

ECO-SERIES REAR BUMPER
2015-2016 FORD F150
(accommodated factory hitch receiver)
PART # FD-2962

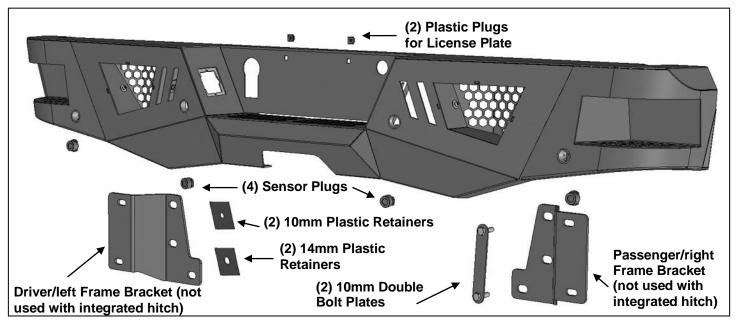
Body Armor 4x4 272 Corporate Terrace St. Corona, CA 92879 951-808-0750

Customer Service hours: M-TH: 7:30am to 4:30 PM Pacific Time

Friday: 8 AM – Noon Pacific Time

#### **PARTS LIST:**

1	LD1 Rear Bumper Assembly	2	10mm x 35mm Double Bolt Plates
1	Driver/left Mounting Bracket	4	10mm x 30mm x 2.5mm Flat Washers
1	Passenger/right Mounting Bracket	4	10mm Nylon Lock Nuts
2	Plastic Plugs for license plate mount	8	4mm x 10mm Button Head Bolts
4	Sensor Hole Plugs	1	2.5mm Wrench
2	14mm Plastic Retainers	1	4mm Wrench
4	10mm Plastic Retainers	10	Nylon Wire Ties



#### PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE. IMPORTANT: OEM BUMPER REINFORCEMENT USED WITH "STANDARD" TOW PACKAGE WITHOUT RECEIVER HITCH CANNOT BE REINSTALLED. OE INTEGRATED "HD" HITCH, "MAX DUTY" HITCH AND MOST AFTERMARKET RECEIVER HITCHES REQUIRED FOR TOWING.

- 1. Remove the license plate from the bumper, (Figure 1). Next, unplug the license plate lights, trailer plug and sensors, (if equipped). Release the wiring harness from the clips attached to the back of the bumper. Move all wiring harnesses away from bumper. NOTE: Bumper is designed to be compatible with larger 7-wire universal trailer harness plug only.
- 2. Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the factory hardware attaching the bumper to the end of the frame and remove the bumper assembly, (Figures 3A, 3B & 4). WARNING! Assistance is required to hold the bumper in place during hardware removal to prevent bumper from falling.
- **3.** Remove sensors, (if equipped), from bumper. Next, release the clips holding the license plate lights in place and remove the lights, **(Figure 2)**. Release the clips securing the trailer plug and remove the plug.
- 4. Optional LED light installation at ends of bumper (sold separately).
  - a. Insert light into opening and up to mounting slots. Check for clearance between front and back of light. If necessary, remove the screens from the back of the openings, (Figure 5). IMPORTANT: Screens must be removed before Bumper is installed.
  - **b.** Follow the light manufacturer's instructions to attach each light to slot in the opening.

- **c.** Repeat the above steps for remaining light installation.
- **d.** Follow light manufacturer's instructions for adjustment and to properly wire the light to the vehicle electrical system after Bumper installation.
- **5.** Reinstall the license plate lights and trailer plug, **(Figure 6)**. **NOTE**: Use a flat blade screwdriver to carefully pry the metal clips on the plug out to grab the edge of the opening.
- **6. NOTE**: Depending on tow package, it may be necessary or easier to install sensors, (if equipped), before installing the Bumper.

## **Models without bumper sensors:**

- **a.** Select the included (4) Rubber Plugs.
- **b.** From behind bumper, push plugs into sensor mounting holes, (Figure 7).

#### 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 7)**. **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.
- 7. Use a small flat blade screwdriver to pry the star washers off of the bolt plates used to attach the factory bumper to the frame, (Figure 8). NOTE: "HD" tow package models use a triple bolt plate, "Standard" and "Max Duty" equipped models use a double bolt plate.
- 8. Determine towing package supplied with vehicle:

# Models with "standard tow package" without HD receiver below bumper and models with "Max Duty" frame mounted receiver hitch below bumper.

- **a.** Insert the factory bolt plate into the passenger/right Mounting Bracket. Thread (1) 14mm Plastic Retainer onto the bolt plate to hold it in position, **(Figure 9)**.
- **b.** Select (1) 10mm Double Bolt Plate and (1) 10mm Plastic Retainer. Insert the Double Bolt Plate into and through the back of the mounting tab on the LD1 Bumper, **(Figure 10)**. Thread the Retainer down onto the Bolt Plate to help hold it in position.
- c. Attach the passenger/right Mounting Bracket assembly to the 10mm Double Bolt Plate with (2) 10mm Flat Washers and (2) 10mm Nylon Lock Nuts, (Figures 11 & 12). Snug but do not fully tighten hardware at this time.
- **d.** Repeat the previous Steps to install the driver side bolt plate and Bracket assembly.
- e. With assistance, hold the LD1 Bumper assembly up to the ends 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. Reuse the factory hex nuts to attach the LD1 Bumper Brackets with bolt plates to the frame, (Figures 13 & 14). Snug but do not fully tighten hardware at this time.
- f. Skip to Step 9.

# Models with "HD" tow package with integrated receiver hitch into bumper and brackets.

- a. Remove integrated receiver hitch and bracket assembly from back of bumper.
- **b.** Use factory hardware to reinstall receiver/bumper bracket assembly to mounts on ends of frame, **(Figure 15)**. Snug but do not fully tighten hardware at this time.
- c. Select (1) 10mm Double Bolt Plate and (1) 10mm Plastic Retainer. Insert the Double Bolt Plate into and through the back of the mounting tab on the bumper, (Figure 16). Thread the Retainer down onto the Bolt Plate to help hold it in position. Repeat to attach the driver side 10mm Double Bolt Plate.
- d. With assistance, attach the Bumper assembly to the receiver/bumper bracket assembly with (4) 10mm Flat Washers and (4) 10mm Nylon Lock Nuts, (Figure 16). 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. Snug but do not fully tighten hardware at this time. Skip to Step 9.

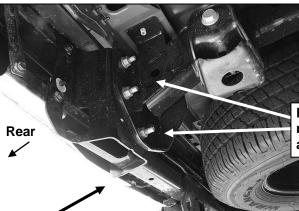
- 9. Level and adjust the bumper and fully tighten all hardware including the Mounting Bracket to Bumper hardware.
- **10.** Attach the wiring harness to the sensors, lights and trailer plug. Use the included Wire Ties to secure the wiring harness to the bumper and frame as necessary.
- **11.** Do periodic inspections to the installation to make sure that all hardware is secure and tight.
- 12. Use the included (2) push-in plugs to attach the license plate to the Bumper, (Figure 17).
- **13.** 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 Bumper assembly.

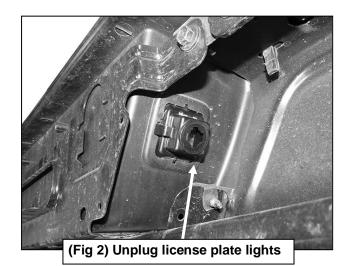
#### **Passenger Side Installation Pictured**



(Fig 1) Unplug and remove 7-wire trailer plug



(Fig 3A) Note bumper with integrated receiver hitch



Remove the factory hex nuts attaching bumper assembly to frame

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

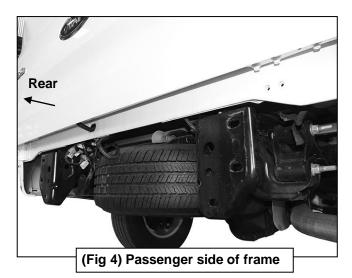
#### ECO-SERIES REAR BUMPER 2015-2016 FORD F150

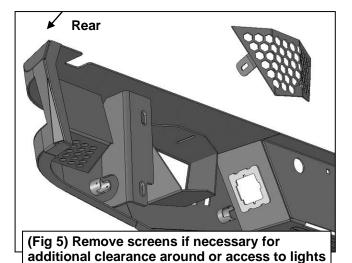
# **Passenger Side Installation Pictured**

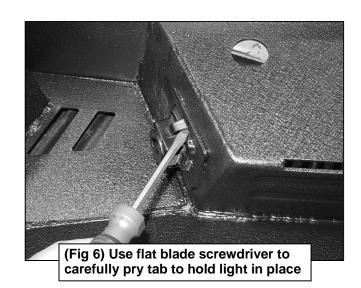


(Fig 3B) Remove the factory hex nuts attaching bumper assembly to frame. STD tow package model pictured (no receiver hitch)

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



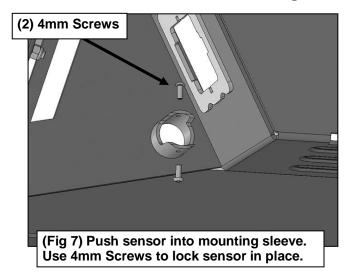




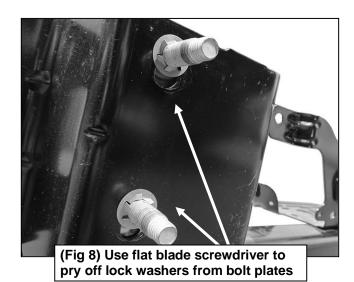
### **Passenger Side Installation Pictured**

14mm Plastic

Retainer



IMPORTANT: Sensors fit snug in sockets. The 4mm Screws are only 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.



Rear

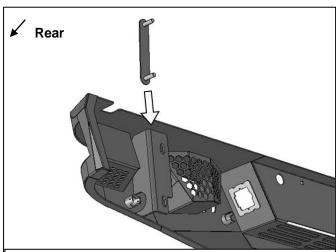
(Fig 9) Attach factory bolt plate to passenger/right Mounting Bracket

Factory triple bolt plate used with "HD tow" package with integrated receiver hitch

Factory double bolt late used on models w/o receiver hitch and "max

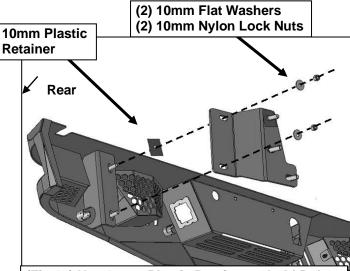
tow" frame mounted receiver hitch

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



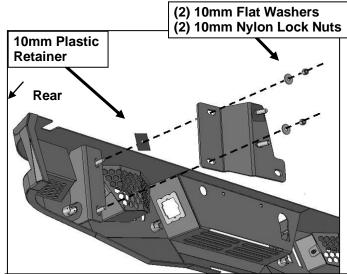
(Fig 10) Insert 10mm Double Bolt Plate into and through back of mounting tab on back of Bumper

### **Passenger Side Installation Pictured**

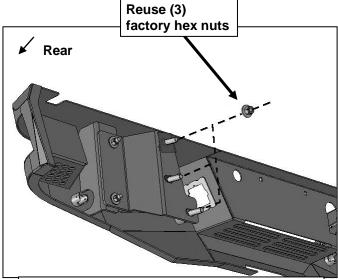


(Fig 11) Use 10mm Plastic Retainer to hold Bolt Plate in position. Note OE triple bolt plate in place

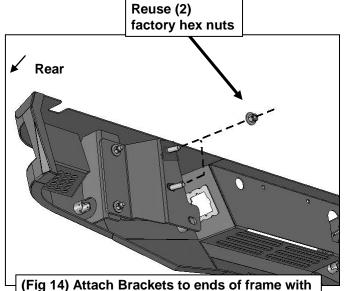
**WARNING!** Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.



(Fig 12) Use 10mm Plastic Retainer to hold Bolt Plate in position. Note OE double bolt plate in place



(Fig 13) Attach Brackets to ends of frame with factory hex nuts (triple bolt plate illustrated)



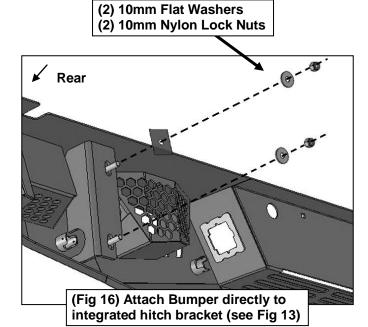
factory hex nuts (double bolt plate illustrated)

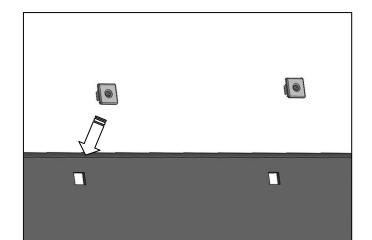
## **Passenger Side Installation Pictured**



(Fig 15) Reinstall integrated receiver hitch/bracket assembly on models with "HD Towing" package

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





(Fig 17) Push plastic plugs into holes for license plate

