

25500817 Rev A1 1123

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

### **⚠ 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 the 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.

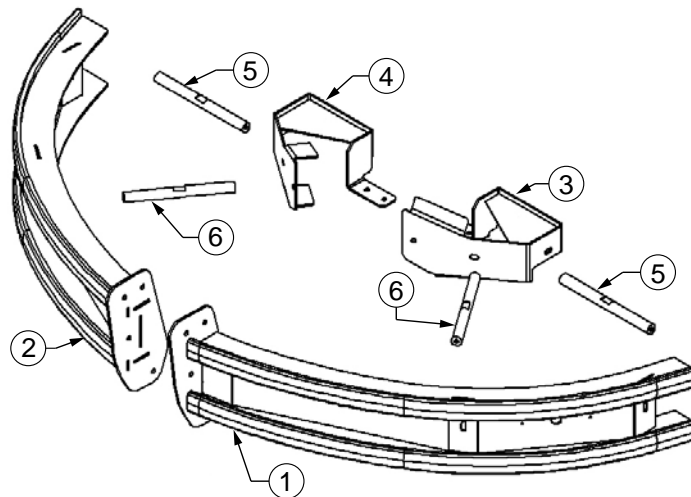
## Unpacking the Product

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 the 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	Qty.
1	Driver Side Lower Guard Assembly	1
2	Passenger Side Lower Guard Assembly	1
3	Driver Side Mounting Bracket	1
4	Passenger Side Mounting Bracket	1
5	Long Spacer Rod	2
6	Short Spacer Rod	2
7	5/16-18 x 1-inch Hex Head Bolt	12
8	5/16-18 x 2.5-inch Hex Head Bolt	2
9	5/16-18 x 1.5-inch Button Head Bolt	6
10	5/16-inch Flat Washer	32
11	5/16-inch Lock Washer	20
12	5/16-inch Hex Nut	12

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 8 on instruction sheet 25500816 for the push bumper, locate the mounting brackets (Items 3 and 4).
2. Slide the mounting bracket (Item 3) over the vehicle bumper. Be sure to align the bottom tab with the existing holes in the vehicle's frame and install the 5/16-18 x 1-inch hex head bolts, flat washers, lock washers and nuts as shown in Figure 2. Torque the hardware to 24-28 ft-lb.

Figure 2 Bottom mounting location and hardware



3. Using the indicated hole in Figure 3 as a guide, drill a hole through the vehicle's bumper using a 21/64-inch drill bit.

Figure 3 Hole location, passenger side shown



## Installing the DFC-LG-TAH21 Pit Bar on the 2021+ Chevrolet® Tahoe®

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4. In the previously drilled hole, use the 5/16-18 by 2.5-inch hex head bolt, flat washers, lock washer, and nut to secure the bracket to the vehicle's bumper.
5. Tighten all hardware, and then repeat steps 3 and 4 for the opposite side.

- Torque 5/16-inch bolts to 24-28 ft-lb

**IMPORTANT:** Trimming is required on the front fascia.

6. Using a tape measure and Figures 4 and 5 as a reference, start the tape measure at the bottom of the fascia feature and make a mark at 3-5/8 inches on the front fascia.

**NOTE:** Figures 4-9 show the driver side of the fascia.

**Figure 4** Tape measure starting point



**Figure 5** Front post horizontal measurement



7. Using Figure 6 as a reference, make an intersecting mark at 5/16 of an inch, starting from the bottom edge of the indented fascia feature.

**Figure 6 Front post vertical measurement**



8. Using Figure 7 as a reference, locate the feature on the fascia near the front of the wheel well. Use this feature as your starting point for taking a measurement.

**Figure 7 Fascia feature/ measurement starting point**



9. Using the tape measure and Figure 8 as references, starting from the previously identified feature and following the wheel well edge with the tape measure, make a mark at 4-7/16 inches.

Figure 8 Side post vertical measurement



10. Using the previously marked location as a starting point, hook the tape measure to the edge of the wheel well opening and follow the profile of the fascia. Be sure that the tape is as horizontal as possible when making the measurement, and make a mark at 4 inches.

Figure 9 Side post horizontal measurement



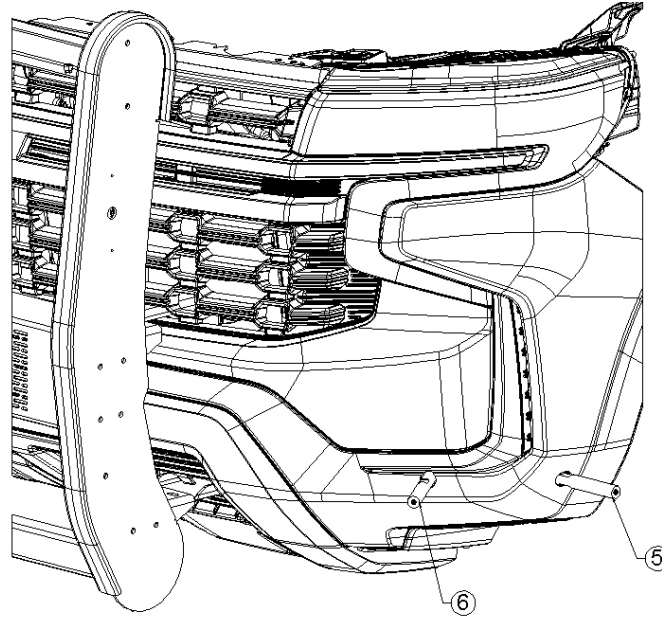
**NOTICE**

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

11. Using a 1-inch hole saw, cut the two holes and then clean the edges. Repeat steps 6 through 10 for the opposite side.
12. Return to instruction sheet 25500816 for the push bumper. Proceed with installing the front fascia of the vehicle but leave the fender area open so you can access the lower guard mounting brackets. Proceed with the push bumper installation. Once complete, continue with the lower guard installation.

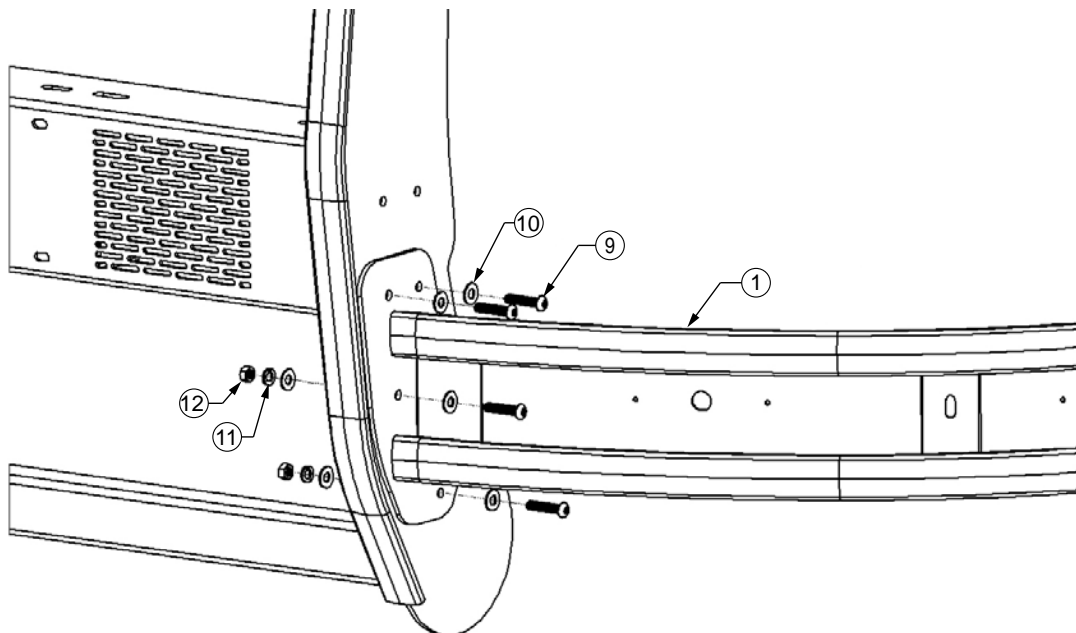
- Slide one short spacer rod (Item 6) into the front-facing hole of the fascia and attach it to the mounting bracket using a 5/16-inch hex head bolt, flat washer, and lock washer. Slide one long spacer rod (Item 5) into the side hole of the fascia and attach it to the mounting bracket using a 5/16-inch hex head bolt, flat washer, and lock washer. Repeat these steps on the opposite side. See Figure 10.

Figure 10 Driver side template alignment



- Referring to the note in step 10 of instruction sheet 25500816 for the push bumper, remove the forward-most bolt on the lower bracket of the push bumper and loosely attach the lower guard to the side of the push bumper using the 5/16-inch button head bolts, flat washers, lock washers, and hex nuts. See Figure 11.

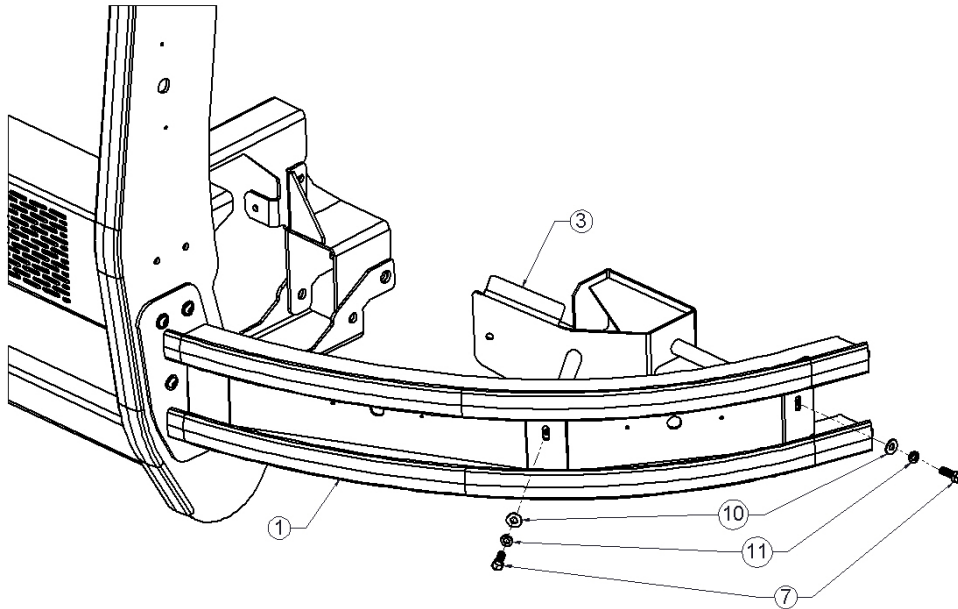
Figure 11 Spacer rods coming through vehicle fascia



**15.** Using the 5/16-inch hex head bolt, flat washer, and lock washer, loosely attach the lower guard assembly to the spacer rods protruding from the front fascia. Align and adjust the lower guard as necessary, then tighten all hardware on the current side.

- Torque 5/16" bolts to 24-28 ft-lb

**Figure 12 Attach spacer rods to pit bar**



**16.** Repeat steps 14 and 15 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 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.



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