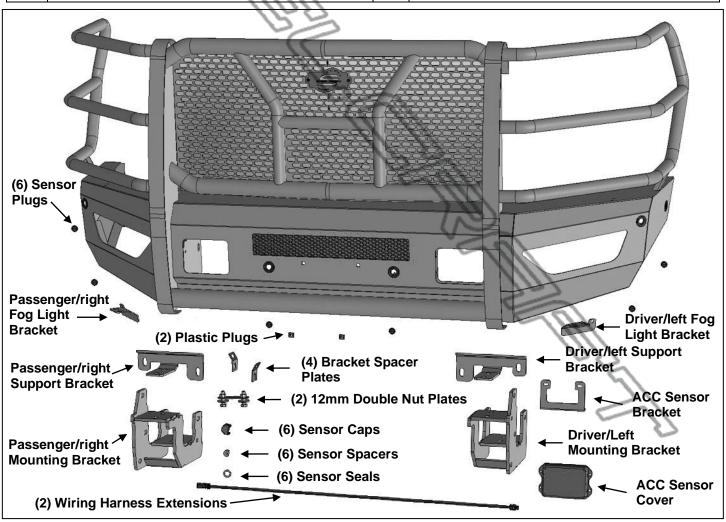
ELEVATION FRONT BUMPER 2021-23 FORD F150

PARTS LIST:

1	Front Bumper Assembly	2	12-1.75mm x 170mm Hex Bolts
1	Driver/left Frame Bracket	18	12-1.75mm x 45mm Hex Bolts
1	Passenger/right Frame Bracket	36	12mm x 37mm x 3mm Flat Washers
4	Frame Bracket "U" Spacer Plates	4	12mm Lock Washers
1	Driver/left Frame Support Bracket	16	12mm Nylon Lock Nuts
1	Passenger/right Frame Support Bracket	4	8-1.25mm x 25mm Hex Bolts
1	Driver/left Fog Light Bracket	8	8mm x 24mm Flat Washers
1	Passenger/right Fog Light Bracket	4	8mm Nylon Lock Nuts
1	ACC Sensor Relocation Bracket	10	6mm x 25mm Hex Bolts
1	ACC Plastic Cover	18	6mm x 18mm x 1.6 Flat Washers
2	Plastic Plugs for license plate mount	10	6mm Lock Washers
6	Sensor Retaining Caps	8	6mm Hex Nuts
6	20mm x 10mm Foam Spacers	2	6mm Flange Nuts
6	15.5mm x 25mm x 2mm Foam Seals	4	5mm x 12mm Hex Bolts
6	Plastic Sensor Hole Plugs	4	5mm x 10mm Flat washers
2	Wiring Harness Extensions	4	5mm Lock Washers
1	Sensor Cover Kit	12	4mm Self Tapping Screws
2	12mm Double Nut Plates	1	4mm Wrench



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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 if equipped.
- 2. From behind the front bumper, unplug and remove the active air dam from the bottom of the frame, (Figures 1 & 2). It is not necessary to remove the lift motors, only remove the (6) bolts to remove the air dam.
- 3. With the air dam out of the way, locate and unplug the main harness plug on the top of the passenger/right frame rail behind the bumper bracket, (Figure 3). Unplug any remaining harnesses leading to the bumper. On hybrid models, temporarily unplug and remove the speaker assembly for the pedestrian audible alert system from the driver/left frame channel, (Figure 4). Note speaker is located on the inner side of the frame, behind the driver/left bumper bracket. From below, remove the hex bolt and drop the speaker down, unplug and remove, (Figure 5).
- 4. Place blocks or jack stands under the front bumper to support it during mounting hardware removal. Once the bumper has been safely supported, remove the large hex nuts from the back of each bumper bracket attaching the bumper to the bumper brackets, (Figure 6). WARNING! Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling. Carefully slide the bumper off over the tow hooks if equipped.
- 5. Remove both tow hooks if equipped, (Figure 6).
- **6.** On models with bolt-on frame extensions, remove the extensions from outside of frame, **(Figure 6)**. **NOTE:** It may be necessary to cut the bolts to remove frame extensions, (removal is optional).
- 7. Models without tow hooks, insert (1) 12mm Double Nut Plate into the end of the driver/left side of the frame and over the two holes in the bottom of the frame, (Figures 6 & 7).
- 8. Select the driver/left Frame Mounting Bracket. Attach the Bracket to the bottom of the frame and inner double nut plate with the included (2) 12mm x 45mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, (Figures 7 & 8). Do not fully tighten hardware at this time.
- 9. Next, insert (1) 12mm x 170mm Long Hex Bolt with (1) 12mm Flat Washer through the inner side of the Frame Bracket, and frame, (Figure 9). Secure the Bracket to the frame with (1) 12mm Flat Washer and (1) 12mm Nylon Lock Nut.
- **10.** Slide (2) "U" Bracket Spacers, (1 on inner, 1 on outer side of frame), down between the side of the frame and the inside of the Frame Bracket, **(Figure 9)**. **NOTE**: On models with ecoboost, it may be necessary to temporarily remove the hardware attaching the intercooler shutter assembly to insert the long Hex Bolt. Reattach assembly once Hex Bolt has been installed. Do not fully tighten hardware.
- 11. Select the driver/left Frame Support Bracket. Attach the Bracket to the end of the frame with the included (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figures 10 & 12). Attach the Support Bracket to the top of the Frame Bracket with the included (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figures 11 & 12). Models with tow hooks, attach the tow hook to the inside of the Frame Bracket, (Figure 12). IMPORTANT: Models with Adaptive Cruise Control (ACC) sensor, do not reinstall the driver/left side tow hook, (Figure 13). Do not fully tighten hardware.
- 12. Repeat Steps 8—11 to install the passenger/right Frame Bracket and Support Brackets, (Figure 12).
- **13.** Disassemble front bumper to unplug and remove fog lights, sensors and wiring harness from bumper. Pay attention to mounting location of all sensors for proper reinstallation.
- **14.** Models with fog lights, attach the driver/left Lower Fog Light Bracket to the bottom of the opening in the Bumper with (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers and (2) 8mm Nylon Lock Nuts, (**Figure 14**). Leave hardware loose.
- 15. Attach the top of the driver/left fog light assembly to the tabs on the back of the Bumper with (2) 6mm x 25mm Hex Bolts, (4) 6mm Flat Washers, (2) 6mm Lock Washers and (2) 6mm Hex Nuts, (Figure 15). Attach the Lower Fog Light Bracket to the back of the fog light housing with (1) 6mm x 25mm Hex Bolt, (2) 6mm Flat Washers, (1) 6mm Lock Washer and (1) 6mm Hex Nut, (Figures 15 & 16). Fully tighten all fog light hardware.
- **16.** Repeat **Steps 14 & 15** to install the passenger/right fog light and Bracket.
- **17.** Determine if the vehicle is equipped front sensors:

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Models without bumper sensors:

- **a.** Select the included (6) Plastic Plugs.
- **b.** From the front, push the plugs into the sensor mounting holes, **(Figure 17)**.

Models with bumper mounted parking sensors:

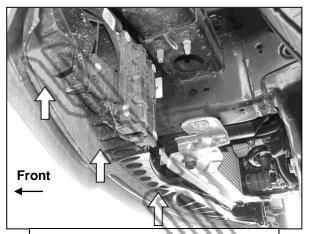
- **a.** Select the driver/left outer sensor. Remove the silicone seal from the end of the sensor. Slide the included larger Foam Sensor Seal over front of sensor, **(Figure 18)**.
- b. Insert sensor with Seal into driver/left outer sensor mount, (Figure 19).
- **c.** Place Foam Spacer over end of sensor. Push Sensor Retaining Cap onto sensor mount and lock into mounting holes, **(Figure 19)**.
- **d.** Repeat previous Steps to install remaining sensors.
- **e.** Install wiring harness for sensors. **NOTE**: Use the included (2) Wire Harness Extensions to extend the length of the factory harness to reach all sensors.
- f. Optional: Secure each sensor to the socket with (2) 4mm Self Tapping 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 overtighten screws or damage to sensors will result.

Models with Adaptive Cruise Control (ACC).

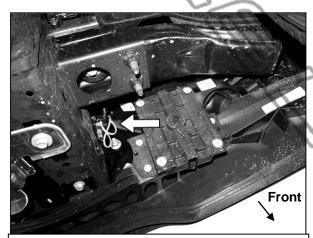
- **a.** Attach the Plastic Sensor Cover to the inside of the Bumper with the included (4) 5mm x 12mm Hex Bolts, (4) 5mm Lock Washers and (4) 5mm Flat Washers, (**Figure 20**).
- b. Remove sensor from outer steel bracket, (Figure 21).
- **c.** Attach the sensor to the back of the Relocation Bracket with (2) 6mm x 25mm Hex Bolts, (2) 6mm Lock Washers, (2) 6mm Flat Washers and (2) 6mm Flange Nuts, (Figure 22).
- d. Next, attach the sensor and Bracket to the tab on the back of the Bumper with the included (2) 6mm x 25mm Hex Bolts, (4) 6mm Flat Washers (2) 6mm Lock Washers and (2) 6mm Hex Nuts, (Figure 23). Fully tighten sensor mounting hardware.
- **18.** Center LED light installation (sold separately).
 - a. Attach the LED light assembly to the tabs on the back of the Bumper, (Figure 24).
 - **b.** Follow light manufacturer's instructions to properly wire the light.
- **19.** With assistance, position the Bumper Assembly up to the outside of the Mounting Brackets. Temporarily support the weight of the Bumper. **NOTE**: On models with ecoboost, trim plastic shroud to fit Bumper profile as needed. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.
- 20. Attach the driver/left mounting plate on the back of the Bumper to the outside of the Mounting Bracket with the included (3) 12mm x 45mm Hex Bolts, (6) 12mm Flat Washers and (3) 12mm Nylon Lock Nuts, (Figures 24 & 25). Repeat this Step to attach the passenger/right side of the Bumper to the Bracket. Do not fully tighten hardware at this time.
- **21.** Level and adjust the bumper and fully tighten all hardware.
- **22.** If front license plate is required, insert (2) Plastic Plugs into the square holes in the Bumper. Reuse the factory screws to attach the license plate to the Plastic Plugs, **(Figure 26)**.
- 23. Models with grille mounted camera, lower center remove screen from Bumper, (Figure 26).
- **24.** 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.

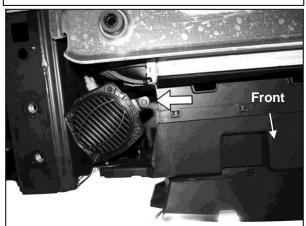
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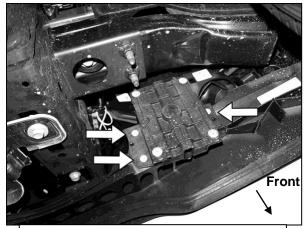
(Fig 1) Active air dam behind bumper



(Fig 3) Locate and unplug main harness plug on passenger/right side of bumper (arrow)



(Fig 5) Remove bolt (arrow) to temporarily remove audible alert speaker located behind driver/left side of bumper (hybrid models only-pictured from below)



(Fig 2) Remove bolts (arrows) to remove active air dam from motors (passenger/right side pictured)



(Fig 4) Hybrid Models Only, locate alert speaker behind driver/left side of bumper

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

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ELEVATION FRONT BUMPER 2021-23 FORD F150

Driver/left Side Installation Pictured

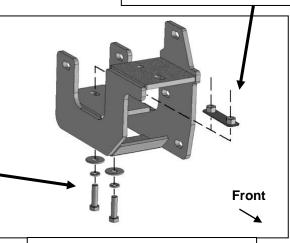


(Fig 6) Remove bumper. Also remove the factory frame extension (arrow-optional)

- (2) 12mm x 45mm Hex Bolts
- (2) 12mm Lock Washers
- (2) 12mm Flat Washers

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

Use either factory double nut plate or the included 12mm Double Nut Plate

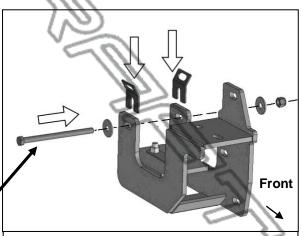


(Fig 7) Attach driver/left Frame Mounting Bracket to end of frame



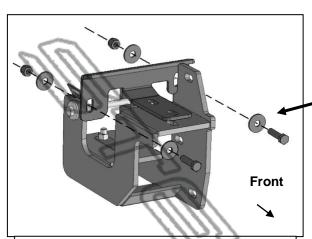
(Fig 8) Driver/left Frame Mounting Bracket attached to inner Double Nut Plate (arrow)

12mm x 170mm Hex Bolt (2) 12mm Flat Washers 12mm Nylon Lock Nut



(Fig 9) Insert "U" Bracket Spacers between side of frame and inside of Frame Bracket (driver/left side Bracket illustrated)

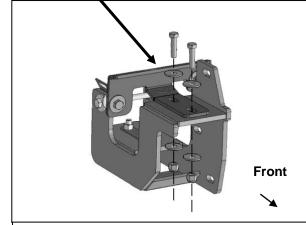
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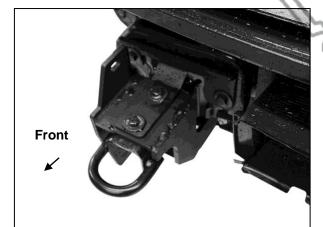
(Fig 10) Attach driver/left Support Bracket to top mounting holes in end of frame



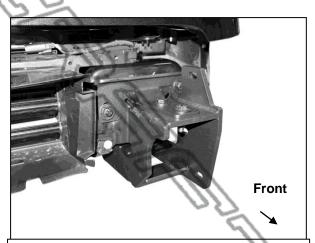
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts



(Fig 11) Attach driver/left Support Bracket to top Frame Bracket. Models equipped with tow hooks without ACC sensor, reinstall tow hook to inside of Frame Bracket



(Fig 12) Passenger/right Frame Bracket and Support Bracket installed with tow hook

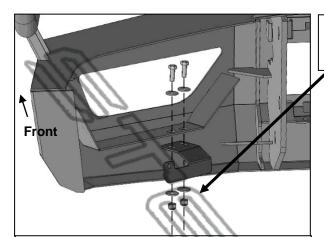


(Fig 13) Driver/left Frame Bracket and Support Bracket installed. Models with ACC sensor, do not install driver/left side tow hook

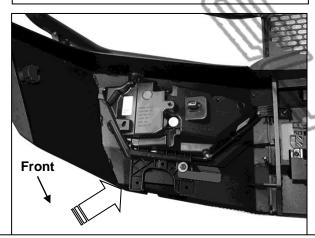
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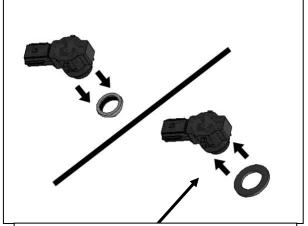
Driver/left Side Installation Pictured



(Fig 14) Attach driver/left Fog Light Bracket to bottom of mount on back of Bumper

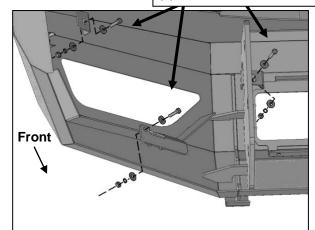


(Fig 16) Driver/left fog light installed. OPTIONAL: Cut mount off bottom of housing (arrow)

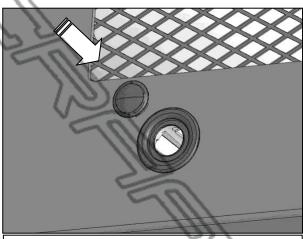


(Fig 18) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

- (2) 8mm x 25mm Hex Bolts
- (4) 8mm Flat Washers
- (2) 8mm Nylon Lock Nuts
- (3) 6mm x 25mm Hex Bolts
- (6) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts

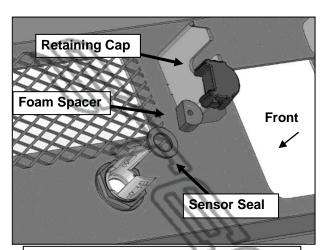


(Fig 15) Attach driver/left fog light assembly to top tabs on Bumper. Attach Fog Light Bracket to back of fog light assembly

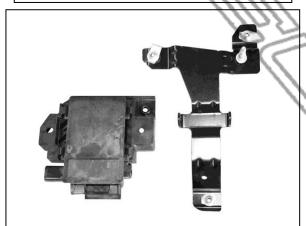


(Fig 17) Push Plastic Plug into sensor mount

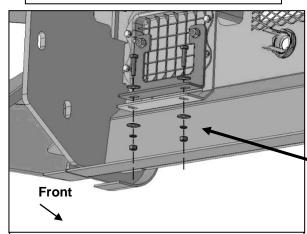
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(Fig 19) Insert sensor assembly into the sensor mount on back of Bumper

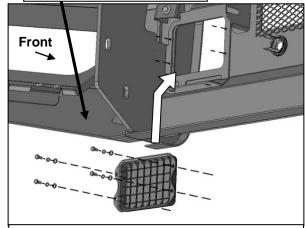


(Fig 21) Models equipped with ACC, remove sensor from mounting bracket



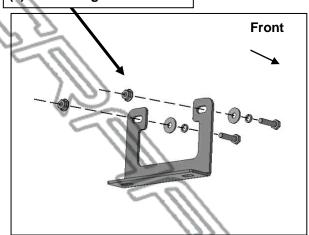
(Fig 23) Models with ACC, attach Bracket with ACC sensor to tab on back of Bumper

- (4) 5mm x 12mm Hex Bolts
- (4) 5mm Lock Washers
- (4) 5mm Flat Washers



(Fig 20) Models equipped with adaptive cruise control (ACC), attach Plastic Sensor Cover to back of Bumper

- (2) 6mm x 25mm Hex Bolts
- (2) 6mm Lock Washers
- (2) 6mm Flat Washers
- (2) 6mm Flange Nuts

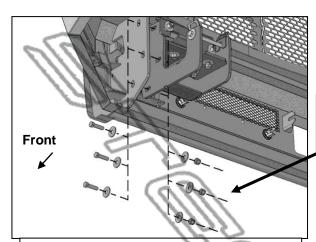


(Fig 22) Models equipped with ACC, attach sensor to back of Relocation Bracket

- (2) 6mm x 25mm Hex Bolts
- (4) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Hex Nuts

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

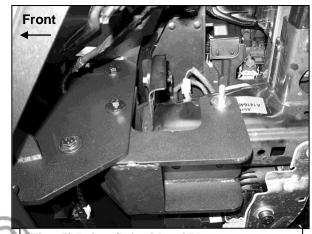
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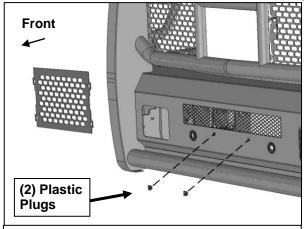
(Fig 24) Attach Bumper to Frame Mounting Bracket (driver/left side illustrated)

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

- (3) 12mm x 45mm Hex Bolts
- (6) 12mm Flat Washers
- (3) 12mm Nylon Lock Nuts



(Fig 25) Driver/left side of Bumper attached to Bracket (pictured from below)



(Fig 26) Models equipped with grille mounted camera, remove center screen. Reuse factory screws to attach license plate to Plastic Plugs



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