



INSTALLATION INSTRUCTIONS

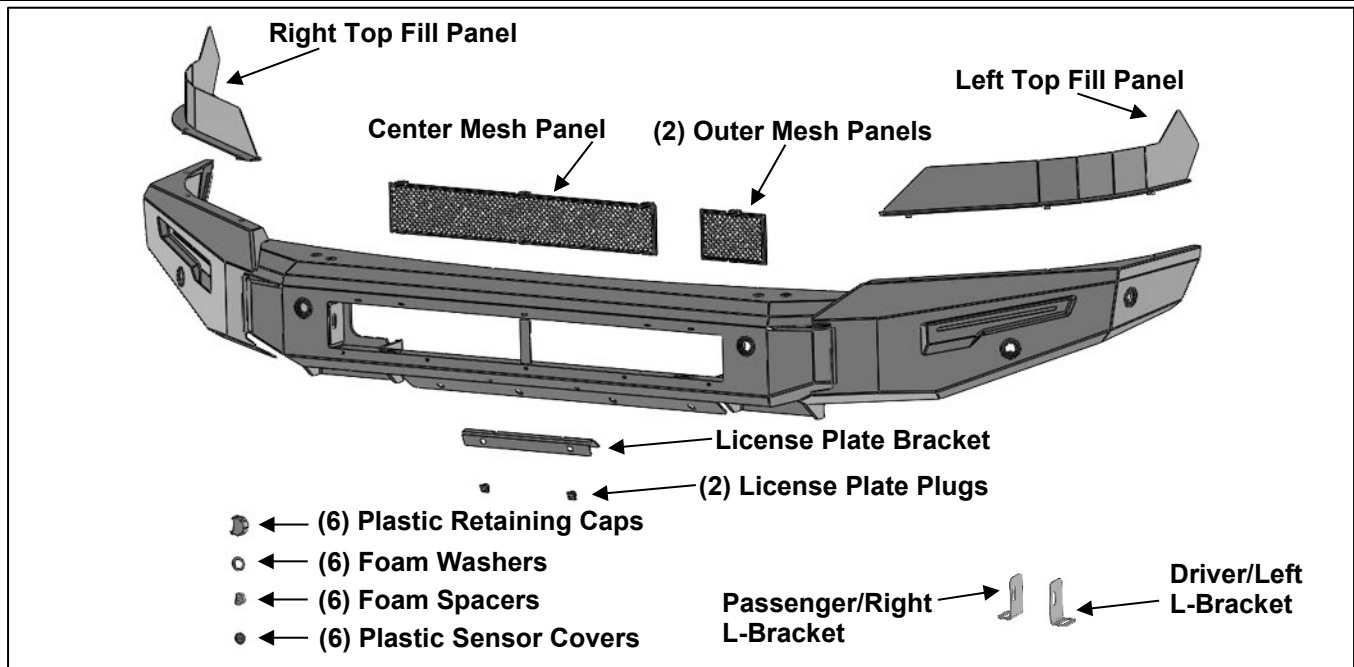
MD1 FRONT BUMPER

2013-18 RAM 1500

(EXCL. REBEL AND WARLOCK/ INCL. 19-22 CLASSIC)

PARTS LIST: HR21564

| | | | |
|----|---------------------------------------|----|------------------------------------|
| 1 | MD1 Front Bumper | 4 | 10mm Lock Washers |
| 1 | Driver/Left Top Fill Panel | 4 | 10mm x 20mm OD x 2mm Flat Washers |
| 1 | Passenger/Right Top Fill Panel | 2 | 8mm x 25mm Hex Bolts |
| 1 | Long Center Mesh Plate | 2 | 8mm x 16mm Hex Bolts |
| 2 | Short Mesh Plates | 6 | 8mm x 24mm OD x 2mm Flat Washers |
| 1 | Driver/Left L-Bracket | 4 | 8mm Lock Washers |
| 1 | Passenger/Right L-Bracket | 2 | 8mm Hex Nuts |
| 1 | License Plate Bracket | 16 | 6mm x 20mm Button Head Combo Bolts |
| 2 | Plastic Plugs for license plate mount | 2 | 6mm x 20mm Button Head Bolts |
| 6 | Sensor Retaining Caps | 4 | 6mm x 18mm OD x 1.6mm Flat Washers |
| 6 | 20mm x 10mm Foam Spacer | 10 | 6mm Flange Nuts |
| 6 | 15.5mm x 25mm OD x 2mm Foam Washers | 2 | 6mm Nylon Lock Nuts |
| 6 | Plastic Sensor Covers | 12 | Self-Tapping Screws |
| 6 | 12mm x 35mm Hex Bolts | 10 | Wire Ties |
| 12 | 12mm x 32mm OD x 3mm Flat Washers | 3 | Sensor Harness Extensions |
| 6 | 12mm Lock Washers | 1 | LED Wiring Harness |
| 6 | 12mm hex Nuts | 1 | 4mm Allen Wrench |
| 4 | 10mm x 30mm Hex Bolts | | |



PROCEDURE:

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

1. Remove the license plate and bracket. Remove lower air dam, (**Figure 1**). **NOTE:** Air dam is attached with many 2pc retaining clips. Pry up center of pin to release and remove clips.
2. On models with factory fog lights and/or sensors, unplug wiring harness leading to bumper, (**Figure 2**). Move harness away from bumper.
3. Next, remove the plastic fascia fill panel between the headlights and the top of the bumper. **NOTE:** Release inner fender liner to access hardware attaching the ends of fascia panel to the bottom of the front fenders, (**Figures 3 & 4**). On some model years, it may be necessary to temporarily remove the grille to remove the fascia or 1pc plastic bumper cover.

4. Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the (3) hex nuts attaching each bumper bracket to the end of the frame, **(Figure 5)**. On models with tow hooks, (2) of the hex nuts attach the “L” bracket for the tow hooks to the back of the bumper bracket. Remove the (2) hex nuts but do not remove the “L” brackets and tow hooks, **(Figure 6)**. **WARNING!** Assistance is required to hold bumper in place during hardware removal to prevent the bumper from falling.
5. Slide the bumper assembly off of the end of the frame and tow hooks if equipped.
6. Next, remove the plastic inner support blocks from the bottom of the headlights, **(Figure 7)**.
7. Carefully unwrap the Bumper assembly. Pull outward to unfold the passenger/right outer wing until fully extended, **(Figure 8)**. Anchor the Wing to the back of the Bumper with the included (2) 10mmx 30mm Hex Bolts, (2) 10mm Lock Washers and (2) 10mm Flat Washers, **(Figure 9)**. Leave hardware loose. Repeat this Step to unfold and attach the driver/left Wing to the Bumper. **IMPORTANT:** There is a small amount of adjustment in the Wings that can increase or decrease the final width of the Bumper. Loosen the (2) pivot bolts and the (2) anchor bolts and pull each Wing outward as far as possible to start. Snug hardware but do not fully tighten.
8. Select the Top Fill Panels and attach each to one side of the Bumper with (3) 6mm Button Head Combo Bolts, **(Figure 10)**. Tighten all Bumper hardware.
9. Determine if accessory lights, (not included), or Mesh Panels will be installed. **IMPORTANT:** It may be easier to install Center Fill Panels and/or lights before installing Bumper.

Mesh Panel Installation (do not install fill panels if installing lights).

- a. Select desired Mesh Panels.
- b. Attach Screen Fill Panels as needed with the included 6mm Button Head Combo Bolts and 6mm Flange Nuts, **(Figures 11A & 11B)**. Fully tighten Fill Panel hardware. Repeat to install all Panels as desired.

Inner center LED bar style light installation (light not included).

- a. Select the Driver/Left L-Bracket.
- b. Attach the L-Bracket to the slot on the back of the Bumper with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 12)**. Repeat this Step to install the Passenger/Right L-Bracket on the other side of the Bumper. **IMPORTANT:** The Bumper features slots designed for 20” and 30” bar style lights. Attach the Brackets to the correct slots in the Bumper. If necessary, hold the light up to the slots to help determine correct slots to use and combination of Brackets.
- c. Attach the light to the L-Brackets with the hardware included with the light or the supplied (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers or (2) 6mm x 16mm Hex Bolts, (2) 6mm Lock Washers and (2) 6mm Flat Washers, **(Figure 12)**. Do not fully tighten hardware.

10. For vehicles equipped with front sensors.

- a. Remove the silicone seal from the end of the sensor. Slide the 15.5mm x 25mm x 2mm Foam Washer over front of sensor.
- b. Insert sensor with Foam Washer into sensor sleeve.
- c. Place (1) Foam Spacer over end of sensor. Push Sensor Retaining Cap onto sensor mount and lock into mounting holes, **(Figure 13)**.
- d. Repeat previous Steps to install remaining sensors.

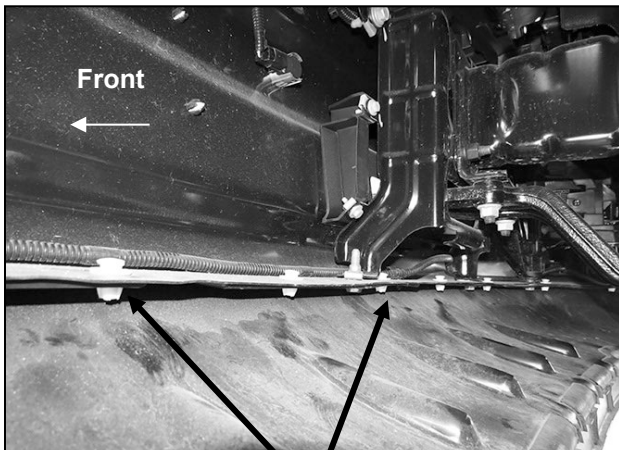
For vehicles not equipped with front sensors.

- a. Select the included (4) Plastic Sensor Covers.
- b. From the front of the bumper, push Covers into sensor sleeves, **(Figure 14)**.

11. With assistance, position the MD1 Bumper Assembly up to the end of the frame. 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. **NOTE:** It may be easier to install accessory lights before installing the Bumper, (models with tow hooks for example).
12. Attach the Bumper to the frame with (6) 12mm Hex Bolts, (12) 12mm Flat Washers, (6) 12mm Lock Washers and (6) 12mm Hex Nuts, **(Figure 15)**. Do not tighten hardware.

13. Select the License Plate Bracket. Attach the Bracket to the front of the Bumper with (2) 6mm Button Head Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figure 16)**. Insert the (2) License Plate Plugs into the License Plate Bracket, **(Figure 17)**.
14. Level and adjust the Bumper, then fully tighten all hardware.
15. 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.



(Fig 1) Release clips (arrow) to remove air dam (pictured from behind bumper-tow hook equipped)



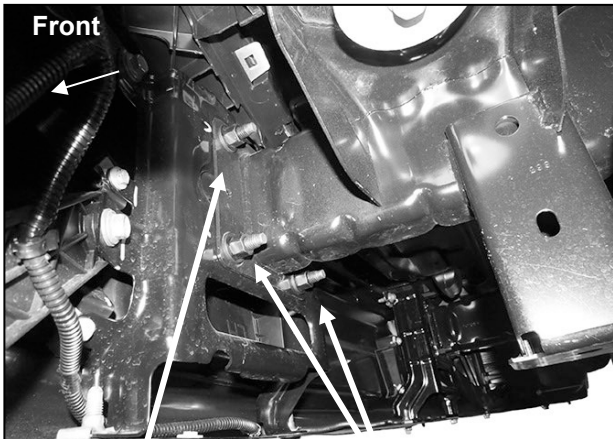
(Fig 2) Unplug lights and sensors if equipped. Unplug harness to bumper and move harness



(Fig 3) Pull back fender liner to locate fascia attachment at bottom of front fender

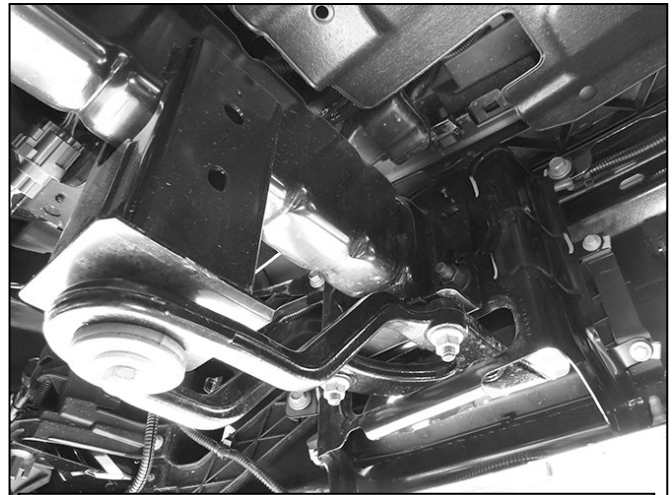


(Fig 4) Remove fascia body panel from top of bumper

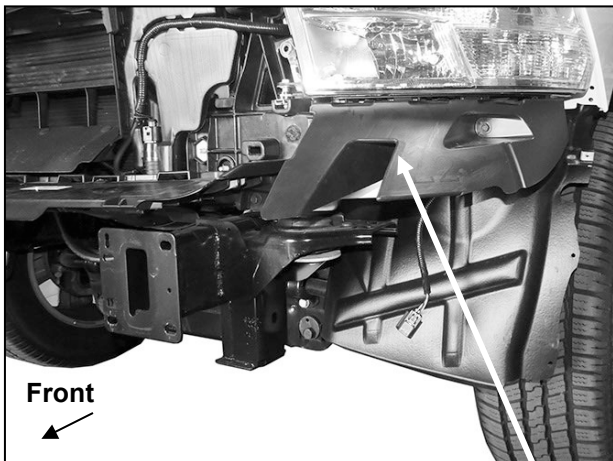


(Fig 5) Remove (3) factory hex nuts from each side

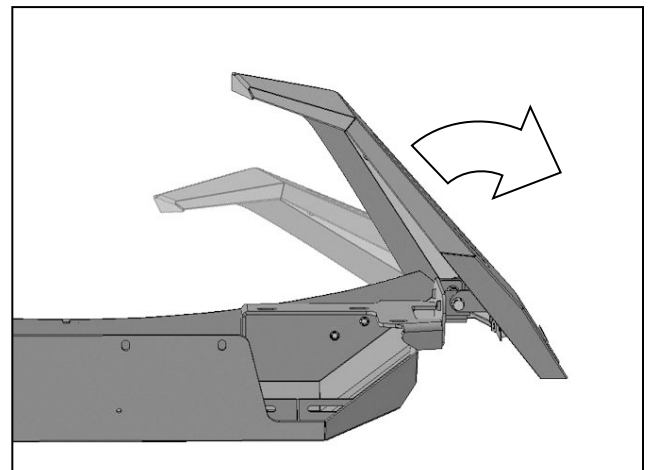
WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or it may fall.



(Fig 6) Models with tow hooks, remove hex nuts attaching bumper but leave tow hook in place

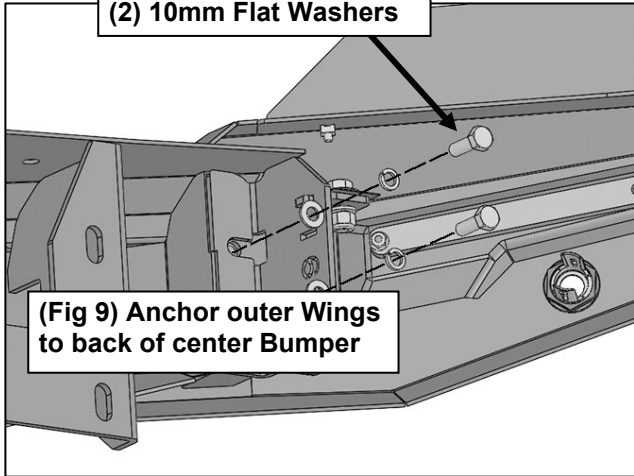


(Fig 7) Remove plastic block from below headlight

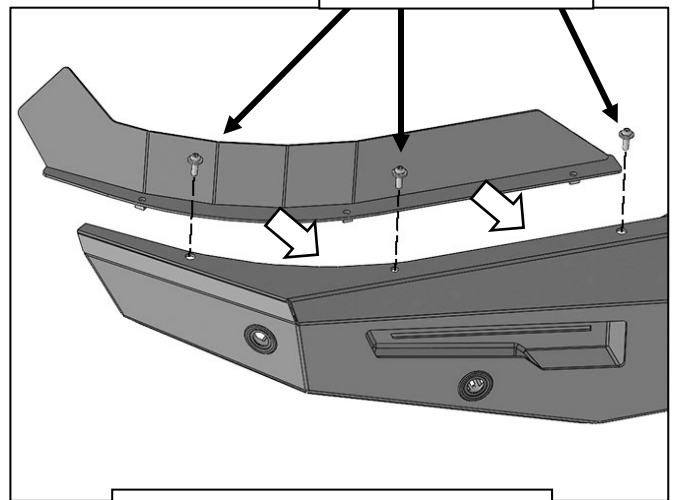


(Fig 8) Unfold outer Wings from center Bumper. Passenger/right side illustrated from below

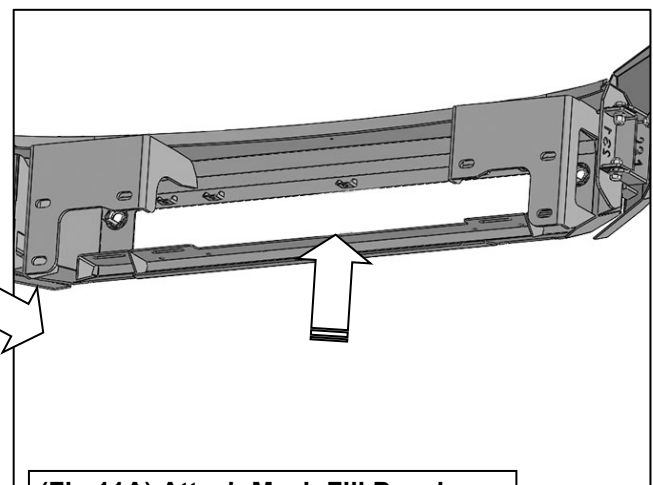
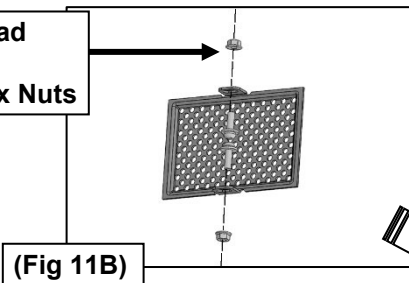
- (2) 10mm Hex Bolts
- (2) 10mm Lock Washers
- (2) 10mm Flat Washers

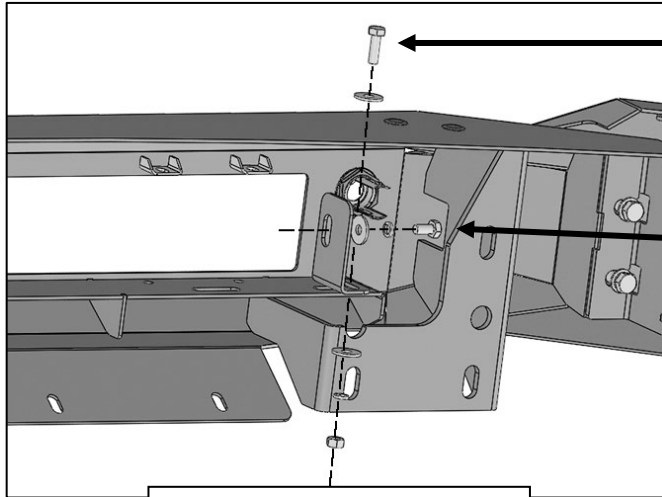


- (3) 6mm Button Head Combo Bolts



- (2) 6mm Button Head Combo Bolts
- (2) 6mm Flange Hex Nuts

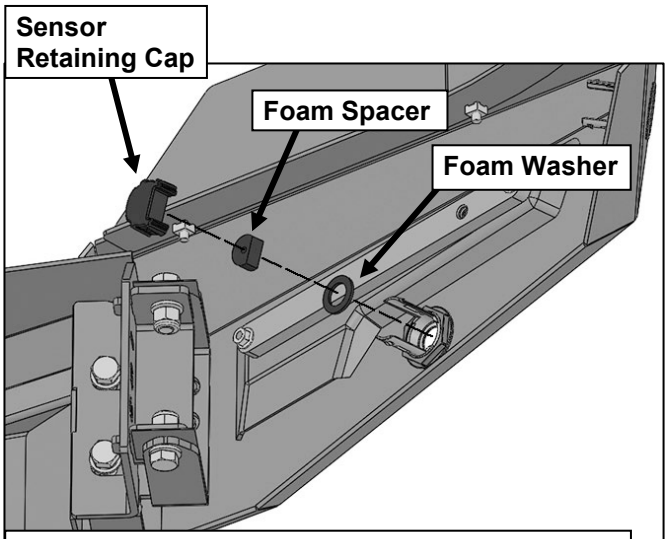




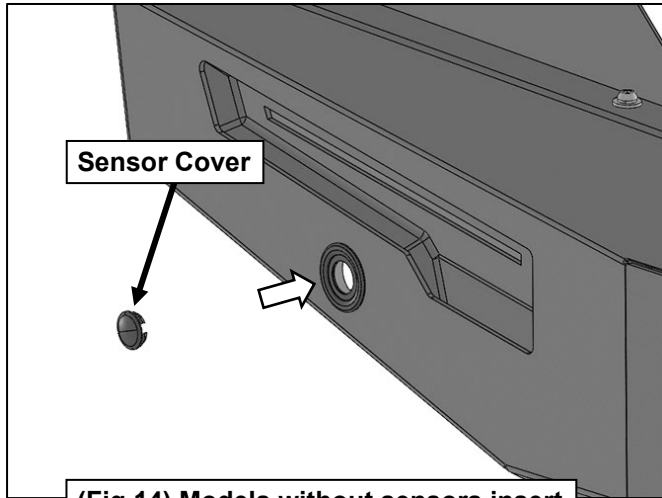
8mm x 25mm Hex Bolt
(2) 8mm Flat Washers
8mm Lock Washer
8mm Hex Nut

6mm x 16mm Hex Bolt
6mm Lock Washer
6mm Flat Washer
Or
8mm x 16mm Hex Bolt
8mm Lock Washer
8mm Flat Washer

(Fig 12) Note multiple slots for different widths of lights



(Fig 13) Insert the sensor into the sensor sleeve

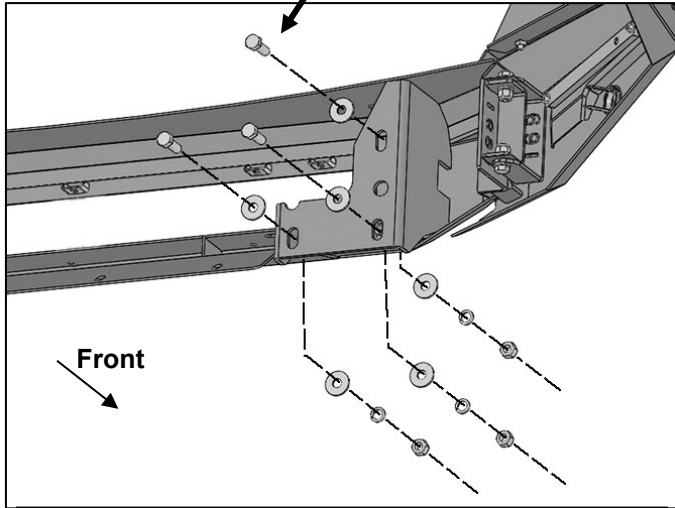


(Fig 14) Models without sensors insert sensor covers into the sensor sleeve

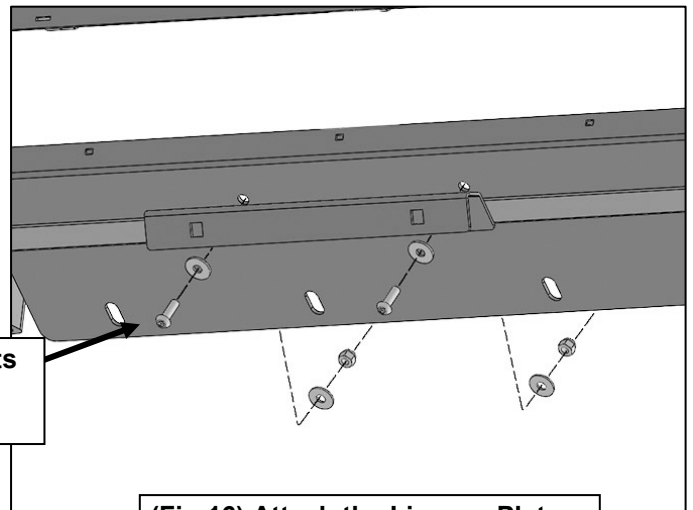
WARNING! Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.

- (3) 12mm x 35mm Hex Bolts
- (6) 12mm Flat Washers
- (3) 12mm Lock Washers
- (3) 12mm Hex Nuts

WARNING! Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.

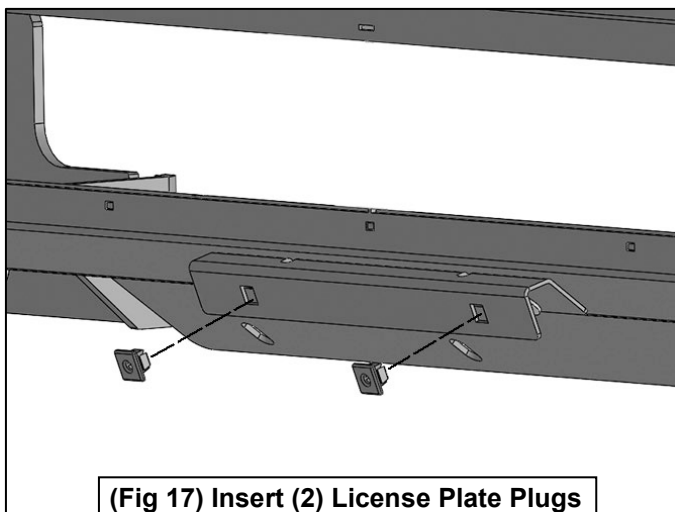


(Fig 15) Attach Bumper assembly to end of frame

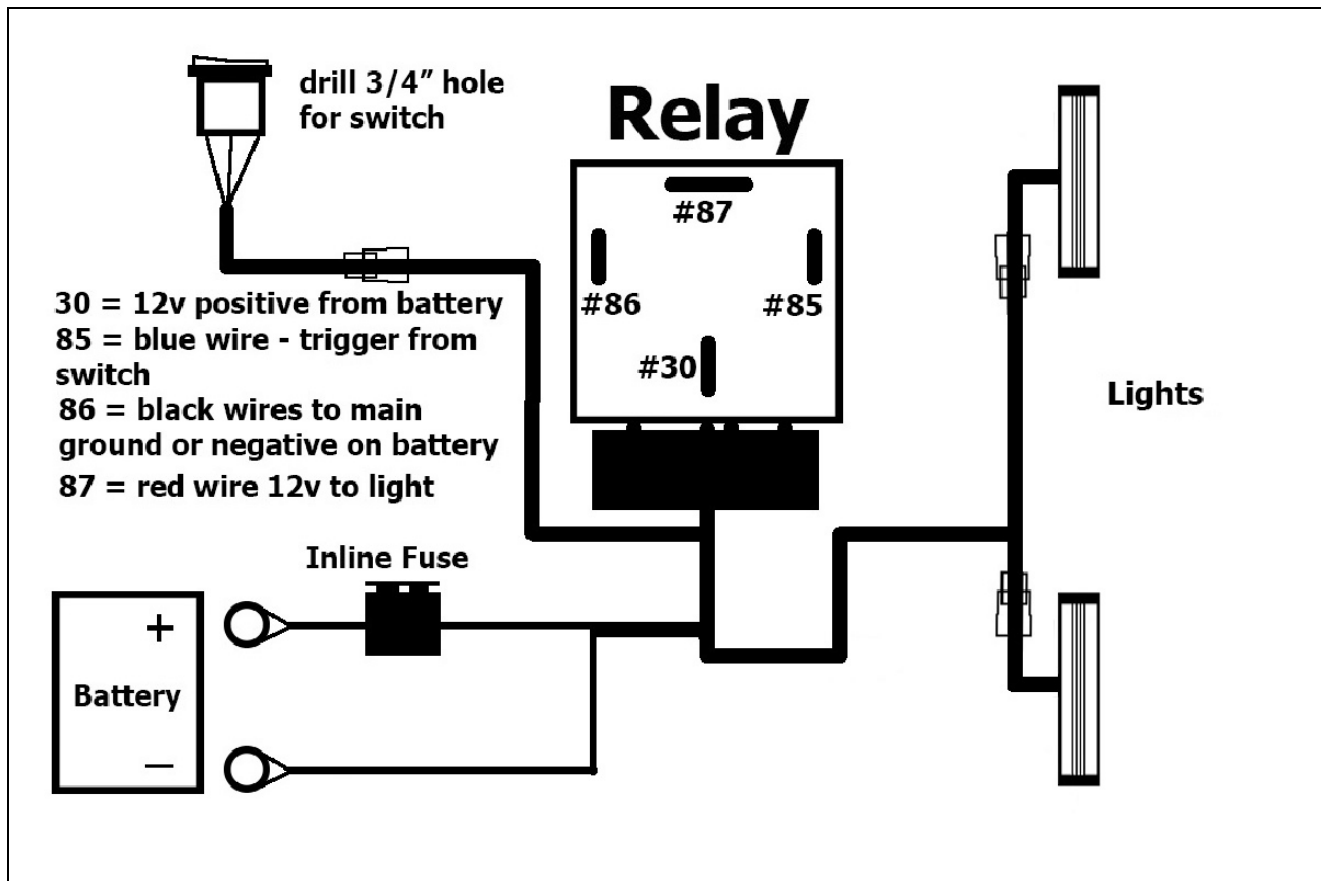


- (2) 6mm Button Head Bolts
- (4) 6mm Flat Washers
- (2) 6mm Hex Nuts

(Fig 16) Attach the License Plate Bracket to the front of the Bumper



(Fig 17) Insert (2) License Plate Plugs into the License Plate Bracket



GENERAL LIGHT WIRING PROCEDURE:

1. REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY. DRILLING IS REQUIRED. ELECTRICAL KNOWLEDGE IS HIGHLY RECOMMENDED.
2. Open hood and disconnect battery.
3. Unwrap preassembled wiring harness. Disconnect the plug in the harness leading to the lighted switch. Locate suitable mounting location for switch. Drill 3/4" hole in panel to mount switch. **IMPORTANT:** Do not drill any holes in panel until back of location is properly checked for clearance. Use of safety goggles is required.
4. Run switch harness through firewall on vehicle. Drill hole through firewall as required for harness plug. Highly recommend use of rubber grommet (not included) to protect harness. Feed switch harness plug through hole in firewall. Seal firewall with silicone as necessary.
5. Attach Relay and main harness to suitable location near battery (firewall or inner fender for example). Do not connect to battery at this time.
6. Attach switch plug to switch harness and tie harness away from anything that could damage harness.
7. Run the prewired light harness down to each light. Plug harness into prewired plug on each light. Tie wiring harness away from anything that could damage harness.
8. Attach the fused red positive and black negative wires on the main harness to the battery. **NOTE:** Attach black negative wire to negative terminal on battery or suitable chassis ground.
9. Reattach battery cables to battery. Installation is complete.
10. Do periodic inspections to the installation to make sure that all hardware is secure and tight and all wiring harnesses are properly secured and free from excessive movement.