MB-IDENT03 Identifier Board Installation, Maintenance, and Service Manual

25500768 Rev. A0 0222

Safety Message to Installers of Warning Light Equipment

A 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. 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
mechanical and 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 performing
equipment installations on a vehicle.

Light Hazards

- To be an effective warning device, this product produces bright light that can be hazardous to your
 eyesight when viewed at a close range. Do not stare directly into this lighting product at a close
 range, or permanent damage to your eyesight may occur.
- Do not install the light system in an area that would block, impair, or blind the driver's vision. Ensure that the light system is mounted in a position that is outside the driver's field of vision, so the driver can safely operate the vehicle.
- Federal Signal power supplies and light heads are designed to work together as a system. Combining
 light heads and a power supply from different manufacturers may reduce the warning effectiveness of
 the lighting system and may damage the components. You should verify or test your combination to
 ensure that the system works together and meets federal, state, and local standards or guidelines.

Electrical Hazards

- A light system is a high current system. In order for the system to function properly, a separate
 negative (-) connection and positive (+) connection must be made. All negative connections should
 be connected to the negative battery terminal, and a suitable fuse should be installed on the positive
 battery terminal connection as close to the battery as possible. Ensure that all wires and fuses are
 rated correctly to handle the device and system amperage requirements.
- 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 or mandated safety functions or circuits. Always check the vehicle for proper
 operation after installation.
- The lighting system components, especially light bulbs, strobe tubes, LEDs, and the outer housing, get hot during operation. Disconnect power to the system and allow the system to cool down before handling any components of the system.
- Do not mount a radio antenna within 18 inches (45.7 cm) of the lighting system. Placing the antenna
 too close to the lighting system could cause the lighting system to malfunction or be damaged by
 strong radio fields. Mounting the antenna too close to the lighting system may also cause the radio
 noise emitted from the lighting system to interfere with the reception of the radio transmitter and
 reduce radio reception.

• Do not attempt to wash any unsealed electrical device while it is connected to its power source.

During Installation and Service

- 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 an ESD-approved cover over the unit. Inspect the unit after mounting to verify that there are no shavings present in or near the unit.
- DO NOT connect this system to the vehicle battery until ALL other electrical connections are made, mounting of all components is complete, and you have verified that no shorts exist. If the wiring is shorted to the vehicle body or frame, high current conductors can cause hazardous sparks, resulting in electrical fires or flying molten metal.
- DO NOT install equipment or route wiring (or the 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 other extreme environmental exposure areas.
- 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, grommet all
 drilled holes through which wiring passes. Ensure that the mounting screws do not cause electrical or
 mechanical damage to the vehicle.
- Refer to the manual packed with the lighting system for proper electrical connections, additional precautions, and information.

After Installation or Service

- After installation, test the light system to ensure that it is operating properly.
- Test all vehicle functions, including horn operation, vehicle safety functions, and vehicle light systems, to ensure proper operation. Ensure that the installation has not affected the vehicle operation or changed any vehicle safety function or circuit.
- If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- Scratched or dull reflectors, mirrors, or lenses will reduce the effectiveness of the lighting system.
 Avoid heavy pressure and the use of caustic or petroleum-based products when cleaning the lighting system.
 Replace any optical components that may have been scratched or crazed during system installation.
- Do not attempt to activate or deactivate the light system control while driving in a hazardous situation.
- Frequently inspect the light system to ensure that it is operating properly and is securely attached to the vehicle.
- 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.

Introduction

The Federal Signal LED Model MB-IDENT03 Identifier Board is a supplemental identification device. The fixed "STATE PATROL" display is created by blue, high brightness, wide-angle LEDs. It operates at a nominal input of 13.6 Vdc (11 Vdc minimum).

The Identifier Board lens is thermoformed PETG material, which is a thermoplastic polyester material comparable to polycarbonate impact resistance properties, with bracketry made from 11-gauge steel. It has a 15-foot power and ground-wire harness. Mounting hardware is supplied.

The Identifier Board has an operating temperature range of -30°C to +65°C (-22°F to +149°F).

Table 1 Dimensions

Length x Width x Height	24.0 x 1.0 x 4.1 inches (61.0 x 2.6 x 10.4 cm)
Weight	5.6 lb (2.54 kg)

Unpacking the Kit

After unpacking the kit, 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 damage. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in Table 2 are included in the package. 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 2 Kit contents

Qty.	Description	Part Number
1	Window Guard (With/C-Wires) / Lens (Potted) Message Board PCBA	20000546/865203582
10	5/8-inch Black Ox. Stainless Steel FLat Head Hex Dr. Screw	70001429A-10
1	Window Guard Message Board Mounting Plate	865203902A
2	Message Board Front Fastener Strip	865203903A
2	Message Board Rear Fastener Strip Assembly	865203905A

Installing the MB-IDENT03 Message Board

To mount the MB-IDENT03 Message Board onto the Rear Window Guards:

- 1. For installation purposes, determine the proper location on the Rear Window Guard by placing the already assembled model on the Rear Window Guard grille surface to make sure the exit wires on the model are not pinched or covered by any of the metal webbing on the window guard.
- 2. Once the proper light position is located on the window guard, mark all four corner edges of the light assembly with a pencil.
- **3.** Set the light assembly on a clean, flat surface and carefully remove all ten of the mounting screws and set the screws aside.
- **4.** For the next two steps, have another person help to hold and align the assembly during the placement of the light assembly and the re-fastening of the screws to mount the light assembly to the window guard. The light assemblies will be on the outside surface of the window guards.

If window guard is already installed on the vehicle, make sure window is rolled down and both sides of the window guard are easily accessible.

5. Carefully lift the upper Front Fastener Strip, lens/PC board assembly, and large mounting plate all together. While keeping these parts together, place the light within the marked locations on the outside surface of the window guard. Keep the wires away from any edges to avoid the chaffing of wires after installation. See Figure 1.

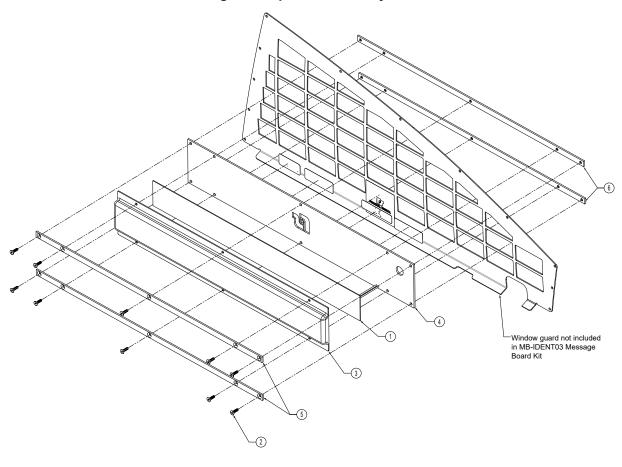


Figure 1 Exploded Assembly View

6. Once the light assembly is in position, insert one flat head machine screw through the top left hole front fastener strip and through the assembly while the Rear Fastener Strip is being held on the opposite side of the window guard. See Figure 2.

Figure 2 Side View of Message Board Mounted on Window Guard



- 7. Loosely tighten that first inserted screw. Insert a second flat head machine screw into the top right hole of the Front Fastener Strip and through the assembly into the Rear Fastener Strip and loosely tighten the screw while the upper Rear Fastener Strip is being held in place on the opposite side of the window guard.
- **8.** Being careful not to scratch the lens, add and align the lower Front Fastener Strip to the bottom front assembly, and insert a flat-head machine screw into the left corner hole of the Front Fastener Strip and loosely tighten the screw. See Figure 1.
- **9.** Insert another flat head machine screw to the right corner hole of the lower Front Fastener Strip and through the assembly while the lower Rear Fastener Strip is being held in place on the opposite side of the window guard. Fasten the screw into the Rear Fastener Strip and loosely tighten the screw. See Figure 3.

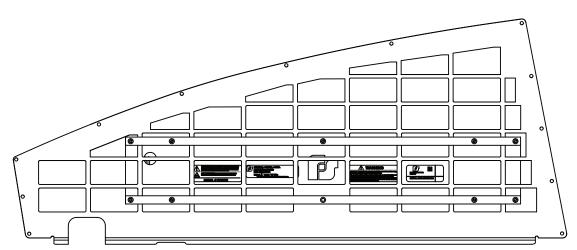


Figure 3 Rear View of Message Board Mounted on Window Guard

10. Add the remaining six flat head machine screws to the assembly and make any final alignment position adjustments to the light before securing all ten screws. Do not use impact tools while securing the screws to the assembly, as they may crack the lens/PC board assembly.

▲ WARNING

LIGHT HAZARD: To be an effective warning device, an emergency warning system produces bright light that can be hazardous to your eyesight when viewed at a close range. Do not stare directly into this lighting product at a close range, or permanent damage to your eyesight may occur.

11. After the light assembly has been secured, make the necessary wire connections to the red (+12 Vdc battery) and black (-) wires, and then check for proper light operation. See Figure 4.

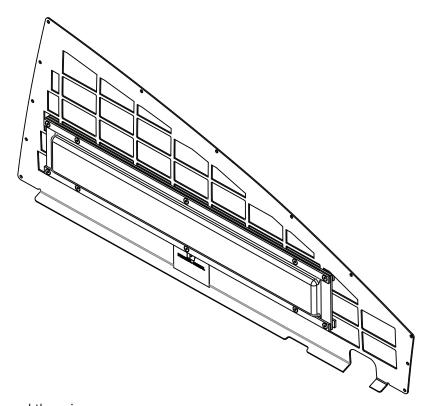


Figure 4 Front ISO Assembled View Mounted on Rear Window Guard

- **12.** Secure and conceal the wires.
- **13.** Installation steps for driver and passenger side Message Board assemblies are the same.

Getting Technical Support and Service

For technical support and service, please contact:

Service Department Federal Signal Corporation 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 units 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 Drive University Park, IL 60484-3167

Ordering Replacement Parts

To order replacement parts, call Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT), or contact your nearest distributor.

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.



2645 Federal Signal Drive University Park, Illinois 60484-3167

www.fedsig.com

Customer Support

Police/Fire-EMS: 800-264-3578 • +1 708 534-3400 Work Truck: 800-824-0254 • +1 708 534-3400 Technical Support: 800-433-9132 • +1 708 534-3400

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