Installing the DFC-LG-FRD21 Lower Guard on 2021+ Ford_® F-150_® Vehicles Without Fog Light Option

25500829 Rev A0 0623

Safety Message to Installers and Service Personnel of Emergency Vehicle Safety Equipment

A WARNING

People's lives depend on your proper installation and servicing of Federal Signal products. It is important to read and follow all instructions shipped with this product. Listed below are some other important safety instructions and precautions you should follow.

Before Installation or Service

Qualifications

• To properly install or service this equipment, you must have a good understanding of automotive electrical procedures and systems, along with proficiency in the installation and service of safety warning equipment. Always refer to the vehicle service manuals when installing equipment on a vehicle.

Electrical Hazards

Never attempt to install aftermarket equipment that connects to the vehicle wiring without reviewing a
vehicle wiring diagram available from the vehicle manufacturer. Ensure that your installation will not affect
vehicle operation and safety functions or circuits.

During Installation or Service

- To avoid a battery explosion, always disconnect the negative battery cable first and reconnect it last. Avoid a spark when connecting near or to the battery. The gasses produced by a battery can cause a battery explosion that could result in vehicle damage and serious injury.
- Do not install equipment or route wiring or a plug-in cord in the deployment path of an airbag.
- Before mounting any components, check the manual to ensure that the component you are installing is suitable for use in that area of the vehicle. Many components are not suitable for use in the engine compartment or in other areas subject to extreme environmental exposure.
- When drilling into a vehicle structure, ensure that both sides of the surface are clear of anything that
 could be damaged. Remove all burrs from drilled holes to prevent electrical shorts, and grommet all
 drilled holes through which wiring passes. Ensure that mounting screws do not cause electrical or
 mechanical damage to the vehicle.

After Installation or Service

- If a vehicle seat is temporarily removed, verify with vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- To ensure proper operation, test all vehicle functions, including horn operation, vehicle safety functions, and vehicle light systems. Ensure that installation has not affected vehicle operation or changed any vehicle safety function or circuit.
- After installation and testing are complete, provide a copy of these instructions to instructional staff and all operating personnel.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

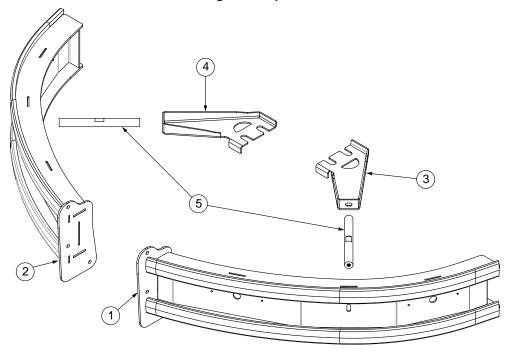
Unpacking the Product

After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier stating the extent of the damage. Failure to identify damage before installation could lead to rejection of any claim. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in Table 1 are included in the package. If you are missing any parts, contact Federal Signal Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT).

Table 1 Kit contents

Item	Description	Part Number	Qty.
1	Driver Side Lower Guard Assembly	806204252-DS	1
2	Passenger Side Lower Guard Assembly	806204252-PS	1
3	Driver Side Mounting Bracket	806204253-DS	1
4	Passenger Side Mounting Bracket	806204253-PS	1
5	Spacer Rod	806203674-L	2
6	5/16-18 x 1-inch Hex Head Bolt	N/A	4
7	5/16-18 x 1.5-inch Button Head Bolt	N/A	2
8	5/16-inch Flat Washer	N/A	8
9	5/16-inch Lock Washer	N/A	6
10	5/16-inch Hex Nut	N/A	2

Figure 1 Kit parts



Installing the Lower Guard

WARNING

PUSH BUMPER PRECAUTION: Installing a push bumper on a vehicle may raise the vehicle's minimum collision speed for airbag deployment. It is imperative that police officers wear safety belts when operating the motor vehicle. Failure to follow this warning may cause serious injury or death.

NOTICE

THREAD DAMAGE AND GALLING: Use anti-seize lubricant on all stainless steel fasteners to prevent thread damage and galling.

To install the lower guard:

1. Starting from step 6 on instruction sheet 25500828 for the push bumper, refer to Figures 2 and 3 for the locations of the fasteners and clips to be removed to remove the fog light covers on both sides.

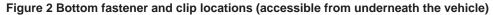




Figure 3 Top fastener location



2. With the fog light cover removed, locate the two bolts shown in Figure 4 and loosen them enough to be able to slide the mounting brackets between the bolt heads and the frame feature.



Figure 4 Bolts to loosen, driver side shown

3. Slide the mounting bracket (Item 3) over the frame feature as shown in Figure 5. Tighten the bolts down and torque the bolts to 76 ft-lb.

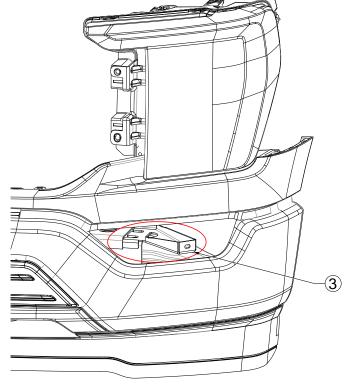


Figure 5 Vehicle bracket mounting location, driver side shown

4. Repeat steps 2 and 3 for the passenger side.

IMPORTANT: Trimming is required on the fog light covers.

5. Using Figure 6 as a reference of where to measure from, make a mark at 9 inches on the fog light cover. The top end of the tape measure should be touching the angled surface of the fog light cover, and the tape measure should follow the indicated feature.

NOTE: Figures 6 and 7 show the driver side fog light cover.

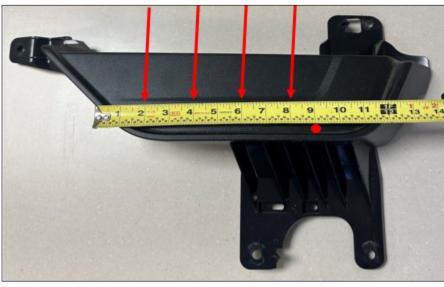


Figure 6 Horizontal measurement

6. Using Figure 7 as a reference of where to measure from, make an intersecting mark at 1-1/8-inches on the fog light cover.



Figure 7 Vertical measurement

NOTICE

DRILLING PRECAUTIONS: Before drilling holes, check the area into which you plan to drill to ensure that you do not damage vehicle components. All drilled holes should be deburred, and all sharp edges should be smoothed.

- 7. Using a 1-inch hole saw, cut out the hole and then clean the edges.
- 8. Repeat steps 5 and 6 for the opposite side, and then reattach both fog light covers to the vehicle bumper.
- **9.** Slide one spacer rod (Item 5) into the previously drilled hole and attach to the mounting bracket using a 5/16-18 by 1-inch hex head bolt, lock washer, and flat washer. Repeat these steps on the opposite side. See Figure 8.

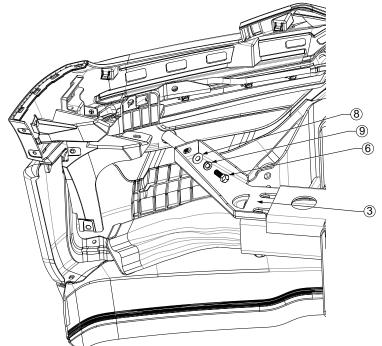


Figure 8 Driver side spacer rod mounting (View from the rear)

- **10.** Return to instruction sheet 25500828 for the push bumper and proceed with installing the grille assembly onto the vehicle. Proceed with the push bumper installation. Once this is complete, continue with the lower guard installation.
- 11. Referring to the notes in steps 11 and 12 of instruction sheet 25500828 for the push bumper, remove the forward-most bolt on the upper bracket and the upper bolt of the lower bracket of the push bumper and loosely attach the lower guard to the side of the push bumper using the 5/16-18 by 1.5-inch button head bolts, lock washers, flat washers, and hex nuts. See Figure 9.

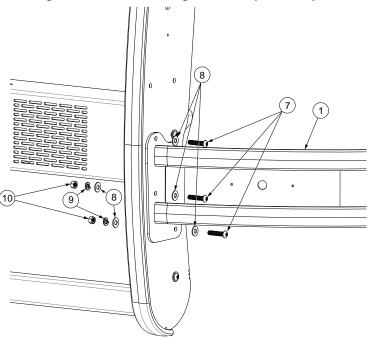


Figure 9 Attach the lower guard to the push bumper

- **12.** Using the 5/16-18 by 1-inch hex head bolt, flat washer, and lock washer, loosely attach the lower guard assembly to the spacer rod protruding from the front fascia. Align and adjust the lower guard as necessary, and then tighten all hardware on the current side.
 - Torque 5/16-inch bolts to 24-28 ft-lb

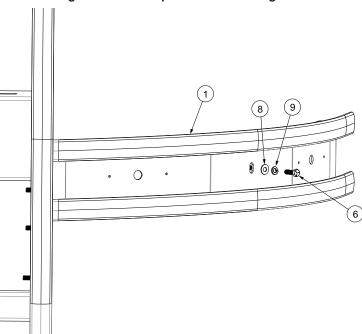


Figure 10 Attach spacer rod to lower guard

13. Repeat steps 10 and 11 for the opposite side.

Maintaining the Lower Guard Assembly

Regularly clean the textured powder coat finishes with either a soft cloth or a brush with a mild soap and warm water. Avoid using any harsh chemicals, as this will damage the product's finish. Pressure washing this product is the most efficient way to remove heavy dirt and grime. The pressure washer should be used on a low pressure setting with filtered water for best results. Using high pressure can damage the product's finish.

Getting Technical Support

For technical support, please contact:

Federal Signal Corporation Service Department Phone: 1-800-433-9132

Email: empserviceinfo@fedsig.com

Getting Repair Service

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally. Any product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization (RMA). Obtain an RMA from a local Distributor or Manufacturer's Representative. Provide a brief explanation of the service requested or the nature of the malfunction.

Address all communications and shipments to the following:

Federal Signal Corporation Service Department 2645 Federal Signal Dr. University Park, IL 60484-3167

Limited Warranty

This product is subject to and covered by a limited warranty, a copy of which can be found at www.fedsig. com/SSG-Warranty. A copy of this limited warranty can also be obtained by written request to Federal Signal Corporation, 2645 Federal Signal Drive, University Park, IL 60484, email to info@fedsig.com or call +1708-534-3400.

This limited warranty is in lieu of all other warranties, express or implied, contractual or statutory, including, but not limited to the warranty of merchantability, warranty of fitness for a particular purpose and any warranty against failure of its essential purpose.



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Customer Support

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