

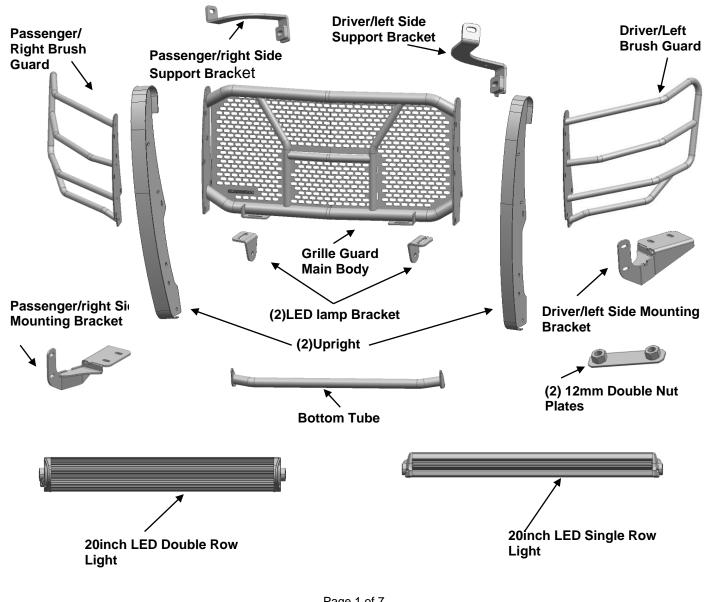
TEL: 1-866-XANATOS

INSTALLATION INSTRUCTIONS

MODULAR RUGGED GRILLE GUARD
2021-2023 FORD F150(Incl. F150 EcoBoost / Excl. all F150 Raptor
models, 20-22 Diesel models and 22-23 F150 Lightning EV)
PART# RU-FOF116-B/RU-FOF116-B-K1/RU-FOF116-B-K2/ RU-FOF116-B-PLR

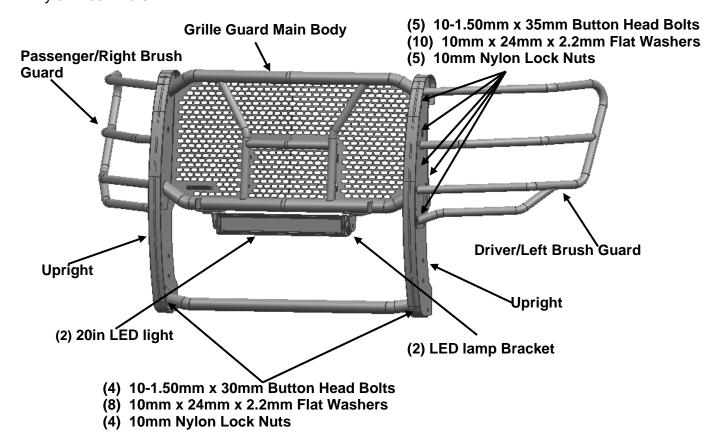
PARTS LIST:

1	Grille Guard Main Body	4	10-1.50 mm x 30mm Hex Bolts
1	Bottom Tube	36	10mm x 24mm x 2.2mm Flat Washers
2	Uprights	18	10mm Nylon Lock Nuts
1	Driver/Left Brush Guard	2	8 -1.25 mm x 30mm Hex Bolts
1	Passenger/Right Brush Guard	2	8 -1.25 mm x 50mm Hex Bolts
1	Driver/left Side Mounting Bracket	6	8mm x 24mm x 2mm Flat Washers
1	Passenger/right Side Mounting Bracket	6	8mm x 22mm x 2mm Flat Washers
1	Driver/left Side Support Bracket	4	8-1.25mm x 25mm Button Head Bolts
1	Passenger/right Side Support Bracket	4	8mm Nylon Lock Nuts
2	LED lamp Bracket	4	8mm Lock Washer
2	12mm Double Nut Plates	1	4mm Allen Wrench
4	12-1.75mm x 35mm Hex Bolts	1	5mm Allen Wrench
4	12mm x 32mm OD x 3mm Flat Washers	1	6mm Allen Wrench
4	12mm Lock Washers	1	20inch LED Single Row Light
4	10-1.50mm x 30mm Button Head Bolts	1	20inch LED Double Row Light
10	10-1.50 mm x 35mm Button Head Bolts		

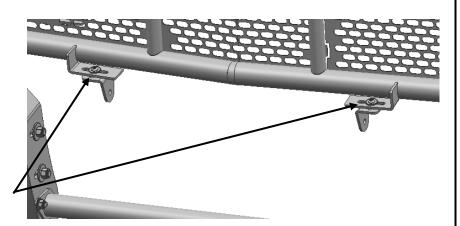


Please Noted:

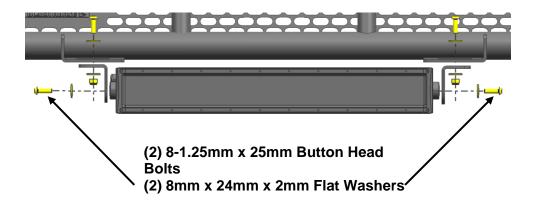
Before you install the Grille Guard on the vehicle, please install the Uprights, Driver/Left Brush Guard, Uprights and Passenger/Right Brush Guard on the Grille Guard Main Body with the included (5) 10-1.50mm x 35mm Button Head Bolts, (10) 10mm x 24mm x 2.2mm Flat Washers, (5) 10mm Nylon Lock Nuts. Attach the Bottom Tube to the Uprights with the included (4) 10-1.50mm x 30mm Button Head Bolts, (8) 10mm x 24mm x 2.2mm Flat Washers and (4) 10mm Nylon Lock Nuts.



- 2. Before you install the LED Lamp on the Grille Guard Main Body please install the LED Lamp Bracket first.
- **3.** If you are not going to install a LED Lamp, the LED Lamp Bracket installation is unnecessary. For Grille Guard Main Body installation follow the instruction as bellow.



- (2) 8-1.25mm x 25mm Button Head Bolts
- (4) 8mm x 24mm x 2mm Flat Washers
- (2) 8mm Nylon Lock Nuts



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. CUTTING MAY BE REQUIRED. INSTALLATION MAY INTERFERE WITH BUMPER MOUNTED PARKING SENSORS. ASSISTANCE IS RECOMMENDED.

- **1.** Temporarily remove the front license plate.
- 2. From under the front bumper, remove the plastic active air dam from behind the front bumper if equipped, (Figure 1). Only remove the air dam, do not remove the motor assemblies, (Figure 2).
- 3. Disconnect wire harnesses leading to the front bumper, (fog lights and sensors for example, Figure 3).
- **4.** From behind the bumper, remove the (3) large factory hex nuts attaching the bumper to each bumper bracket, **(Figure 4)**. Move bumper to a clean, soft surface. **IMPORTANT**: Assistance is required to hold bumper in place as hardware is removed.
- 5. Remove the hex bolt from the bumper support on the back of the bumper, (Figure 5). Select the driver/left side Support Bracket, (Figure 6). Slightly loosen but do not remove the outer bolt on the end of the support.
- **6.** Slide the Driver/Left side Support Bracket between the support and the back of the bumper. Attach the Driver/Left side Support Bracket to the support bracket and bumper with the included (1) 8 -1.25 mm x 50mm Hex Bolts, (1) 8mm Lock Washer and (1) 8mm x 22mm x 2mm Flat Washers, **(Figure 6)**. With Bracket mounting plate straight up and down, fully tighten the Hex Bolt.
- 7. Repeat **Steps 5 & 6** to install the Driver/left Side Support Bracket.
- 8. Remove both tow hooks and plastic trim from the end of the frame Select the Driver/left Side Support Bracket, (Figure 8). NOTE: Plastic trim must be cut to clear Bracket to be reinstalled or simply remove. Models without tow hooks:
 - a. Insert (1) 12mm Double Nut Plate into the end of the driver/left side of the frame, (Figures 8 & 9). Line up the Nut Plate with the holes in the bottom of the frame, (Figure 8).
 - b. Insert the included (2) 12-1.75mm x 35mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm x 32mm OD x 3mm Flat Washers up through the frame and into the Nut Plate to hold the Nut Plate in the correct position, (Figures 8 & 11). Leave hardware loose at this time. Repeat the previous Steps for the passenger/right side 12mm Double Nut Plate installation.
 - **c.** Remove the plastic covers from the driver and passenger side lower openings in the bottom of the bumper, **(Figure 10)**.
- **9.** Reinstall the bumper assembly.
- **10.** Select the Driver/left Side Mounting Bracket, **(Figure 11)**. Insert the Bracket through the opening in the bumper.

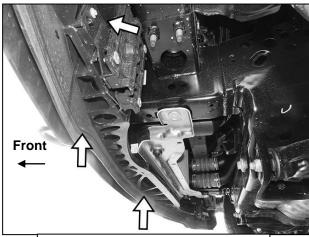
Models with tow hooks, insert the Bracket between the tow hook and the frame. Reattach the tow hook over the Bracket with the factory bolts. Leave hardware loose.

Models without tow hooks, attach the Bracket to the bottom of the frame and Nut Plate with the (2) 12-1.75mm x 35mm Hex Bolts, 12mm Lock Washers and (2) 12mm x 32mm OD x 3mm Flat Washers, **(Figures 11 & 12)**. Leave hardware loose at this time.

- 11. Repeat appropriate previous Step for Passenger/right Side Mounting Bracket installation (Figure 13).
- **12.** With assistance, place the Grille Guard up to the outside of the Brackets. Attach the Grille Guard to the Driver/left Side Mounting Bracket with (2) 10 -1.50 mm x 30mm Hex Bolts, (4) 10mm x 24mm x 2.2mm Flat Washers and (2) 10mm Nylon Lock Nuts, **(Figure 14)**. Repeat to attach the Passenger/right Side Mounting Bracket to the Grille Guard. But do not tighten hardware at this time.
- 13. Line up the Driver/left Side Support Bracket with the hole in the uprights on the Grille Guard. Attach the Bracket to the Grille Guard with (1) 8 -1.25 mm x 30mm Hex Bolts, (2) 8mm x 22mm x 2mm Flat Washers, (1) 8mm Nylon Lock Nuts, (Figure 14). Repeat to attach the Passenger/right Side Support Bracket to the Grille Guard.
- **14.** Center the Grille Guard on the vehicle. Once properly adjusted, fully tighten all hardware and reinstall license plate.
- 15. On models equipped with grille mounted camera, remove center screen from Grille Guard, (Figure 15).
- 16. 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 Grille Guard.

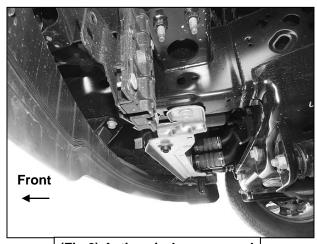
Driver Side Installation Pictured



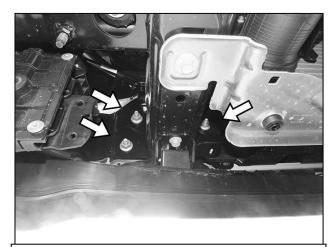
(Fig 1) Remove active air dam from back of bumper (arrows)



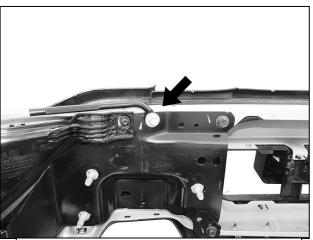
(Fig 3) Unplug all wiring harnesses leading to the front bumper (arrow)



(Fig 2) Active air dam removed



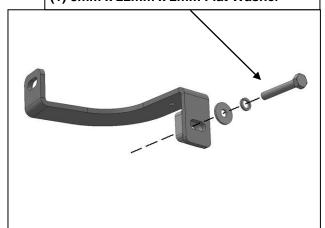
(Fig 4) Remove hex nuts from back of driver/left bumper bracket to remove bumper (arrows)



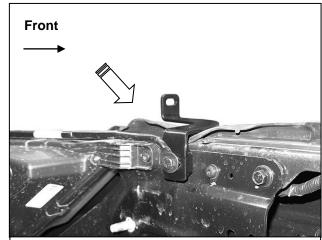
(Fig 5) Remove inner hex bolt from support bracket on the back of driver/left bumper bracket (arrow). Loosen but do not remove outer hex bolt attaching support bracket

Driver Side Installation Pictured

- (1) 8 -1.25 mm x 50mm Hex Bolt
- (1) 8mm Lock Washer
- (1) 8mm x 22mm x 2mm Flat Washer



(Fig 6) Insert Driver/left Side Support Bracket between support bracket and back of bumper bracket



(Fig 7) Insert Driver/left Side Support Bracket between support bracket and back of bumper bracket



(Fig 8) Temporarily remove tow hooks if equipped



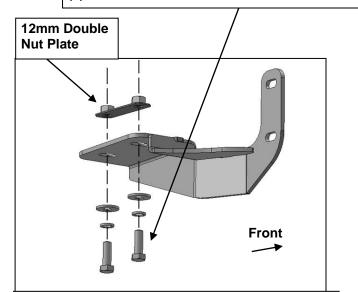
(Fig 9) Models without tow hooks, insert 12mm Double Nut Plates into end of frame (see Fig 8)



(Fig 10) On models without tow hooks, release clips and remove plastic covers

Models without tow hooks, use:

- (2) 12-1.75mm x 35mm Hex Bolts
- (2) 12mm Lock Washers
- (2) 12mm x 32mm OD x 3mm Flat Washers

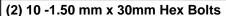


(Fig 11) Attach Frame Bracket to bottom of frame and Nut Plate. Models with tow hooks, install Frame Bracket between tow hook and frame

Driver Side Installation Pictured



(Fig 12) Driver/left side Mounting Bracket installed without tow hook

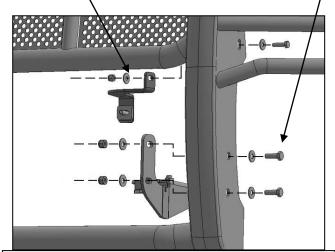


- (4) 10mm x 24mm x 2.2mm Flat Washers
- (2) 10mm Nylon Lock Nuts

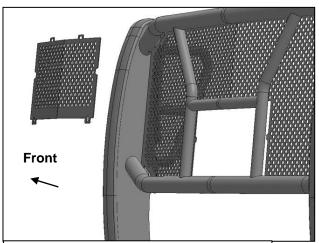


(Fig 13) Brackets installed

- (1) 8 -1.25 mm x 30mm Hex Bolts
- (2) 8mm x 22mm x 2mm Flat Washers
- (1) 8mm Nylon Lock Nuts



(Fig 14) Attach Grille Guard to outside if Brackets



(Fig 15) On models equipped with grille mounted camera, remove center screen