

# GUARDIAN FRONT BUMPER PART NO. IB-FCS1-06

2015-2017 Ford F150 (Exclude Raptor Models)

# 90-180 min

Cutting May Required

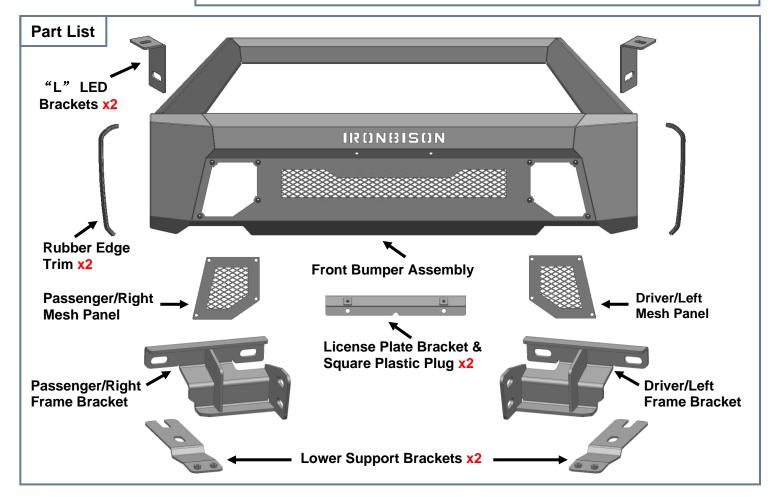


#### Fastener **Tightening Torque** Allen Wrench Wrench Required Size (ft-lbs) Required 6mm 7-8.5 □ 10mm **4**mm **18-20** 8mm 13mm 5mm 10mm 35-40 16mm □ 6mm 12mm 60-70 18mm □ 8mm

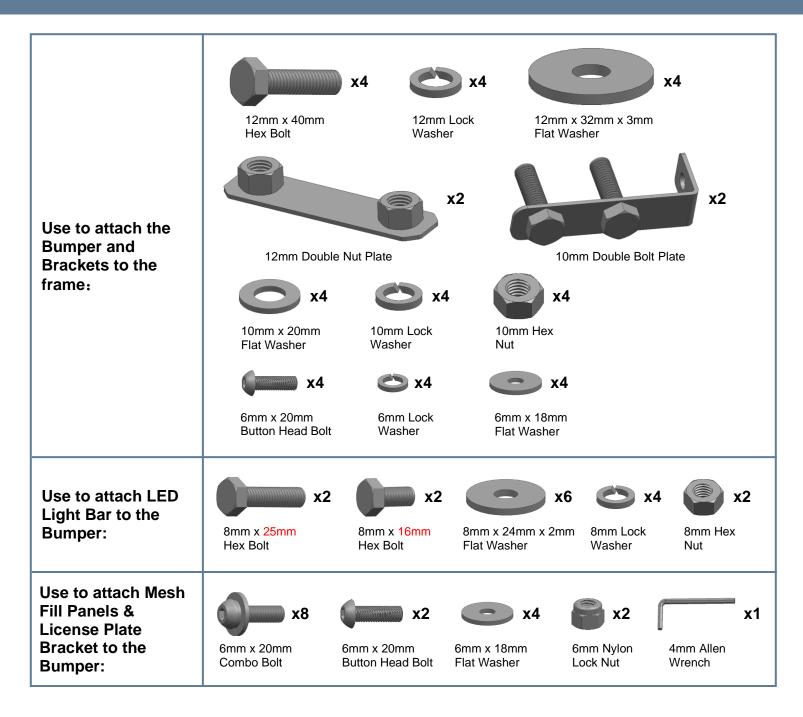
#### **BEFORE INSTALLATION**

**Torque & Tools** 

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT DEPEND ON THE PARTS LIST. READ INSTRUCTIONS CAREFULLY. BUMPER IS HEAVY, ASSISTANCE IS HIGHLY RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

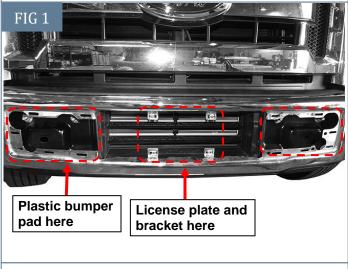








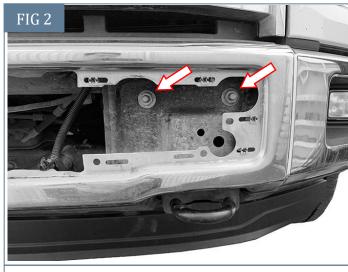
Remove the license plate and bracket. Next, remove the plastic bumper pads from the bumper, (Fig 1). NOTE: Pull bumper pads straight out to release metal clips. Unplug and remove the adaptive cruise control, if equipped.



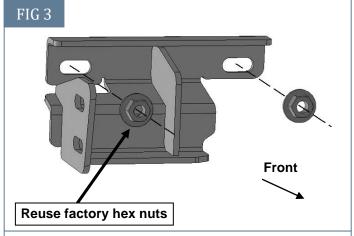
(Fig 1) Remove license plate and bracket. Carefully pull plastic bumper pad off of bumper

### STEP 2

Remove the (2) factory hex nuts attaching the driver/left side of the bumper to the end of the frame, **(Fig 2)**. Select the driver/left side Frame Mounting Bracket, **(Figs 3 & 4)**. Reuse the factory hex nuts to attach the Frame Mounting Bracket to the inner bumper bracket and frame. Do not fully tighten hardware at this time. Repeat this Step to install the passenger/right Frame Bracket.



(Fig 2) Remove (2) factory hex nuts (arrows)



(Fig 3) Reuse factory hex nuts to install Frame Mounting Brackets (driver/left Frame Bracket illustrated)



(Fig 4) Driver/left Frame Bracket installed

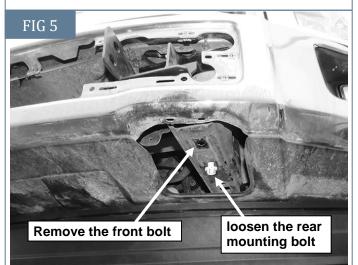


#### **STEP 3.1**

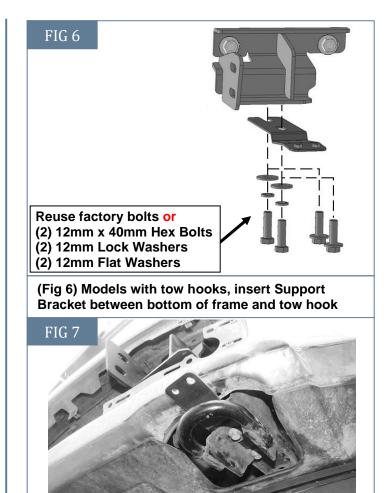
Determine if vehicle is equipped with tow hooks to install lower Support Brackets.

#### Models with tow hooks:

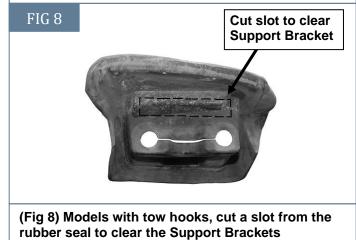
- a. Remove the rubber seal around the tow hook. Remove the front bolt but only loosen the rear mounting bolt, (Fig 5). Leave tow hook in place.
- b. Select (1) Lower Support Bracket. Slide the Support Bracket between tow hook and the bottom of the frame, (Figs 6 & 7). Reinstall the front factory tow hook bolt. Do not fully tighten hardware at this time. NOTE: Cut the rubber seal to reinstall over Bracket, (Fig 8).



(Fig 5) Models with tow hooks, remove forward bolt, loosen but do not remove rear bolt to hold factory double nut plate in place in frame



(Fig 7) Brackets installed, model with tow hook pictured

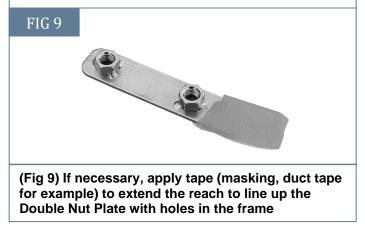


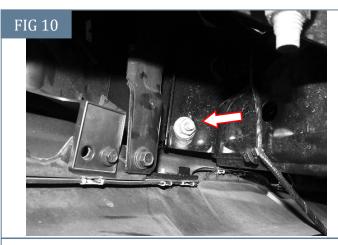


#### STEP 3.2

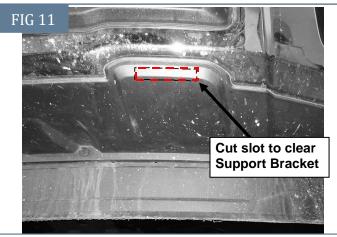
#### Models without tow hooks.

- a. Select the included (1) 12mm Double Nut Plate. Apply a short piece of tape, (duct or masking tape for example) to the end of the Nut Plate to act as a temporary handle, (Fig 9). Slide the Nut Plate into the open end of the frame and over the holes in the bottom of the frame, (Fig 5).
  NOTE: On some models, it may be necessary to loosen or remove the large hex nuts (1 per side) attaching the back of the bumper to the bumper bracket to tilt the bumper forward to insert the Double Nut Plates into the frame, (Fig 10).
- b. Select (1) Support Bracket. Use a sharp knife or hacksaw blade to cut a slot out of the lower plastic splash guard to clear the Support Bracket, (Fig 11).
- c. Slide the Support Bracket through the slot and attach the Support Bracket to the bottom of the frame and Double Nut Plate with the included (2) 12mm x 40mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, (Fig 12). Do not tighten.

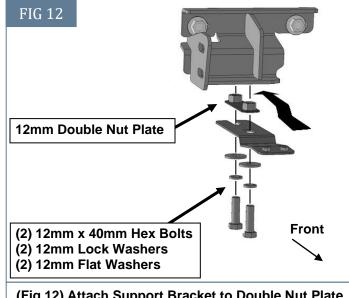




(Fig 10) loosen or remove the large hex nuts(arrow) attaching the back of the bumper to the bumper bracket.



(Fig 11) cut a slot from the plastic splash guard to clear the Support Brackets



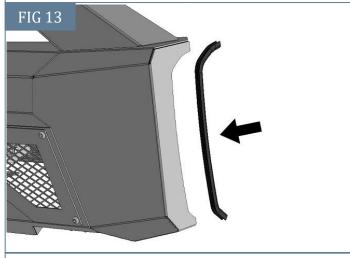
(Fig 12) Attach Support Bracket to Double Nut Plate in frame



Repeat the appropriate **Step 3** to install the passenger/right Support Bracket.

#### STEP 5

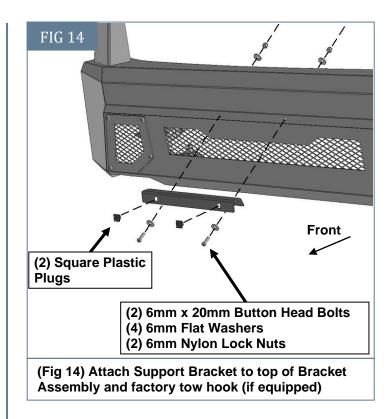
Carefully unwrap the Bumper. Attach the included Edge Trim to the sides of the Bumper, **(Fig 13)**.



(Fig 13) Push Edge Trim onto both ends of Bumper

#### STEP 6

On vehicles requiring front license plate, select the License Plate Bracket. Attach the Bracket to the front of the Bumper with the included (2) 6mm x 20mm Button Head Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, **(Fig 14)**. Push the included (2) Square Plastic Plugs into the square holes in the Bracket. Reuse the factory hardware to attach the license plate to the Plastic Plugs.



### STEP 7

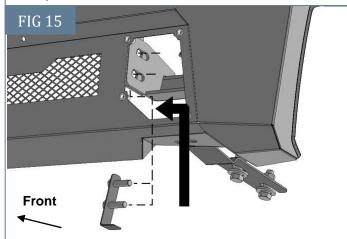
With assistance, position the mounting tabs on the back of the Bumper up to the inside of the Frame Brackets. Temporarily support Bumper. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.



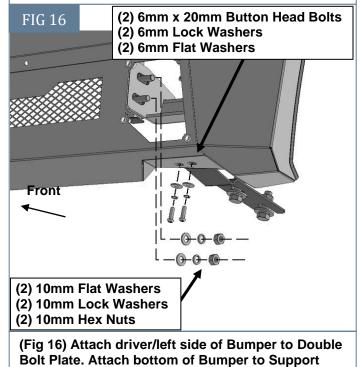
**WARNING!** Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.



Select (1) 10mm Double Bolt Plate. Insert the Bolt Plate through the outer opening in the Bumper, (Fig 15). Guide the Bolt Plate into, up and through the back of the Brackets. Attach the Bumper to the Bolt Plate with (2) 10mm Flat Washers, (2) 10mm Lock Washers and (2) 10mm Hex Nuts, (Fig 16). Do not tighten hardware. Repeat this Step to attach the passenger/right side of the Bumper to the Bracket.



(Fig 15) Insert 10mm Double Bolt up and through back of tab on Bumper and Frame Bracket



# STEP 9

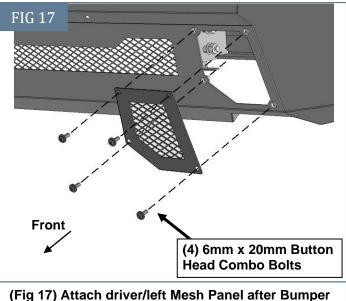
Line up the mounting hole in the driver/left Support Bracket with the holes in the bottom of the Bumper. Attach the Support Bracket to the inside of the Bumper with the included (2) 6mm x 20mm Button Head Bolts, (2) 6mm Lock Washers and (2) 6mm Flat Washers, **(Fig 16)**. Do not fully tighten hardware. Repeat this Step to attach the passenger/right Support Bracket.

# STEP 10

Check the Bumper for level and centered on the vehicle. Adjust the Bumper as necessary and fully tighten all Mounting Bracket hardware. **NOTE**: If additional left-right adjustment is required, temporarily loosen the Frame Bracket hardware and slide the Brackets left or right as necessary and fully tighten Frame Bracket hardware.

# STEP 11

Once hardware has been fully tightened, attach Mesh Fill Panels to Bumper with the included (8) 6mm x 20mm Button Head Combo Bolts, **(Fig 17)** 



(Fig 17) Attach driver/left Mesh Panel after Bumper has been adjusted and hardware fully tightened

Bracket



Top mounted LED light installation (optional-light not included).

- a. Select (1) LED "L" LED Bracket. Attach the Bracket to the bottom of the top hoop with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, (Figure 18). Do not tighten hardware at this time.
- **b.** Repeat previous Step to attach the passenger/right Bracket.
- c. Attach light to Top Brackets with the hardware included with the light or the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers. Adjust the width of the Brackets to the light. IMPORTANT: Top Light Brackets are designed to install most 20" to 24" single and double row bar style LED lights.
- **d.** "L" Brackets installed to the inside will accommodate a light 21-3/8" to 23-3/16" wide.
- e. "L" Brackets installed to the outside will accommodate a light 24-9/16" to 26-5/16" wide.
- **f.** Fully tighten top light hardware once adjusted.

FIG 18 8mm x 25mm Hex Bolt (2) 8mm Flat Washers 8mm Lock Washer 8mm Hex Nut Front 8mm x 16mm Hex Bolt 8mm Lock Washer 8mm Flat Washer (Fig 18) Attach LED "L" Brackets to bottom of loop. NOTE: Top Light bracket mounting location is designed for 20-24" single or double row bar style light. Flip Brackets around if necessary **FIG 19** 

#### STEP 13

(Fig 19) Compete Installation

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