

## MSA-RM-1 and MSA-RM-2 Relay Modules

Replacement Relay Modules for MINI-SCREEN<sup>®</sup> and MICRO-SCREEN<sup>®</sup> Metal Boxes

Model MSA-RM-1 shown



**WARNING . . .  
Shock Hazard**

Before performing any maintenance inside the control box, always remove all power from the control box and from the machinery to which the control box is connected. **Failure to do so can result in electrical shock and serious injury or death.**

### Installation

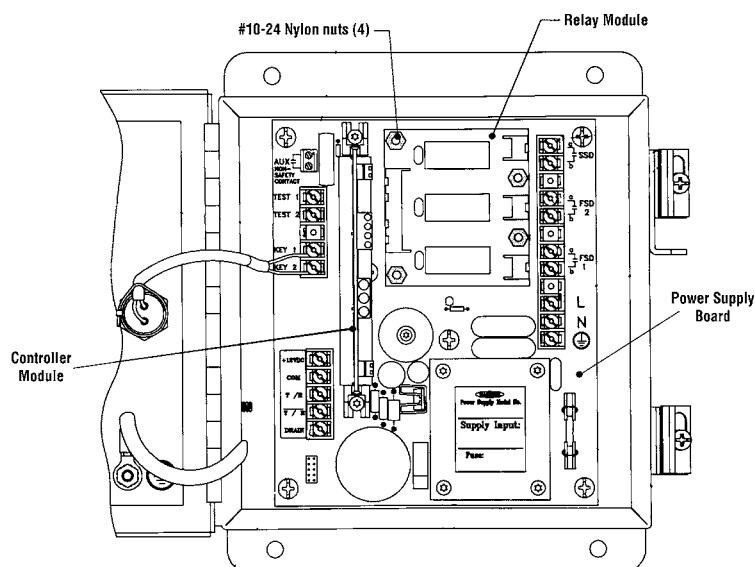
Module replacement requires only a 3/8" nut driver. The procedure given below is for replacement of the module.

#### Removing the old module

1. Before opening the control box cover, remove all power to the control box and to the machinery to which the control box is connected. Open the control box cover. Refer to the drawing below.
2. The relay module is held to the power supply board by four #10-24 nylon nuts and connector pins. The nuts are shaded in the drawing below. Remove the nuts from the module that is to be removed. NOTE: A spare set of nuts is provided.
3. Free the module from its connector sockets as follows: Grasp the module. Pull up gently and evenly, while rocking the module from side-to-side until the module comes free of the connector sockets.

#### Installing the new module

1. Make certain that all power has been removed from the control box and the machinery to which the control box is connected.
2. Place the module onto its nylon mounting studs. Press gently but firmly along the right and left edges of the module to seat the circuit connector pins snugly and completely into their sockets.
3. Replace the four #10-24 nylon nuts and tighten them snugly using a 3/8" nut driver. **Use caution to avoid overtightening.**
4. Refer to the system instruction manual and perform the *Commissioning Checkout Procedure* found there.



If you have any problems or questions, contact the Banner Applications Department at 888.373.6767. E-mail: [sensors@bannerengineering.com](mailto:sensors@bannerengineering.com)