

25500847 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.

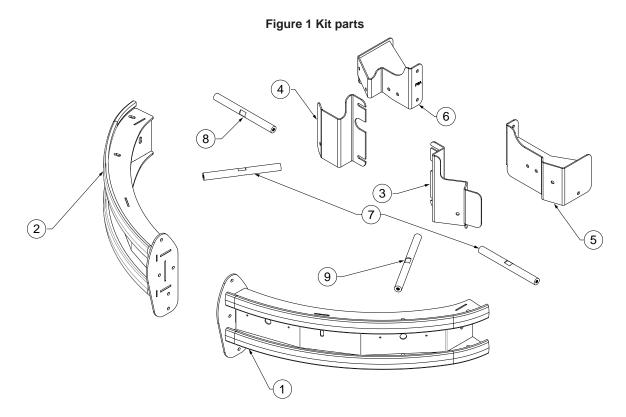
Unpacking the Product

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 the 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).

ltem	Description	Qty.
1	Driver Side Lower Guard Assembly	1
2	Passenger Side Lower Guard Assembly	1
3	Driver Side Front Mounting Bracket (DSF)	1
4	Passenger Side Front Mounting Bracket (PSF)	1
5	Driver Side Alley Mounting Bracket (DSA)	1
6	Passenger Side Alley Mounting Bracket (PSA)	1
7	8.0-inch Spacer Rod	2
8	8.3-inch Spacer Rod	1
9	9.40-inch Spacer Rod	1
10	5/16-18 x 1.5-inch Button Head Bolt	6
11	5/16-18 x 1-inch Hex Head Bolt	8
12	5/16-inch Flat Washer	20
13	5/16-inch Lock Washer	14
14	5/16-inch Hex Nut	6

Table 1 Kit contents



Installing the Lower Guard

AWARNING

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 instructions sheet 25500846 for the push bumper, locate the front mounting brackets (Items 3 and 4).
- 2. Locate the front driver side structure column and loosen the bolts on the front and side of the column (callouts 2 and 3 in Figure 2).

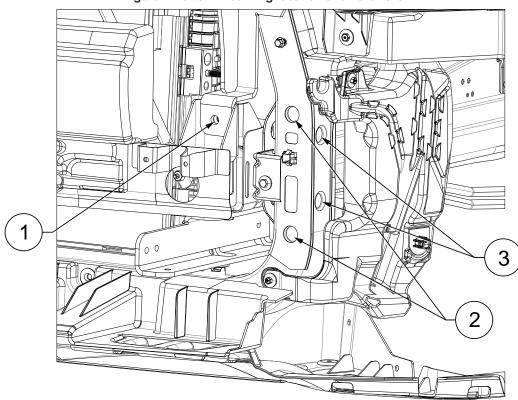


Figure 2 Bottom mounting location and hardware

3. Once the bolts are loosened, mount the Driver Side Front Mounting Bracket to the front structure column, aligning the slots to the loosened bolts at callout 2 in Figure 2.

NOTE: If there is not enough clearance for the front mounting bracket, loosen the bumper bash bar bolt located at callout 1 in Figure 2.

- 4. Once the Driver Side Front Bracket is mounted, secure the loosened bolts at callouts 1 and 2 in Figure 2.
- **5.** Locate the 9.4-inch Spacer Rod and mount it to the Driver Side Front Bracket using the 5/16-18 by 1-inch hex head bolt and 5/16-inch flat washer.
- **6.** Locate the Driver Side Alley Mounting Bracket and mount the slots to the loosened bolts (Position 3 in Figure 2) on the front driver side structure column.
- 7. Secure the loosened bolts to the manufacturer's torque specification. Locate an 8.0-inch spacer rod and mount it to the Driver Side Alley Mount using the 5/16-18 by 1-inch hex head bolt and 5/16-inch flat washer.
- **8.** Repeat steps 2-7 for the passenger side, mounting the 8.0-inch spacer rod to the Passenger Side Front Mounting Bracket and the 8.3-inch spacer rod to the Passenger Side Alley Mounting Bracket.

NOTICE

WIRE DAMAGE: Disconnect all wires or harnesses inside the fascia before drilling the pit bar holes.

9. Following Figures 3 through 5, mark the approximate location of the pit bar holes and drill 1-inch diameter holes on the driver side and passenger side of the fascia.



Figure 3 Pit bar hole location



Figure 4 Pit bar hole location

Figure 5 Pit bar hole location



10. Mount the Fascia back onto the vehicle, carefully passing the Spacer Rods through the drilled holes.

11. With the fascia mounted on the vehicle, complete the push bumper installation according to instruction sheet 25500846 for the push bumper. Leave the hardware mounting the lower connecting bracket to the push bumper (see figure 6) loose.

NOTE: This hardware will be used to mount the Pit Bar.

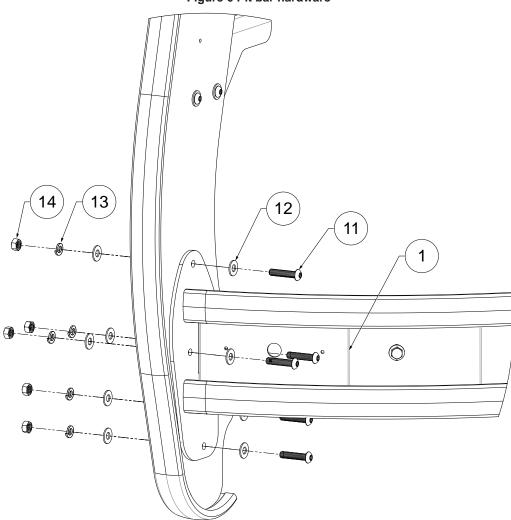


Figure 6 Pit bar hardware

12. Remove the loosened hardware and mount the driver side pit bar using the 5/16-inch button head bolt, flat washers, lock washers, and hex nuts. See Figure 6.

13. Secure the spacer rods protruding from the front fascia to the pit bar using the 5/16-inch hex head bolt, flat washer, and lock washer. See Figure 7. Align and adjust the lower guard as necessary, and then tighten all hardware on the current side. Torgue the 5/16-inch bolts to 24-28 ft-lb.

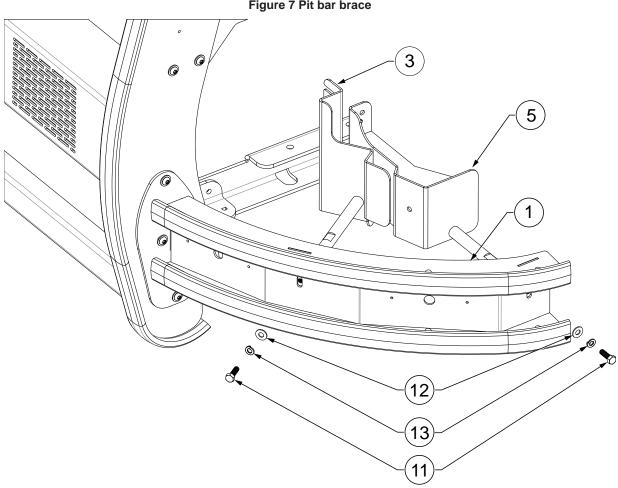


Figure 7 Pit bar brace

14. Repeat steps 11-13 for the passenger 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 lowpressure 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.



2645 Federal Signal Drive University Park, Illinois 60484-3167

www.fedsig.com

800-264-3578 • +1 708 534-3400
800-824-0254 • +1 708 534-3400
800-433-9132 • +1 708 534-3400

© Copyright 2023 Federal Signal Corporation All trademarks are property of their respective owners.