

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. Also 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

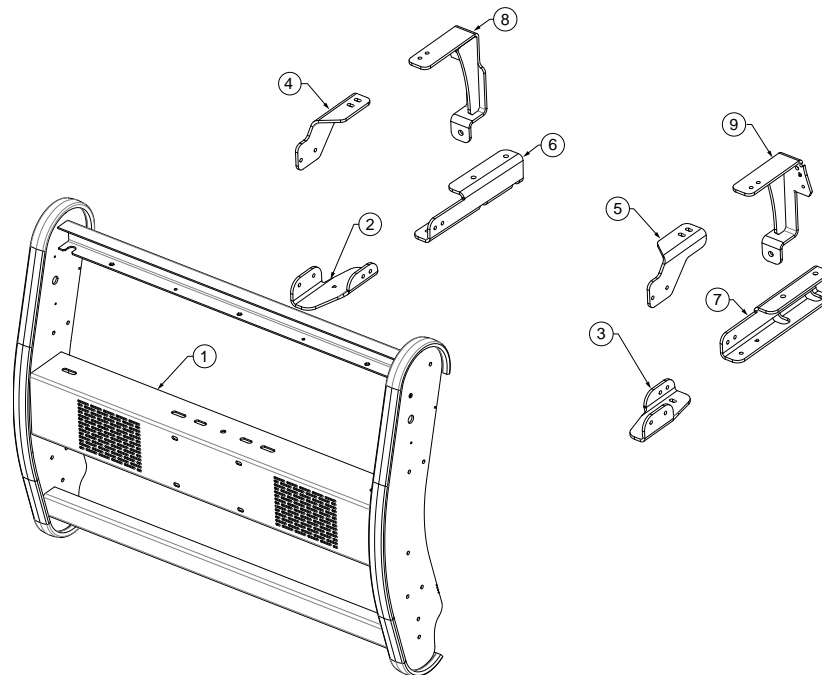
After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of the damage. Failure to identify the damage before installation could lead to the rejection 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).

Table 1 Kit contents (See Figure 1)

Item	Description	Qty.
1	Push Bumper Assembly	1
2	Passenger Side Lower Connecting Bracket	1
3	Driver Side Lower Connecting Bracket	1
4	Passenger Side Upper Connecting Bracket	1
5	Driver Side Upper Connecting Bracket	1
6	Passenger Lower Mounting Bracket	1
7	Driver Side Lower Mounting Bracket	1
8	Passenger Side Upper Mounting Bracket	1
9	Driver Side Upper Mounting Bracket	1
10	5/16-18 x 1-inch Hex Head Bolt	10
11	5/16-18 x 1.5-inch Button Head Bolt	8
12	5/16-inch Flat Washer	36
13	5/16-inch Lock Washer	18
14	5/16-inch Hex Nut	18
15	M10 -1.5 X 50 Serrated Flange Head Cap Screw	4

Figure 1 Kit parts



Installing the Push Bumper

⚠ 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 push bumper:

1. Remove the front fascia per the manufacturer's instructions. Refer to Figures 2 through 6.

Figure 2 Remove Trim at Callout 1, Remove fasteners (red circles), Release upper grille clips (marked by yellow dots).



Figure 3 Fascia fastener and rivet locations in wheel well

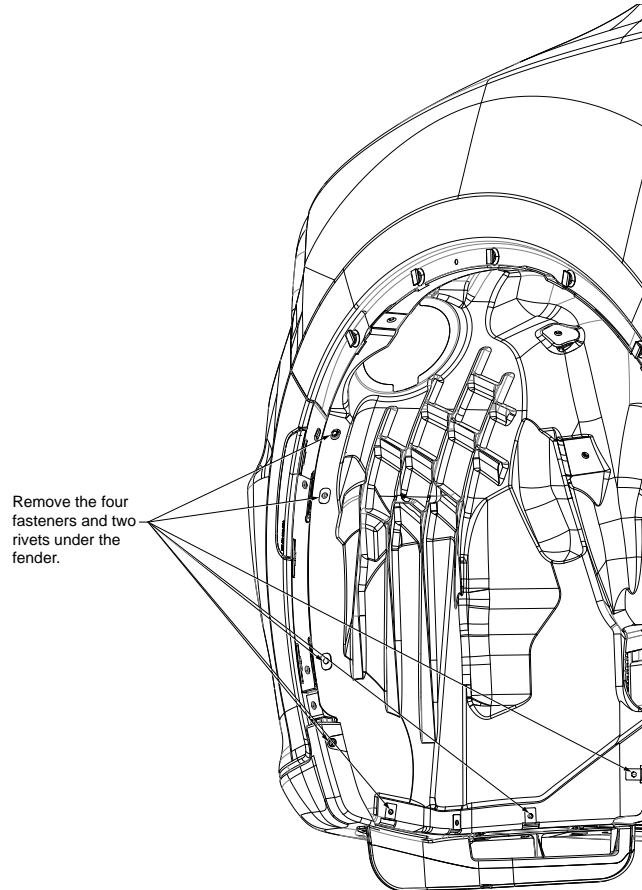


Figure 4 Remove the fascia retaining fender clips and partially remove the fender trim from the front fascia



Figure 5 Remove the fascia fastener locations from under the vehicle

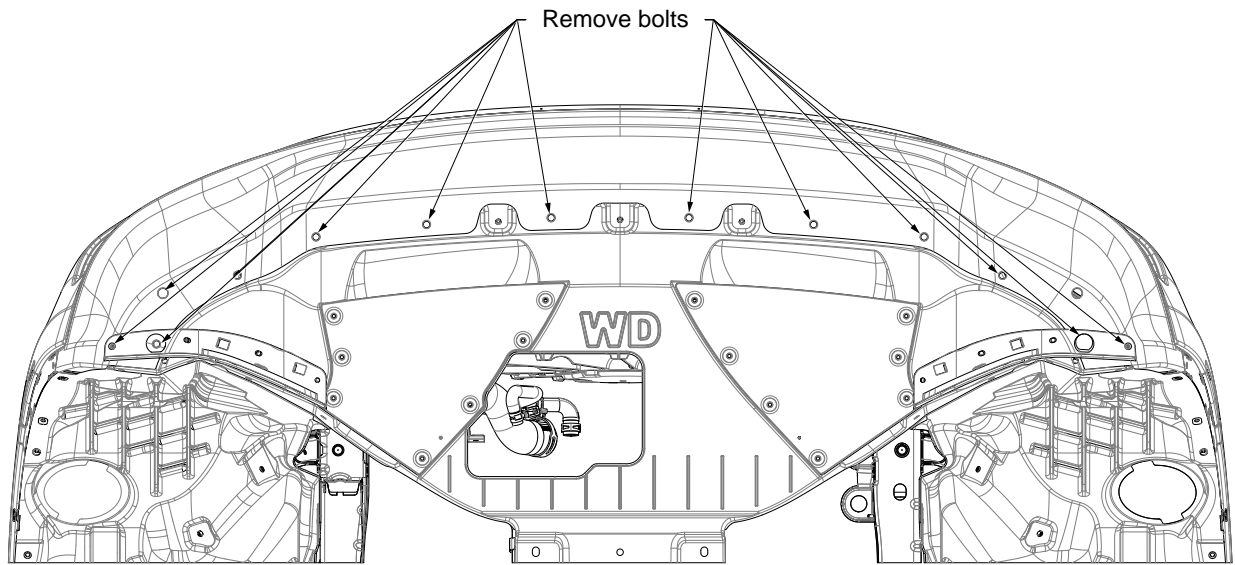
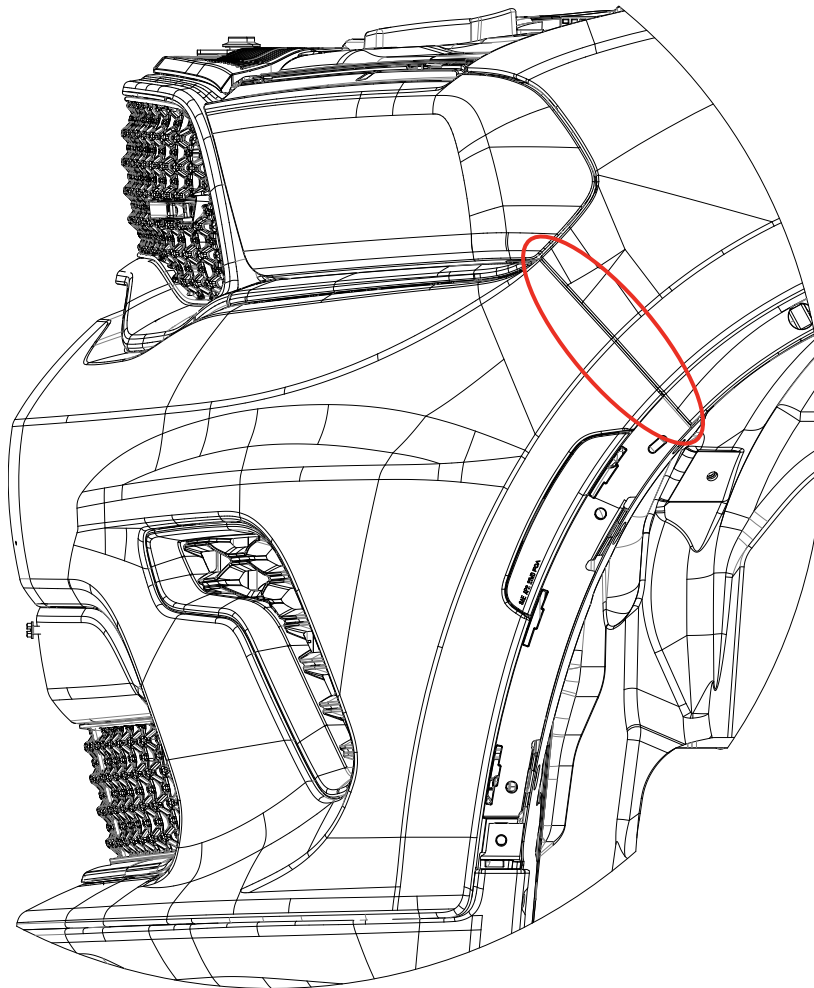


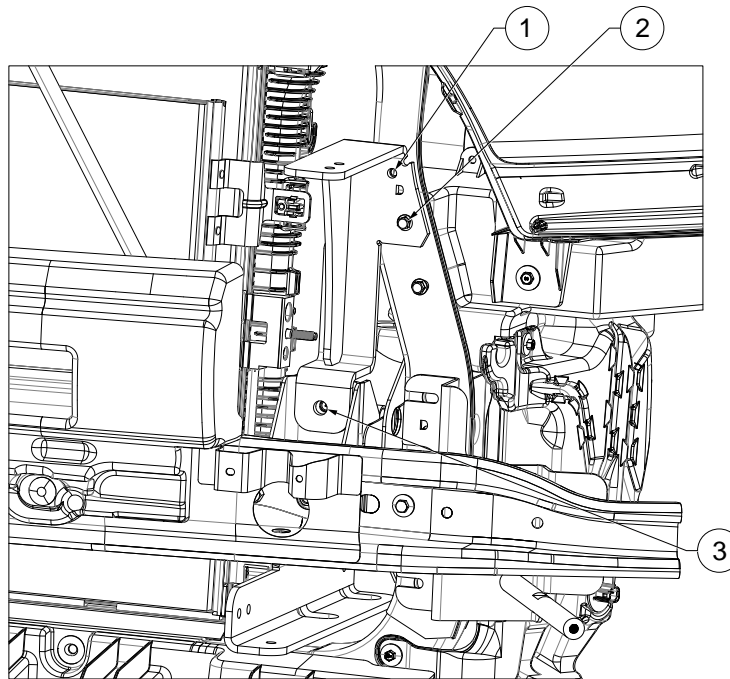
Figure 6 Carefully remove the Fascia from vehicle



2. Remove the bolts shown in Figure 7. Mount the driver-side bracket in the position shown, lining up the holes shown in positions 2 and 3 of Figure 7. Secure the bracket using a 1/4-inch bolt and nut in position 1 of Figure 7. Continue to secure the bracket and refasten the removed bolts. Repeat these actions for the passenger-side bracket.

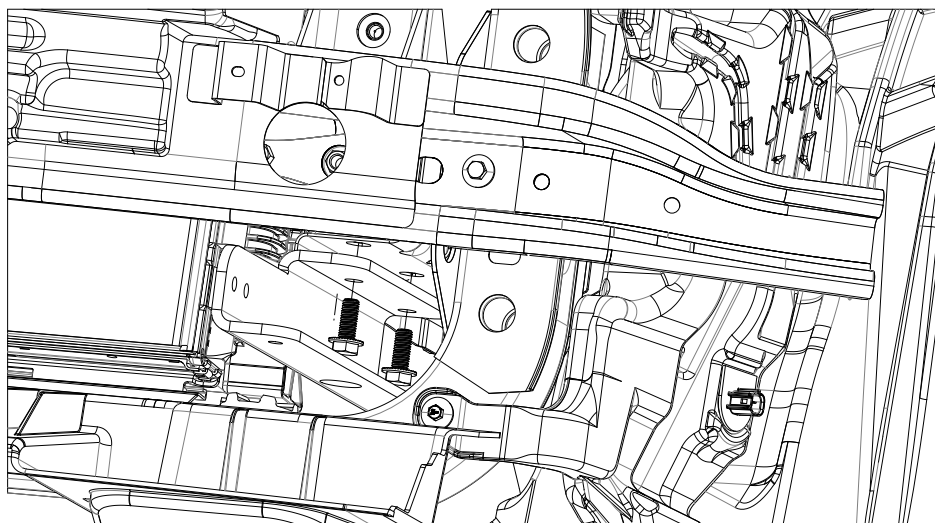
IMPORTANT: A portion of the plastic trim housing the radiator/upper grille must be trimmed to provide clearance for the upper mounting brackets for both the passenger and driver sides of the vehicle.

Figure 7 Upper mounting bracket



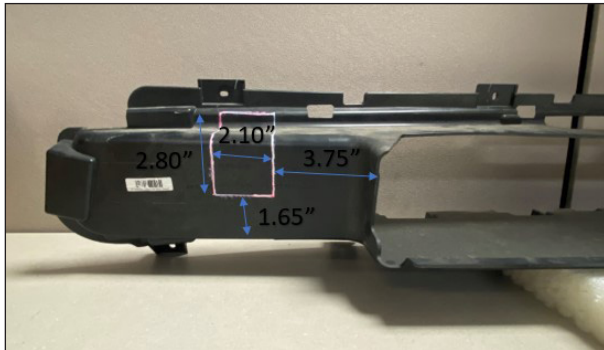
3. Position the driver-side lower mounting brackets to the tow-hook mounts on the vehicle; secure it using the M10-1.5 x 20 Serrated Flange Head Cap Screws. See Figure 8. Repeat this process for the passenger side.

Figure 8 Tow-hook mounts

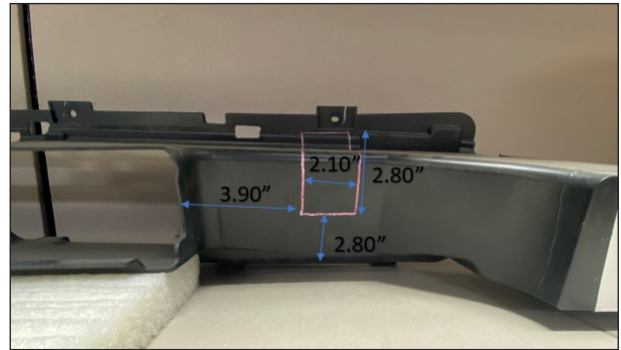


4. With the fascia now removed, cut out the outlined sections in Figure 9 on the lower grille to clear room for the lower vehicle mounting bracket.

Figure 9 Cut out indicated areas



Driver side

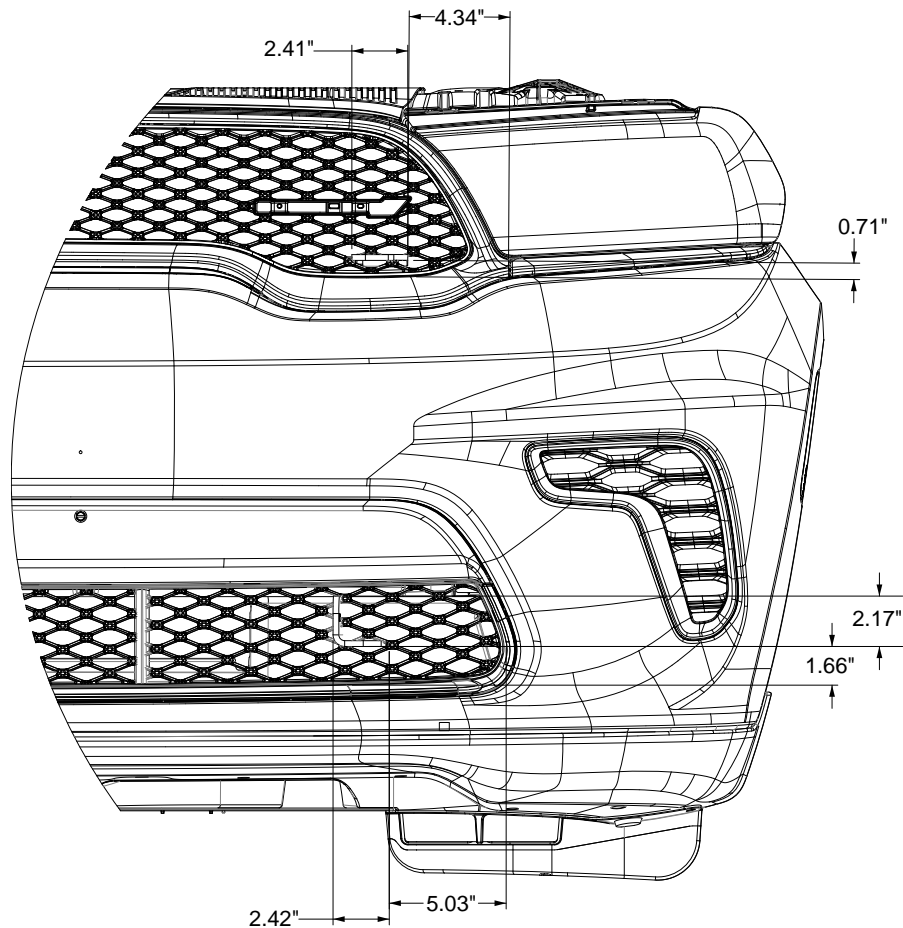


Passenger side

NOTE: If mounting the lower guard kit, refer to the lower guard instruction sheet 806204275 before moving on to step 5.

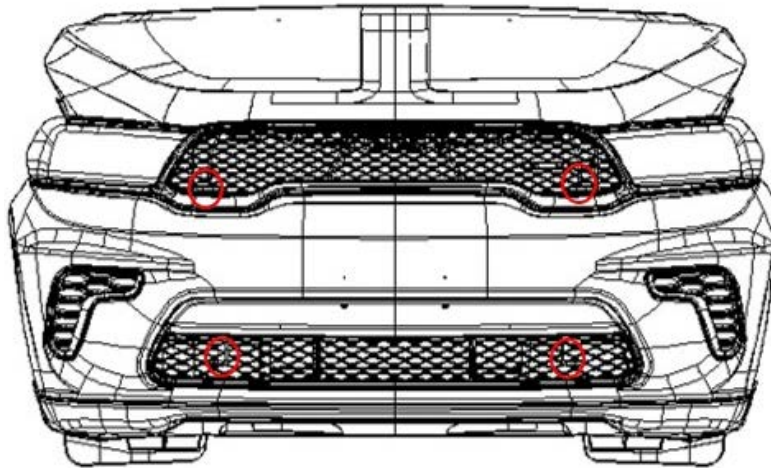
5. On the upper and lower grille, make cuts to the dimensioned area of the honeycomb grille. See Figure 10.

Figure 10 Honeycomb grille



- Carefully reinstall the fascia back onto the vehicle, ensuring that the brackets protrude through the cut locations from steps 4 and 5.

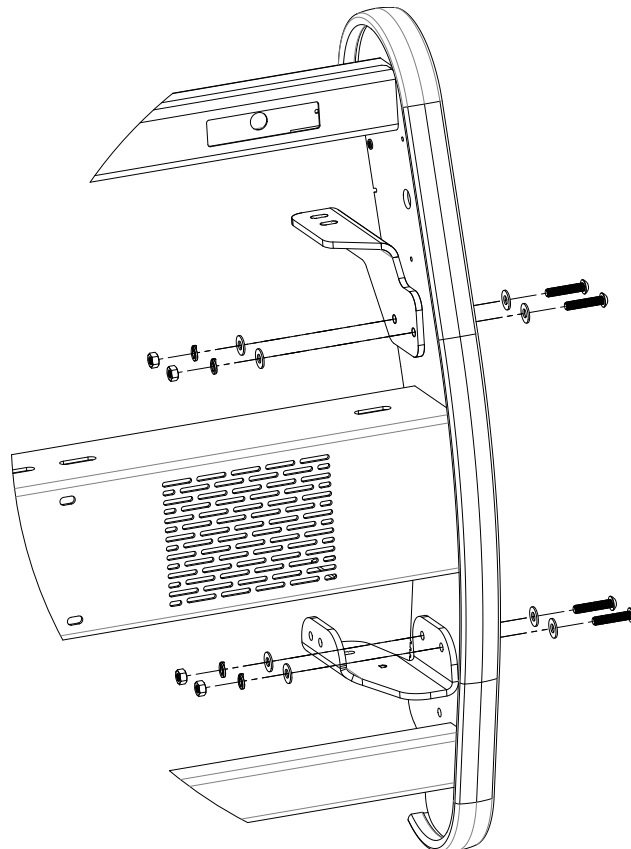
Figure 11 Reinstall the fascia



- Using the 5/16-18 by 1.5-inch-long button head bolts, lock washers, flat washers, and hex nuts, install the driver side and passenger side upper and lower connector brackets to the push bumper. See Figure 12. Torque the bolts to 24-28 ft-lb.

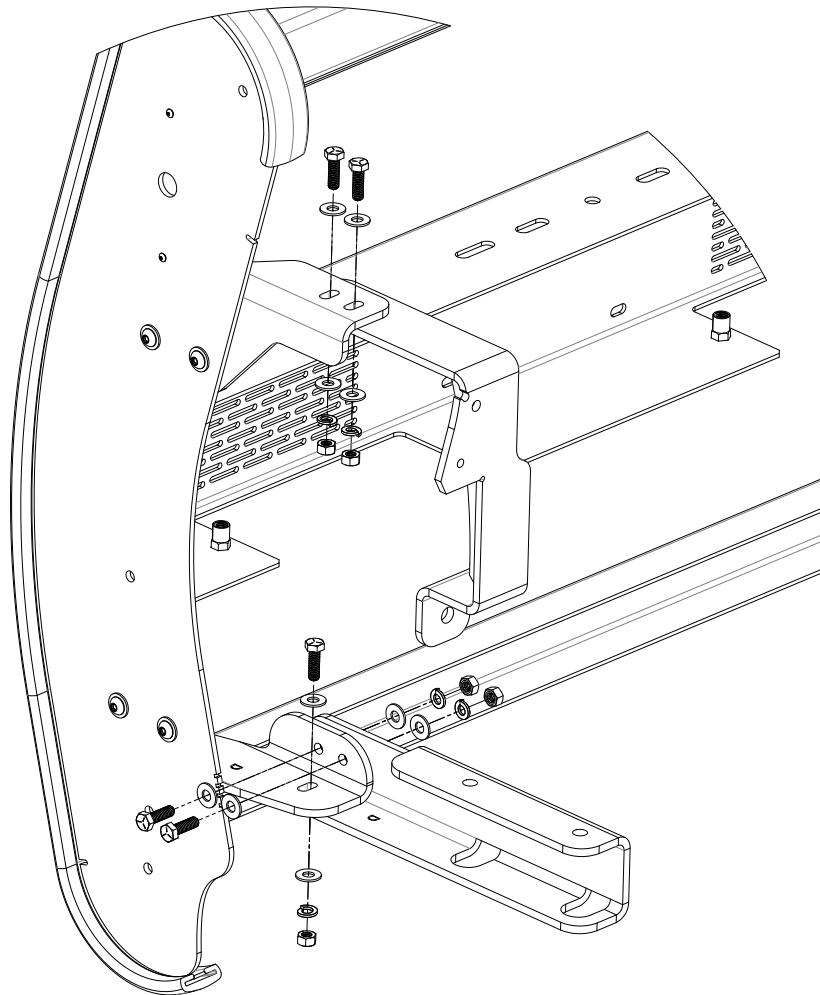
NOTE: If installing the lower guard, do not tighten the forward most bolt on the lower bracket.

Figure 12 Install the connector brackets



8. With the assistance of another technician, position the push bumper over the brackets that are installed on the vehicle and insert the 5/16-18 by 1-inch-long hex head bolts, flat washers, lock washers, and hex nuts through each bracket and loosely tighten. See Figure 13.

Figure 13 Position the push bumper



Maintaining the Push Bumper 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.

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 +1 708-534-3400.

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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