



Safety Message to Installers of Siren Speakers

⚠ 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 and the original product. In addition, listed below are some other important safety instructions and precautions you should follow:

- To properly install an electronic siren, 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's service manuals when installing equipment on a vehicle.
- All effective sirens and horns produce loud sounds (120 dB) that may cause permanent hearing loss. Always minimize your exposure to siren sound and wear hearing protection. Do not sound the siren indoors or in enclosed areas where you and others will be exposed to the sound.
- Federal Signal siren amplifiers and speakers are designed to work together as a system. Combining a siren and speaker from different manufacturers may reduce the warning effectiveness of the siren system and may damage the components. You should verify or test your combination to make sure the system works together properly and meets federal, state and local standards or guidelines.
- Be sure the siren amplifier and speaker(s) in your installation have compatible wattage ratings.
- In order for the electronic siren to function properly, the ground connection must be made to the **NEGATIVE** battery terminal.
- **DO NOT** get metal shavings inside the product. Metal shavings in the product can cause the system to fail. If drilling must be done near the unit, place a ESD-approved cover over it to prevent metal shavings from entering the unit. Inspect the unit after mounting to be sure that there are no shavings present in or near it.
- Sound output will be severely reduced if any objects are in front of the speaker. If maximum sound output is required for your application, you should ensure that the front of the speaker is clear of any obstructions.
- **DO NOT** install the speaker(s) or route the speaker wires where they may interfere with the operation of airbag sensors.
- **DO NOT** install equipment or route wiring or cord in the deployment path of an airbag.
- Locate the control head so the vehicle and control can be operated safely under all driving conditions and **CONTROL** can be.
- After installation, test the siren system to ensure that it is operating properly.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- After testing is complete, provide a copy of these instructions to the 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.

Before You Begin

IMPORTANT: The ES100 complies with the requirements of SAE J1849 EVS3 and CCR Title 13 Class A when it is used with Federal Signal Corporation electronic sirens. The ES100 is a compact speaker intended to be mounted with the supplied mounting system. If the ES100 is installed with another mounting system, the safety and effectiveness of the installation must be carefully evaluated.

Introduction

This kit mounts an ES100 speaker to the front bumper of a 2012 Ford Super Duty truck (F250/350/450). It is designed for on both the driver and passenger sides of the vehicle.

Unpacking the Kit

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

Table 1 Kit contents

Qty.	Description	Part Number
1	Bracket	856700181
2	Screw, 1/4"-20 x 0.625", Hex Hd.	7000A311-10
2	1/4" Flat Washer	7072A024
2	1/4"-20 Elastic Stop Nut	7058A010

Mounting the Speaker

⚠ WARNING

ES100 MOUNTING PRECAUTIONS — *To avoid reducing the sound output and damaging the speaker, ensure that the speaker is mounted with the wires protruding from the bottom of the speaker.*

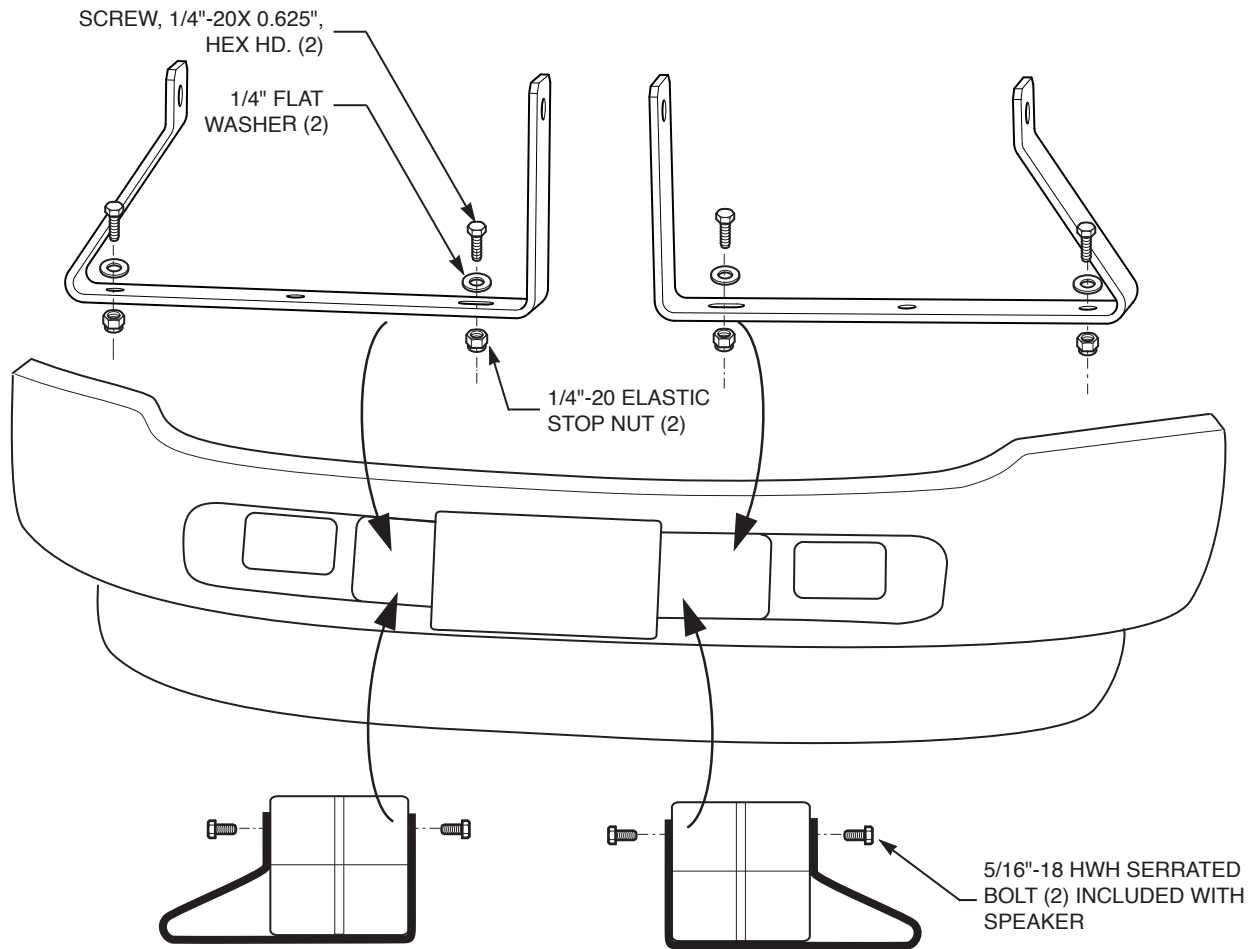
NOTICE

DRILLING PRECAUTIONS — *Before drilling holes, check the area into which you plan to drill to ensure you do not damage vehicle components. All drilled holes should be deburred and all sharp edges should be smoothed. All wires going through drilled holes should be protected by a grommet or convolute/split-loom tubing.*

To mount the speaker:

1. The bracket mounts to the holes on the bottom surface of the front bumper on either side of the license plate holder. Select a side and line up the bracket with the holes in the bumper. Remove any hardware in the holes.
2. See Figure 1. Attach the bracket to the bumper using the supplied 1/4"-20 hardware.
3. Attach the speaker to the bracket using the two 5/16"-18 screws supplied with the speaker. Ensure the wires exit from the bottom of the speaker.
4. Complete the wiring according to the instructions included with the speaker.

Figure 1 ES100 Speaker mounted in right or left side of bumper



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Getting Technical Support and Service

Federal Signal Corporation will service your equipment or provide 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 number. The RMA number can be obtained from your local distributor or Federal Signal. Please provide a brief explanation of the service requested or the nature of the malfunction. Contact your local dealer/distributor for replacement parts availability or contact the Federal Signal Service Department (7 A.M. to 5 P.M., Monday through Friday, Central Time) at:

Service Department
 Federal Signal Corporation
 2645 Federal Signal Drive
 University Park, IL 60484-3167
 800-433-9132
 800-343-9706 (fax)
www.fedsig.com

Returning a Product to Federal Signal

Before returning a product to Federal Signal, call 800-264-3578, 800-433-9132, or 800-824-0254 to obtain a Returned Merchandise Authorization number (RMA number). To expedite the process please be prepared with the following information:

- Your Federal Signal customer or account number.
- The purchase order number under which the items were purchased.
- The shipping method.
- The model or part number of the product being returned.
- The quantity of products being returned.
- Drop ship information as needed.
- Any estimate required.

When you receive your RMA Number:

- Write the RMA number on the outside of the box of returned items.
- Reference the RMA number on your paperwork inside of the box.
- Write the RMA number down, so that you can easily check on status of the returned equipment.

Send all material with the issued RMA Number to:

Federal Signal Corporation
Public Safety Systems
2645 Federal Signal Drive
University Park, IL 60484-3167
Attn: Service Department
RMA: # _____
800-433-9132
800-343-9706 (fax)
www.fedsig.com