

INSTRUCTION SHEET FOR FEDERAL MODEL 58 SERIES B RESONATING HORN

SAFETY MESSAGE TO INSTALLERS

People's lives depend on your safe installation of our products. It is important to follow all instructions shipped with the products. This device is to be installed by a trained electrician who is thoroughly familiar with the National Electrical Code and will follow the NEC Guidelines as well as local codes.

The selection of the mounting location for the device, its controls and the routing of the wiring is to be accomplished under the direction of the Facilities Engineer and the Safety Engineer. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating this equipment.
- Do not connect this unit to the system when power is on.
- Optimum sound distribution will be severely reduced if any objects are in front of the horn. You should ensure that the front of the horn is clear of any obstructions.
- All effective warning horns produce loud sounds which may cause, in certain situations, permanent hearing loss. You should take appropriate precautions such as wearing hearing protection.
- All effective warning speakers produce loud sounds, which may cause, in certain situations, permanent hearing loss. The device should be installed far enough away from potential listeners to limit their exposure while still maintaining its effectiveness. The OSHA Code of Federal Regulations 1910.95 Noise Standard provides guidelines which may be used regarding permissible noise exposure levels.
- After installation, ensure that all bolts and threaded joints are tightened.
- Establish a procedure to routinely check the sound system for proper activation and operation.
- Provide a copy of these instructions to the Safety Engineer, operator(s) and maintenance personnel.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the device.

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

A. INSTALLATION.

To minimize the chance of moisture entering the projector or the horn mechanism, it is recommended that the horn be mounted with the projector parallel to a flat mounting surface. In addition, the horn **MUST** be mounted above a horizontal mounting surface. To avoid destroying the horn mechanism, make sure that the horn is installed so that it clears ALL vehicle and warning system parts.

1. Using the rubber support bracket fender pad as a template, scribe four hole location marks on the mounting surface. The support bracket fender pad is the larger of the two rubber pads.

CAUTION

Before drilling holes in ANY part of a vehicle, be sure that both sides of the mounting surface are clear of parts that could be damaged; such as brake lines, fuel lines, electrical wiring or other vital parts.

2. Drill three 17/64" holes at the outer location marks that were scribed in step 1. Drill a 3/8" hole at the inner mark.
3. See figure 1. Place the projector mounting bracket pad on the mounting surface so that the center to center distance between the 3/8" hole that was drilled in step 2 and the holes in the pad are approximately 10-1/2 inches. Scribe two screw location marks on the mounting surface.
4. Drill two 17/64" holes at the location marks that were scribed in step 3.
5. See figure 1, mounting detail "A". Scrape the paint and other surface coatings from around one of the 17/64" mounting holes on the under side of the mounting surface to ensure a good electrical ground.
6. Route both power leads through the 1/4" hole in the fender pad, through the 3/8" hole at the mounting location, and through the large hole in the mounting plate.
7. Attach the horn to the mounting surface. See figure 1, mounting detail "A". Mount the support bracket first, using the support bracket fender pad, the mounting plate, three 1/4-20 x 7/8" mounting bolts, flat washers, split lockwashers, and nuts. Be sure to install the ring terminal on the support bracket mounting screw at the hole from where the paint was scraped.
8. If necessary, adjust the position of the projector mounting bracket to align the two holes in the bracket with the two holes in the mounting surface. Attach the projector mounting bracket to the mounting surface using the projector mounting pad, two 1/4-20 x 7/8" bolts, mounting plate, split lockwashers, and nuts.

IMPORTANT

The projector mounting bracket is designed to control, but not prevent, projector movement. It is NOT intended to provide support for the horn projector. In addition, the rubber grommet, in the projector mounting bracket, acts as a shock absorber. As a result, the horn projector should "float" in the grommet.

9. Inspect the projector mounting bracket and horn projector to ensure that the projector is "floating" in the grommet.
10. If the projector is not "floating" in the grommet, remove the horn from the mounting surface and bend the suspension bracket slightly by grasping the horn projector near the flare and applying a moderate amount of pressure in the appropriate direction. Repeat steps 7, 8, and 9. It may be necessary to repeat steps 7, 8, 9, and 10 several times before the proper horn projector/grommet fit is attained.

B. ELECTRICAL.

It is recommended that a momentary switch, rated at 10-amperes (minimum), be used to control the horn. If desired, the vehicle horn ring circuit can be used to operate a horn relay. See figure 2. When wiring the horn to the relay or switch, use wire that is no smaller than 12AWG.

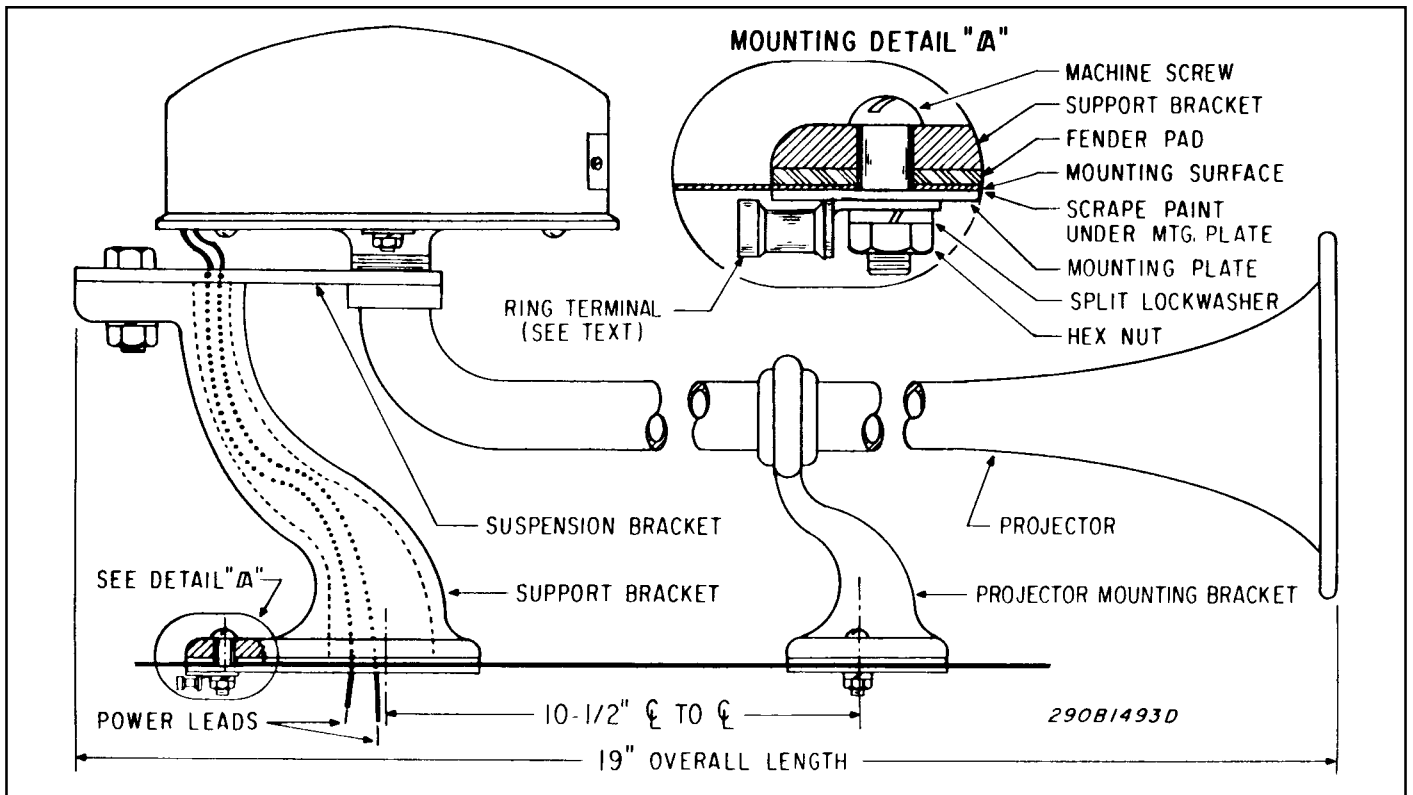


Figure 1.

C. MAINTENANCE.

SAFETY MESSAGE TO MAINTENANCE PERSONNEL

- Read and understand all instructions before performing any maintenance to this unit.
- To reduce the risk of electrical shock or ignition of hazardous atmospheres, do not perform maintenance/service on this device when circuits are energized.
- Optimum sound distribution will be reduced if the horn becomes clogged with a foreign substance. Periodic checks should be performed to ensure foreign substances are not packed into the horn.
- Any maintenance to the unit **MUST** be performed by a trained electrician in accordance with NEC Guidelines and local codes.
- Never alter the unit in any manner. Safety in hazardous locations may be endangered if additional openings or alterations are made in units specifically designed for use in these locations.
- The nameplate, which may contain cautionary or other information of importance to maintenance personnel, should not be obscured if exterior of housings used in hazardous locations are painted.

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

Any obstruction in the horn projector rapidly causes permanent damage to the horn mechanism while impairing horn operation. Therefore, inspect the projector frequently to be sure that it is free of obstructions. Remove any obstructions that may be present.

The Model 58 Horn has no user serviceable parts.

The Federal factory will service your equipment or provide technical assistance with any problems that cannot be handled locally.

Any units returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization. This R.M.A. can be obtained from the local Distributor or Manufacturer's Representative.

At this time a brief explanation of the service requested, or the nature of the malfunction, should be provided.

Address all communications and shipments to:

Service Department
Signal Division/Electrical Products
Federal Signal Corp.
2645 Federal Signal Dr.
University Park, IL 60466-3195

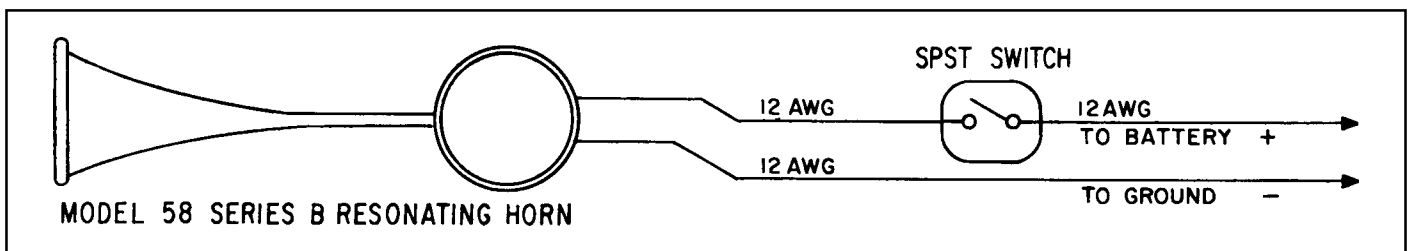


Figure 2.