

## Switchboard (SB1, SB2, SB3)/ Power Panel Kit (P4, P5) SJG, SJG1D, SLG, SLGD for Branch Mounting Type VL JG, LG Frame Breakers

### Installation Instructions

10. Reference fig. 8 - Installing the Branch Neutral Lug (item 2) in a Panelboard. The Branch Neutral is located at the bottom of the "Z-rails", or mirrored at the top depending upon the feed cable location. Two (2) different Neutral lug assemblies are included in the kit, be sure to install the type pictured below. The Neutral lug assemblies can be mounted, as shown, on either side of the Branch Neutral depending on cable feed location. Torque all hardware as specified on the rear of the deadfront.

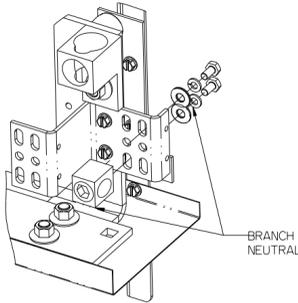


Figure 8  
PANELBOARD ONLY

11. Reference fig. 9 - Installing the Branch Neutral Lug (item 2) in a Switchboard. The Branch Neutral is located at the bottom of the "Z-rails", or mirrored at the top depending upon the feed cable location. Two (2) different Neutral lug assemblies are included in the kit, be sure to install the type pictured below. The Neutral lug assemblies can be mounted, as shown, on either side of the Branch Neutral depending on cable feed location. Torque all hardware as specified on the rear of the deadfront.

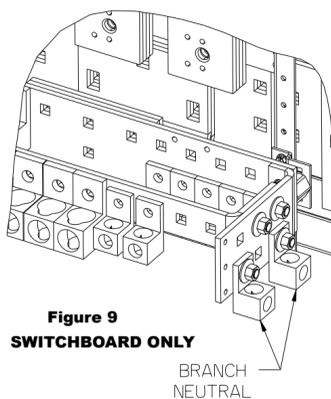


Figure 9  
SWITCHBOARD ONLY

12. Re-install the deadfront using one of the breaker cover plates supplied with this kit. Other filler plates may be required for proper fit. See filler plate kits listed on the rear of the deadfront.

This device/system may only be set up and used in conjunction with these instructions. Installation, maintenance and operation of this device/system may only be performed by **qualified personnel**. Within the context of these instructions, qualified persons are defined as persons who have the skills and knowledge related to the construction and operation of the electrical equipment and installations and have received safety training to recognize and avoid the hazards involved.

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### Installation Instructions

The following instructions are for the installation of Siemens VL JG & LG Frame electronic trip breakers in switchboard (SB1, SB2, SB3) or shallow/deep type panelboards (P4, P5). This kit will require 6-1/4" of unit space. The parts provided in this kit are for connections to a 3-phase / 3-wire or 3-phase / 4-wire system.



**DANGER**  
**Hazardous voltage. Will cause death or serious injury.**  
Keep out. Qualified personnel only. Disconnect and lock off all power before working on this equipment.

1. Lock off power supplying this equipment before working on it.
2. Reference fig. 1 - Remove the (2) gutter covers and all cover plates.

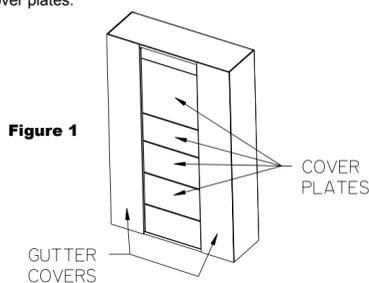


Figure 1

3. Reference fig. 2 - To mount a VL JG & LG Frame breaker, 6-1/4" of empty unit space is required. To locate the mounting position, measure from the top deadfront support to the top of the empty unit space filler on the deadfront. Transfer this dimension from the deadfront support along the Z-rail and mark. This will be the unit space as shown on Fig. 3. After marking the Z-rail, remove the deadfront.

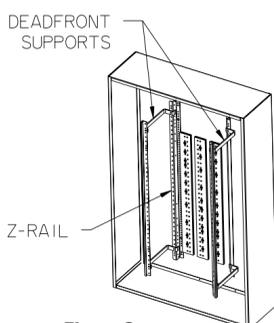


Figure 2

4. Open the shipping box and check the contents against the following list:

ITEM	DESCRIPTION	QTY.
1	BREAKER INSTALLATION INSTR.	1
2	BRANCH NEUTRAL LUG ASSY.	2
3	LONG PHASE CONNECTOR	1
4	MEDIUM PHASE CONNECTOR	1
5	SHORT PHASE CONNECTOR	1
6	STRAP-SECTION BUS HARDWARE KIT	1
7	BARRIER	1
8	BREAKER MOUNT	1
9	CHRISTMAS TREE RIVET	1
10	1/4-20 X 3-3/4" SCREW	2
11	CARD HOLDER	1
12	CIRCUIT ID CARD	1
13	1/4-20 X 3/8" SCREW	4
14	1/4-20 X 1/2" SCREW	2
15	5/16" WASHER	3
16	5/16-18 X 3/4" HEX HEAD BOLT	3
17	5/16 LOCK WASHER	3
18	PACKAGING ASSEMBLY	1
19	PROVISION BARRIER	2

5. Reference fig. 3 - Installing the strap assembly for right-feed applications (flip assembly for left-feed applications). Locate two 0.228" diameter holes on the A-Phase of the section bus, 1-1/4" down from the top of the 6-1/4" of unit space selected. Insert two 1/4-20 (item 6) thread-forming screws (see mounting hardware kit for proper length) through the two holes in the Long connector (item 3) and then into the 0.228" diameter holes in the A-phase bus and tighten. Locate four 0.228" diameter holes on the B-phase of the section bus, 2-1/2" down from the top of the 6-1/4" of unit space selected. Insert four 1/4-20 thread-forming screws (see mounting hardware kit for proper length) through the four holes in the medium connector (item 4) and then into the 0.228" diameter holes in the B-phase bus and tighten. Locate two 0.228" diameter holes on the C-phase of the section bus, 5.00" down. Insert two 1/4-20 thread-forming screws through the two holes in the short phase connector (item 5) and then into the 0.228" diameter holes in the section bus and tighten. Torque all screws to the values specified on the back of the deadfront.

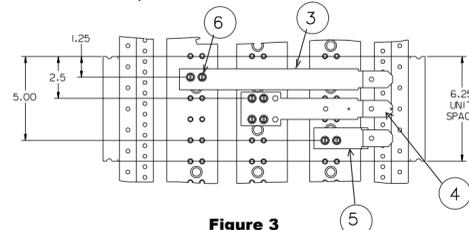


Figure 3

6. Reference fig. 4 - Installing the breaker mount. Locate one 0.228" hole on the Z-rail 1-7/8" down from the top of the 6-1/4" of unit space selected. Orient the breaker mount (item 8) as shown in fig. 4. Insert one 1/4-20 X 1/2" screw (item 14) through the hole in the breaker mount and then into the 0.228" hole in the Z-rail and tighten securely. Insert another 1/4-20 X 1/2" (item 14) screw through the second 0.312" diameter hole in the mounting bracket and then into the 0.228" diameter hole in the Z-rail and tighten securely.

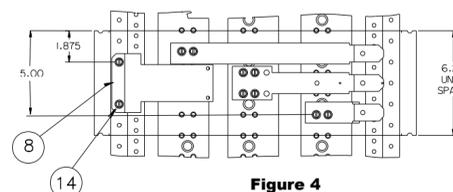


Figure 4

7. Reference fig. 5 - Installing the barrier. Insert the christmas tree rivet (item 9) through the 0.25" diameter hole in the barrier and then through the medium phase connector (item 4) orienting as shown in fig. 5 and push for a tight fit.

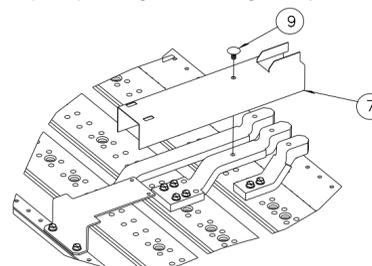


Figure 5

Deep Kit Reference

8. Reference fig. 6 - Installing the breaker. Insert three 5/16-18 X 3/4" hex head bolts (item 16) along with three lock washers (item 17) and three flat washers (item 15) through each of the three contacts on the line side of the breaker and into the tapped hole at the end of the three phase connectors. Insert two 1/4-20 X 3-3/4" Screws (item 10) into the two holes toward the other end of the Breaker and into the two 0.228" diameter holes in the Breaker Mounting Bracket (item 8) and tighten securely. Torque the 5/16-18 hardware as specified on the rear of the deadfront.

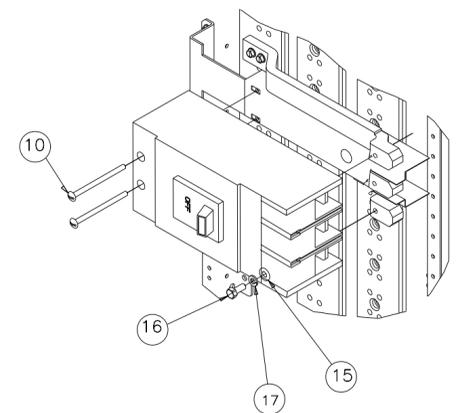


Figure 6

9. Reference fig. 7 - Installing the provision barrier (item 19). In the case of a provision, orient the barriers as shown in fig. 7. Insert the 5/16-18" hex head bolt with a lock washer (item 17) and a flat washer (item 15) through the 0.312 hole in the barrier and through the tapped hole in the B-phase and tighten.

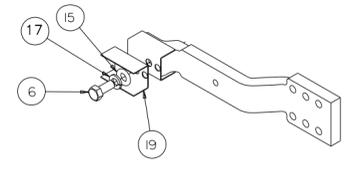


Figure 7

NOTE: If a Branch Neutral Lug Assembly is NOT Required, skip to Step 12.

NOTE: For switchboard applications, skip to Step 11.

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