

Fixed Barrier Kit for use with Powerlink™ Systems

Retain for future use.

Introduction

This bulletin explains how to install the fixed barrier kit NFASBKG3, which is used to provide an expanded wiring compartment and a barrier for Class 2 external control wiring entering a NF panelboard equipped with a Powerlink remote power switching system.

NOTE: The fixed barrier kit is not compatible with column-width panelboards.

Installing the Fixed Barrier Kit

Follow these instructions to install the fixed barrier kit into a panelboard.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, NOM-029-STPS or CSA Z462 or local equivalent.
- Electrical equipment must be installed, operated, serviced, and maintained only by qualified personnel.
- Turn off all power supplying the panelboard and the equipment in which it is installed before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.
- Before energizing panelboard, all unused spaces must be filled with blank fillers.

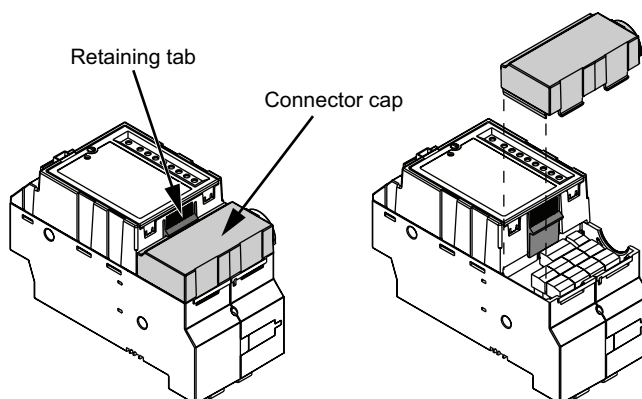
Failure to follow these instructions will result in death or serious injury.

Connecting the Controller Extension

1. Disconnect all power to the panelboard.
2. Remove the panelboard cover and deadfront, then verify that all power is off using a properly rated voltage sensing device.

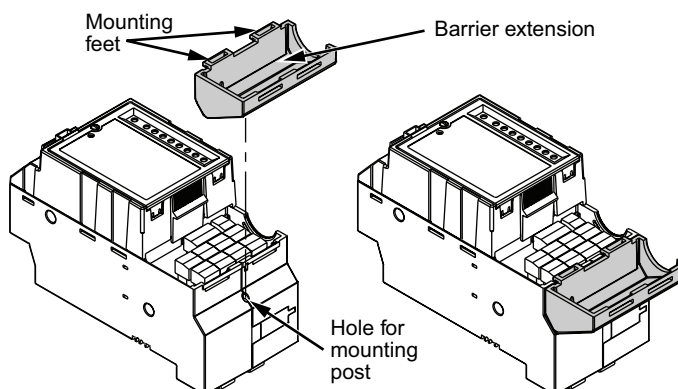
3. To remove the existing connector cap, press down on the retaining tab securing the connector cap, then slide the connector cap up and away from the controller (see Figure 1).

Figure 1 - Removing the Cap and Mounting the Extension



4. There is a mounting post on the bottom of the barrier extension. Line up the mounting post above the hole on the controller (see Figure 2).
5. Insert the mounting post into the hole, and push down until the mounting feet on the barrier extension snap onto the end of the controller (see Figure 2).

Figure 2 - Installing the Barrier Extension

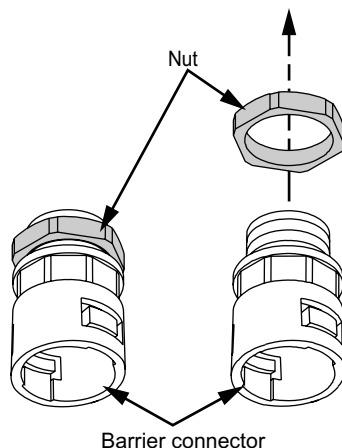


Attaching the Barrier Connector

Follow the instructions below to attach the barrier connector to the tubing.

1. Remove the nut from the barrier connector (see Figure 3).

Figure 3 - Removing the Nut from the Barrier Connector



2. Slide the barrier connector onto one end of the tubing. The barrier connector will automatically lock onto the tubing. Verify that the barrier connector is securely attached by pulling on it.

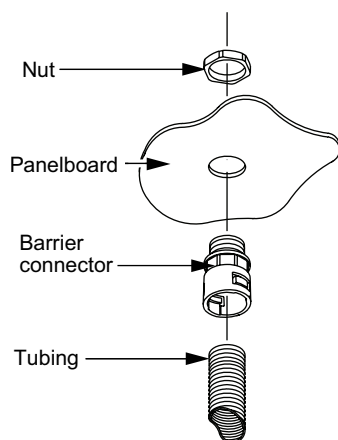
NOTE: See Figure 4 for steps 2 to 5.

3. Locate a knockout on the top of the panelboard near the controller, then remove it.

NOTE: If attaching to an external conduit, remove a knockout where the conduit will enter the panelboard.

4. Push the narrow end of the barrier connector through the hole. The barrier connector will keep the tubing from exiting through the opening.
5. Screw the nut onto the end of the barrier connector, securing the connector to the panelboard.

Figure 4 - Barrier Connector Assembly

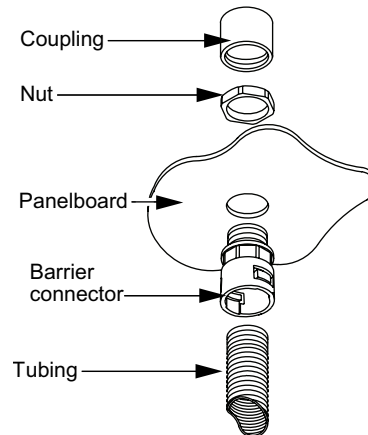


Continue with the following steps if attaching to an external conduit:

6. Attach a 3/4 in. coupling (not included) to the barrier connector (see Figure 5).

7. Connect the conduit to the coupling.

Figure 5 - Attaching to a Conduit

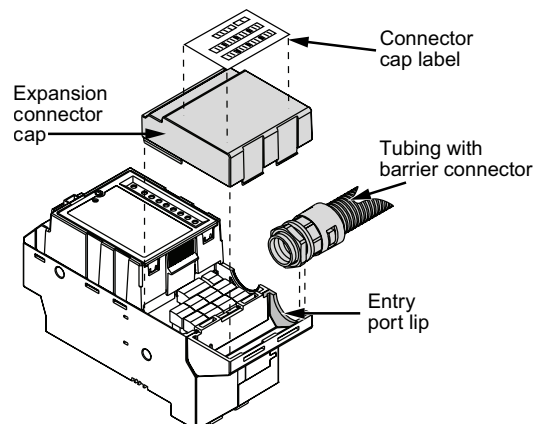


Connecting to the Controller

Follow the steps below to install the barrier kit onto the controller.

1. Measure the space from where the termination wires enter the panelboard to the entry port on the controller extension.
2. After finding the correct distance, cut the tubing to the length measured by using scissors or a knife. Make sure the cut is straight and there are not any jagged edges.
3. Attach the second barrier connector to the end of the tubing.
4. Unscrew the nut on the end of the barrier connector so that there is 1/4 in. of space between the nut and the barrier connector.
5. Pull the external control wires through the tubing.
6. Strip 1/4 in. of insulation from the end of the control wire, then insert the wire into a terminal of the plug-on connector. The plug-on connectors are provided with the controller so refer to the related installation instructions for details.
7. Connect the plug-on connectors to the appropriate termination in the controller as indicated in the documentation for the controller.

Figure 6 - Assembling the Connector Cap



8. When aligning the space between the nut and the barrier connector with the entry port, push down on the barrier connector until it is securely attached to the lip of the entry port (see Figure 6).

NOTE: The lip of the entry port will fit securely between the nut and the barrier connector. If it does not, screw the nut further onto the barrier connector, and reattach the barrier connector to the lip of the entry port.

9. Slide the expansion connector cap on until it snaps into place (see Figure 6).
10. Apply the appropriate connector cap label to the connector cap. The label used is determined by the controller model chosen (NF500G3, NF1000G3, or NF2000G3).
11. Proceed with the installation of any other Powerlink components according to installation instruction sheets. If other components are not being installed at this time, or the installation is complete, replace the panelboard deadfront and cover before turning on the power.