# BDFB / BDCBB RTN Bus Expander Kit

Model 007-0002-0022 Installation Guide

Telect's Model 007-0002-0022, RTN Bus Expander Kit, fits Telect's BDFB / BDCBB, Model 007-001-2600. Each kit interconnects the RTN terminal plates on one side of two BDFB / BDCBBs stacked one on top of the other. The expander kit enables input cabling to accommodate larger current feeds per PDU bay.

You will need two expansion kits (one for Side A, one for Side B) to expand each pair of BDFB / BDCBBs.

Procedure steps:

1. Make sure the power is OFF.

2. Lightly coat anti-oxidant on the contacting surfaces of bus bars, couplers, and plates shown in Figure 1.

3. Pre-assemble RTN expander bars and plates as shown using the $^3/_8$" - 16 hardware.

4. Torque $^3/_8$" - 16 hardware to no greater than 17 ft-lb (23 N•m).

5. Use one of two sets of $^5/_{16}$" - 18 hardware to pre-assemble the stand-off insulator to one of the RTN bus insulators, as shown in Figure 2.
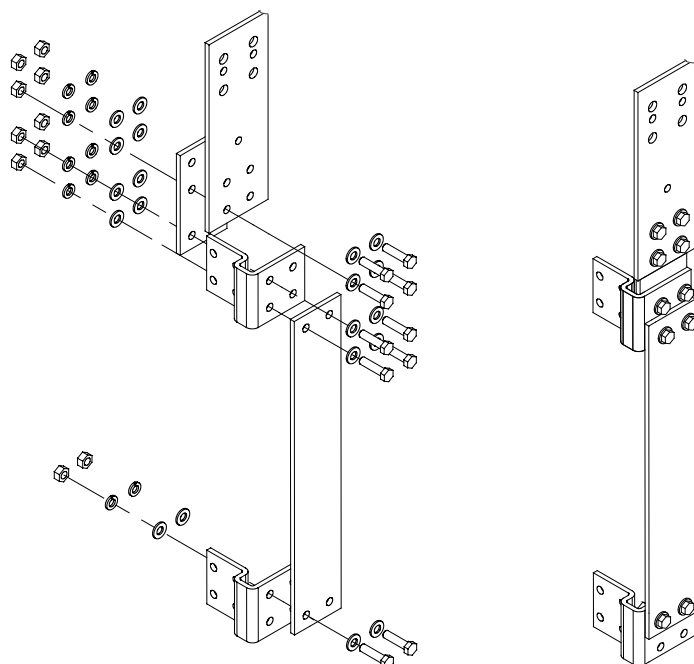
Assembling RTN Expander Bars & Plates
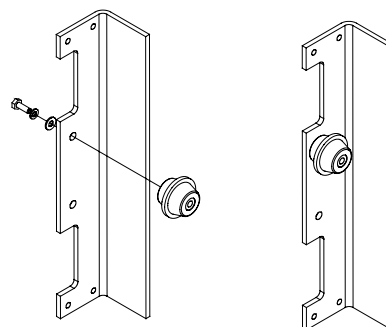
Assembling Insulators

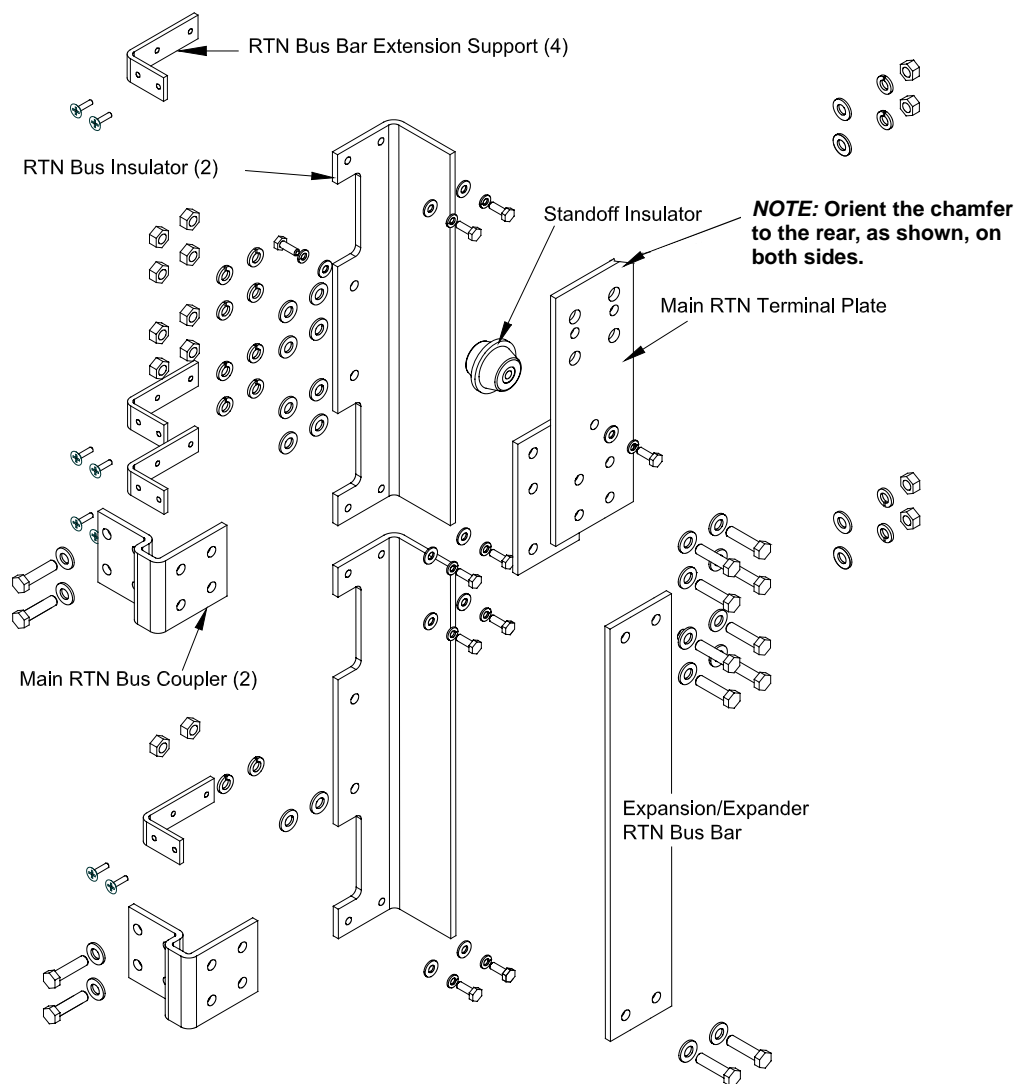**Figure 1 - Assembling the RTN Expander Bars & Plates and the Insulators**

Telect®

RTN Bus Bar Extension Support (4)

RTN Bus Insulator (2)

Standoff Insulator

NOTE: Orient the chamfer to the rear, as shown, on both sides.

Main RTN Terminal Plate

Main RTN Bus Coupler (2)

Expansion/Expander RTN Bus Bar

Figure 2 - Assembling the Standoff Insulator

6. Use the $^1/_4$" - 20 hardware to secure the insulators to the BDFB / BDCBB as shown in Figure 3.

7. Torque the $^1/_4$" - 20 hardware to no greater than 4 ft-lb (~5.5 N•m).

Original RTN Terminal

Side B

BDFB / BDCBB
(Rear View, Typical)

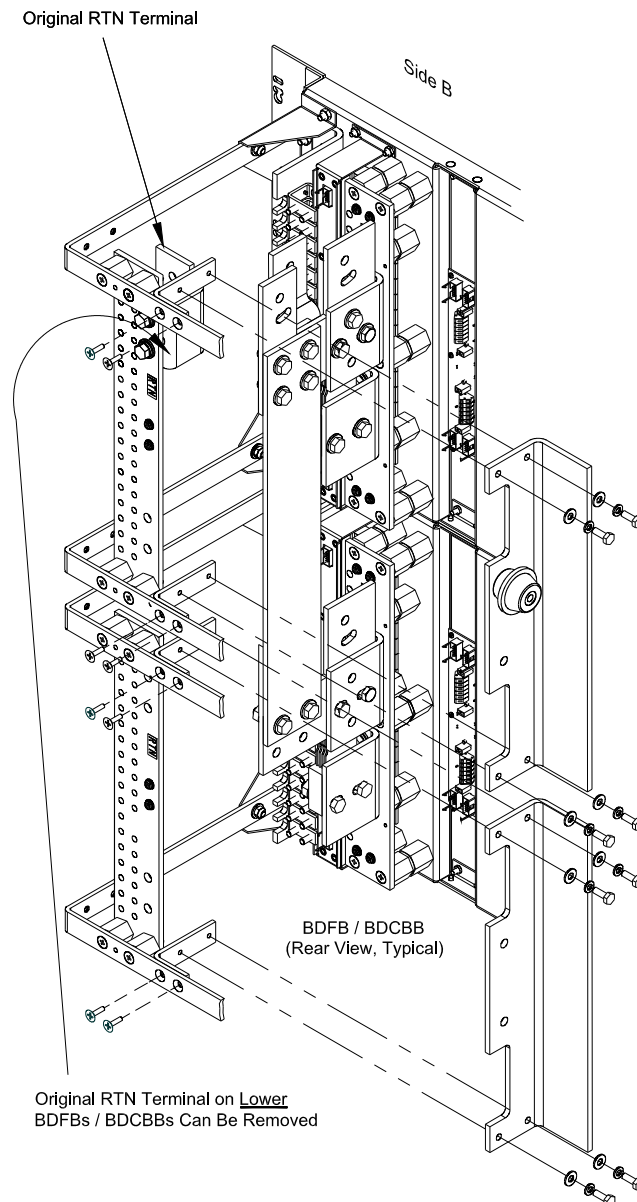Original RTN Terminal on Lower
BDFBs / BDCBBs Can Be Removed

Figure 3 - Installing the Insulator Assembly

8. If desired, remove the original RTN terminal from the *lower* BDFB / BDCBB.

9. If you don't intend to use the original RTN terminal on the upper BDFB / BDCBB, you can re-move that one as well. Removing either or both original RTN terminals may make cabling and cable access easier.

10. Lightly coat anit-oxidant on contacting surfaces of the expander bus and bar assembly, assembled in Step 3, along with electrical contact surfaces on the BDFB / BDCBB.

11. Use the remaining $^3/_8$" - 16 hardware to install the expander bus and bar assembly as shown.
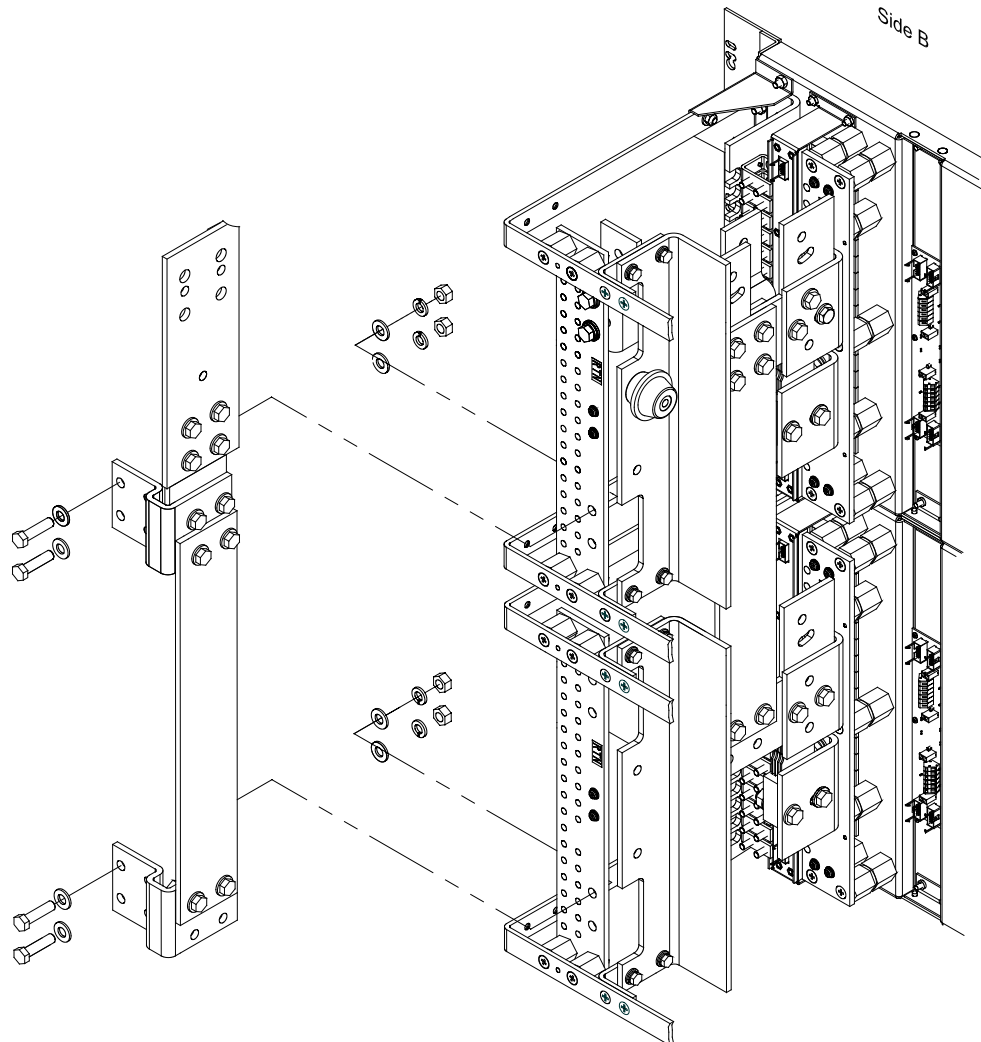

Figure 4 - Installing RTN Expander Bus & Bar Assembly

12. Torque the hardware to no more than 17 ft-lb (23 N•m).

13. Complete the expander installation by securing the main RTN terminal plate to the standoff insulator, as shown below.
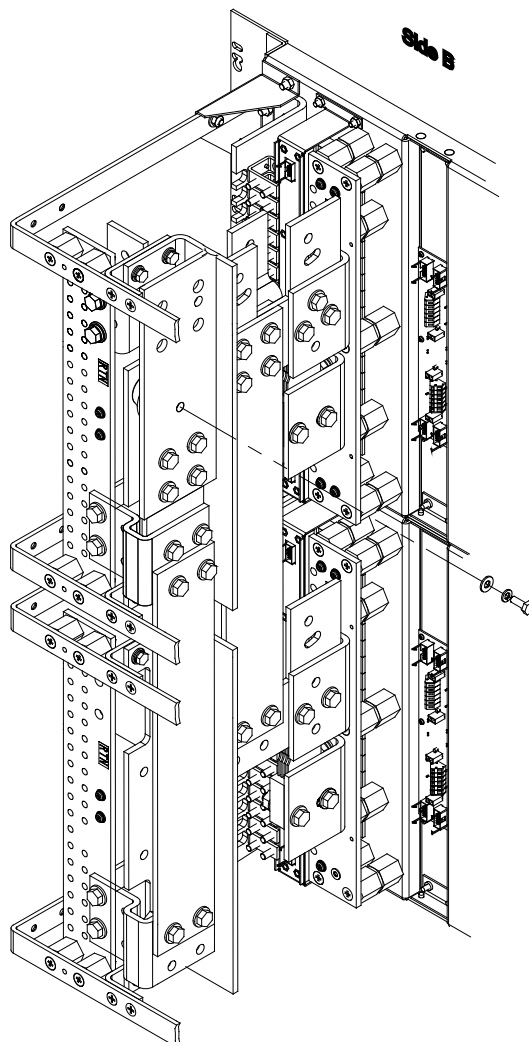

Figure 5 - Completing the RTN Expander

14. Connect appropriate input cables with approved dual-hole lugs.

15. You can connect up to two 777MCM cables/lugs to each of three RTN input sites. (Figure 6 shows three lugs on the main RTN terminal plate and two on the original plate.)

16. Again, lightly coat contacting surfaces of lugs and plates with anti-oxidant.

17. Torque the $^3/_8$-in. lug hardware to no more than 17 ft-lb (23 N•m).

NOTE: Don't "piggy-back" (stack) lugs on top of each other. When connecting two lugs, the terminal and expansion plates must be "sandwiched" between the broad, flat bottoms of the lugs, as shown in Figure 6.
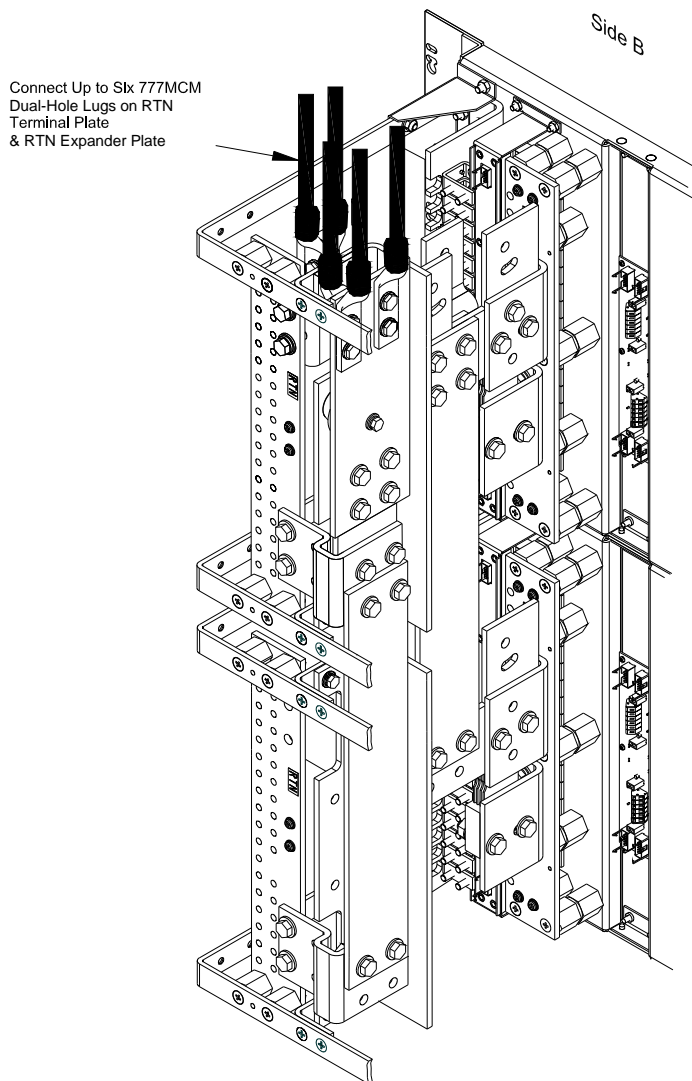

Connect Up to Slx 777MCM
Dual-Hole Lugs on RTN
Terminal Plate
& RTN Expander Plate

Side B

Figure 6 - Installing RTN Cables

This procedure is complete.