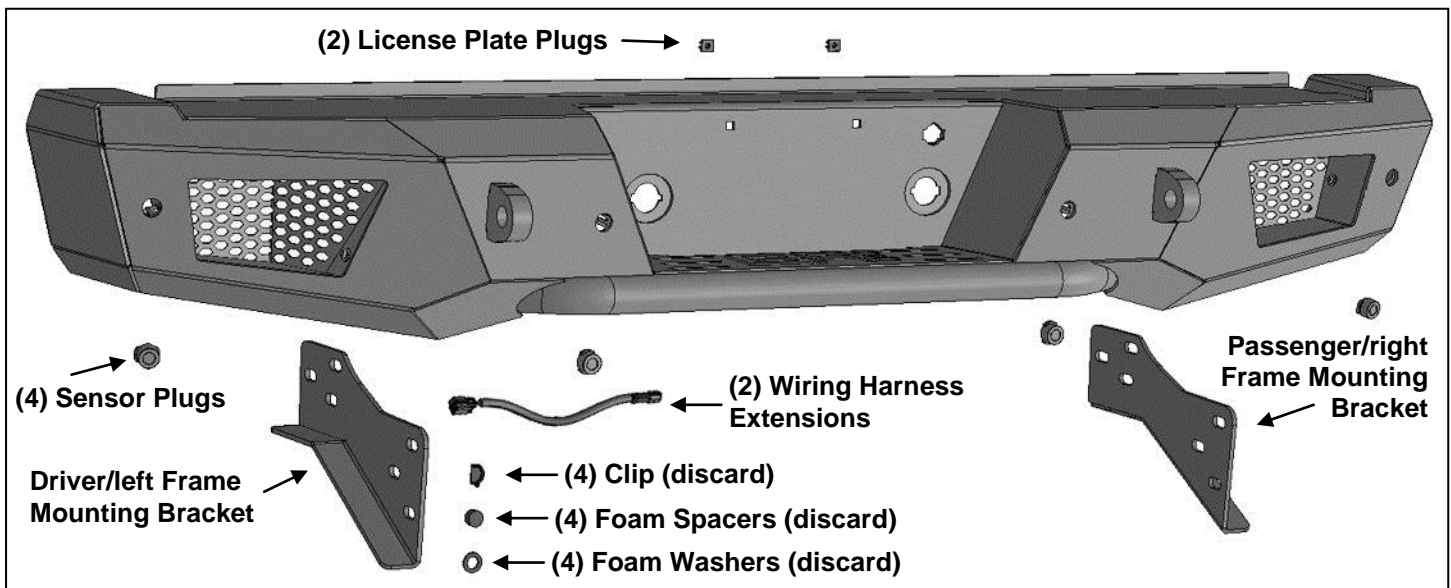


## 1999-2016 F250/350 SUPER DUTY AMBUSH REAR BUMPER PART #FD-3164

### PARTS LIST:

1	Ambush Rear Bumper Assembly	8	12-1.75mm x 35mm Hex Bolts
1	Driver/left Frame Bracket	12	12mm x 37mm x 3mm Large Flat Washers
1	Passenger/right Frame Bracket	4	12mm x 24mm x 2.5mm STD Flat Washers
4	Sensor Retaining Clips	8	12mm Hex Nuts
4	Foam Spacers	2	Plastic Plugs for license plate mount
4	Foam Washers	4	4mm x 10mm Socket Head Screws
4	Sensor Plugs	1	2.5mm Wrench
2	Wiring Harness Extensions	10	Plastic Wire Ties
1	Sensor Cover Kit	8	12mm Lock Washer



### 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 move the wiring harness leading to 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, (**Figures 2 & 3**).
3. Select the driver/left Frame Mounting Bracket, (**Figure 4**). Reuse the factory double bolt plate and hardware to attach the bracket to the side of the frame, (**Figure 5**). Attach the top of the Bracket to the hole in the frame with the included (1) 12mmx 35mm Hex Bolt, (2) 12mm x

24mm STD Flat Washers, (1) 12mm Lock Washer and (1) 12mm Hex Nut. Leave hardware loose. Repeat this **Step** to attach the passenger/right Mounting Bracket to the frame.

4. Remove the license plate lights, spare tire access lock, wiring harness and parking sensors as equipped, from the factory bumper, **(Figure 6)**.
5. Determine if the vehicle is equipped with sensors.

**Models without bumper sensors:**

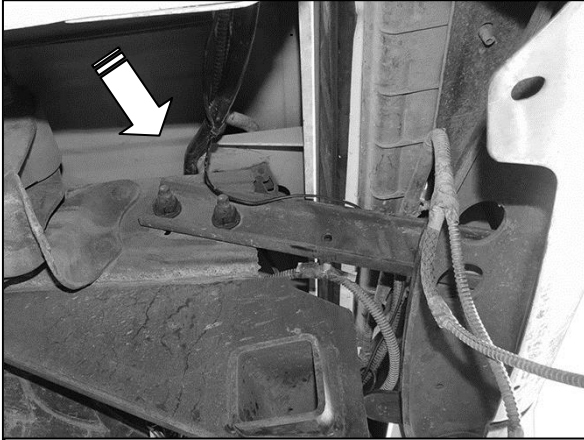
- a. Select the included (4) Rubber Plugs, **(Figure 7)**.
- b. From behind bumper, push plugs into sensor mounting sleeves, **(Figure 7)**. Insert the included 4mm x 10mm Screws to lock the plugs into the sleeves.

**Models with bumper mounted sensors:**

- a. Select (1) sensor. Test fit sensor in mounting sleeve. It may be necessary to cut or grind off the tabs on the sides of the sensor to fit into the sleeve.
- b. Insert the sensor into sensor mount, **(Figure 8)**.
- c. Secure each sensor to the sleeve with (1) 4mm x 10mm Button Head Screw, **(Figure 8)**.  
**IMPORTANT:** Sensors fit snug in sockets. The 4mm Screws are used to apply slight pressure to lock the sensors in place. Do not overtighten screws or damage to sensors will result.
- d. Repeat previous **Steps** to install remaining sensors.
6. Select the (2) factory license plate lights and spare tire access lock. Attach the lock to the Ambush Bumper. Push the lights into the holes in the Bumper, **(Figure 9)**.
7. Install the factory wiring harness, **(Figure 9)**. Plug the harness into the lights and sensors if equipped. **NOTE:** Use the included (2) Wiring Harness Extensions to reach the outer sensors if necessary.
8. **LED light installation at end of bumper**, (lights sold separately).
  - a. Insert light into the driver/left side opening and up to mounting slot, **(Figure 10)**. 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 10)**.
  - b. Follow the light manufacturer's instructions to attach the light.
  - c. Repeat the above **Steps** for passenger/right side light installation.
  - d. Follow light manufacturer's instructions to properly wire the light to vehicle electrical system.
9. With assistance, position the Ambush Bumper Assembly up to the inside of the Frame Brackets. 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.
10. Attach the driver/left mounting plate on the back of the Bumper to the inside of the Frame Bracket with the included (3) 12mm Hex Bolts, (6) 12mm Large Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, **(Figure 11 & 12)**. Snug but do not fully tighten hardware. Repeat this **Step** to attach the passenger/right side of the Bumper to the Bracket.
11. Level and adjust the bumper and fully tighten all hardware.
12. Reattach the wire harness to the bottom of the tow hitch of removed.
13. Plug the Bumper wiring harness into the vehicle. Use the included Wire Ties to secure the wiring harness to the Bumper and frame.
14. Use the included (2) push-in Plastic Plugs to attach the license plate, (if required), to the (2) holes in the Bumper Assembly, **(Figure 13)**.
15. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

To protect your investment, 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 Ambush Bumper assembly.

## Driver/left Side Installation Pictured

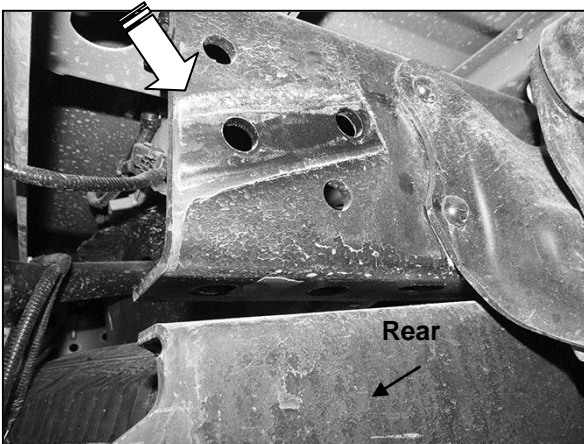


(Fig 1) Remove hex nuts from bumper brackets Unplug and move wiring harness away from bumper

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

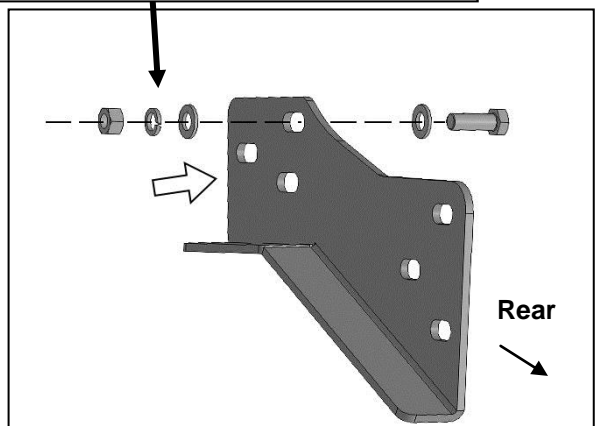


(Fig 2) Remove bumper assembly



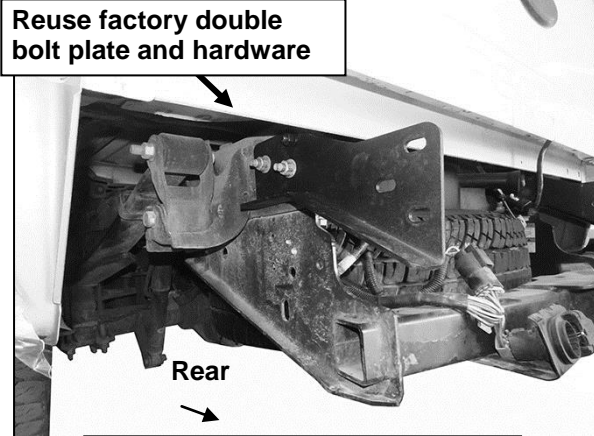
(Fig 3) Remove double bolt plates (arrow). Passenger/right side of frame pictured

- 12mm x 35mm Hex Bolt
- (2) 12mm x 24mm STD Flat Washers
- 12mm Lock Washer
- 12mm Hex Nut



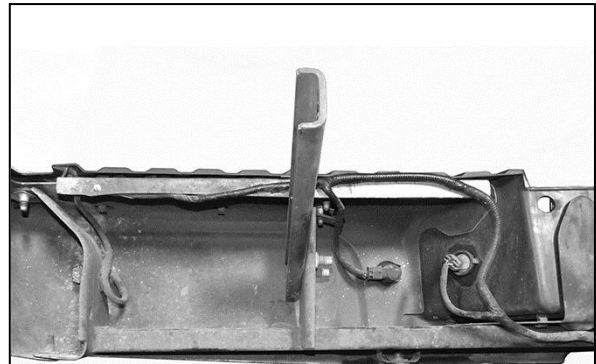
(Fig 4) Reuse the factory double bolt plates to attach the Mounting Brackets to the side of the frame (arrow). Use the included 12mm Hardware to attach top of Bracket to hole in frame

## Driver/left Side Installation Pictured

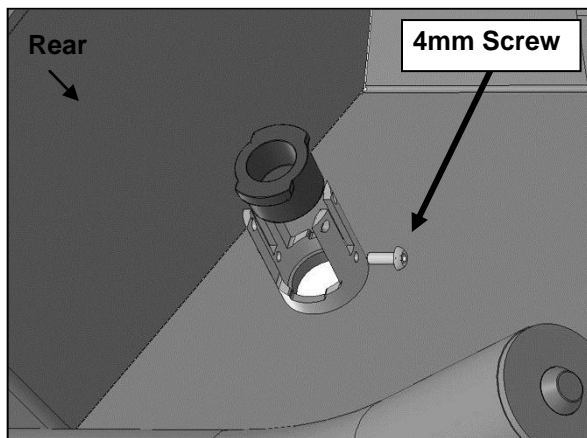


(Fig 5) Driver/left side Mounting Bracket installed

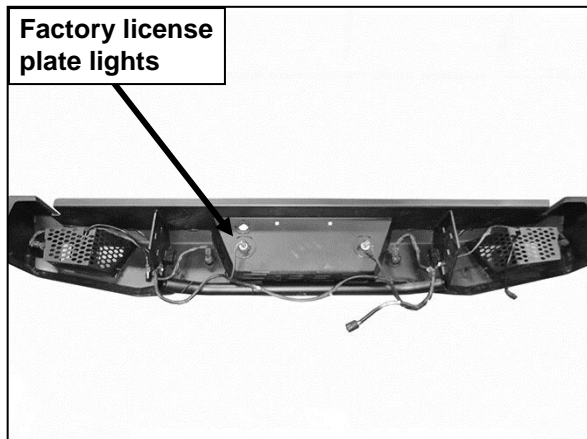
**WARNING!** Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.



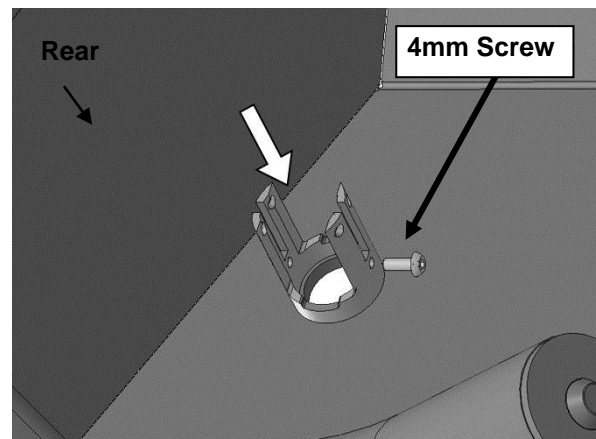
(Fig 6) Remove license plate lights, wiring harness and parking sensors from factory bumper as equipped



(Fig 7) Models without parking sensors, push Plugs into sensor mounts on back of Bumper

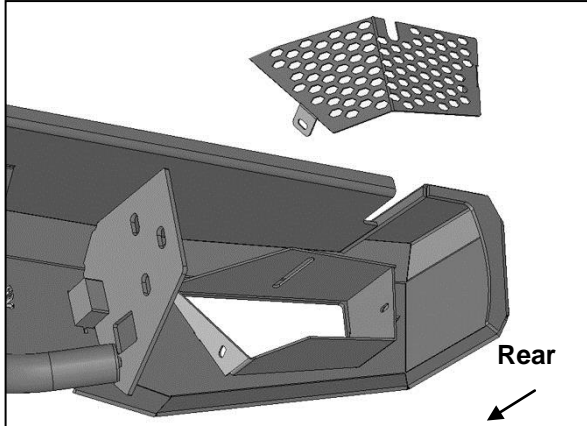


(Fig 9) Attach spare tire access lock, license plate lights and wiring harness to Bumper. Plug harness into sensors if equipped

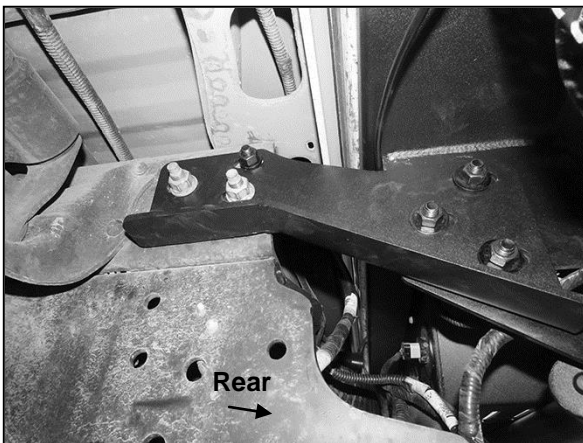


(Fig 8) Push sensor into mounting sleeve. Use 4mm Screw to hold sensor in place.

## Driver/left Side Installation Pictured



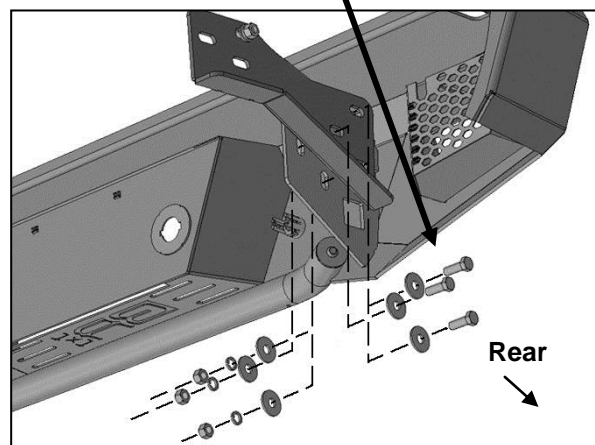
(Fig 10) Attach light to slot. Remove screens if necessary for additional clearance around or access to lights



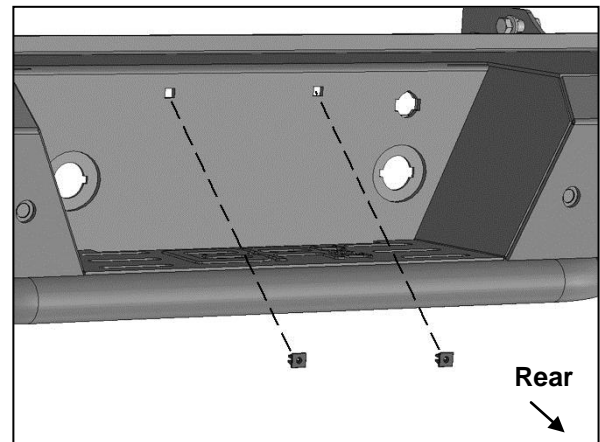
(Fig 12) Driver/left side installation pictured

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

- (3) 12mm x 35mm Hex Bolts
- (6) 12mm x 37mm Large Flat Washers
- (3) 12mm Lock Washers
- (3) 12mm Hex Nuts



(Fig 11) Attach driver/left side of Bumper to inside of Mounting Bracket



(Fig 13) Push plastic plugs into holes in Bumper for license plate



Complete Installation