

CENTERLINE® Motor Control Centers

Splicing Horizontal Ground Buses

Instructions

Application

This publication outlines the procedure for splicing the following ground buses: front mounted, splicing to the same (aligned and offset ground buses); back-to-back, splicing to the same; for both 1" and 2" ground bus, NEMA types 1, 1 with gasket, 12 and 3R.



ATTENTION: Disconnect or interrupt all sources of power to the motor control center prior to splicing buses. Serious injury or death can result from working on energized sections.

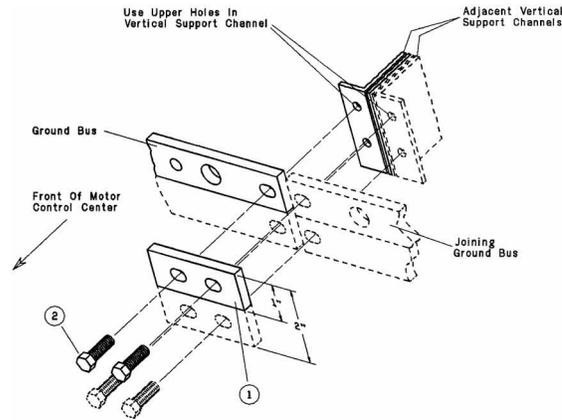
Recommended Tools

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

Splicing Procedure

1. Verify parts list (refer to figures 1-4, parts are listed on 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 2100-5.1, Joining and Splicing Vertical Sections with Aligned Buses, for details.
3. Remove the ground bus from shipping location for front mounted, for offset splicing remove link from shipping package. Save these screws for assembling the splice.
4. Align the ground buses and links. Assemble per the appropriate figure.
5. 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).
6. Replace wireway cover(s).

Figure 1
Front mounted horizontal ground bus splice assembly.

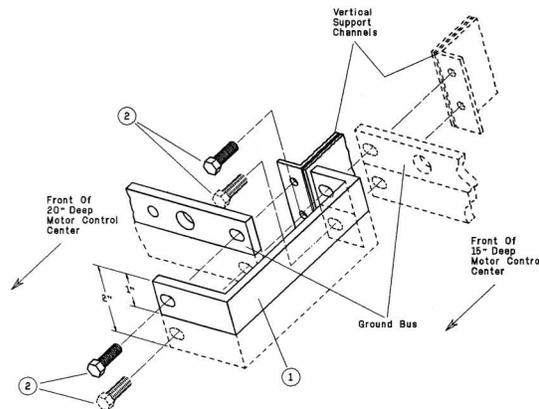


Parts List:

- 1. 1" Bus: ground bus link (1)
- 2. 2" Bus: ground bus link (2)
- 2. 1" Bus: 1/4-20 X 3/4 hex head screw (2) (from structure - not in kit)
- 2. 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 the instructions below. 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.

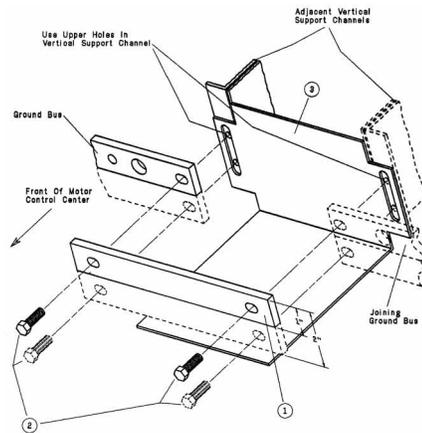
Figure 2
Front mounted offset horizontal ground bus splice assembly.



Parts List:

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

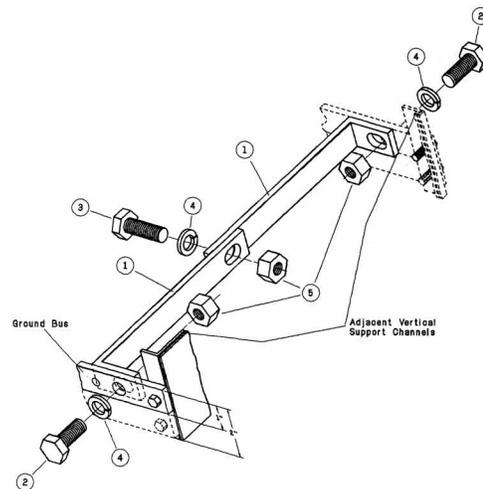
Figure 3
Front mounted NEMA 3R horizontal ground bus splice assembly.



Parts List

1. 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)

Figure 4
Back-to-back horizontal bus splice assembly.



Parts List:

1. 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. Washer (3)
5. 1/2-13 nut (3)

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