

Assembly, Installation, Operation and Maintenance Instructions Full Replacement Front Bumper

Part Number: FX3027

240 minutes

Dealer / Installer:

Provide a copy of these instructions to the end user of this product. These instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.

End User:

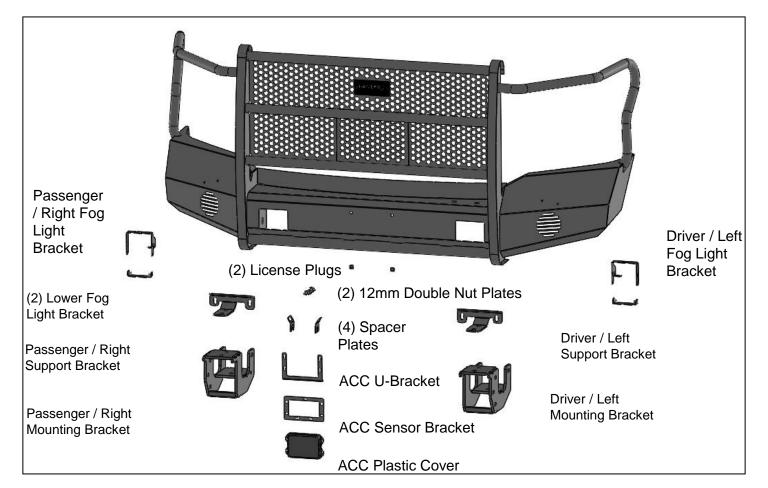
△WARNING △

Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any decals from the product. Failure to follow these instructions can result in injury or death.

APPLICATION: 2018 – 2020 Ford F150

PARTS LIST:				
Qty	Part Description	Qty	Part Description	
1	Full Replacement Front Bumper	4	12mm Lock Washers	
1	Driver/Left Mounting Bracket	12	12mm Nylon Lock Nuts	
1	Passenger/Right Mounting Bracket	2	8mm x 25mm Button Head Bolts	
1	Driver/Left Support Bracket	2	8mm x 20mm Hex Bolts	
1	Passenger/Right Support Bracket	8	8mm x 24mm OD x 2mm Flat Washers	
1	Driver/Left Upper Fog Light Bracket	2	8mm Lock Washers	
1	Passenger/Right Upper Fog Light Bracket	2	8mm Hex Nuts	
2	Lower Fog Light Brackets	2	8mm Nylon Lock Nuts	
1	ACC Plastic Cover	7	6mm x 25mm Button Head Bolts	
1	ACC Relocation Bracket	4	6mm x 16mm Hex Bolts	
1	ACC Sensor Bracket	11	6mm Lock Washers	
1	Foam Gasket	10	6mm x 18mm OD x 1.6mm Flat Washers	
2	License Plate Plugs	4	6mm x 12mm OD x 1.6mm Flat Washers	
4	Tow Hook Spacers	7	6mm Hex Nuts	
2	12mm Double Nut Plates	1	5mm Hex Wrench	
2	12mm x 170mm Hex Bolts	1	4mm Hex Wrench	
14	12mm x 45mm Hex Bolts	1	2.5mm Hex Wrench	
28	12mm x 37mm OD x 3mmFlat Washers			

Torque Specs		
12mm	70 ft/lbs	
8mm	20 ft/lbs	
6mm	102 in/lbs	
5mm	54 in/lbs	
4mm	27 in/lbs	
Factory	See Mfg.	



INSTALLATION PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

- 1. Remove the license plate and bracket. Release the wiring harness from the clips attached to the back of the bumper. Move all wiring harnesses away from bumper.
- 2. Next, remove the plastic bumper pads, **(Figure 1)**. **NOTE**: Release metal clips from back of bumper to remove bumper pad assembly. It may be easier to access bumper hardware with plastic air dam removed from bottom of bumper.
- 3. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the large hex nut from the back of each bumper bracket, (Figure 2). Next, from the front of the bumper, remove the (2) factory hex nuts attaching the bumper to each bumper bracket, (Figure 3). WARNING! Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper off over the tow hooks.
- 4. Remove the tow hooks and plastic covers, (if equipped), from the bottom of the frame, **(Figure 4)**.
- 5. Next, select the Passenger/Right Mounting Bracket, **(Figure 5)**. Slide the Bracket over the end of the frame. Insert (1) 12mm Double Nut Plate into the open end of the frame. Attach the Mounting Bracket to the bottom of the frame and the Double Nut Plate with (2) 12mm x 45mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, **(Figure 5)**. **NOTE:** On models with tow hooks, reuse the factory nut plate and hardware to attach the Mounting Bracket to the bottom of the frame. Do not tighten.

- 6. Insert (1) 12mm x 170mm Long Hex Bolt with (1) 12mm Flat Washer through the outside of the mounting tab on the Frame Bracket, through the frame and inside tab. Secure with (1) 12mm Flat Washer and (1) 12mm Nylon Lock Nut. Insert (1) Spacer Plate down between each mounting tab and the side of the frame, (Figure 6). Do not tighten.
- 7. Select the Passenger/Right Support Bracket, (Figure 7).

On models without tow hooks,

- a. Reuse the factory hex nuts to attach the Support Bracket to the frame, (Figure 7).
- b. Attach the Support Bracket directly to the top of the Mounting Bracket with (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, **(Figure 8)**. Do not tighten.

On models with tow hooks,

- a. Line up the Support Bracket with the top of the Mounting Bracket.
- b. Reuse the factory hex nuts to attach the Support Bracket to the frame, (Figure 7).
- c. Slide the tow hook into the Mounting Bracket and up to the top. Attach the tow hook to the Frame Bracket and Support Bracket with (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figure 8).
- 8. Repeat **Steps 5—7** to attach the Driver/Left Mounting Bracket, Support Bracket and tow hook if equipped.
- 9. If equipped with factory fog lights, unplug both lights and remove the complete light assemblies from back of bumper, (**Figure 9**). Unplug and remove the adaptive cruise control, if equipped.

10. Models with factory fog lights:

- a. Use a flat blade screwdriver to carefully pop out the tabs on the side of the fog light bracket attaching the light to the bracket, **(Figure 9)**. Pop the light out of the plastic bracket housing.
- Remove the adjustment screw and spring from the light assembly.
- c. Select the Passenger/Right Upper Light Bracket, **(Figure 10)**. Attach the Bracket to the slot in the light opening on the back of the Bumper with (1) 8mm x 20mm Hex Bolt, (2) 8mm Flat Washers and (1) 8mm Nylon Lock Nut, **(Figure 10)**.
- d. Carefully spread the sides of the Bracket enough to slide the OE plastic fog light between and into the Bracket, (Figure 10). Attach (1) Lower Bracket to the Upper Bracket with (2) 6mm x 16mm Hex Bolts, (2) 6mm Lock Washers and (2) 6mm Flat Washers, (Figure 11).
- e. Insert the factory spring between the tab on the Bracket and the light. Insert the screw through the tab, spring and into the fog light, **(Figure 11)**.
- f. Repeat to install the driver/left fog light.
- 11. Determine if vehicle is equipped with an adaptive cruise control, (ACC), and note the design of sensor. **NOTE:** Install the ACC assembly before attaching Bumper to vehicle.

Vehicles with early style ACC with tabs on ends:

- a. Select the ACC Plastic Cover and the Relocation Bracket, (Figure 12). Insert (3) 6mm Button Head Bolts through the Plastic Cover, the Relocation Bracket and out through the ACC sensor. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts.
- b. Next, attach the ACC assembly to the top of the bumper with (2) 8mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, (Figure 15).

Vehicles with late style ACC with tabs on top and bottom:

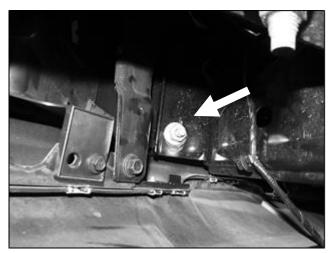
- a. Select the ACC Sensor Bracket, (Figure 13).
- b. Attach the ACC sensor to the back of the Bracket with the included (3) 6mm Button Head Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts,

- c. Attach the ACC and Sensor Bracket to the back of the Relocation Bracket. Line up the plastic cover with the front of the Relocation Bracket. Insert (4) 6mm x 25mm Button Head Bolts through the ACC Plastic Cover, the Relocation Bracket, the Sensor Bracket, (Figure 14). Secure with (4) 6mm Flat Washers, (4) 6mm Lock Washers and (4) 6mm Hex Nuts.
- d. Attach the ACC assembly to the top of the bumper with (2) 8mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, (Figure 15).
- 12. On models with grille mounted factory camera, remove the center screen.
- 13. With assistance, position the Bumper Assembly onto the outside of the Mounting Brackets. 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.
- 14. Attach the Bumper to the Brackets with (6) 12mm x 45mm Hex Bolts, (12) 12mm Flat Washers and (6) 12mm Nylon Lock Nuts, (Figure 16). Do not tighten.
- 15. Level and adjust the bumper and fully tighten all 12mm hardware to 65-70ft-lbs. **NOTE**: If additional in-out adjustment is required, loosen Frame Bracket Hardware, slide the Bracket in or out as necessary and fully tighten all hardware.
- 16. Reattach the wiring harness. Adjust lights as necessary and tighten all fog light bracket hardware.
- 17. Use the included (2) push-in plastic nuts to attach the front license plate, (if required), to the (2) holes in the front bumper, (Figure 17).
- 18. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

INSTALLATION PROCEDURE IMAGES:



(Fig 1) From behind bumper, release metal clips attaching plastic bumper pad to the bumper



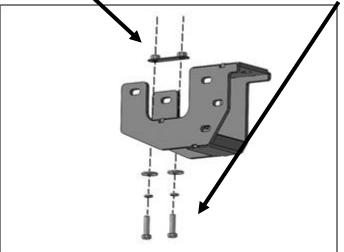
(Fig 2) Remove factory hex nut (arrow) from back of bumper bracket (Driver side pictured)



(Fig 3) Remove (2) factory hex nuts from each side

Double Nut Plate

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

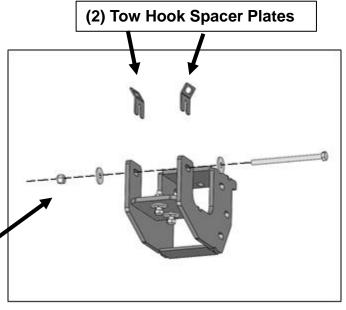


(Fig 5) Passenger/Right Mounting Bracket

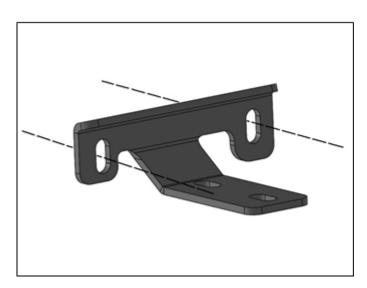
12mm x 170mm Hex Bolt (2) 12mm Flat Washers 12mm Nylon Lock Nut WARNING! To reduce the risk of injury or damage to the vehicle, do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.



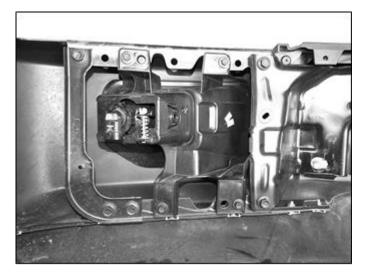
(Fig 4) Remove the tow hooks and plastic covers, if equipped



(Fig 6) Insert Spacers between tow hook and Mounting Bracket for more secure fit

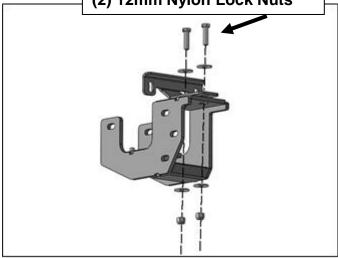


(Fig 7) Reuse the factory hardware to attach the Passenger/Right Support Bracket to the frame



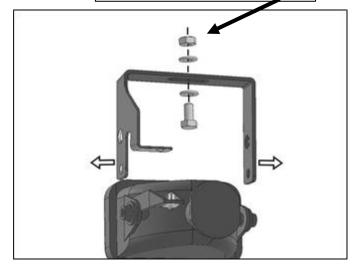
(Fig 9) Remove fog light assembly from bumper

- (2) 12mm x 45mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts



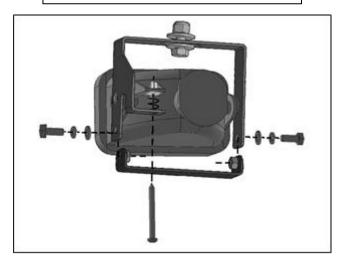
(Fig 8) Models without tow hooks, attach Passenger/Right Support Bracket to the top of the Frame Bracket. Models with tow hooks, attach tow hook to inside top of Mounting Bracket

8mm x 20mm Hex Bolt (2) 8mm Flat Washers 8mm Nylon Lock Nut



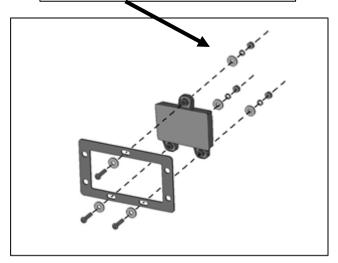
(Fig 10) Optional OEM fog light installation (light not included). Attach passenger/right Upper Bracket to the slot in top of the opening. Carefully spread sides to slide OEM fog light into position in pivot holes

- (2) 6mm x 16mm Hex Bolts
- (2) 6mm Lock Washers
- (2) 6mm x 12mm Flat Washers



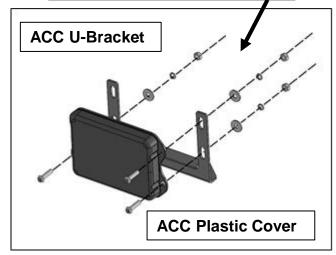
(Fig 11) Attach lower U Bracket to Upper Bracket. Reuse factory adjustment hardware (screw, spring and plastic nut)

- (3) 6mm Button Head Bolts
- (3) 6mm x 18mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



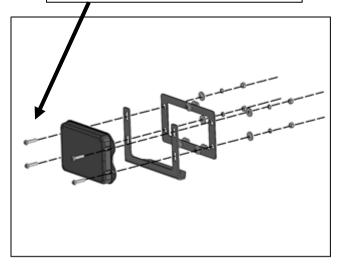
(Fig 13) Attach the "late style" ACC sensor to back of Adapter Plate

- (3) 6mm Button Head Bolts
- (3) 6mm x 18mm Flat
- **Washers**
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



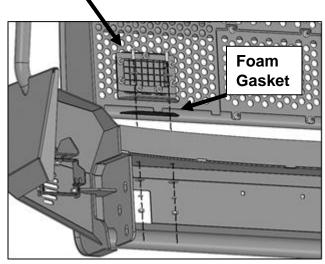
(Fig 12) Attach Plastic Cover and "early style" Adaptive Cruise Control sensor to U-Bracket

- (4) 6mm Button Head Bolts
- (4) 6mm x 18mm Flat Washers
- (4) 6mm Lock Washers
- (4) 6mm Hex Nuts

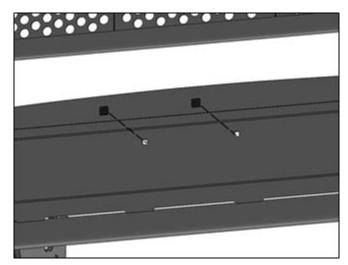


(Fig 14) Attach the Plastic Cover and "late style" ACC assembly to the U-Bracket

- (2) 8mm Button Head Bolts
- (4) 8mm Flat Washers
- (2) 8mm Lock Washers
- (2) 8mm Hex Nuts



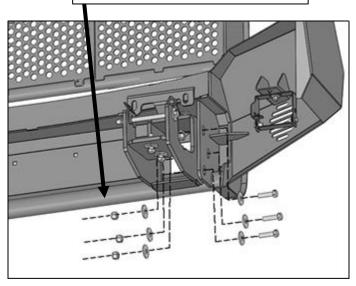
(Fig 15) Attach ACC assembly to the Bumper



(Fig 17) Push plastic plugs into holes in Bumper for license plate if required

WARNING! Do not crawl under bumper unless the bumper 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 16) Attach Bumper to Brackets

Installation is now complete, check all hardware is tightened and torqued to spec.

PRODUCT CARE:

- Periodically check the product to ensure all fasteners are tight and components are intact.
- Use ONLY Non-Abrasive automotive wax. Use of any soap, polish or wax that contains an abrasive is detrimental and can scratch the finish leading to corrosion.
- Mild soap may be used to clean the Black finish product.

FAQ'S

- Hardware and mounting brackets are not aligning properly
 - Ensure that hardware is being used on the correct side of the vehicle. In some cases, the hardware may appear same for driver or passenger side but may alter the alignment of mounting location. Check mounting brackets for both sides.
- Products are thumping / rattling after installation
 - Ensure that all required mounting brackets / hardware's are installed & tighten correctly. Suggest using white lithium / regular grease between metal-to-metal contact.
- Missing / Excess Hardware
 - Recheck hardware count as per the part list.
- Product not installing properly
 - Ensure the Year / Make / Model as well as cab and bed dimensions are correct for the application. Review all steps for installation to ensure they were followed correctly.
- Who should be contacted for questions regarding product / installation assistance?
 - www.trailfx.com / <u>support@trailfx.com</u> 1-(866) 638-4870

Warranty Terms:

3 Year Limited Warranty:

TrailFX and Keystone Automotive Operations Inc. make no guarantees or warranties for products not manufactured by Keystone Automotive Operations Inc. Such products are covered solely under any applicable warranty of the manufacturer. It is always recommended that the operating instructions and warranty instructions provided by the manufacturer are followed.

Keystone Automotive Operations Inc. warrants its products to be free from manufacturing and material defects to the original purchaser for the length of warranty stated above from the date of retail purchase. If any products are found to have a manufacturing or material defect, the product will be replaced or repaired at the option of TrailFX and Keystone Automotive Operations Inc. with proof of purchase by the original purchaser. The original purchaser shall pay all transportation and shipping costs associated with the return of the defective product and the defective product shall become the property of Keystone Automotive Operations Inc.

The Warranty applies to Keystone Automotive Operations Inc. products used for individual and recreational purposes. Commercial usage of the Keystone Automotive Operations Inc. products limits the warranty to 90-days from date of purchase.

The Warranty applies only to Keystone Automotive Operations Inc. products which are found to be defective in manufacturing or material. This warranty does not apply to normal wear and tear of the finish placed on Keystone Automotive Operations Inc. products.

TrailFX and Keystone Automotive Operations Inc. are not responsible for any labor costs incurred for removal or replacement of the defective product.

TrailFX and Keystone Automotive Operations Inc. are not responsible for repair or replacement of any product under the limited warranty where the product was improperly installed, misapplied, altered, abused, neglected, overloaded, misused or damaged as a result of an accident, including any use of the product not in accordance with all product operating and safety instructions.

Without limiting the generality of the foregoing, TrailFX and Keystone Automotive Operations Inc. shall under no circumstances be liable for any incidental or consequential loss or damage whatsoever arising out of, or in any way relating to any such breach of warranty or claimed defect in, or non-performance of the products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state.