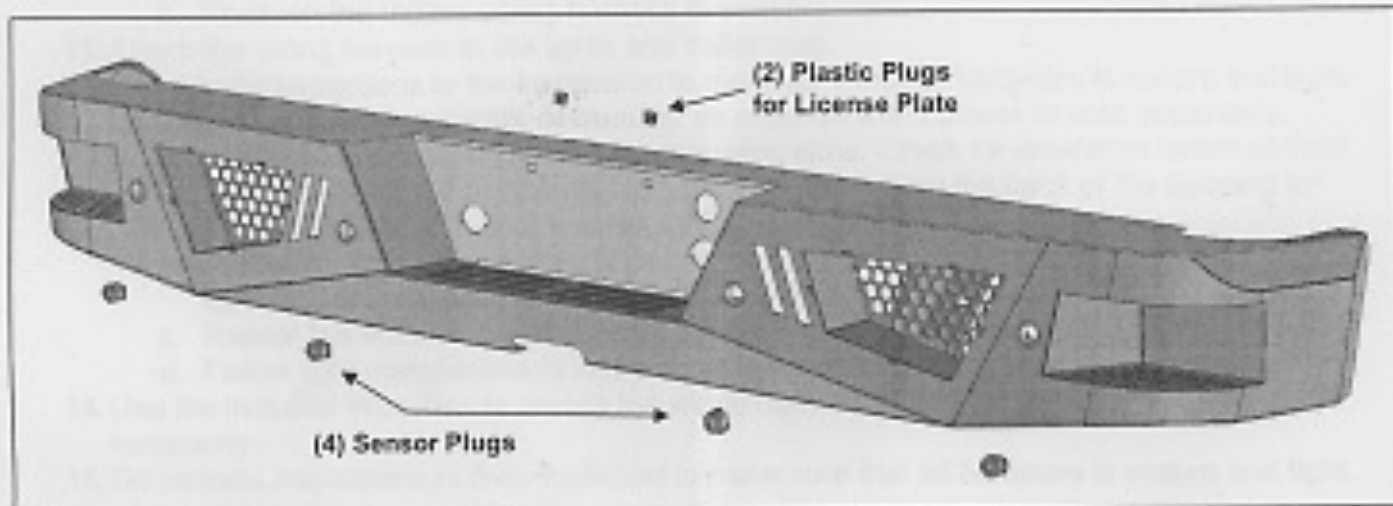




## 2009-2014 Ford F150 Extreme HD Rear Bumper

### 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.

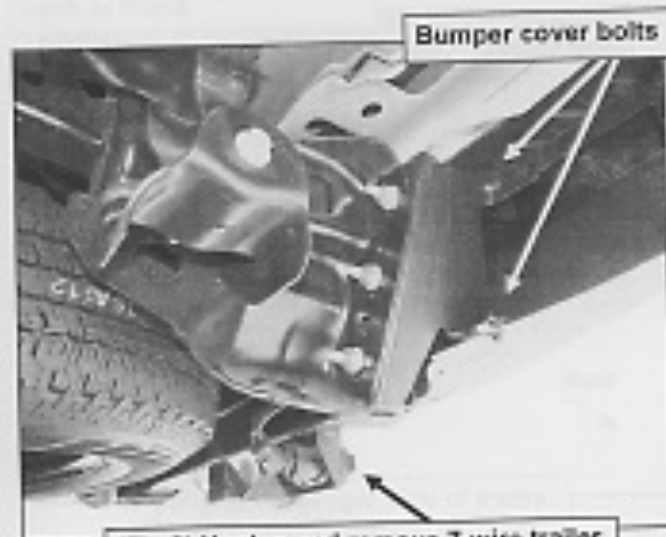
7. Slowly lower tailgate and check for clearance. Adjust Bumper height as necessary.
8. Reinstall the license plate lights and trailer plug.
9. Use the included (2) push-in plugs to attach the license plate to the Bumper, (Figure 7).
10. Models with bumper mounted sensors:
  - a. Remove the rubber plugs 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 overlighten 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

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

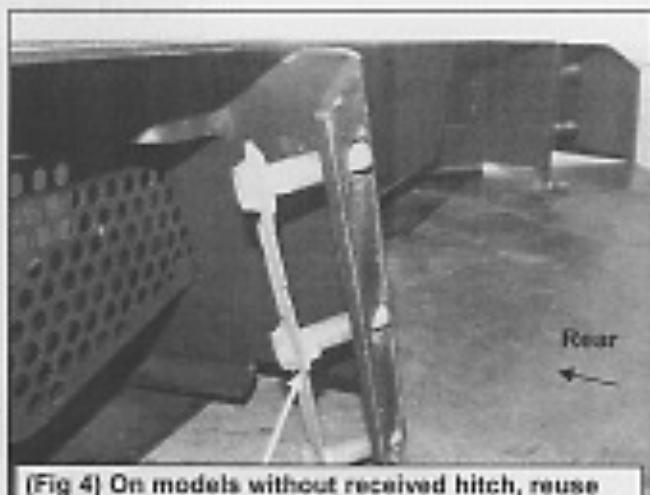


(Fig 2) Unplug and remove 7-wire trailer plug and bumper sensors if equipped

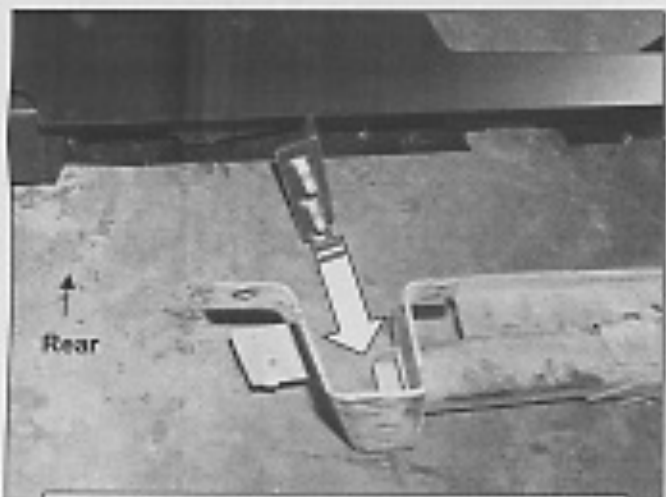
Once cover is removed, remove the (3) factory hex nuts attaching tow hitch assembly to frame



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



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

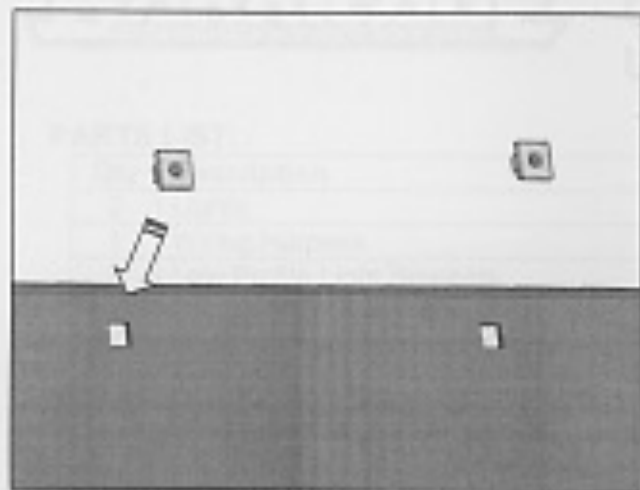


(Fig 5) On models with factory receiver hitch, slide Bumper up against the hitch. Insert triple bolt plates through bumper and hitch

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

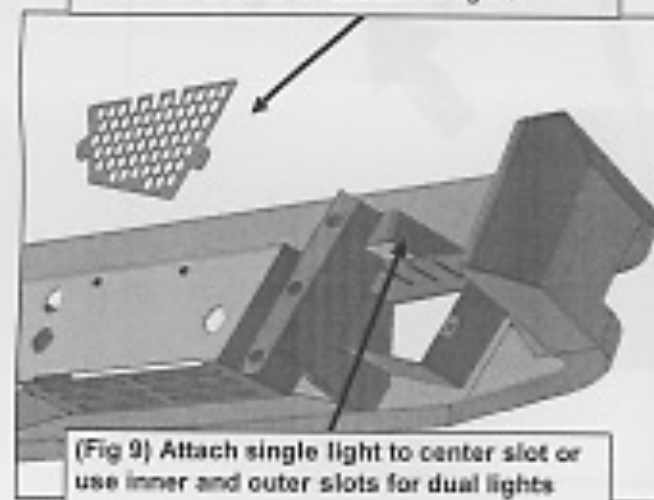


(Fig 6) Passenger side of frame



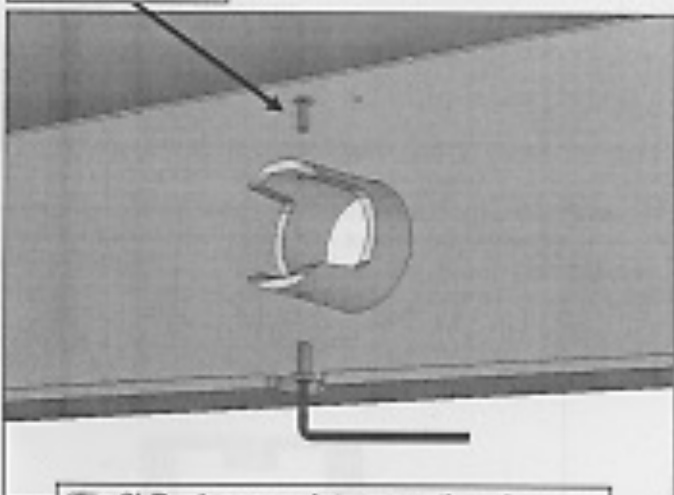
(Fig 7) Push plastic plugs into holes for license plate

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.



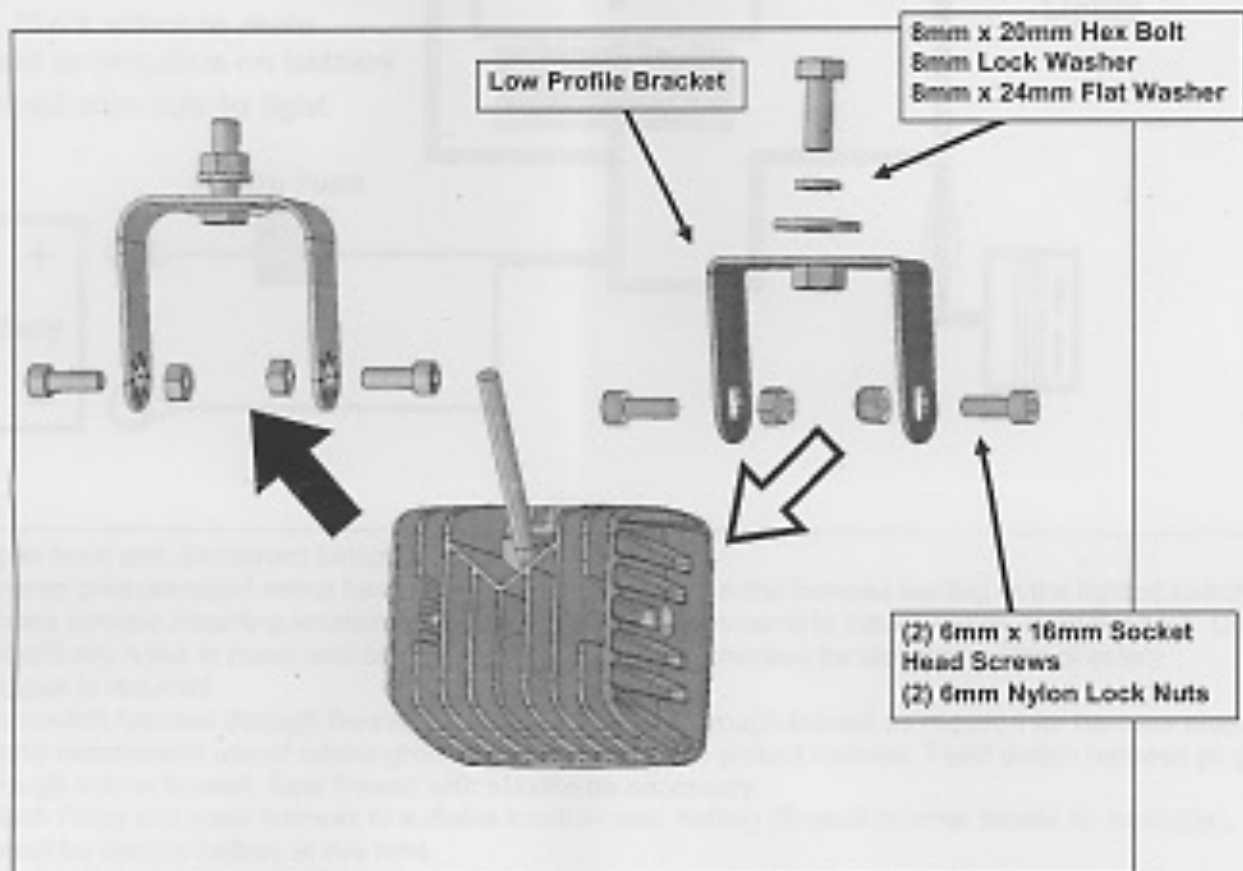
Complete Installation



## Optional: Universal Extreme HD Lights

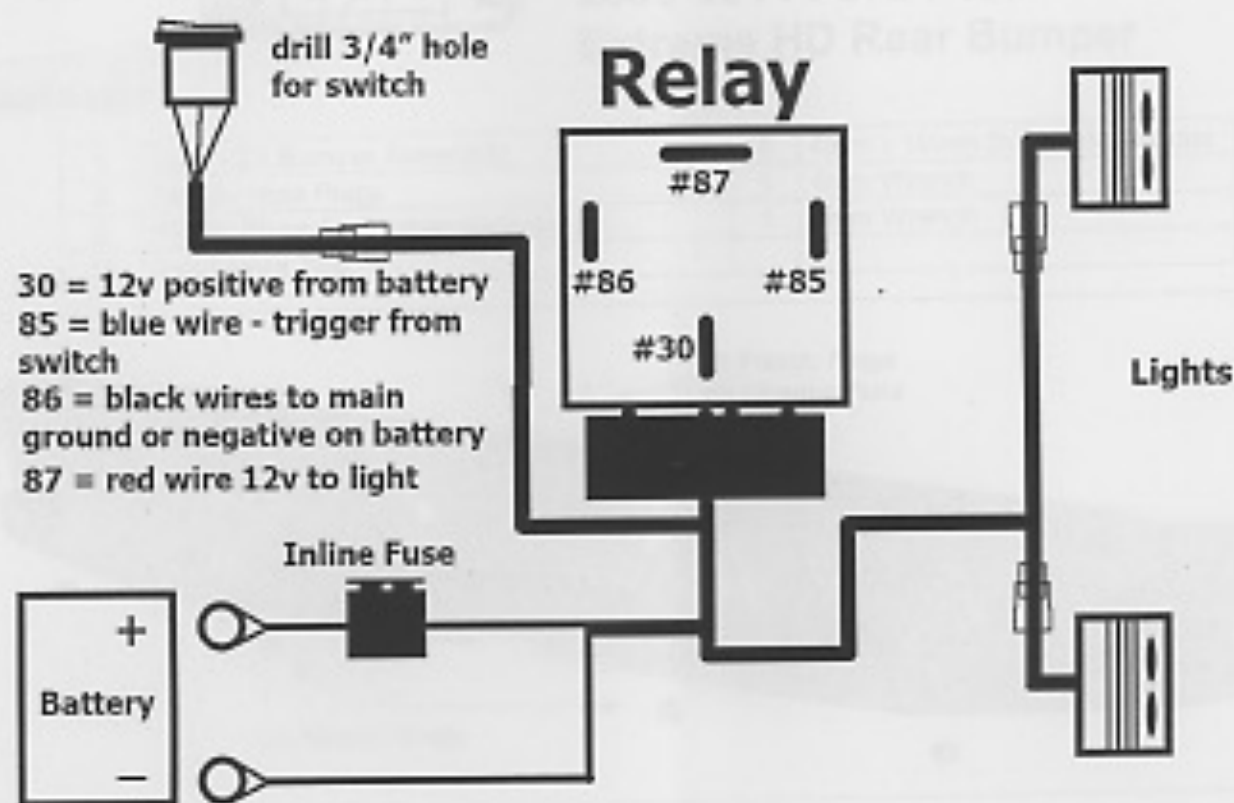
### PARTS LIST:

Qty	Description	Qty	Description
2	Lights	2	8mm Lock Washers
1	Wiring Harness	4	6mm x 16mm Socket Head Cap Screws
2	Low Profile Light Brackets	4	6mm Nylon Lock Nuts
2	8-1.25mm x 20mm Hex Bolts	1	Wrench
2	8mm x 24mm x 2mm Flat Washers	4	6mm x 16mm Socket Head Cap Screws



### PROCEDURE:

1. REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY. DRILLING IS REQUIRED. ELECTRICAL KNOWLEDGE IS HIGHLY RECOMMENDED.
2. Select (1) Light. Remove the factory installed bracket and hardware from the light.
3. Slide (2) 6mm Nylon Lock Nuts into the slots in the back of the light. Select (1) Low Profile Bracket. Attach the Bracket to the light with the included (2) 6mm Socket Head Screws. Snug but do not fully tighten hardware at this time.
4. Insert the light into the opening in the bumper and up to the slots in the top of the opening. Attach the light and bracket to the top of the opening with (1) 8mm x 20mm Hex Bolt, (1) 8mm Lock Washer and (1) 8mm x 24mm Flat Washer. Snug but do not fully tighten hardware at this time. **NOTE:** The screen attached to the back of the opening in the bumper is removable (see instructions for bumper installation). Depending on light size and quantity to install, it may be necessary to remove the screen before installation for best results. Repeat Steps as necessary for all light installations.



5. Open hood and disconnect battery.
6. 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.
7. 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.
8. Attach Relay and main harness to suitable location near battery (firewall or inner fender for example). Do not connect to battery at this time.
9. Attach switch plug to switch harness and tie harness away from anything that could damage harness.
10. Run the prewired light harness down to the light. Plug harness into prewired plug on each light. Tie wiring harness away from anything that could damage harness.
11. 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.
12. Reattach battery cables to battery. Installation is complete.
13. Adjust lights for best results and fully tighten all hardware.
14. 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.