



INSTALLATION INSTRUCTIONS

EC1 MODULAR BULL BAR W-LIGHT

2009-2018 DODGE RAM 1500

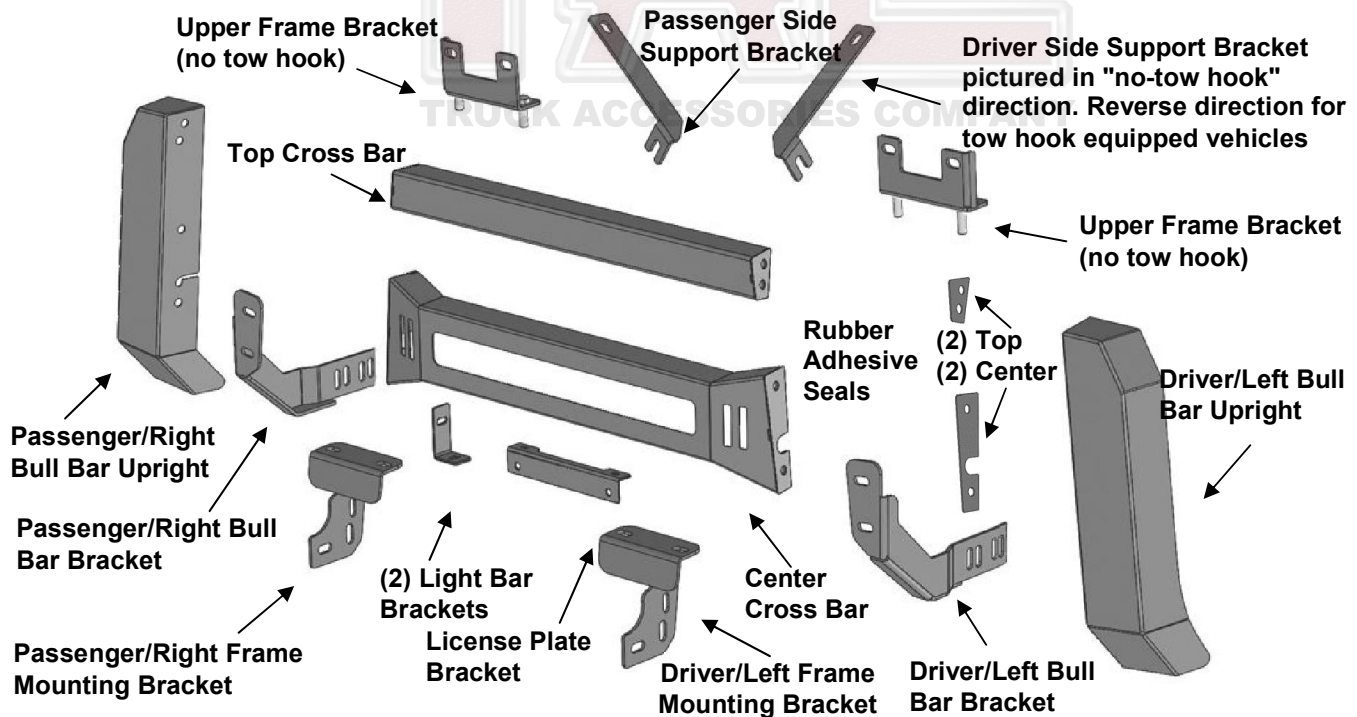
(EXCLUDING REBEL MODEL & WARLOCK TRIMS)

(INCL. 2019-2023 RAM 1500 CLASSIC)

PART# EC1-D110T

PARTS LIST:

1	Driver/Left Side Bull Bar Upright	2	10-1.5mm x 35mm Hex Bolts
1	Passenger/Right Side Bull Bar Upright	12	10-1.5mm x 25mm Hex Bolts
1	Top Cross Bar	8	10mm x 30mm x 2.5mm Flat Washers
1	Center Cross Bar	16	10mm x 20mm x 2mm Flat Washers
1	Driver/Left Side Frame Mounting Bracket	14	10mm Lock Washers
1	Passenger/Right Side Frame Mounting Bracket	10	10-1.5mm Hex Nuts
2	Upper Frame Brackets (for trucks without tow hooks only)	2	8-1.25mm x 25mm Hex Bolts
1	Driver/Left Side Support Bracket	2	8-1.25mm x 16mm Hex Bolts
1	Passenger/Right Side Support Bracket	6	8mm x 24mm x 2mm Flat Washers
1	Driver/Left Side Bull Bar Bracket	4	8mm Lock Washers
1	Passenger/Right Side Bull Bar Bracket	2	8-1.25mm Hex Nuts
1	LED Bar Style Light	2	6-1.0mm x 20mm Button Head Combo Bolts
2	Light Bar Brackets	2	6-1.0mm x 20mm Button Head Bolts
1	License Plate Bracket	4	6mm x 18mm x 1.6mm Flat Washers
2	Black Rubber Self-Adhesive Top Seal	2	6mm Lock Washers
2	Black Rubber Self-Adhesive Center Seal	2	6mm Hex Nuts
2	12-1.5mm x 30mm Special Fine Thread Hex Bolts (for trucks without tow hooks only)	1	4mm Allen Wrench
4	12-1.75mm x 35mm Hex Bolts	2	5-0.80mm x 20mm Button Head Bolts
10	12mm Lock Washers	4	5mm x 10mm x 1mm Flat Washers
14	12mm x 32mm x 3mm Flat Washers	2	5mm Nylon Lock Nuts
8	12-1.75mm Hex Nuts	1	3mm (5mm) Allen Wrench



PROCEDURE:

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

1. Starting at the underside of the front bumper, carefully remove the plastic splash guard. **NOTE:** Depending on the model of truck, the splash guard may be attached to the bottom of the truck with hex bolts and several two-piece plastic push-in clips, (**Figure 1**). Remove all hex bolts then locate the clips behind the bumper cover. Pry up on the center pin of the clip with a small flat blade screwdriver and remove the entire clip. Pay close attention to the type and location of all factory hardware for reinstallation. The splash guard may also be attached to the bumper cover with rivets at the corners. Use wire cutters to remove the rivets. Once all fasteners have been removed, move splash guard to a clean stable work area.
2. Next, determine if the truck is equipped with tow hooks.

For models without tow hooks:

- a. Remove the hex nuts from the two lower factory bumper bolts, (**Figure 2**).
- b. Select (1) Upper Frame Bracket, (will fit left or right-without tow hooks only), and the driver side Mounting Bracket, (**Figure 3**). Bolt the two Brackets together with (2) 12mm Flat Washers, (2) 12mm Lock Washers and (2) 12mm Hex Nuts. Do not tighten at this time.
- c. Insert the assembled Mounting Bracket up from behind the bumper and align the holes in the Mounting Bracket with the bumper bolts. Attach the Bracket to the bumper bolts using the factory hex nuts and snug but do not tighten the hardware, (**Figure 3**).

NOTE: On some vehicles, it may be easier to assemble the two-piece bracket on the vehicle. Install the Upper Frame Bracket first, then bolt the Mounting Bracket to the bottom as previously described.

- d. Select the driver side Lower Support Bracket, (**Figure 4**). Attach the bent end of the Support Bracket to the inside of the Lower Mounting Bracket with the included (1) 10mm x 35mm Hex Bolt, (2) 10mm x 30mm Flat Washers, (1) 10mm Lock Washer and (1) 10mm Hex Nut, (**Figures 4 & 5**).
- e. Attach the flat end of the Support Bracket to the bottom of the frame with (1) 12-1.5mm x 30mm **Special Fine Thread** Hex Bolt, (1) 12mm Lock Washer and (1) 12mm Flat Washer, (**Figures 4—6**). **IMPORTANT:** The hole in the bottom of the frame is **fine thread**. Only use the 12-1.5mm x 30mm Hex Bolt provided in the hardware kit.
- f. Select the driver side Bull Bar Bracket. Attach the Bracket to the outside of the Lower Mounting Bracket with the included (2) 12mm x 35mm Hex Bolts, (4) 12mm Flat Washers, (2) 12mm Lock Washers and (2) 12mm Hex Nuts, (**Figure 5 & 6**). Snug but do not tighten hardware.

For models with tow hooks:

- a. Remove the (2) hex nuts holding the front of the tow hook to the back of the bumper, (**Figure 7**).
- b. Select the driver side Lower Mounting Bracket, (**Figure 8**). Attach the Bracket to the (2) tow hook mounting studs using the factory Hex Nuts, (**Figures 8 & 9**). Do not tighten hardware at this time.
- c. Select the driver/left Support Bracket. Attach the bent end of the Support Bracket to the rear tow hook bolt. Loosen the rear mounting bolt for the tow hook. Insert the slotted end under the head of the factory bolt, (**Figures 8 & 9**).
- d. Line up the flat end of the Support Bracket with the inside of the Lower Mounting Bracket, (**Figures 8—10**). The Support Bracket will line up with the rear hole for the Bull Bar. Do not attach.
- e. Select the driver side Bull Bar Bracket. Attach the Bracket to the outside of the Lower Mounting Bracket with the included (2) 12mm x 35mm Hex Bolts, (4) 12mm Flat Washers, (2) 12mm Lock Washers and (2) 12mm Hex Nuts, (**Figure 10**). **NOTE:** On vehicles with tow hooks, insert the rear bolt through the Bull Bar Bracket, the Mounting Bracket and through the flat end of the Support Bracket. Snug but do not tighten hardware.

3. Repeat the appropriate **Step 2** for the passenger side Mounting Bracket installation.
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. 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 11**). 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. 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 11**). Do not fully tighten hardware.

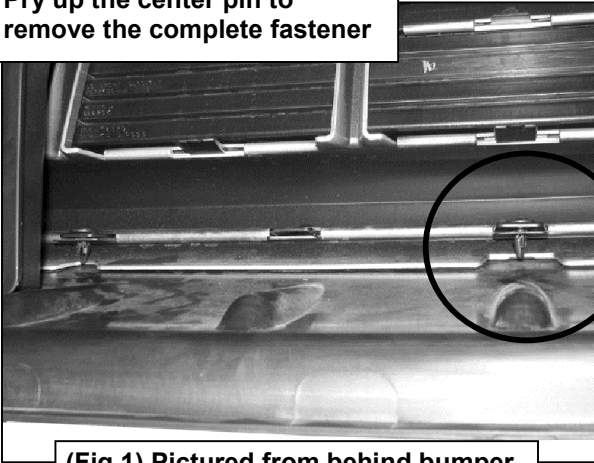
(EXCLUDING REBEL MODEL&WARLOCK TRIMS / INCLUDING 2019-2023 RAM 1500 CLASSIC)

6. Repeat **Steps 5 & 6** 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 12)**.
 - b. Attach license plate to Bracket with (2) 6mm Button Head Combo Bolts, **(Figure 12)**.
8. LED light installation, (optional).
 - a. Start at the driver/left side of the vehicle. Select (1) Light Bar 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 13)**. **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 13)**.
 - d. Follow light manufacturer's instructions to properly wire the light bar to the electrical system.
 - e. Proceed to **Step 10**.
9. With assistance, hold the assembled Bull Bar up to the Bull Bar Brackets. Attach the Brackets to the (2) bottom holes in each Upright on the Bull Bar assembly with (4) 10mm x 25mm Hex Bolts, (4) 10mm Lock Washers and (4) 10mm x 30mm Large Flat Washers **(Figure 14 & 15)**
10. Stand back from the vehicle and check to see that the Bull Bar is centered and leveled on the vehicle. Adjust as necessary. Tighten only the hardware securing the Bull Bar Brackets and Mounting Brackets to the truck. Do not tighten the hardware on the Bull Bar. Temporarily remove the Bull Bar.
11. Next, hold the splash guard up to the bumper cover and align it with the mounting points. Mark the location of the Bull Bar Brackets and Mounting Brackets onto the back of the splash guard, **(Figure 16)**. Cut an approximately 1.5" wide by 4.5" slot in the splash guard as pictured in **Figure 17**. **NOTE:** The size of the box is an estimate only and may vary due to different factory designs for the splash guards and front bumper covers. Also, additional cutting may be required to clear the Support Bracket on vehicles equipped with tow hooks. **IMPORTANT:** To maintain the integrity of the splash guard, do not cut the slot any larger than necessary. Do not cut through the front or back edges of the cover, **(Figure 17)**. Make several small cuts first and check the fit often for a clean installation.
12. Check the fit and reinstall the splash guard using the factory hardware. Use (2) 5mm x 20mm Button Head Bolts, (4) 5mm Flat Washers and (2) 5mm Lock Nuts to replace the rivets if required, **(Figure 18)**.
13. Reinstall the Bull Bar described in **Step 10**, **(Figure 14 & 15)**.
14. Level and adjust the Bull Bar and tighten all hardware.
15. 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 Bull Bar.

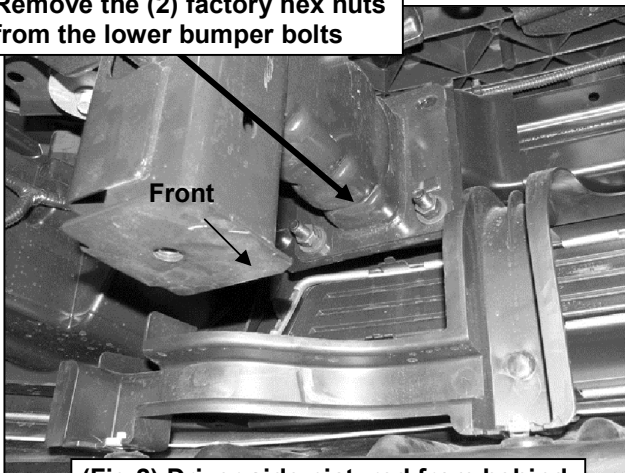
Driver Side Installation Pictured

Pry up the center pin to remove the complete fastener

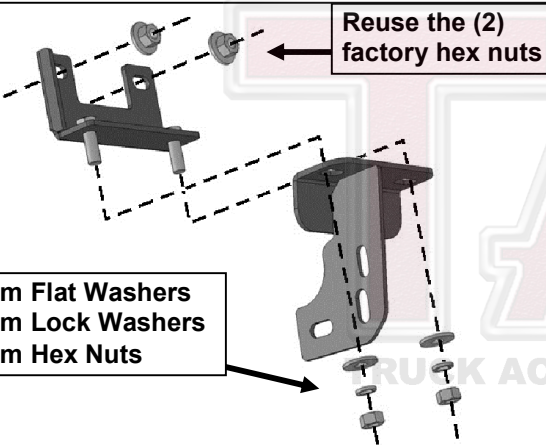


(Fig 1) Pictured from behind bumper

Remove the (2) factory hex nuts from the lower bumper bolts



(Fig 2) Driver side pictured from behind bumper (non-tow hook models)



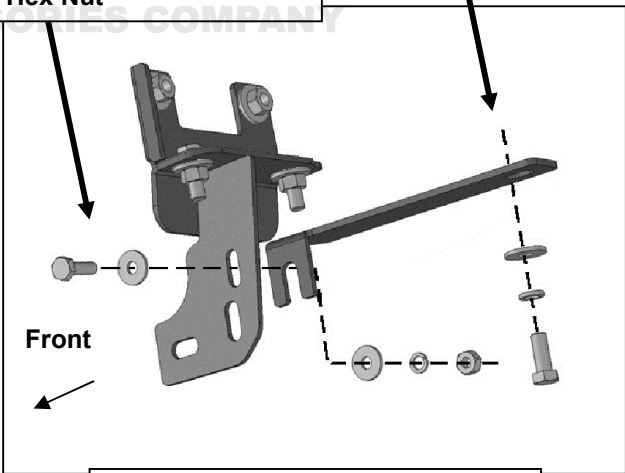
Reuse the (2) factory hex nuts

- (2) 12mm Flat Washers
- (2) 12mm Lock Washers
- (2) 12mm Hex Nuts

(Fig 3) Models without tow hooks, reuse hex nuts to attach driver/left Upper Frame Bracket to back of bumper bracket. Attach Lower Frame Bracket to bottom of Upper Bracket

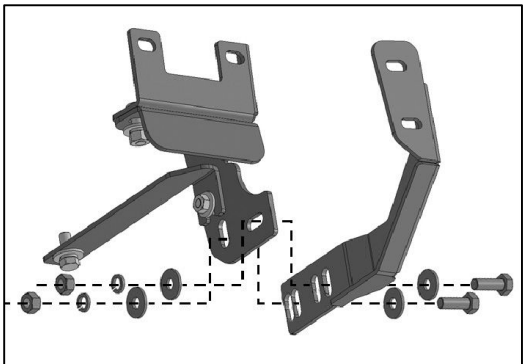
IMPORTANT: On models without tow hooks, use only the supplied
12-1.5mm x 30mm Fine Thread Hex Bolt
12mm Lock Washer
12mm Flat Washer

- 10mm x 35mm Hex Bolt
- (2) 10mm x 30mm Flat Washers
- 10mm Lock Washer
- 10mm Hex Nut



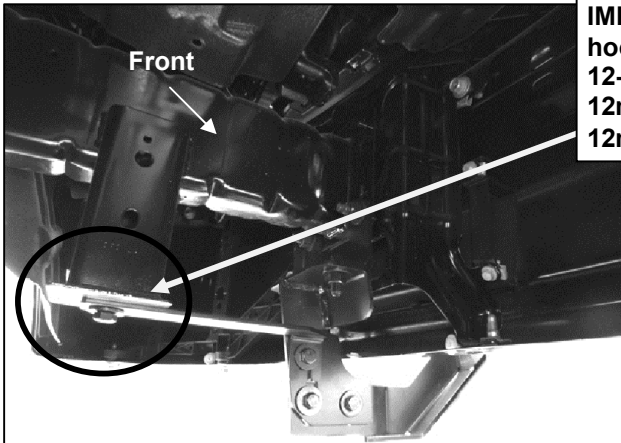
(Fig 4) Driver side Support Bracket in "no Tow Hook" position

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



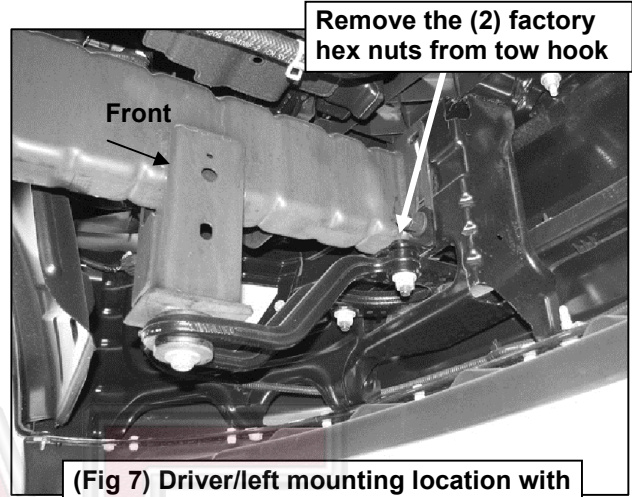
(Fig 5) Attach Bull Bar Bracket to Lower Bracket

Driver Side Installation Pictured



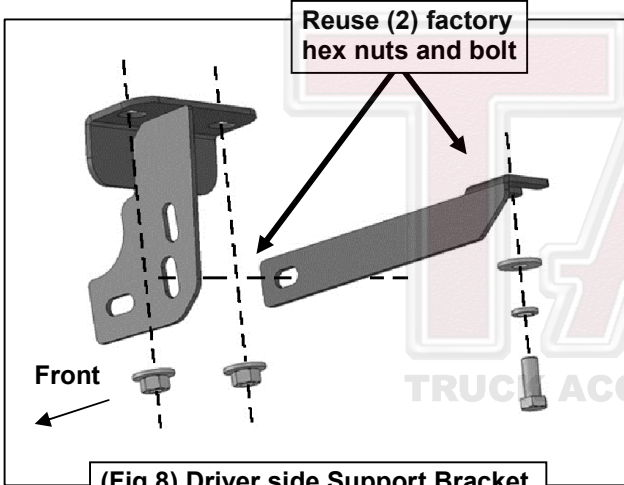
IMPORTANT: On models without tow hooks, use only the supplied
 12-1.5mm x 30mm Fine Thread Hex Bolt
 12mm Lock Washer
 12mm Flat Washer

(Fig 6) Driver/left Brackets without tow hook



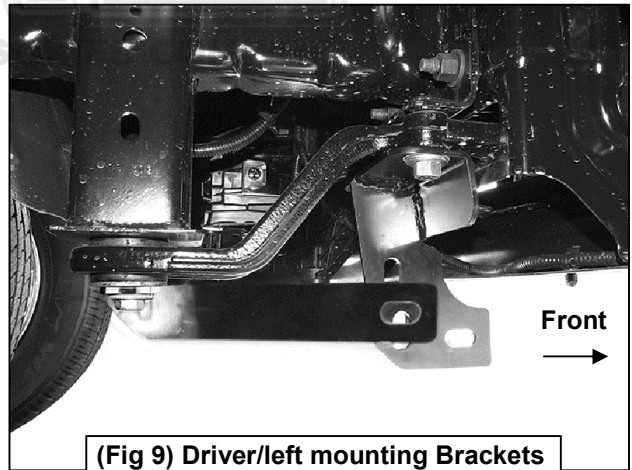
Remove the (2) factory hex nuts from tow hook

(Fig 7) Driver/left mounting location with tow hook pictured from behind bumper



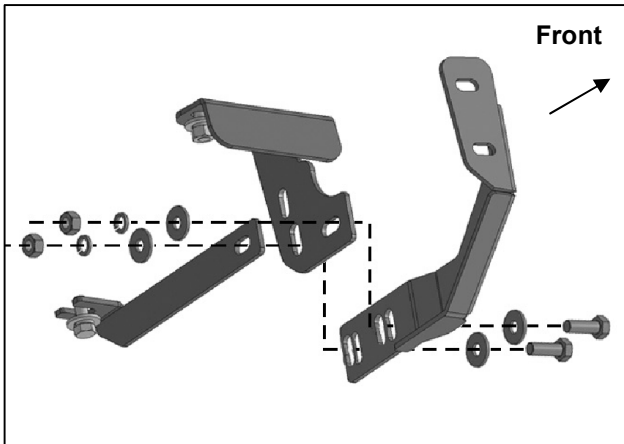
Reuse (2) factory hex nuts and bolt

(Fig 8) Driver side Support Bracket in "with Tow Hook" position



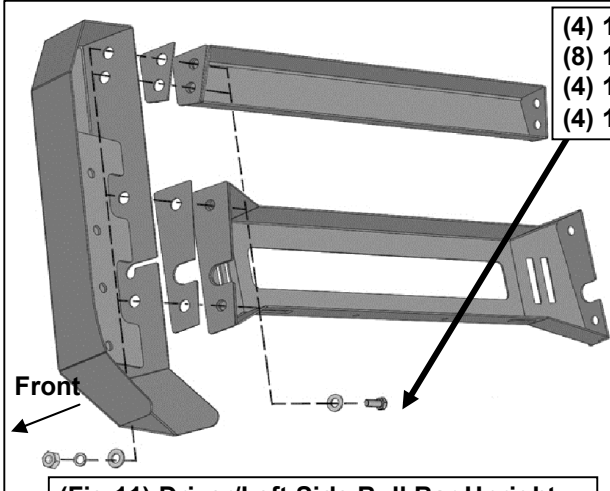
(Fig 9) Driver/left mounting Brackets attached to bottom of Tow Hook

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



(Fig 10) Insert rear mounting bolt through all (3) Brackets on tow hook equipped model only

Driver Side Installation Pictured

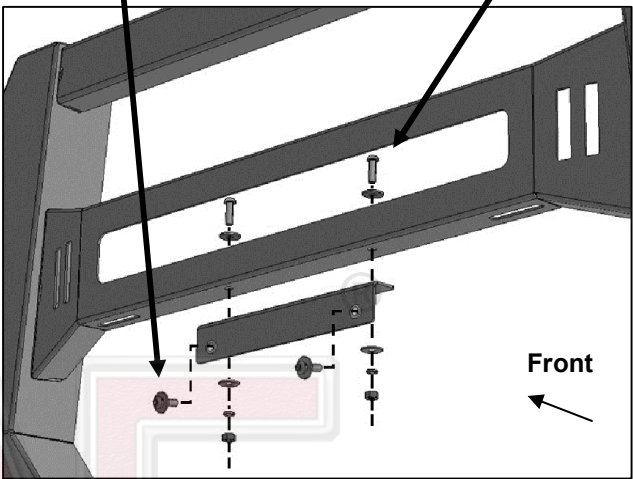


- (4) 10mm x 25mm Hex Bolts
- (8) 10mm x 20mm Flat Washers
- (4) 10mm Lock Washers
- (4) 10mm Hex Nuts

- (2) 6mm Button Head Combo Bolts

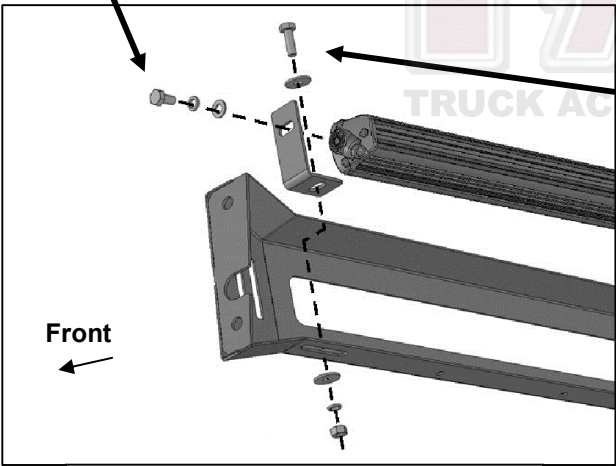
- (2) 6mm Button Head Bolts
- (4) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Hex Nuts

(Fig 11) Driver/Left Side Bull Bar Upright attached to Top and Center Cross Bars



(Fig 12) Attach License Plate Bracket to bottom of Center Cross Bar

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



(Fig 13) Attach "L" Light Brackets to slots in bottom of Center Cross Bar. Attach LED Bar light to Brackets

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

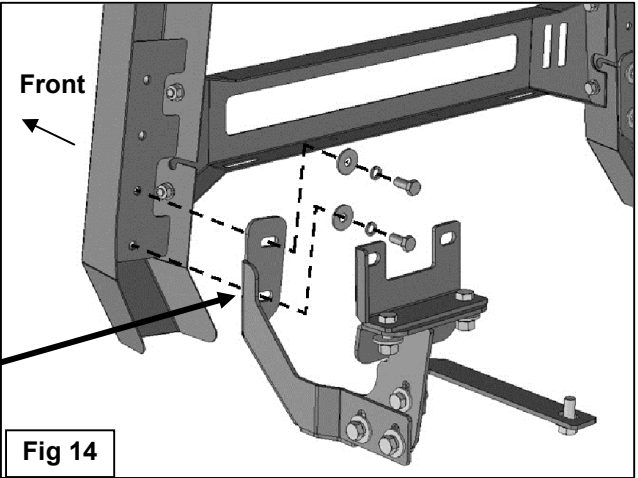
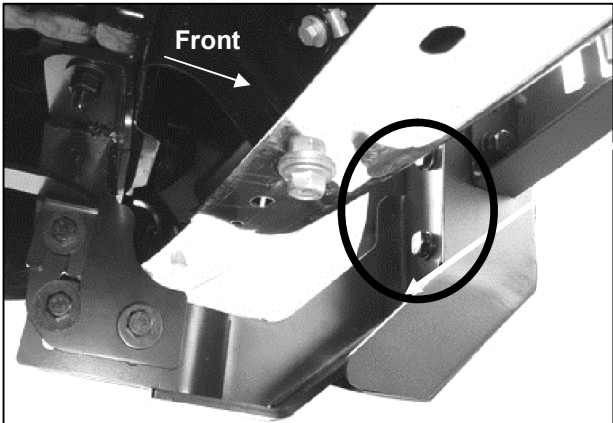


Fig 14

- (2) 10mm x 25mm Hex Bolts
- (2) 10mm Lock Washers
- (2) 10mm x 30mm Flat Washers



(Fig 15) Driver/left Bracket attached to Bull Bar

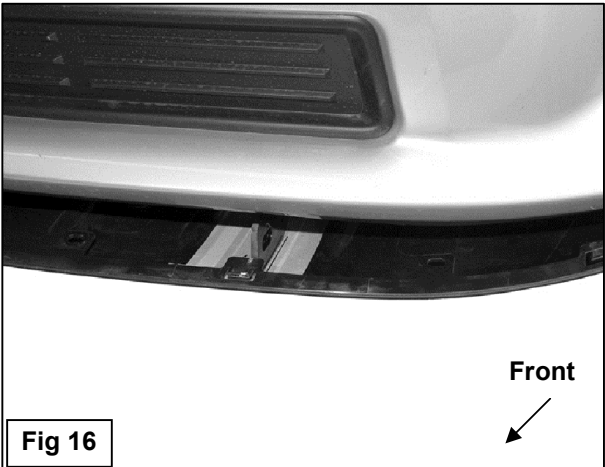


Fig 16

Temporarily remove Bull Bar. Hold the splash guard up to the bottom of the brackets and mark location for cutting to clear brackets. Cut only what is needed to insert bracket through the splash guard.

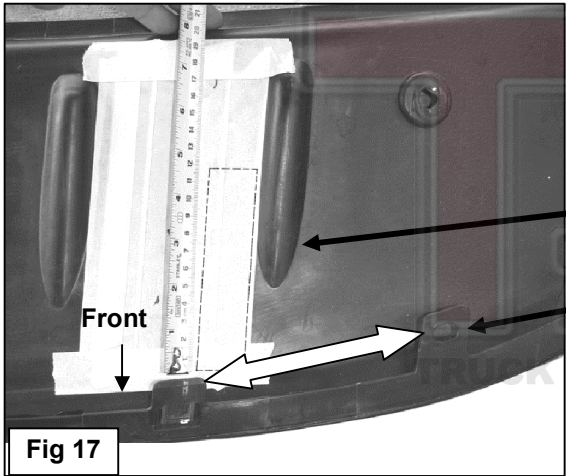


Fig 17

Cut only what is needed to insert bracket through the splash guard. Do not cut through the front edge of the splash guard

Hole for mounting bolt or clip

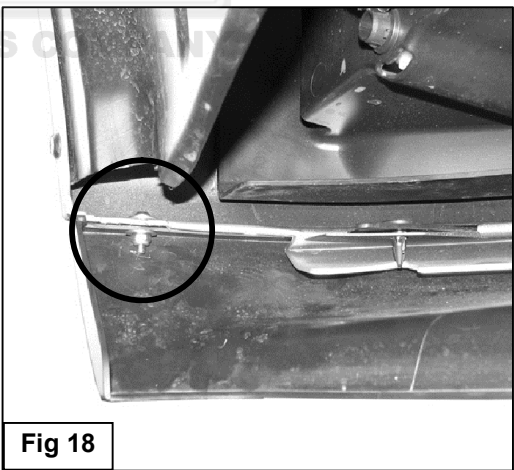
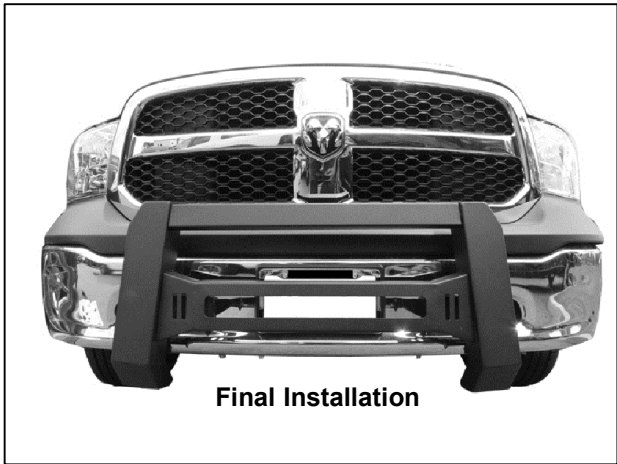


Fig 18

If required, replace the rivet at the corner of the splash guard with the supplied:
(1) 5mm x 20mm Button Head Bolt
(2) 5mm Flat Washers
(1) 5mm Nylon Lock Nut



Final Installation

Installation pictured without the splash guard for instruction purposes only