



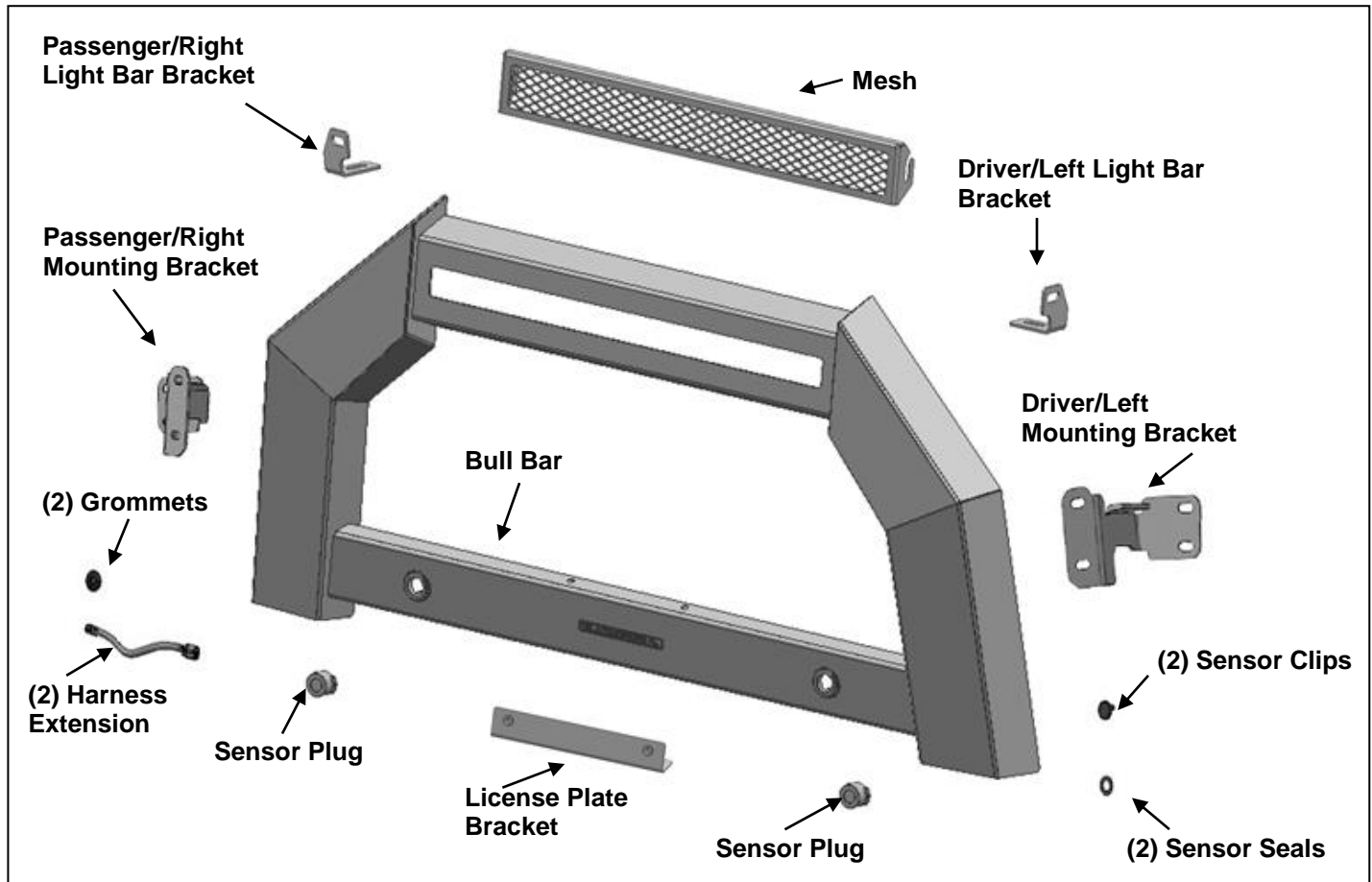
INSTALLATION INSTRUCTIONS

**ARMOUR BULL BAR
FOR 2010-18 DODGE RAM 25-3500
(W/ Parking Sensor)**

PART#AB-DO20

PARTS LIST:

1	Bull Bar	4	10-1.5mm Hex Nuts
1	Driver/Left Side Mounting Bracket	2	8mm Nylon Lock Nuts
1	Passenger/Right Side Mounting Bracket	2	8-1.25mm x 20mm Hex Bolts
1	Driver/Left Side Light Bar Bracket	2	8-1.25mm x 16mm Hex Bolts
1	Passenger/Right Side Light Bar Bracket	8	8mm x 24mm x 2mm Flat Washers
1	Mesh	4	8mm Lock Washers
1	License Plate Bracket	2	8mm Hex Nuts
2	Rubber Sensor Plugs	2	6-1.0mm x 20mm Combo Bolts
2	Ram Wire Harness Extensions	2	6-1.0mm x 20mm Button Head Bolts
2	Sensor Clips	4	6mm x 18mm x 1.6mm Flat Washers
2	Sensor Seals	2	6mm Lock Washers
2	Rubber Grommets (Wire Harness)	2	6mm Hex Nuts
4	10-1.5mm x 35mm Hex Bolts	4	4mm x 10mm Button Head Bolts (Backup Accessories)
4	10-1.5mm x 25mm Hex Bolts	1	Wrench S=4 (Backup Accessories)
12	10mm x 30mm x 2.5mm Flat Washers	1	Wrench S=2.5
8	10mm Lock Washers		



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. TOW HOOKS CANNOT BE REINSTALLED WITH THIS BULL BAR. ASSISTANCE IS RECOMMENDED.

1. Starting at the front of the vehicle, determine if the truck is equipped with tow hooks, (Figure 1).

For models without tow hooks:

- a. Select the driver side Mounting Bracket. Attach the Bracket to the (2) outer holes in the frame with the included (2) 10mm x 35mm Hex Bolts, (4) 10mm x 20mm Flat Washers, (2) 10mm Lock Washers and (2) 10mm Hex Nuts, **(Figure 2, 3 & 4)**. Do not tighten at this time.
- b. Repeat to install the passenger/right Mounting Bracket.

For models with tow hooks:

- a. Remove the (4) hex bolts attaching the tow hook to the frame, **(Figure 1)**. Remove the tow hook.
TIP: Removing the inner hex bolts securing each tow hook can be difficult to reach from behind the bumper, (long socket extensions required). It may be easier to access the (2) hex bolts through the front of the bumper and holding the hex nuts in place with an open-ended wrench, **(Figure 2)**.
 - b. Select the driver side Mounting Bracket. Attach the Bracket to the (2) outer holes for the tow hook with the factory hardware or the included (2) 10mm x 35mm Hex Bolts, (4) 10mm Flat Washers, (2) 10mm Lock Washers and (2) 10mm Hex Nuts, **(Figure 2, 3 & 4)**. Do not tighten at this time.
 - c. Repeat to install the passenger/right Bracket.
2. Relocation of front license plate is not required, but strongly recommended.
- a. Attach the License Plate Bracket to the Bull Bar with (2) 6mm Button Head Bolts, (4) 6mm Flat Washers, (2) 6mm Lock Washers and (2) 6mm Hex Nuts, **(Figure 5)**. Use (2) 6mm Combination Bolts to attach the front license plate to the Bracket, **(Figure 5)**.
3. **Mesh and LED Light installation, (LED light sold separately)**. Select the driver/left side Light Bar Bracket. Attach the Bracket to the back of the mounting plate on the Bull Bar with (1) 8mm x 20mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 6)**. Repeat this step to attach the passenger/right side Light Bar Bracket to the back of the Bull Bar. Do not tighten hardware.

LED Light Installation

- a. Use (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers to attach the Light Bar Brackets to the Bull Bar, **(Figure7)**.
- b. Follow the light manufacturer's instructions to attach the Bull Bar.
- c. Follow light manufacturer's instructions to properly wire the Bull Bar.

Mesh installation

- a. Use (2) 8mm x 16mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts to attach the Mesh to the inside surface of the Light Bar Brackets, **(Figure8)**.
- b. Level and adjust the Brackets to the Mesh Panel and fully tighten hardware.

4. Determine if the vehicle is equipped with parking sensors

Models without sensors

- a. Select (2) Sensor Plugs. Insert Rubber Plugs into back of sensor mounts, **(Figure9)**.

Models with Sensors:

- a. Unplug and remove sensors from factory bumper.
 - b. Slide included Sensor Seal over front of sensor, **(Figure 10)**.
 - c. Insert sensor into sensor mount. **NOTE:** It may be necessary to cut off mounting tabs from sides of sensors to fit into Mount. Attach the included Wiring Extension to the sensor before installing.
 - d. Push Sensor Retaining Clip into sensor mount and lock into mounting holes, **(Figure 11)**.
 - e. Repeat previous Steps to install remaining sensor.
5. With assistance, hold the Bull Bar assembly up to the Mounting Brackets. Line up the (4) bottom mounting holes in the Uprights with the Mounting Brackets. Attach the Bull Bar assembly to the Brackets with (4) 10mm x 25mm Hex Bolts, (4) 10mm Lock Washers and (4) 10mm Flat Washers, **(Figures 12 & 13)**. Do not tighten hardware at this time.
6. Stand back from the vehicle and check to see that the Bull Bar is centered and level on the vehicle and adjust as necessary. Once properly adjusted, tighten all hardware.
7. Models with sensors only:
- a. Select (1) Rubber Grommet. Slide the Grommet over the small plug on the Wiring Extension, **(Figure 14)**.
 - b. Push the Grommet into the hole in the bumper.
 - c. Plug the Extension into the factory wiring harness for the sensor. Repeat the previous Steps to attach the remaining Wiring Extension.

8. 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

Remove factory tow hook if equipped

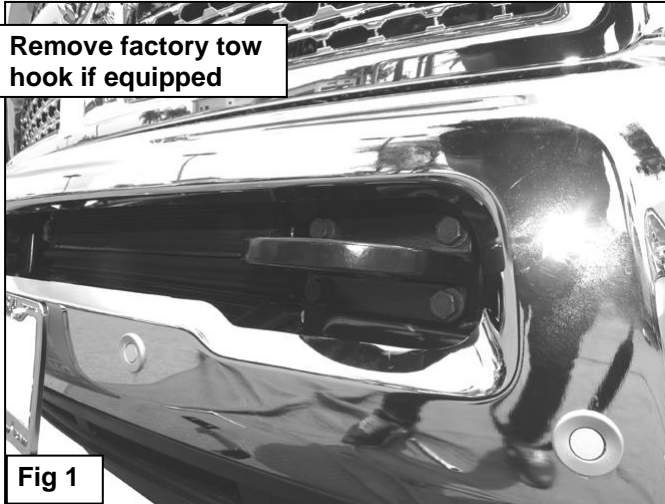
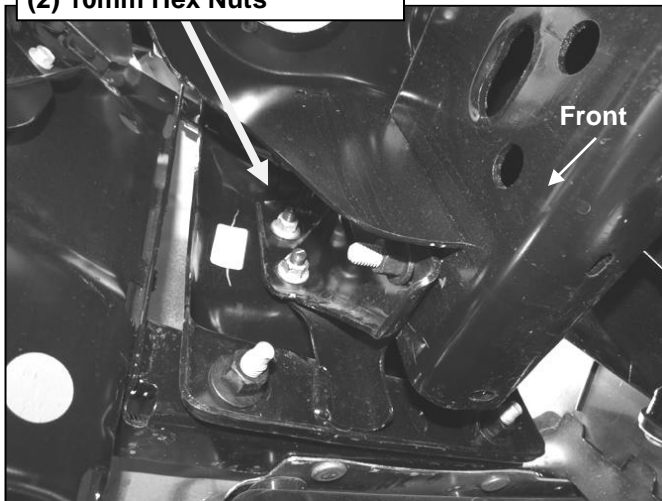


Fig 1

Reuse the factory tow hook hardware or the included:
(2) 10mm x 35mm Hex Bolts
(2) 10mm Lock Washers
(4) 10mm Flat Washers
(2) 10mm Hex Nuts



(Fig 3) Pictured from behind and below the driver/left side of the bumper

Attach Frame Bracket up to these (2) holes

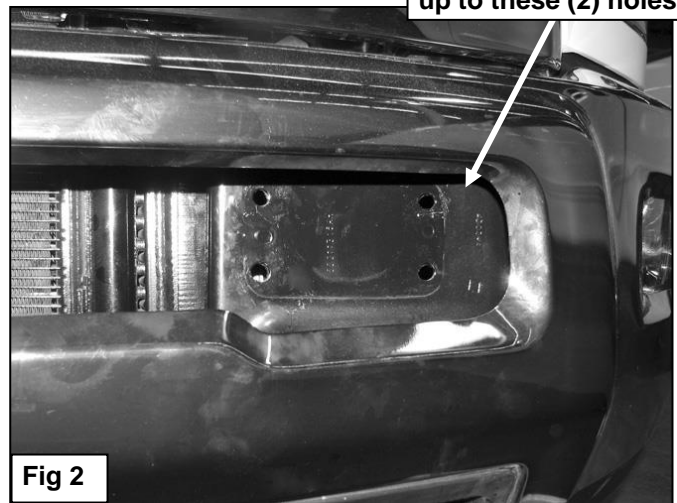
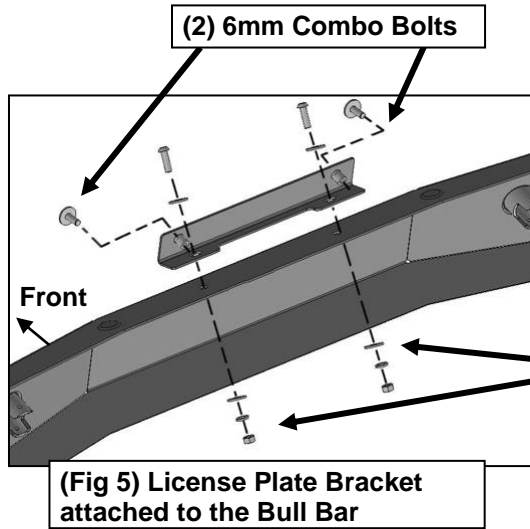


Fig 2



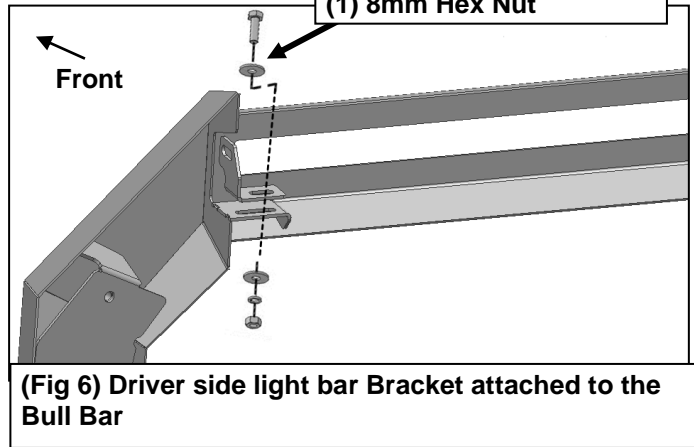
(Fig 4) Driver/Left Side Mounting Bracket Installed

Driver Side Installation Pictured

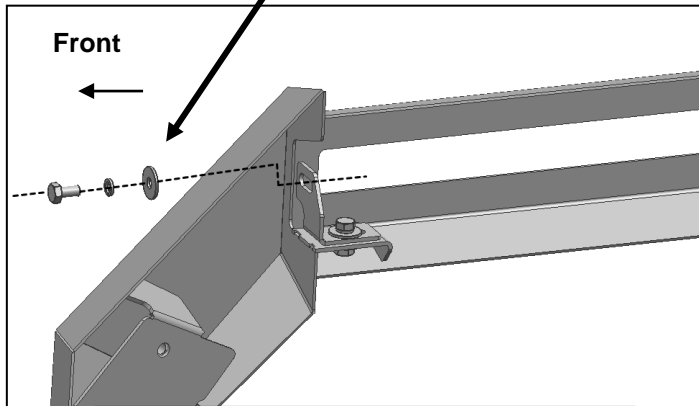


- (2) 6mm Button Head Bolts
- (4) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Hex Nuts

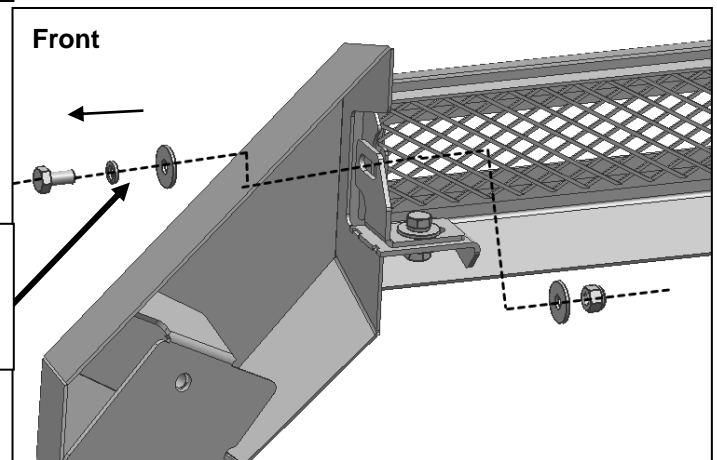
- (1) 8mm x 20mm Hex Bolt
- (2) 8mm Flat Washers
- (1) 8mm Lock Washer
- (1) 8mm Hex Nut



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

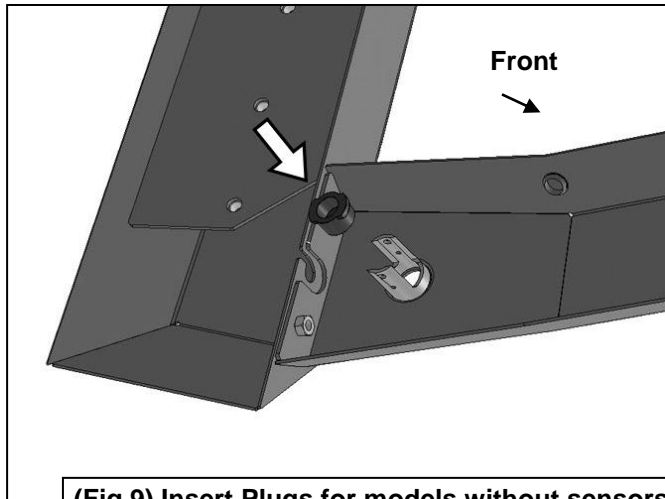


- (1) 8mm x 16mm Hex Bolt
- (2) 8mm Flat Washers
- (1) 8mm Lock Washer
- (1) 8mm Hex Nut

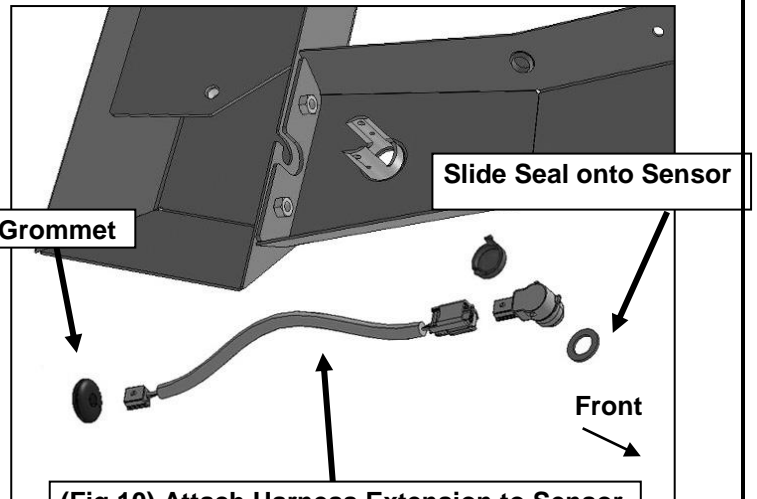


(Fig 8) Driver side light bar Bracket attached to Mesh hardware

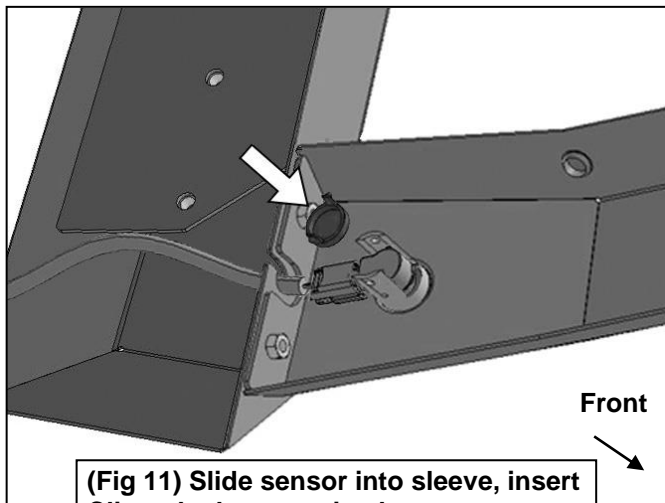
Driver Side Installation Pictured



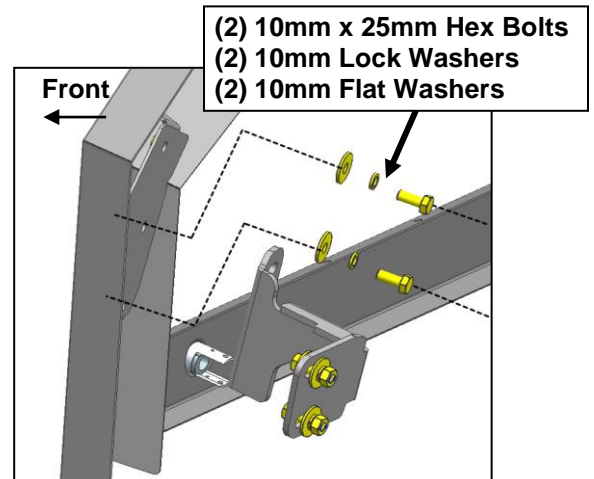
(Fig 9) Insert Plugs for models without sensors (example only)



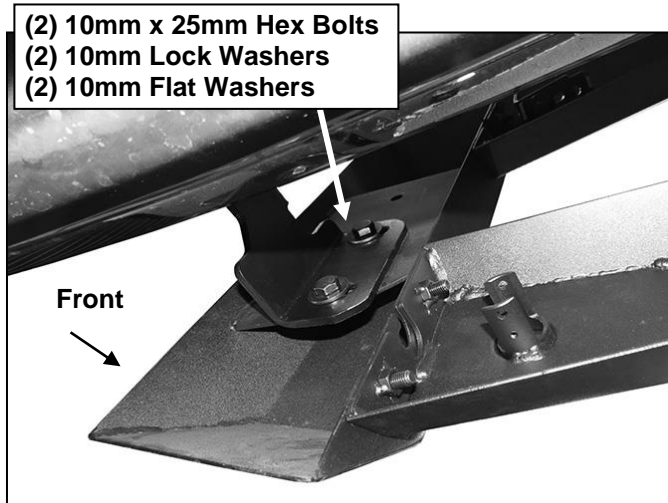
(Fig 10) Attach Harness Extension to Sensor (example only)



(Fig 11) Slide sensor into sleeve, insert Clip to lock sensor in sleeve (example only)



(Fig 12) Attach Bracket to bottom mounting holes



(Fig 13) Attach Bull Bar assembly to Mounting Bracket



(Fig 14) Models with sensors, slide Grommet over small end of Harness Extension. Push Grommet into hole in bumper and attach to wiring harness