



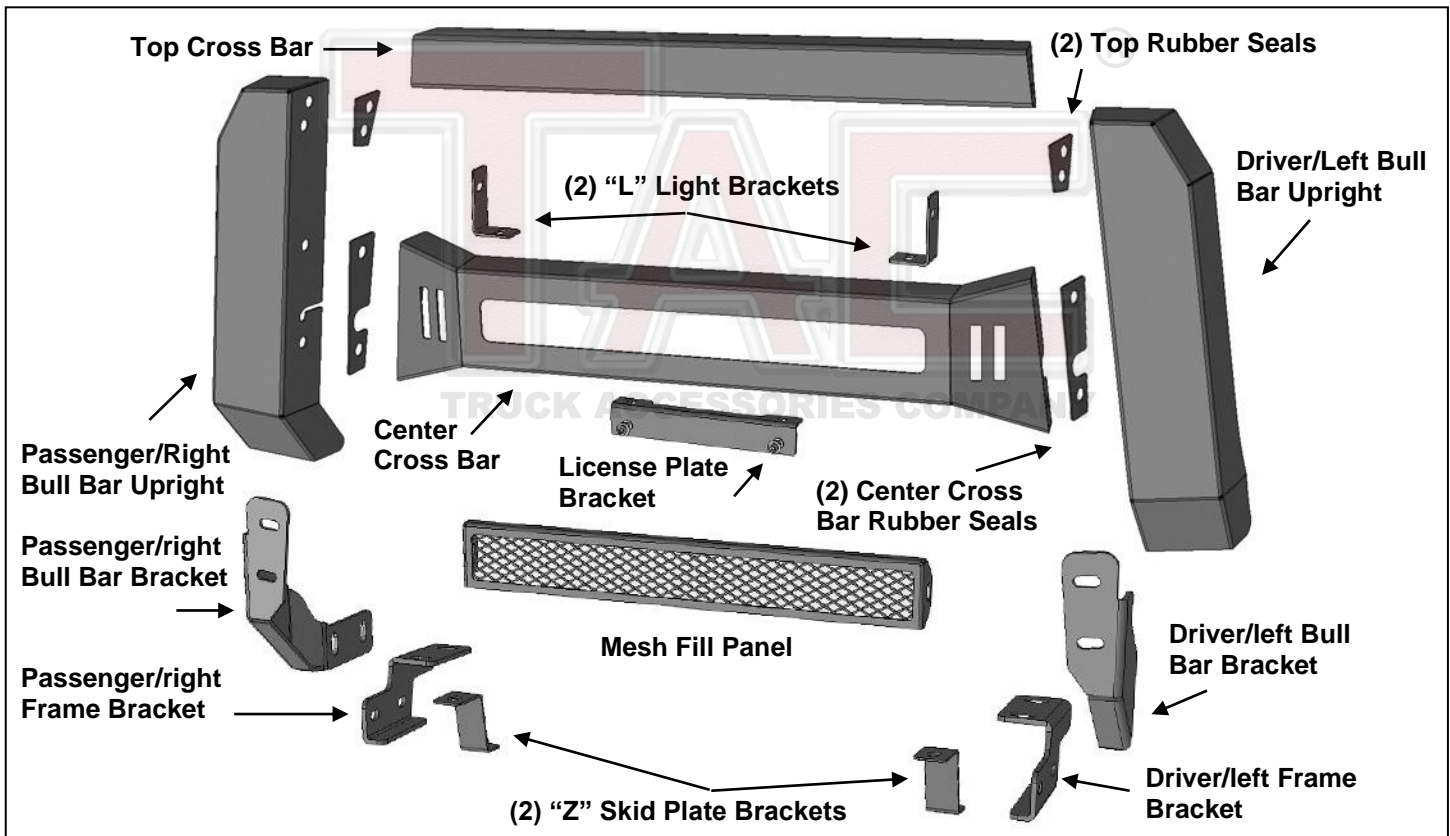
## **INSTALLATION INSTRUCTIONS**

**EC1 MODULAR BULL BAR  
2019-2023 FORD RANGER  
PART# EC1-F200TM**

**TRUCK ACCESSORIES COMPANY**

**PARTS LIST:**

1	Driver/Left Side Bull Bar Upright	8	12mm Lock Washers
1	Passenger/Right Side Bull Bar Upright	4	12mm Hex Nuts
1	Top Cross Bar	12	10-1.5mm x 25mm Hex Bolts
1	Center Cross Bar	4	10mm x 30mm x 3mm Flat Washers
1	Driver/Left Side Frame Bracket	16	10mm x 20mm x 2mm Flat Washers
1	Passenger/Right Side Frame Bracket	12	10mm Lock Washers
2	"Z" Skid Plate Mounting Brackets	8	10-1.5mm Hex Nuts
1	Driver/Left Side Bull Bar Bracket	4	8-1.25mm x 25mm Hex Bolts
1	Passenger/Right Side Bull Bar Bracket	2	8-1.25mm x 16mm Hex Bolts
1	Mesh Fill Panel	8	8mm x 24mm OD x 2mm Flat Washers
2	LED Light "L" Brackets	4	8mm Lock Washers
1	License Plate Bracket	4	8mm Hex Nuts
2	Black Rubber Self-Adhesive Top Seal	2	6mm Combo Bolts
2	Black Rubber Self-Adhesive Center Seal	2	6-1.0mm x 20mm Button Head Bolts
4	12-1.75mm x 45mm Hex Bolts	4	6mm x 18mm OD x 1.6mm Flat Washers
4	12-1.75mm x 35mm Hex Bolts	2	6mm Lock Washers
4	12mm x 37mm OD x 3mm Large Flat Washers	2	6mm Hex Nuts
8	12mm x 32mm OD x 3mm Flat Washers	1	4mm Wrench



**PROCEDURE:**

**REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. CUTTING MAY BE REQUIRED. ASSISTANCE IS RECOMMENDED. INSTALLATION MAY INTERFERE WITH FRONT BUMPER MOUNTED SENSORS.**

1. Start installation from under the front of the vehicle.
2. Determine if the vehicle is equipped with tow hooks. **IMPORTANT:** Tow hooks cannot be reinstalled with the Bull Bar.

**Tow Hook equipped vehicles:**

- a. Remove the plastic cover attached to the tow hook, **(Figure 1)**. Next, remove the tow hook from the bottom of the frame, **(Figures 2—4)**. On models with steel skid plate, temporarily remove skid plate, **(Figure 3)**.
- b. Proceed to **Step 3**.

**Vehicles without tow hooks:**

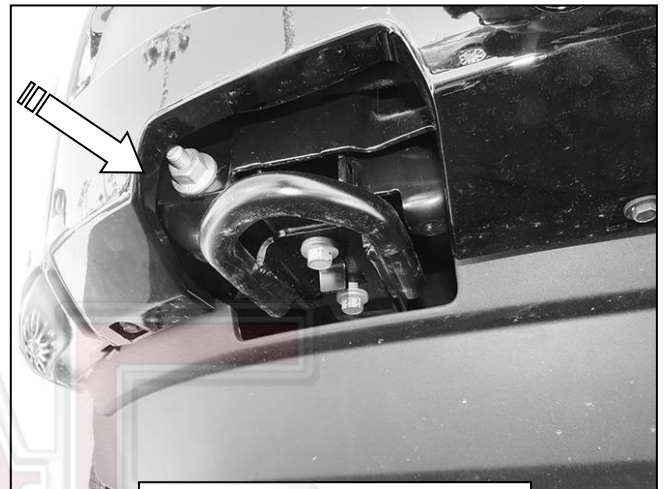
- c. Cut out the lower section of the indented area in both sides of the plastic bumper insert to clear the Brackets as pictured, **(Figure 5)**. **NOTE:** Hold the Frame Mounting Bracket up to the back of the bumper to determine area to remove to clear Bracket. **IMPORTANT:** Make several small cuts for best fit.
  - d. Insert the Mounting Brackets through the openings in the bumper to check for clearance around Brackets and hardware. Trim the plastic as required to clear the Brackets.
3. Select the driver/left Frame Mounting Bracket, **(Figure 6)**. Hold the Bracket up to the bottom of the frame. Line up the holes in the Bracket with the (2) mounting bolt holes for the tow hook. Attach the Bracket to the threaded holes in the frame with (2) 12mm x 45mm Hex bolts, (2) 12mm Lock Washers and (2) 12mm x 37mm Large Flat Washers, **(Figures 6 & 7)**. **IMPORTANT:** Models with steel skid plate, attach (1) Skid Plate Bracket to the rear mounting Bolt, **(Figure 6)**. Leave hardware loose. Repeat this **Step** to attach the passenger/right Frame Bracket and Skid Plate Bracket if equipped.
  4. Select the driver side Bull Bar Upright and the Top Cross Bar. Attach the Black Rubber Self-Adhesive Top Seal between the Upright and Top Cross Bar, **(Figure 9)**. Bolt through the Top Cross Bar, Self-Adhesive Top Seal and Upright using (2) 10mm x 25mm Hex Bolts, (4) 10mm x 20mm Flat Washers, (2) 10mm Lock Washers and (2) 10mm Hex Nuts, **(Figure 9)**. Do not fully tighten hardware.
  5. Select the Center Cross Bar. Attach the Black Rubber Self-Adhesive Center Seal between the Upright and the Center Cross bar, **(Figure 9)**. Bolt through the Center Cross Bar, Self-Adhesive Center Seal, and Upright with (2) 10mm x 25mm Hex Bolts, (4) 10mm x 20mm Flat Washers, (2) 10mm Lock Washers and (2) 10mm Hex Nuts, **(Figure 9)**. Do not fully tighten hardware.
  6. Repeat **Steps 4 & 5** to attach the passenger side Bull Bar Upright to the Top Cross Bar and Center Cross Bar. Place assembled Bull Bar face down on a clean flat surface and fully tighten top and center cross bar to upright hardware only at this time.
  7. Relocation of front license plate may be necessary.
    - a. Attach the License Plate Bracket to bottom of Center Cross Bar with (2) 6mm Button Head Bolts, (4) 6mm Flat Washers, (2) 6mm Lock Washers and (2) 6mm Hex Nuts, **(Figure 10)**.
    - b. Attach license plate to Bracket with (2) 6mm Button Head Combo Bolts, **(Figure 10)**.
  8. LED light installation, (optional-light available separately).
    - a. Start at the driver/left side of the vehicle. Select (1) Light Bar “L” Bracket. Attach the Bracket to the slot in the back of the Center Cross Bar with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 11)**. **NOTE:** Check for clearance between the Hex Bolt and the bottom of the Light. If necessary, insert the Hex Bolts down through the Brackets then through slots in the Cross Bar. Leave hardware loose at this time.
    - b. Repeat the previous **Step** to attach the passenger/right Light Bracket.
    - c. If needed, use the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers to attach the LED light bar to the Brackets, **(Figure 11)**.
    - d. Follow light manufacturer’s instructions to properly wire the light bar to the electrical system.
    - e. Proceed to **Step 10**.
  9. Center Screen Fill Panel Installation, (cannot be installed with LED light).
    - a. Select (1) “L” Light Bar Bracket. Attach the Bracket to the outside of the tab on the Center Screen Fill Panel with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 12)**. **NOTE:** Insert the Hex Bolt through the tab on the Panel and out through the Bracket. Repeat to attach the remaining Bracket to the other end of the Fill Panel. Leave hardware loose.
    - b. Attach the Fill Panel with Brackets to the slots in the back of the Center Cross Bar with (2) 8mm x 25mm Hex Bolts, (4) 8mm 24mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 12)**. **NOTE:** Insert the Hex Bolts up through the bottom of the Cross Bar.
    - c. Push the Fill Panel up tight against the inside of the opening and fully tighten hardware.

10. Select the driver/left Bull Bar Bracket. Attach the Bracket to the (2) bottom holes in the Upright on the Bull Bar assembly with (2) 10mm x 25mm Hex Bolts, (2) 10mm Lock Washers and (2) 10mm x 30mm Large Flat Washers (**Figure 13**). Do not fully tighten hardware. Repeat this **Step** to attach the passenger/right Bull Bar Bracket.
11. With assistance, hold the assembled Bull Bar up to the outside of the Frame Brackets. Attach the Bull Bar to the Frame Mounting Brackets with the included (4) 12mm x 35mm Hex Bolts, (8) 12mm x 32mm STD Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, (**Figures 14 & 15**). Do not tighten hardware.
12. Stand back from the vehicle and check to see that the Bull Bar is centered and leveled on the vehicle. Adjust as necessary and fully tighten all hardware.
13. 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 Bull Bar.



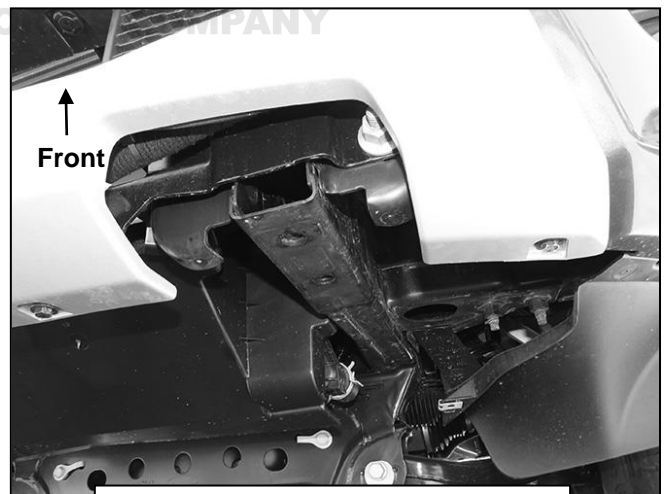
(Fig 1) Example of Tow hook



(Fig 2) Remove plastic cover surrounding tow hook



(Fig 3) Models with steel skid plate, temporarily remove skid plate to access tow hooks



(Fig 4) Driver/left mounting location

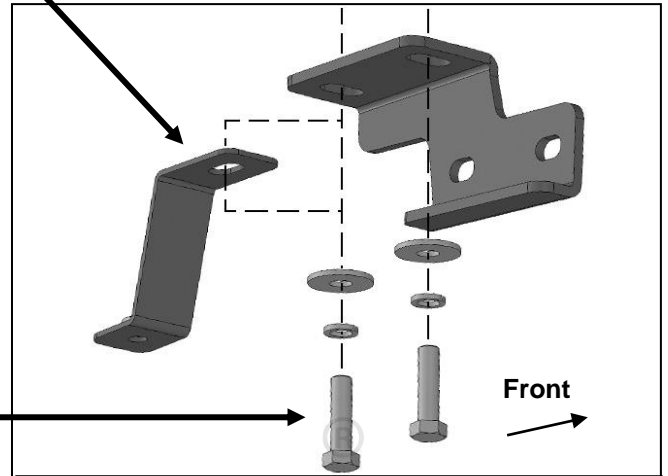
### Driver/left Side Installation Pictured



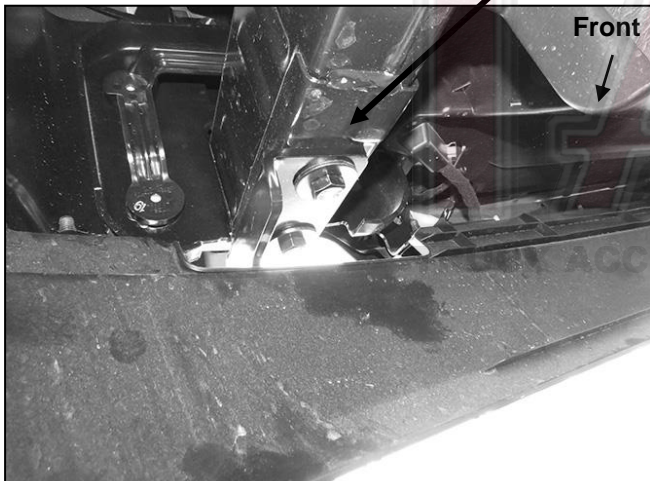
(Fig 5) Models without tow hooks, cut openings in lower plastic cover to clear Brackets

- (2) 12mm x 45mm Hex Bolts
- (2) 12mm Lock Washers
- (2) 12mm x 37mm Large Flat Washers

Skid plate bracket



(Fig 6) Attach driver/left Frame Bracket to bottom of frame. Attach skid plate bracket to rear mounting bolt if equipped with steel skid plate

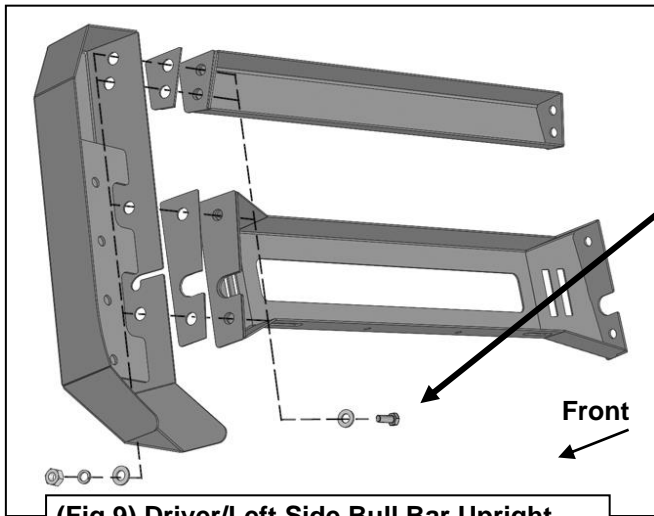


(Fig 7) Attach driver/left Frame Bracket to bottom of frame (pictured from below/behind bumper)



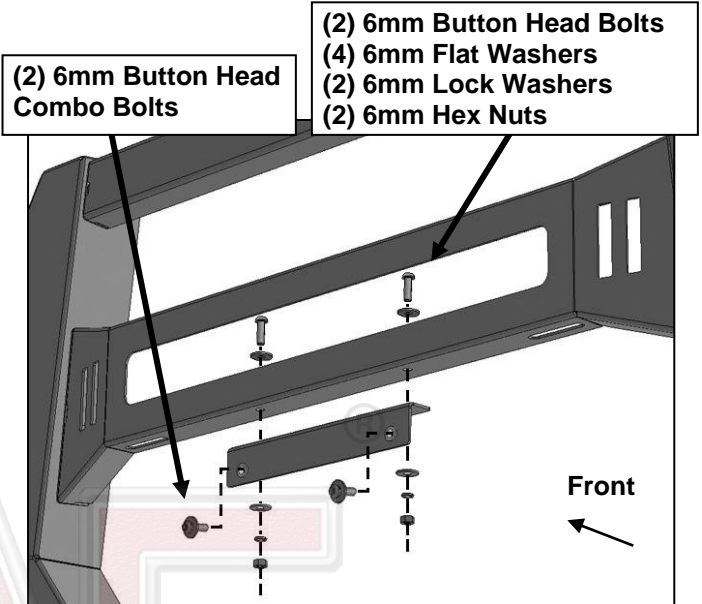
(Fig 8) Driver/left Frame Bracket installed on model equipped with tow hooks pictured

### Driver/left Side Installation Pictured



- (4) 10mm x 25mm Hex Bolts
- (8) 10mm x 20mm Flat Washers
- (4) 10mm Lock Washers
- (4) 10mm Hex Nuts

(Fig 9) Driver/Left Side Bull Bar Upright attached to Top and Center Cross Bars

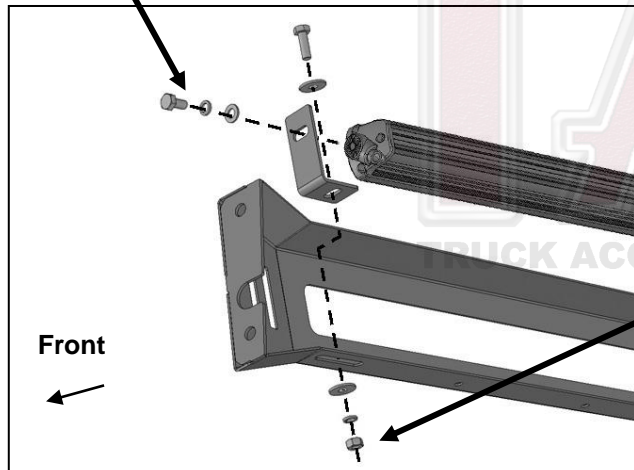


- (2) 6mm Button Head Combo Bolts

- (2) 6mm Button Head Bolts
- (4) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Hex Nuts

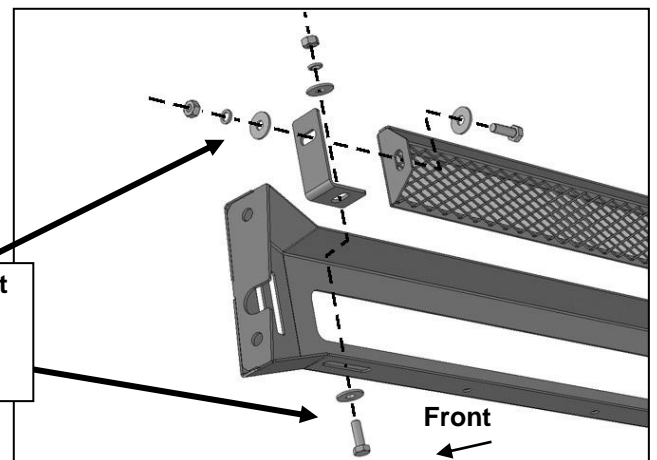
(Fig 10) Attach License Plate Bracket to bottom of Center Cross Bar

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



(Fig 11) Optional LED light available separately

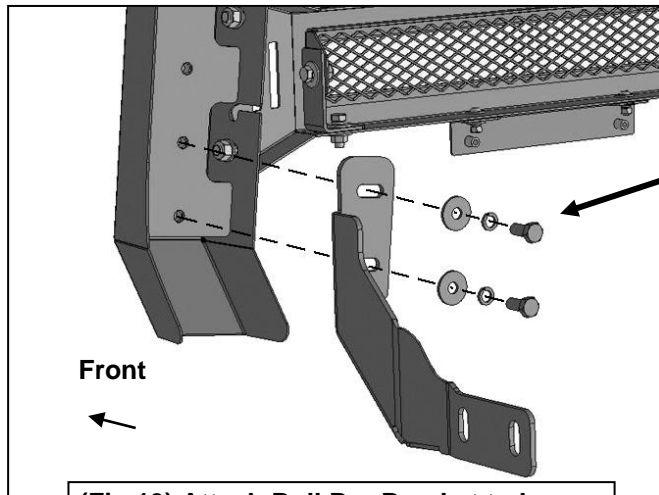
- 8mm x 25mm Hex Bolt
- (2) 8mm Flat Washers
- 8mm Lock Washer
- 8mm Hex Nuts



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

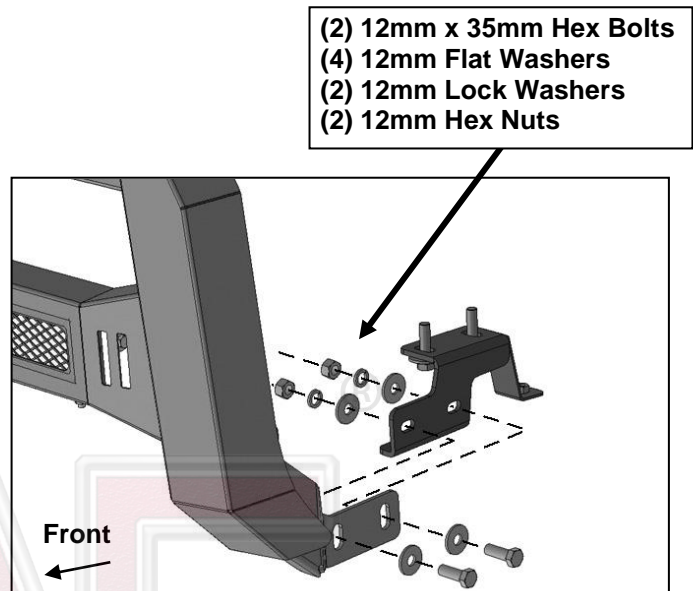
(Fig 12) Attach Center Fill Panel to "L" Brackets

### Driver/left Side Installation Pictured



- (2) 8mm x 30mm Hex Bolts
- (2) 8mm Lock Washers
- (2) 8mm Flat Washers

(Fig 13) Attach Bull Bar Bracket to lower mounting holes on back of Bull Bar



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

(Fig 14) Attach Bull Bar with Brackets to outside of Frame Bracket (Driver/left side illustrated)



(Fig 15) Driver/left side complete installation pictured from behind bumper

