CENTERLINE® Motor Control Centers
Splicing Horizontal Ground Buses

Application

This publication outlines the procedure for splicing the horizontal ground bus in front mounted and back-to-back mounted CENTERLINE motor control center sections.

ATTENTION

Disconnect all sources of power to the motor control center prior to splicing buses. Serious damage and/or personal injury can result when the equipment is energized.

Recommended Tools

- Screwdriver (to remove wireway covers)
- 3/8” wrench or socket (hex-type suggested)
- Torque wrench

Splicing Procedure

1. Verify parts list (refer to Figure 1 - Figure 4, parts are listed for each figure).

2. Determine the ground bus location: top, bottom or both. Remove the corresponding wireway cover(s). The wireway end covers should have been removed for general splicing. If not, refer to Publication 2100-IN010x-EN-P, Joining and Splicing Vertical Sections, for details.

3. Refer to Figure 1 - Figure 4. Use the appropriate figure to align, assemble and secure the horizontal ground buses and links.

4. Tighten all connections. Torque 1/4-20 screws to a maximum of 65 lb-in (7.3 N-m). Torque 1/2-13 screws to a maximum of 45 lb-ft (61 N-m).

5. Replace wireway cover(s).
**Parts List:**

1. 1” Bus: 1” ground bus link (1)
   
   2” Bus: 1” ground bus link (2)

2. 1” Bus: 1/4-20 X 3/4 hex head screw (2) (from structure - not in kit)
   
   2” Bus: 1/4-20 X 3/4 hex head screw (4) (from structure - not in kit)

**IMPORTANT:** If splicing a series L or later section to an older series K or newer section with a 1/4 X 2” ground bus in the top, follow these instructions.

The ground bus in the series K section is mounted 1” lower than the ground bus in the series L section. The side sheets in both sections have three holes used to mount the ground bus in the top. For the series K section, the bottom two holes are used and for the series L section, the top two holes are used. This results in a 1” difference in height between the ground bus in the sections. The user must stack the links, one on top of the other, and use the center hole for mounting the splice links.
**Figure 2** Front mounted NEMA Type 1, Type 1 with gasket and 12 offset horizontal ground bus splice assembly

**Parts List:**

1. 1” Bus: 1” ground bus link (1)
   2” Bus: 2” ground bus link (2)

2. 1” Bus: 1/4-20 X 3/4 hex head screw (2) (from structure - not in kit)
   2” Bus: 1/4-20 X 3/4 hex head screw (4) (from structure - not in kit)
Figure 3 Front mounted NEMA Type 3R horizontal ground bus splice assembly

Parts List

1. 1” Bus: 1” ground bus link (1)  
   2” Bus: 2” ground bus link (1)

2. 1” Bus: 1/4-20 X 3/4 hex head screw (2) (from structure - not in kit)  
   2” Bus: 1/4-20 X 3/4 hex head screw (4) (from structure - not in kit)

3. Wireway extension (1) (from power bus splice kit)
Figure 4  Back-to-Back NEMA Type 1, Type 1 with gasket and 12 horizontal ground bus splice assembly

Parts List:

1. 1” Bus: 1” ground bus link (2)
   2” Bus: 2” ground bus link (2)
2. 1/2-13 X 1-1/4 hex head screw (2)
3. 1” Bus: 1/2-13 X 1-1/4 hex head screw (1)
   2” Bus: 1/2-13 X 1-1/2 hex head screw (1)
4. Flat washer (3)
5. Lock washer (3)
6. 1/2-13 nut (3)
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