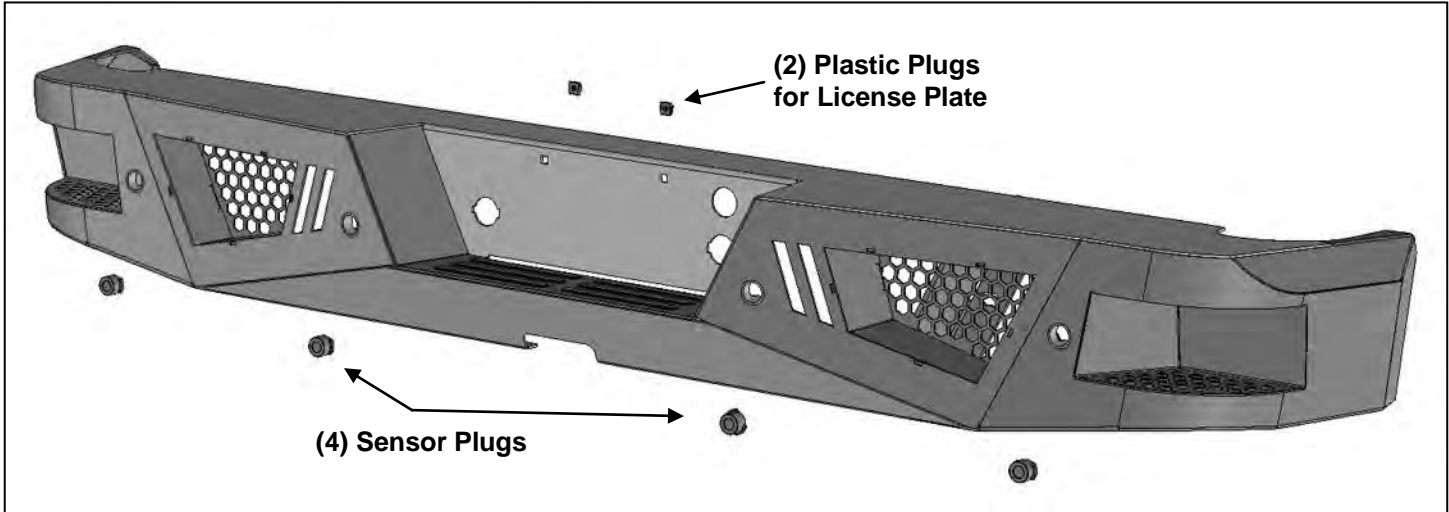


BODY ARMOR **4 X 4**

**ECO-SERIES REAR BUMPER
FOR FORD F150 06-14
#FD-2963**

PARTS LIST:

1	Rear LD1 Bumper Assembly	8	4mm x 10mm Button Head Bolts
4	Sensor Hole Plugs	1	4mm Wrench
2	Plastic Plugs for license plate mount	1	6mm Wrench
10	Nylon Wire Ties		



PROCEDURE:

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

BUMPER IS DESIGNED TO INSTALL ON MODELS WITH FACTORY TOW HITCH ONLY.

1. Release the clips attaching the license plate lights and remove the lights, **(Figure 1)**.
2. Remove the license plate from the bumper. 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, **(Figure 2)**. Move all wiring harnesses away from bumper.
3. 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 hex bolts attaching the outer bumper to the inner reinforcement or tow hitch, **(Figure 2)**. With assistance, move outer bumper to a clean surface. Next, remove the (6) hex nuts attaching the inner reinforcement or tow hitch to the end of the frame, **(Figure 3)**.
4. Remove the long bolt plates from the inner reinforcement or tow hitch. Insert the bolt plates into the LD1 Bumper, **(Figure 4)**. On models with factory tow hitch, slide the hitch into position against the Bumper and bolt plates, **(Figure 5)**. With assistance, position the Bumper Assembly, (and hitch), up to the mounting flanges on the end of the frame, **(Figure 6)**. **NOTE:** Bumper reinforcement, (models without receiver hitch only), cannot be reinstalled. Bumper is designed to install with factory tow hitch only.
5. Reuse the factory hex nuts to attach the Bumper to the ends of the frame, **(Figure 6)**. Do not tighten hardware.
6. Level and adjust the bumper and fully tighten all hardware.
7. Slowly lower tailgate and check for clearance. Adjust Bumper height as necessary.
8. Reinstall the license plate lights and trailer plug.
9. Use the included (2) push-in plugs to attach the license plate to the Bumper, **(Figure 7)**.

10. Models with bumper mounted sensors:

- a. Remove the rubber plugs from the sockets in the bumper assembly. Push the sensor in from the back of the bumper. Secure each sensor to the socket with (2) 4mm x 10mm Button Head Screws, **(Figure 8)**. **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.
- b. Reattach the factory wiring harness to sensors.

11. Attach the wiring harness to the lights and trailer plug.

12. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

13. **LED light installation at ends of bumper** as supplied with bumper or 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 screen from the back of the opening for additional clearance or access to light, **(Figure 9)**.
- b. 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.
- c. Repeat the above steps for passenger side light installation.
- d. Follow light manufacturer's instructions to properly wire the light.

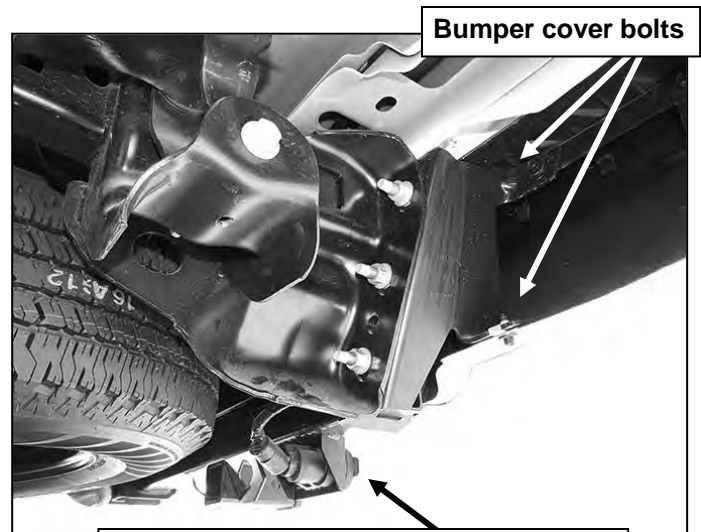
14. Use the included Wire Ties to secure the wiring harness to the bumper and frame as necessary.

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 Bumper assembly.



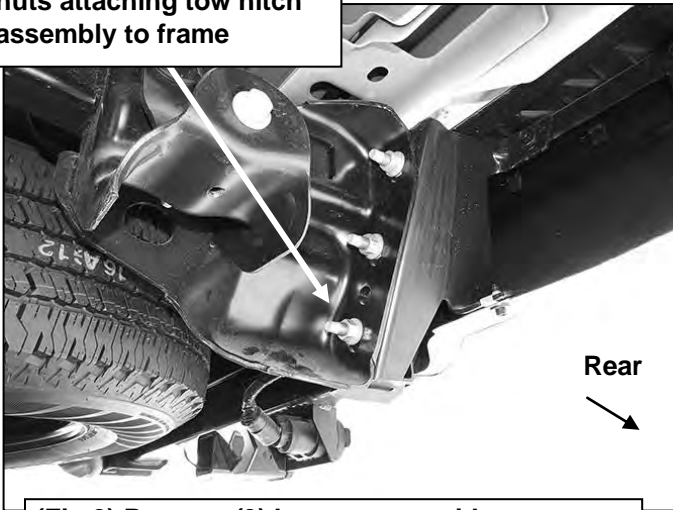
(Fig 1) Unplug license plate lights



(Fig 2) Unplug and remove 7-wire trailer plug and bumper sensors if equipped

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

Once cover is removed,
remove the (3) factory hex
nuts attaching tow hitch
assembly to frame



(Fig 3) Remove (3) hex nuts per side to remove bumper reinforcement or receiver hitch

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

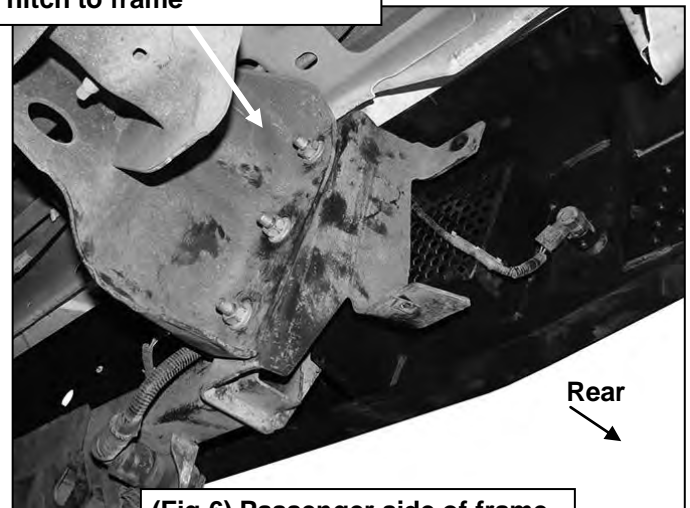


(Fig 4) On models without received hitch, reuse triple bolt plate to attach bumper to ends of frame

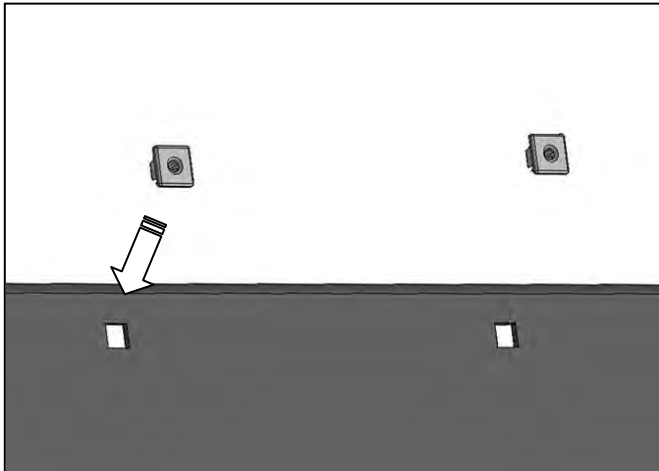


(Fig 5) On models with factory receiver hitch, slide Bumper up against the hitch. Insert triple bolt plates through bumper and hitch

Reuse factory hex nuts to
attach Bumper and receiver
hitch to frame

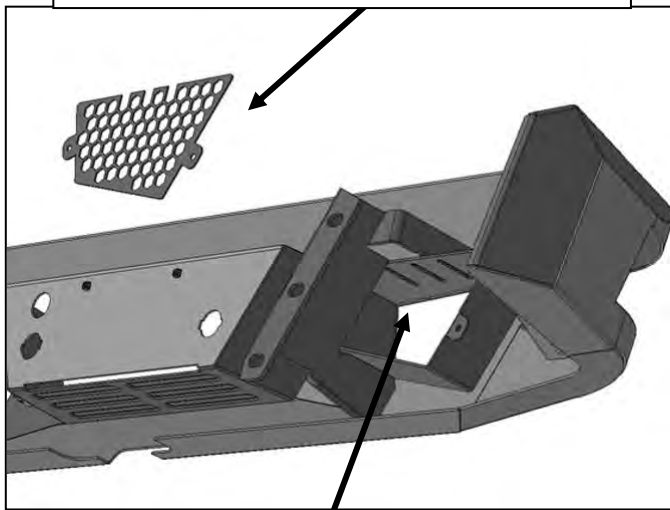


(Fig 6) Passenger side of frame



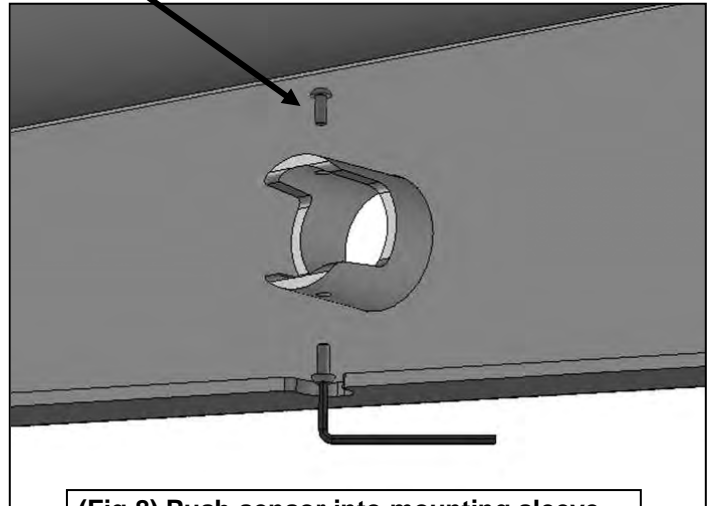
(Fig 7) Push plastic plugs into holes for license plate

Remove screens if necessary for additional clearance around or access to lights



(Fig 9) Attach single light to center slot or use inner and outer slots for dual lights

(2) 4mm Screws



(Fig 8) Push sensor into mounting sleeve. Use 4mm Screws to lock sensor in place.

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.



Complete Installation