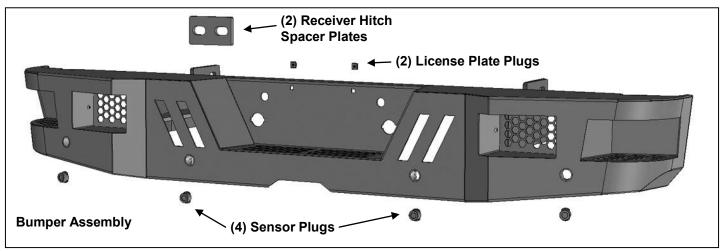


ECO-Series Rear Bumper | '99-'16 Ford Super Duty

PARTS LIST:

1	HD1 Rear Bumper Assembly	2	Plastic Plugs for license plate mount
2	2-hole Spacer Plates (for tow hitch only)	8	4mm x 10mm Socket Head Screws
4	Sensor Plugs	1	Wrench



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.

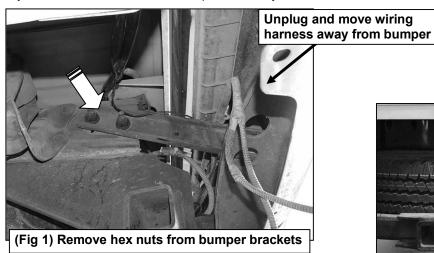
- 1. Remove the license plate and bracket. On models with back up sensors, unplug and remove the sensors. Unplug the factory license plate lights remove them from the bumper. Move the wiring harness away from the bumper, (**Figure 1**). On some models, it may also be necessary to temporarily move the trailer/towing wiring harness from the bottom of the hitch and move it away from the hitch.
- 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 (2) large hex nuts per side attaching the bumper brackets to the sides of the frame, (Figure 1). WARNING! Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling. Remove the double bolt plates and slide the bumper off of the end of the frame, (Figure 2).
- **3.** On models equipped with receiver hitch, first remove the (4) hex bolts, (2) per side, attaching the rear of the hitch to the bottom of the frame, **(Figure 3)**. Allow the hitch to tilt down slightly. If necessary, use stands or blocks to temporarily support the hitch. Next, <u>slightly loosen</u> but do not remove the (4) hex bolts, (2) per side, attaching the hitch at the front. **IMPORTANT**: Only remove the rear hardware.
- **4.** With assistance, position the HD Bumper Assembly up to the sides and end of the frame. Temporarily support the weight of the Bumper Assembly. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
- 5. Slide the mounting tab on the brackets on the Bumper between the hitch and the bottom of the frame. Line up the (2) holes in the passenger side vertical mounting plate with the (2) holes in the side of the frame. Reuse the factory double bolt plate and hardware to attach the bracket to the frame, (Figures 5 & 8). Leave hardware loose. Repeat to attach the driver side mounting bracket to the frame.
- **6.** Line up the hitch with the rear mounting holes toward the end of the frame and bottom mounting plate on the HD1 Bumper. Use the (4) factory hex bolts and nut plates to attach the hitch to the bottom mounting tabs, **(Figure 8)**. Leave hardware loose at this time.
- 7. With the rear of the hitch and the Bumper safely attached to the frame, remove the (4) hex bolts, (2) per side, attaching the hitch at the front. Select (1) 2-hole Space Plate, (Figure 6). Insert the Spacer between the forward mount on the passenger/right side of the hitch and the bottom of the frame, (Figures 7 & 8). Reuse the factory hex bolts to attach the hitch to the Spacer and frame. Repeat to install the Spacer on the driver/left side of the frame. Do not fully tighten the (4) front bolts at this time.
- 8. Level and adjust the bumper and fully tighten all hardware.



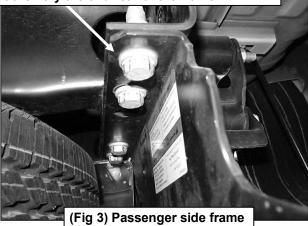
ECO-Series Rear Bumper | '99-'16 Ford Super Duty

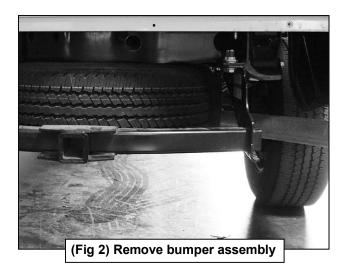
- 9. Reattach the wire harness to the bottom of the tow hitch of removed.
- 10. Select the (2) factory license plate lights. Push the lights into the holes in the Bumper.
- **11.** Use the included (2) push-in plastic nuts to attach the license plate, (if required), to the (2) holes in the Bumper Assembly, **(Figure 9)**.
- 12. Remove screens in light housings for more room around lights as needed, (Figure 10).
- 13. 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 11). 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.
- **14.** Reattach all wiring harnesses and use the included Wire Ties to secure the wiring harness to the bumper and frame.
- **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 HD1 Bumper assembly.



Remove only the (4) factory bolts (2 per side) at the very the end/rear of the frame.



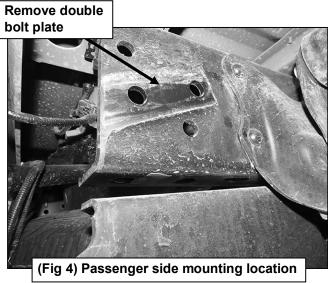


WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or the bumper may fall.



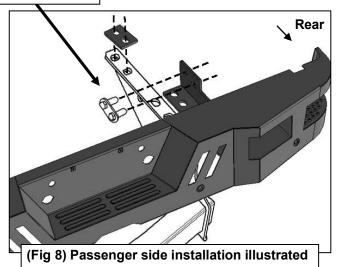
ECO-Series Rear Bumper | '99-'16 Ford Super Duty

Passenger/right Side Installation Pictured

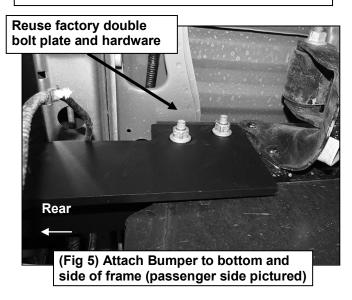


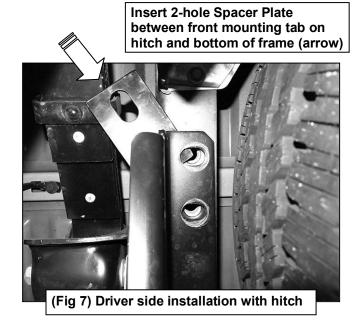


Factory double bolt plate



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

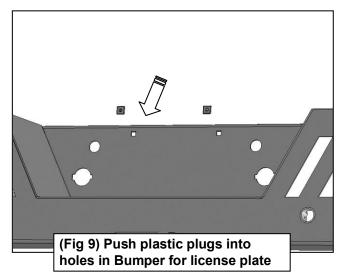




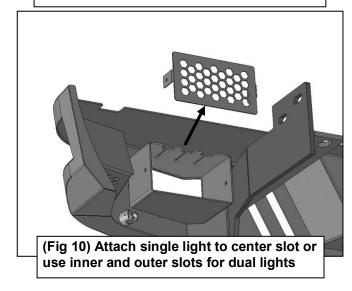


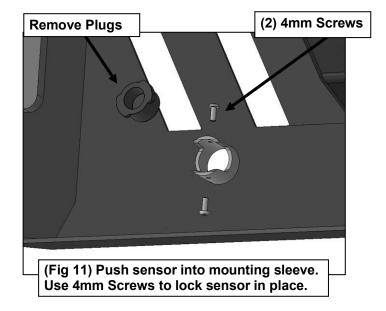
ECO-Series Rear Bumper | '99-'16 Ford Super Duty

Passenger/right Side Installation Pictured



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









ARMOR GUARD WARRANTY

3-YEAR FINISH | LIMITED LIFETIME

WARRANTY POLICY & PROCEDURE

Contact your Body Armor 4x4 Distributor or Body Armor 4x4 directly regarding any issue prior to removing product from vehicle. If it appears said product is warrantable, you will be given a Return Authorization Number (RA #) and asked to return said product freight pre- paid. The RA # must appear on the outside of the carton/box of any returned product. Unauthorized returns will be refused. RA # must be given by Body Armor 4x4 in advance of return.

BODY ARMOR LIMITED LIFETIME WARRANTY

Body Armor 4x4 (BA) warrants to the original purchaser that

these products will be free from defects in material and workmanship prior to shipping and/or installation for the life of the product. This non-transferable limited lifetime warranty does not cover damage or impairment in any part due to misuse, improper installation, accident or contact with on-road or off-road hazards, product modification, improper or inadequate cleaning and/or maintenance. All other warranties and representations express or implied are hereby disclaimed, including fitness for merchantability and buyer's intended use or purpose.

BA products are built and sold for highway and off-road use. The original purchaser assumes all risks as to the selection, suitability and performance of all goods and products purchased.

BA's sole and exclusive obligation under this warranty shall be to repair or replace the item(s) and their discretion and BA will not issue any credit or refund to the consumer. Proof of purchase is required on all warranty claims. BA may require pictures to diagnose the warranty claim and may require the product(s) be returned if determined by BA to be necessary. If a return is required then a RGA number will be issued by BA. Any item arriving to BA without a valid

RGA number will be refused and sent back. Upon evaluating the RGA and no valid warranty claim is made, the RGA will be returned to the consumer at their expense or disposed by BA after 60 days. BA will not be responsible for incidental charges such as removal, installation, shipping costs or lost during transit. Any items that are ordered in error, refused or cancelled are not considered a valid warranty claim and cannot be returned to BA.

WARRANTY PROCESS

Contact an authorized BA dealer to initiate warranty process. Authorized dealers must contact BA to assist in evaluating the warranty claims. Valid warranties will have a RGA issued. Once issued the dealer will request the product be returned to BA facilities. Products purchased through an authorized BA dealer will be refunded and/or credited by that BA dealer.

Warranty contact: orders@bodyarmor4x4.com

Return address: Body Armor 4×4, 1050 N. Vineyard Ave. Ontario CA, 91764, P: 951-808-0750

FINISH WARRANTY

The finish is warranted to be free of defects for a period of 3 years from date of purchase. Product(s) that have been abused, altered, incorrectly installed or used in competition are void of said warranty. Surface rust, pitting or discoloration is a direct result of improper maintenance is not covered by this warranty. It is the responsibility of the owner to preserve and maintain the finish of their product(s). In areas where high concentrations of road salts and other corrosive agents are used, rust or damage to the finish may occur if BA product(s) are not properly maintained. Lack of proper maintenance in these areas may void the finish warranty. See below for routine maintenance tips and recommendations.



PRODUCT CARE AND MAINTENANCE

Textured coat finished should be cleaned ONLY with a mild soup on a damp sponge.

BA recommends wiping down the product with a light coat of lubricate (i.e. WD40) periodically to maintain its luster.

DO NOT apply polish or wax that requires buffing for removal as this may damage the finish.

DO NOT coat the product with any type of shine such as Tire Shire or glossy aerosol or gel. This can cause discoloration, staining or bubbling.