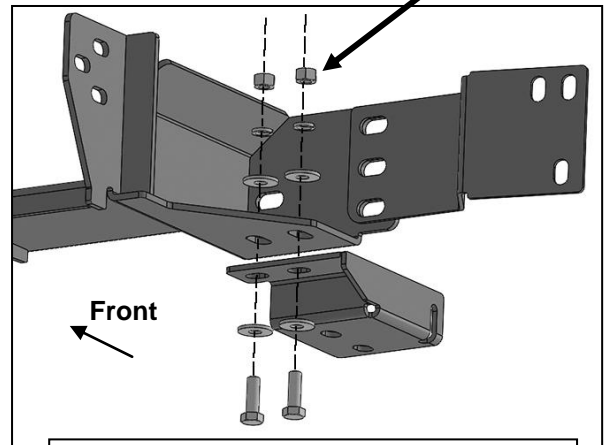


(Fig 19) Driver/Left mounting location

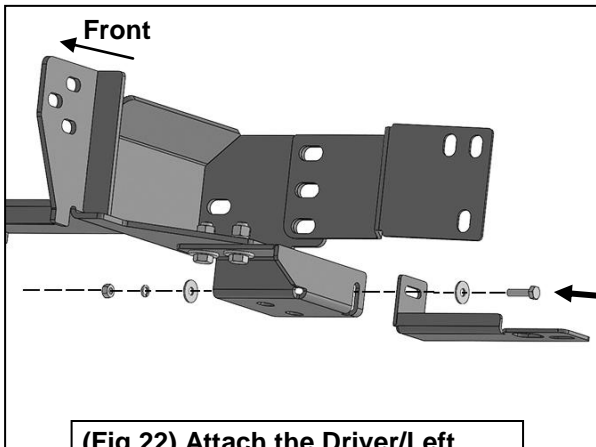


(Fig 20) Reuse the factory bumper mounting hardware to attach the Winch Tray and Reinforcement Brackets

- (2) 12mm x 35mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Lock Washers
- (2) 12mm Hex Nuts



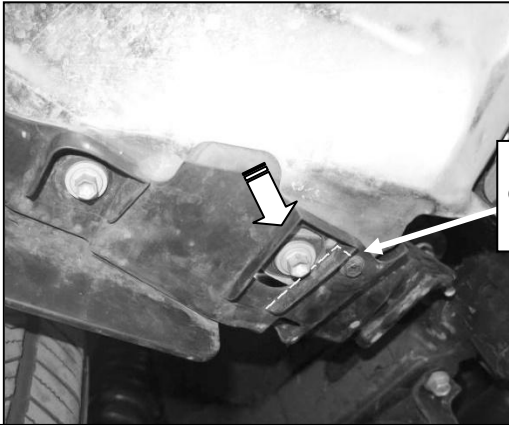
(Fig 21) Attach the Driver/Left Support Bracket to the bottom of the Winch



(Fig 22) Attach the Driver/Left Lower Bumper Support Bracket to the side of the Support Bracket

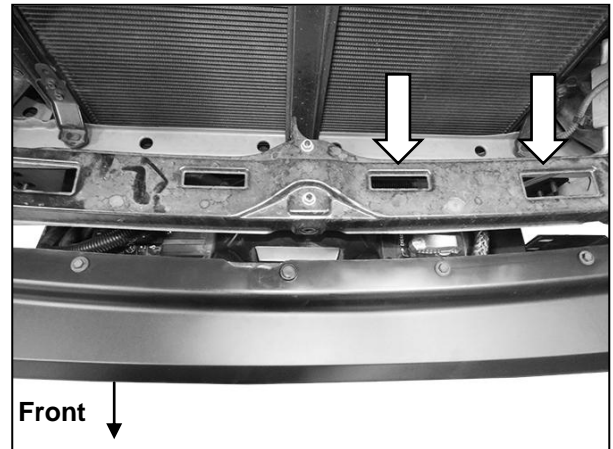
- 8mm x 30mm Hex Bolt
- (2) 8mm Flat Washers
- 8mm Lock Washer
- 8mm Hex Nut

Driver Side Installation Pictured

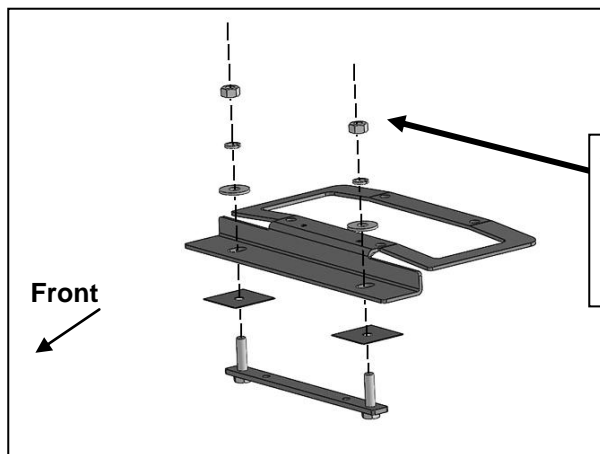


NOTE: It may be necessary to trim excess plastic for the Bracket to be flush against the bumper

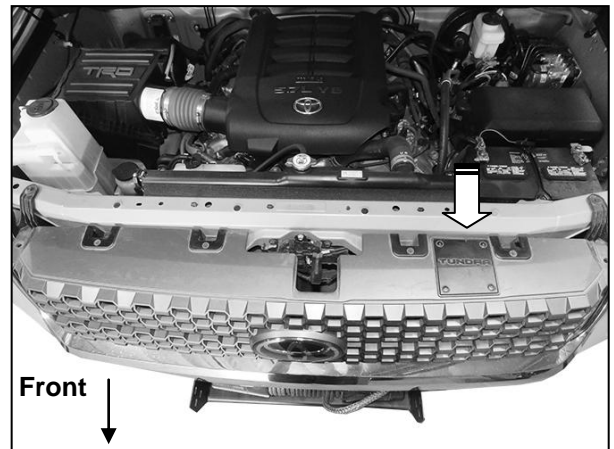
(Fig 23) Remove the inner factory bolt from the from of the fender. Reuse the factory bolt to attach the Lower Bumper Support Bracket (Passenger/Right side shown)



(Fig 24) Locate the crossbar above the Winch Tray to attach the Winch Control Relocation Bracket

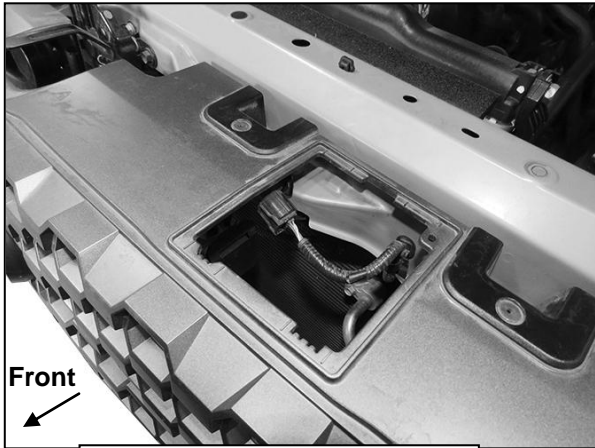


(Fig 25) Attach driver/left Frame Support Bracket to side of Winch Tray assembly

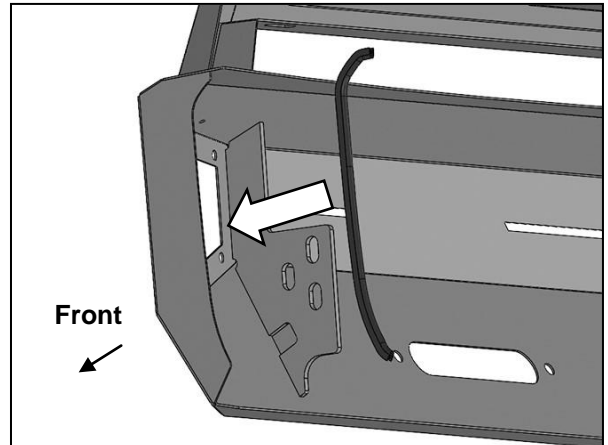


(Fig 26) Reattach the grille to the vehicle. To access the Winch Control Pack, remove the small panel on the top of the grille

Driver Side Installation Pictured

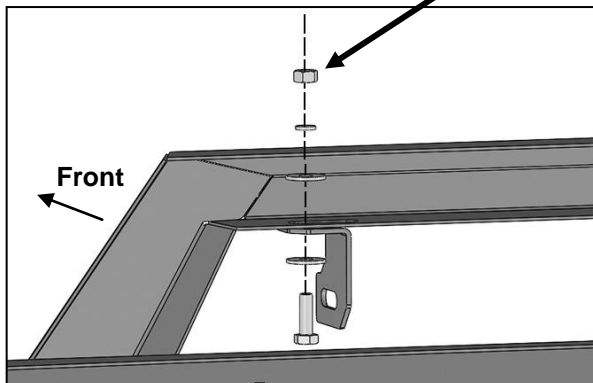


(Fig 27) Upper panel removed



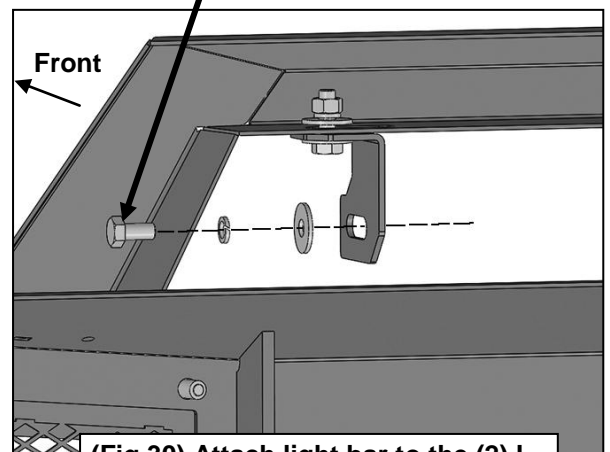
(Fig 28) Push long Edge Trim onto ends of Bumper

8mm x 25mm Hex Bolt
(2) 8mm Flat Washers
8mm Lock Washer
8mm Hex Nut



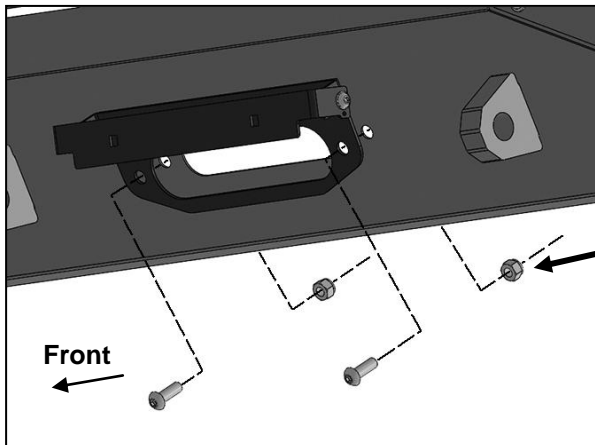
(Fig 29) Attach L-Brackets to bottom of loop.
NOTE: Top Light bracket mounting location is designed for 20-24" single or double row bar style light. Flip Brackets side to side if necessary

8mm x 16mm Hex Bolt
8mm Lock Washer
8mm Flat Washer



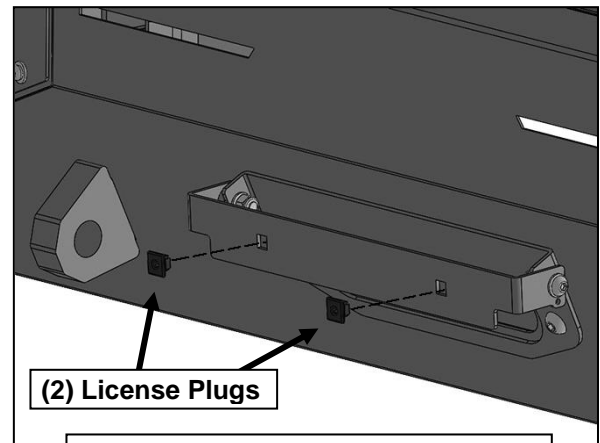
(Fig 30) Attach light bar to the (2) L-Brackets, (Light bar not included)

Driver Side Installation Pictured



(2) 10mm x 30mm Button Head Bolts
(2) 10mm Nylon Lock Nuts

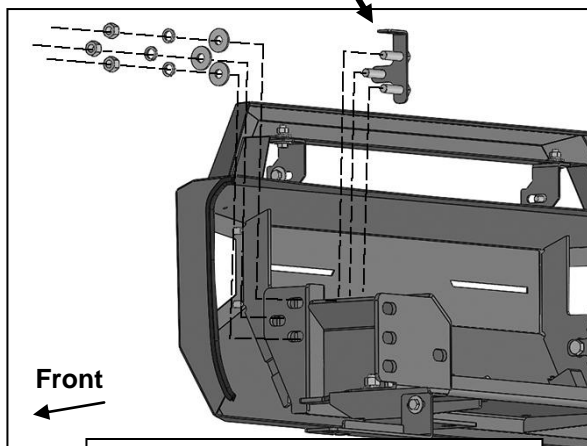
(Fig 31) Attach License Plate Bracket to Bumper



(2) License Plugs

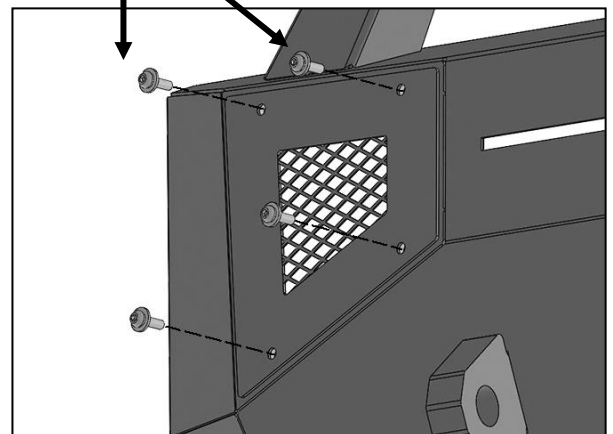
(Fig 32) Insert the (2) License Plate Plugs into the License Plate Bracket

12mm Triple Bolts Plate
(3) 12mm Flat Washers
(3) 12mm Lock Washers
(3) 12mm Hex Nuts



(Fig 33) Attach Bumper to inside of Winch Tray Bracket Assembly

(4) 6mm Combo Bolts



(Fig 34) Attach the Mesh Plates to the front of the Bumper (Passenger/Right side shown)