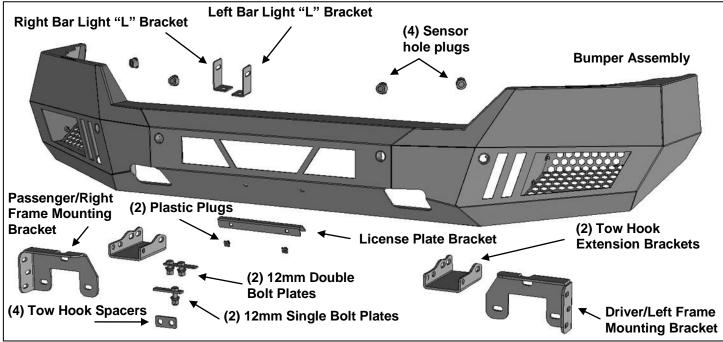
# BOJY ARNORY

# ECO-SERIES FRONT BUMPER FOR CHEVY SILVERADO 1500 16+ #GM-19336

Body Armor 4x4 272 Corporate Terrace St. Corona, CA 92879 951-808-0750 Customer Service hours: M-TH: 7:30am to 4:30 PM Pacific Time Friday: 8 AM – Noon Pacific Time

## PARTS LIST:

1	LD1 Front Bumper Assembly	6	10-1.5mm x 35mm Hex Bolts
1	Driver/left Frame Mounting Bracket	12	10mm x 27mm OD x 3mm Flat Washers
1	Passenger/right Frame Mounting Bracket	6	10mm Lock Washers
2	Tow Hook Extension Brackets	6	10mm Hex Nuts
4	Spacers (tow hooks)	2	8mm x 16mm Hex Bolts
1	License Plate Bracket	2	8mm x 25mm Hex Bolts
2	Plastic Plugs for License Plate	2	8mm Hex Nut
4	Sensor Plugs	4	8mm Lock Washer
1	Driver/left "L" Bracket (center LED light)	6	8mm x 24mm x 2mm Flat Washers
1	Passenger/right "L" Bracket (center LED light)	2	6mm x 20mm Button Head Bolts
2	12mm x 30mm Double Bolt Plates	4	6mm x 18mm x 1.6 Flat Washers
2	12mm x 35mm Single Bolt Plates	2	6mm Nylon Lock Nuts
6	12mm x 24mm OD x 2.5mm Flat Washers	1	6mm Wrench
6	12mm Lock Washers	8	4mm x 10mm Socket Head Screws
6	12mm Hex Nuts	1	4mm Wrench
		10	Nylon Wire Ties



### PROCEDURE:

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

- 1. Remove the license plate and bracket. On models with factory fog lights and/or bumper sensors, unplug the wiring harness leading to the bumper. Move harness away from bumper.
- Next, open the hood and remove the plastic cover between the top of the radiator and the grille, (Figure 1). Next, carefully remove the grille from the vehicle. NOTE: Grille is held in place with screws at the top and several clips, (Figure 1). Remove the screws and firmly pull the grille straight out from the vehicle to release the grille from the clips, (Figures 2 & 3).
- 3. From behind the bumper, remove the outer bumper supports on each side of the frame, (Figure 4).
- 4. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the bumper bolts attaching the bumper assembly to the frame bracket bolted to the end of the frame, (Figure 5). WARNING! Assistance is required to hold the

bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper assembly off of the ends of the frame.

5. Once bumper has been removed, reinstall the plastic grille and cover removed in Step 2.

6. Remove both bumper brackets and tow hooks, (if equipped), from the ends of the frame, (Figure 6).

# Models without tow hooks, skip ahead to Step 10.

# Models with tow hooks, follow, Steps 7–9

- 7. Models with tow hooks, select (1) Single Bolt Plate and (1) Double Bolt Plate, (Figure 7). Select (1) Tow Hook Extension Bracket, (Figure 8). Slide the Bracket over the end of the frame. Line up the slots in the Bracket with the factory tow hook mounting holes. Insert the Bolt Plates into the open end of the passenger/right side of the frame and out through the holes in the side and Bracket. Secure the Bracket to the Bolt Plates with (3) 12mm Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, (Figures 8—10). Do not fully tighten at this time.
- Select (1) tow hook. Place the tow hook on top of the Extension Bracket. Slide (1) Spacer Plate between each side of the tow hook and the Bracket. Reuse the factory hardware to attach the tow hook to the Extension Bracket, (Figures 8—10). Fully tighten tow hook and Extension Bracket hardware only. Do not tighten Frame Bracket hardware at this time.
- 9. Repeat **Steps 7 & 8** to install the driver/left side Extension Bracket and tow hook.
- 10. Select the passenger/right Frame Bracket. Reuse the (3) factory bumper bolts to attach the Frame Bracket to the threaded bumper mount, (Figures 9 & 10). Do not fully tighten hardware at this time.
- 11. Repeat Step 10 to install the driver/left side Frame Bracket.
- **12.** With assistance, position the Bumper Assembly up to and over the Frame Brackets. 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.
- 13. Line up the (3) holes in the passenger/right side mounting plate on the back of the Bumper with the (3) slots in the Frame Bracket. Attach the Bumper to the Bracket with the included (3) 10mm x 35mm Hex Bolts, (6) 10mm Flat Washers, (3) 10mm Lock Washers and (3) 10mm Hex Nuts, (Figures 11 & 12). Do not fully tighten hardware at this time. Repeat this Step to attach the driver/left side of the Bumper to the Frame Bracket.
- 14. Level and adjust the bumper and fully tighten all hardware.

# Models without bumper sensors:

- a. Select the included (4) Rubber Plugs.
- b. From behind bumper, push plugs into sensor mounting holes, (Figure 13).

# Models with bumper mounted sensors:

- **a.** Push the sensor into the mounting socket in the back of the bumper.
- b. Secure each sensor to the socket with (2) 4mm x 10mm Button Head Screws, (Figure 13). IMPORTANT: Sensors fit snug in sockets. The 4mm Screws are used to apply slight pressure to lock the sensors in place. Tighten both screws evenly until they touch the sensor body only. Do not overtighten screws or damage to sensors will result.
- 15. If front license plate is required, attach the License Plate Bracket to the holes in the bumper with the included (2) 6mm x 20mm Button Head Screws, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts. Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the plastic plugs, (Figure 14).

# 16. Center LED light installation (sold separately).

- a. Select the L/R "L" Brackets, (Figure 15). Attach the Brackets to the top of the (2) mounting tabs welded onto the back of the bumper with the included 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts. Leave loose at this time.
- b. Attach the LED light assembly to the "L" Brackets with the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, (Figure 15). Do not fully tighten hardware at this time. IMPORTANT: "L" Brackets are designed for 8mm light mounting hardware only. Modify "L" Brackets if necessary or use brackets supplied by your light manufacturer if possible to install hardware larger than 8mm.
- c. Follow light manufacturer's instructions to properly wire the light.
- 17. LED light installation at ends of bumper (sold separately).
  - **a.** Insert light into opening and up to mounting slots in the top of the passenger/right light opening.

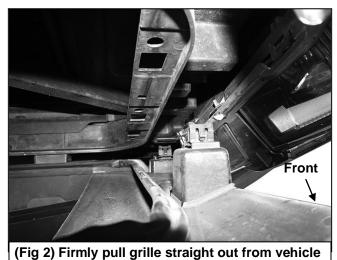
- **b.** Check for clearance between front and back of light. If necessary, remove the screen from the back of the opening, (Figure 16).
- c. Follow the light manufacturer's instructions to attach (1) light to the center slot or (2) lights to the inner and outer slots in the top of the light opening. **IMPORTANT**: On two light systems with (1) flood and (1) spot light per side, attach the flood light to the outer and the spot light to the inner slot.
- **d.** Repeat the above steps for driver/left side light installation.
- e. Follow light manufacturer's instructions to properly wire the light.
- **18.** 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 Front Bumper assembly.



Passenger/Right Side Installation Pictured

(Fig 1) Remove cover between radiator and grille. Remove screws attaching top of grille (arrows)



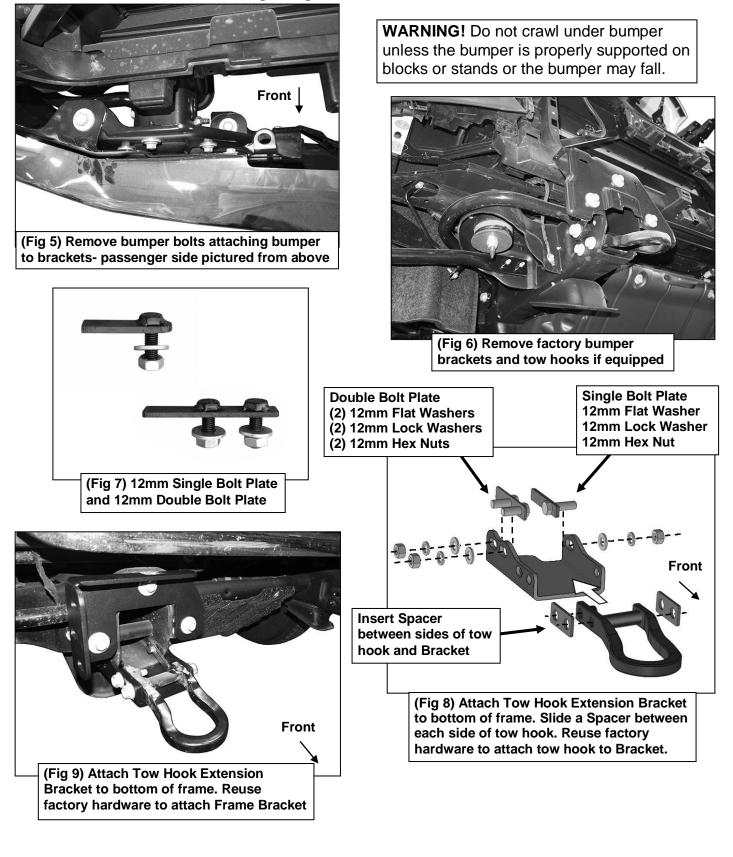


(Fig 3) Grille removed to access top bumper bolts

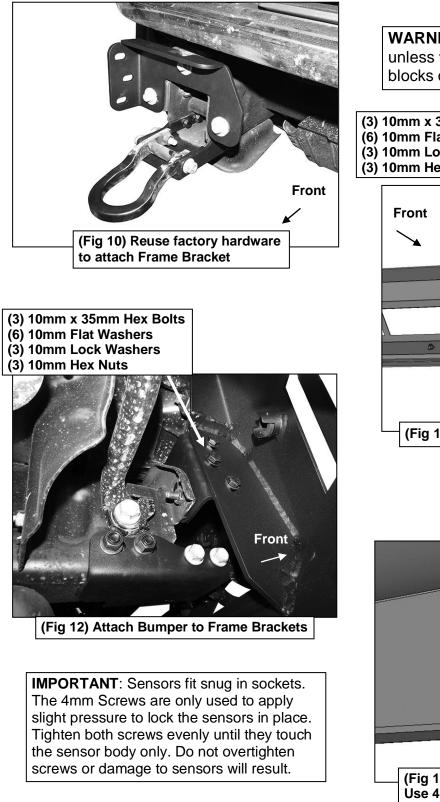


Fig 4) Remove outer bumper support brackets

### **Passenger/Right Side Installation Pictured**



### Passenger/Right Side Installation Pictured



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

- (3) 10mm x 35mm Hex Bolts
- (6) 10mm Flat Washers
- (3) 10mm Lock Washers
- (3) 10mm Hex Nuts

