

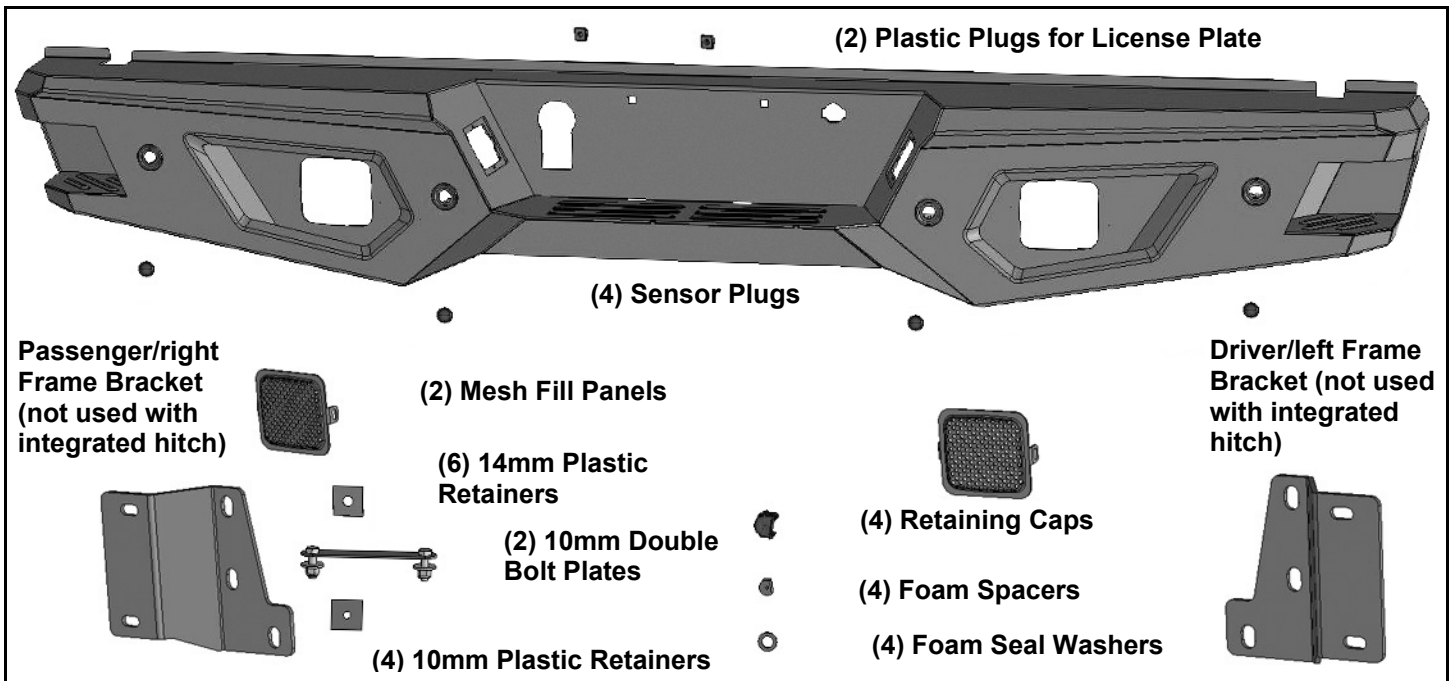


INSTALLATION INSTRUCTIONS

**LD2 REAR BUMPER
2015-18 FORD F150**

PARTS LIST: X3B-FORD31-RB

1	LD2 Rear Bumper Assembly	4	10mm Plastic Retainers
1	Driver/left Mounting Bracket	2	10mm x 35mm Double Bolt Plates
1	Passenger/right Mounting Bracket	4	10mm x 30mm x 2.5mm Flat Washers
2	Mesh Fill Panels	4	10mm Nylon Lock Nuts
2	Plastic Plugs for license plate mount	4	6mm Button Head Combo Bolts
4	Sensor Plugs	4	6mm Flange Nuts
4	Sensor Retaining Caps	8	4mm Self Tapping Screws
4	20mm x 10mm Foam Spacers	1	4mm Wrench
4	15.5mm x 25mm x 2mm Foam Washers	10	Nylon Wire Ties
6	14mm Plastic Retainers	1	Sensor Covers Kit



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, **(Figure 2)**. Unplug the wiring harness leading to the bumper. Move wiring harness 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 the wiring harness, license plate lights, trailer plug and spare access lock from the factory bumper. Remove sensors, (if equipped), from bumper.

4. Determine correct procedure for your model.

Models without bumper sensors:

- a. From the front of the bumper, push the included Plastic Plugs into sensor mounting holes, **(Figure 5)**.
- b. Install wiring harness from factory bumper.

Models with bumper mounted sensors:

- a. Select (1) sensor. Remove the silicone seal from the end of the sensor, **(Figure 6)**.
- b. Slide the included larger Foam Sensor Seal over front of sensor, **(Figure 6)**.
- c. Insert sensor with Seal into sensor mount in LD2 Bumper, **(Figure 7)**.
- d. Place Thick Foam Spacer over end of sensor. Push Sensor Retaining Cap onto sensor mount and lock into mounting holes, **(Figure 7)**.
- e. Repeat previous **Steps** to install remaining sensors.
- f. Install wiring harness from factory bumper.

5. **Determine if accessory lights, (not included), or Mesh Fill Panels will be installed.**

Mesh Fill Panel Installation (do not install fill panels if installing lights).

- a. Select the Fill Panels, **(Figure 8)**.
- b. Attach Panels to mounting tabs on back of Bumper with the included 6mm Combo Bolts and 6mm Flange Nuts, **(Figure 8)**. Fully tighten Fill Panel hardware at this time.

LED cube style light installation (light not included).

- a. Attach lights to mounting tabs on back of each end of the Bumper, **(Figure 8)**.

6. Install the license plate lights, spare access lock and trailer plug to the LD2 Bumper. **NOTE:** Use a flat blade screwdriver to carefully pry the metal clips out on the plug to grab the edge of the opening. Plug the bumper harness into the lights, trailer plug and sensors, (if equipped).
7. Select (1) 10mm Double Bolt Plate and (2) 10mm Plastic Retainers, **(Figure 9)**. Insert the Double Bolt Plate into and through the back of the mounting tab on the LD2 Bumper. Thread the Retainers down onto the Bolt Plate to help hold it in position, **(Figure 9)**. Repeat this **Step** to install the driver/left 10mm Double Bolt Plate.
8. 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 10)**. **NOTE:** "HD" tow package models use a triple bolt plate, "Standard" and "Max Duty" equipped models use a double bolt plate.

9. **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, (2 or 3-bolt), into the passenger/right Mounting Bracket. Thread, (2 or 3), 14mm Plastic Retainers onto the bolt plate to help hold it in position during Bumper installation, **(Figure 11)**.
- b. Attach the passenger/right Mounting Bracket assembly to the 10mm Double Bolt Plate in the back of the Bumper with (2) 10mm Flat Washers and (2) 10mm Nylon Lock Nuts, **(Figure 12)**. Snug but do not fully tighten hardware at this time.
- c. Repeat the previous **Steps** to install the driver/left side Bolt Plate and Bracket.
- d. With assistance, hold the LD2 Bumper assembly up to the end 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.
- e. Reuse the factory hex nuts to attach the LD2 Bumper Brackets with bolt plates to the frame, **(Figures 13 & 14)**. Snug but do not fully tighten hardware at this time.

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

- a. Remove integrated receiver hitch and bracket assembly from back of factory bumper.
- b. Use factory hardware to reinstall receiver/bumper bracket assembly to mounts on end of frame, **(Figure 15)**. Snug but do not fully tighten hardware at this time.

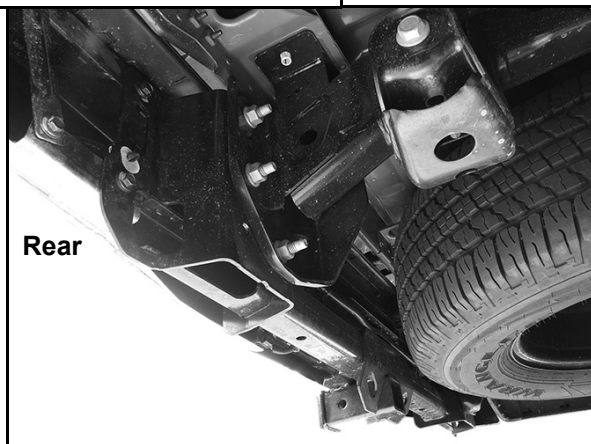
- c. With assistance, attach the Bumper assembly to the receiver/bumper bracket assembly with (4) 10mm Flat Washers and (4) 10mm Nylon Lock Nuts, **(Figure 16)**. Temporarily support the weight of the Bumper. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported. Snug but do not fully tighten hardware at this time.
10. Level and adjust the bumper and fully tighten all hardware.
 11. Plug the bumper wiring harness into the main harness. Use the included Wire Ties to secure the wiring harness to the bumper and frame as necessary.
 12. Do periodic inspections to the installation to make sure that all hardware is secure and tight.
 13. Use the included (2) Push-in Plugs to attach the license plate to the Bumper, **(Figure 17)**.
 14. 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 Bumper assembly.

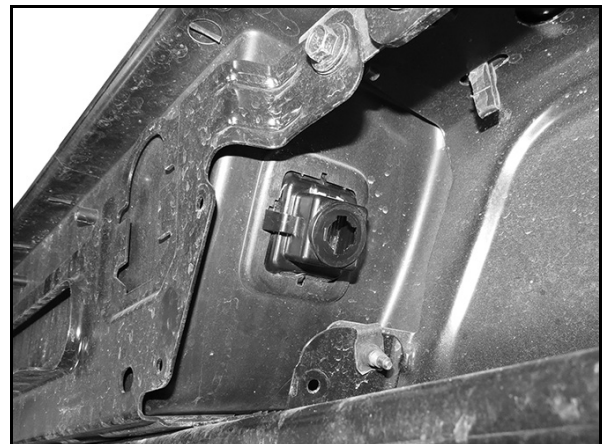


(Fig 1) Unplug and remove 7-wire trailer plug

Remove the factory hex nuts attaching bumper assembly to frame



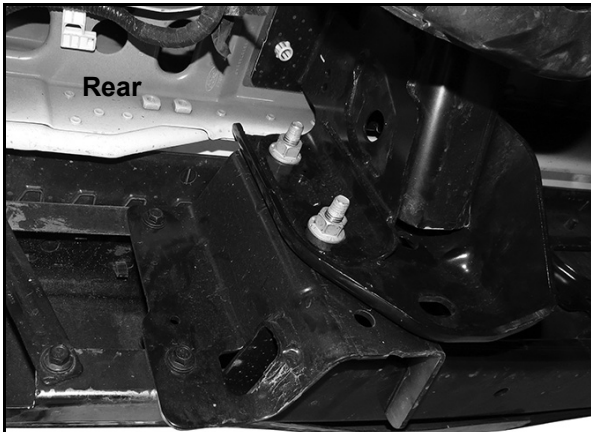
(Fig 3A) Note bumper with integrated receiver hitch



(Fig 2) Unplug license plate lights

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

Passenger/right Side Installation Pictured

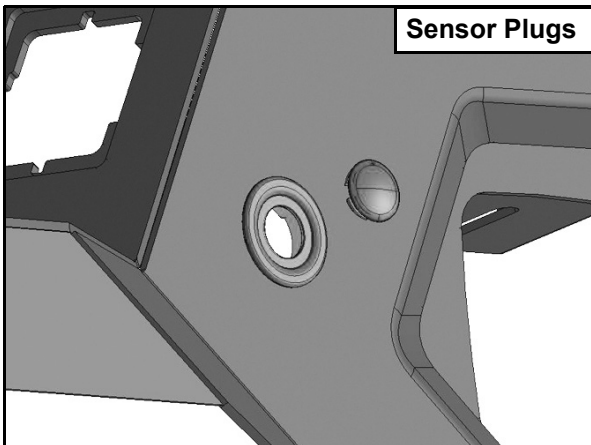


(Fig 3B) Remove the factory hex nuts attaching bumper assembly to frame. STD tow package model pictured (no receiver hitch)

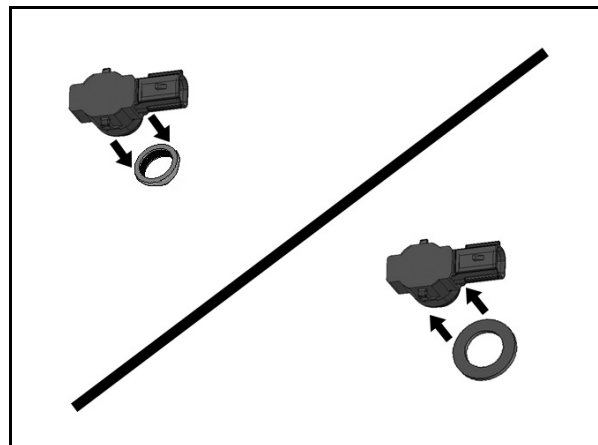
WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or it may fall.



(Fig 4) Bumper removed. Passenger side pictured without receiver hitch



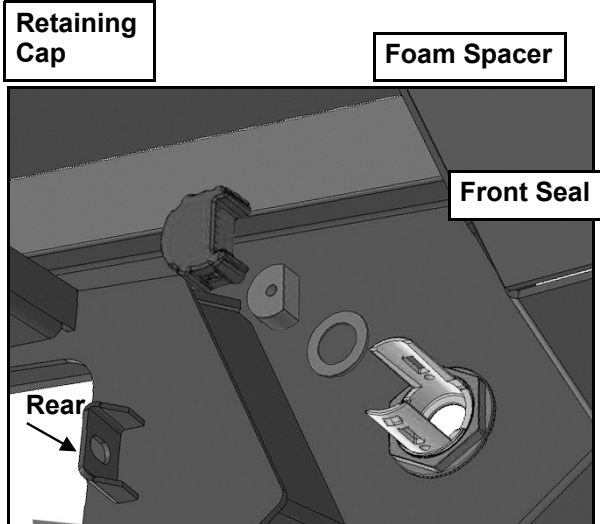
(Fig 5) Models without sensors, push Plug into Sensor Mount



(Fig 6) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

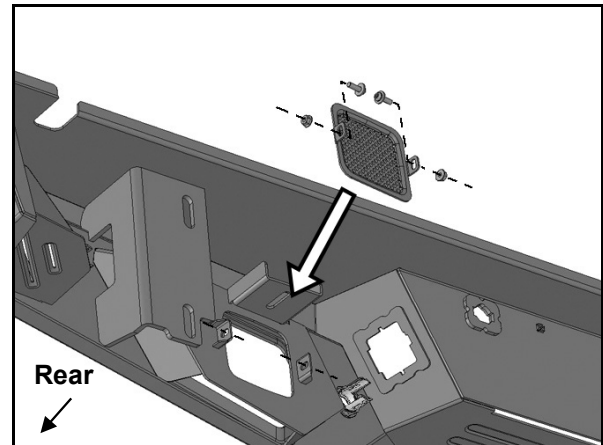
(Fig 6) Use flat blade screwdriver to carefully pry tab to hold light in place

Passenger/right Side Installation Pictured



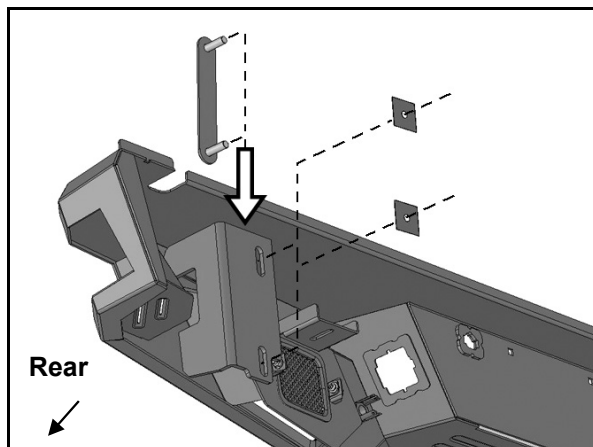
(Fig 7) Insert sensor with Foam Seal into sensor Mount. Place Foam Spacer onto sensor. Snap Cap onto sensor and Mount

(2) 6mm Button Head Combo Bolts
(2) 6mm Flange Nuts

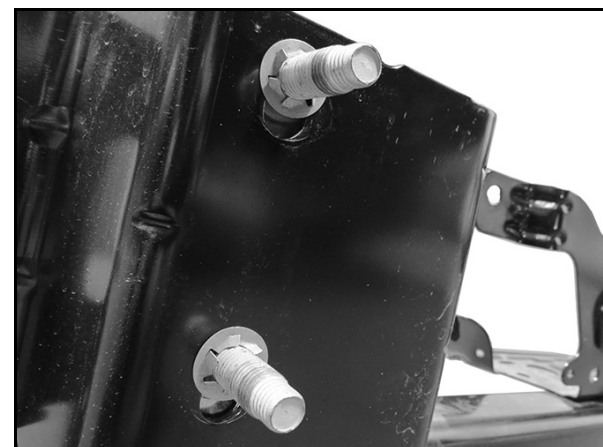


(Fig 8) Attach Mesh Fill Panels if desired

10mm Plastic Retainer



(Fig 9) Insert 10mm Double Bolt Plate into and through back of mounting tab on back of Bumper



(Fig 10) Use flat blade screwdriver to pry off lock washers from bolt plates

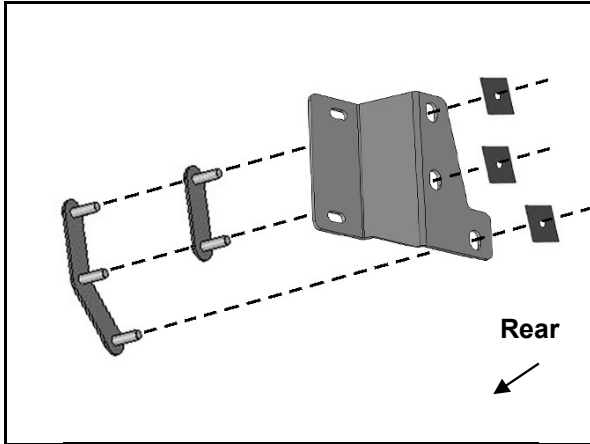
WARNING! Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.

Passenger/right Side Installation Pictured

Factory double bolt late used on model's w/o receiver hitch and "max tow" frame mounted receiver hitch

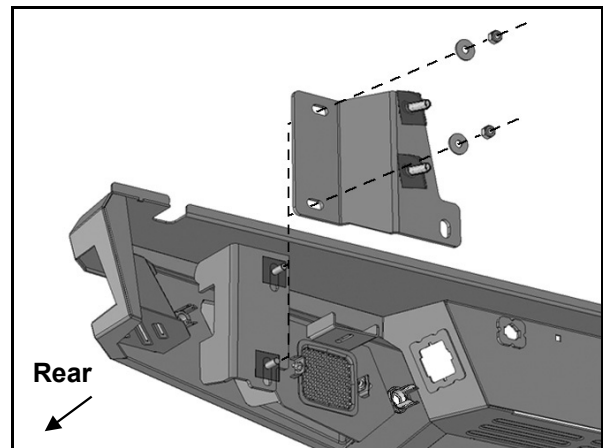
14mm Plastic Retainers

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



(Fig 11) Attach factory bolt plate to passenger/right Mounting Bracket

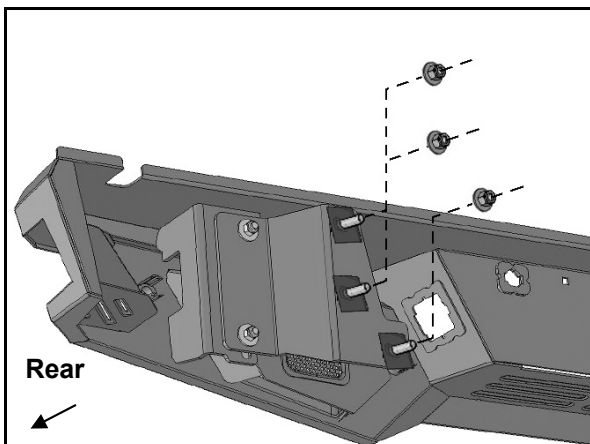
(2) 10mm Flat Washers
(2) 10mm Nylon Lock Nuts



(Fig 12) Attach Bracket with OE bolt plate to 10mm Double Bolt Plate in back of Bumper (see Fig. 8). OE double bolt plate illustrated in Bracket

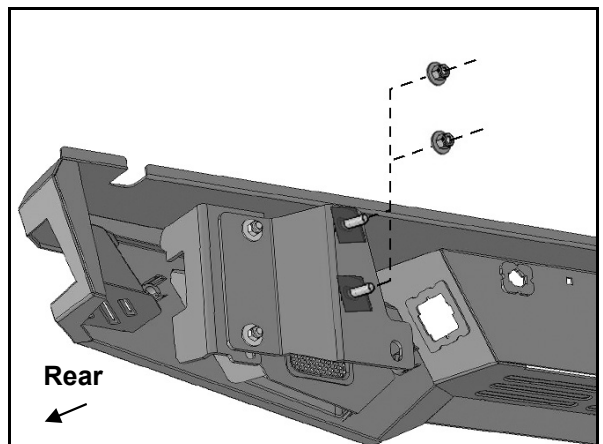
Factory triple bolt plate used with "HD tow" package with integrated receiver hitch

Reuse (3) factory hex nuts



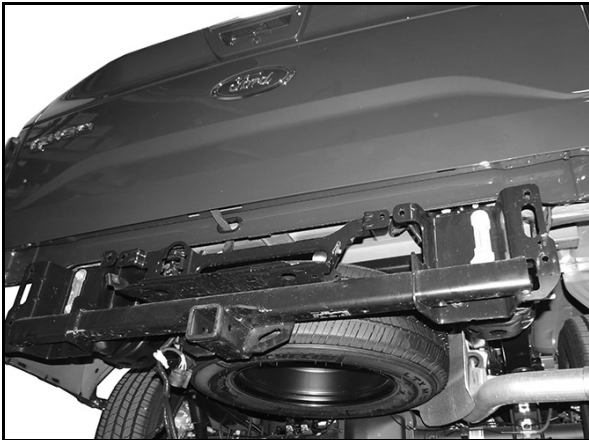
(Fig 13) Attach Brackets to ends of frame with factory hex nuts (triple bolt plate illustrated)

Reuse (2) factory hex nuts



(Fig 14) Attach Brackets to ends of frame with factory hex nuts (double bolt plate illustrated)

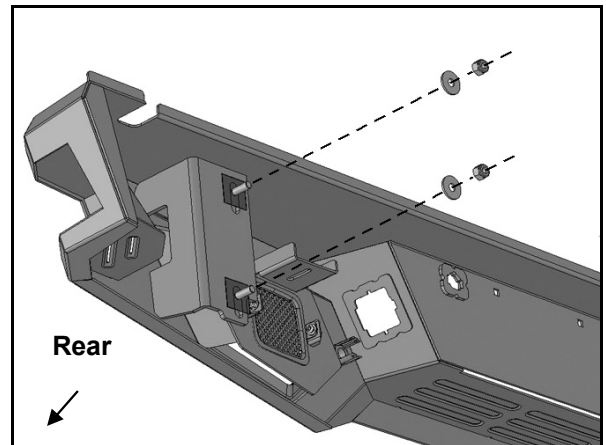
Passenger/right Side Installation Pictured



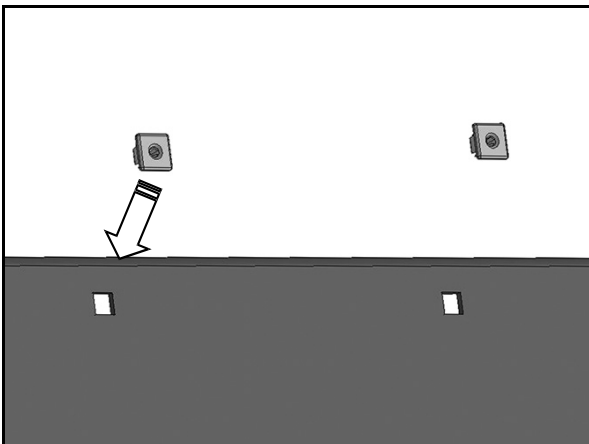
(Fig 15) Reinstall integrated receiver hitch/bracket assembly on models with "HD Towing" package

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

- (2) 10mm Flat Washers
- (2) 10mm Nylon Lock Nuts



(Fig 16) Attach Bumper directly to integrated hitch bracket (see Fig 15)



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

