

## DEAD FRONT MODIFICATIONS AND PANEL RE-ASSEMBLY

10. Refer to Fig. 4 - Identify the dead front area that will cover the 6" kit unit space. Measure the unit space locating dimension D directly from the dead front end plate, as shown.

11. Remove any full width plate covering the area for the kit unit space. Fasten the Type A dead front plate (item 7) for single phase panels, or the Type B dead front plate (item 8) for 3-phase panels, with four 8-32 screws (item 11). Insert the two QJ dead front adaptors into the plate cut-outs and snap them into place.

12. For applications where only one breaker is installed, insert the provision filler plate (item 10) into the recess in the QJ adaptor covering the unused mounting location. Insert two carriage bolts (item 16) into the holes in the corners of the filler. On the rear of the adaptors, place a flat washer (item 17) and then a nut (item 18) on the screws. Tighten the nuts to the torque values on the back of the dead front.

13. If the installed kit does not completely fill the unit space of removed modules, a dead front filler plate is required to cover the unit space where no branch components are installed. Use kit DFFP3 for 3" gaps and kit DFFP6 for 6" gaps.

14. Replace the dead front using the the hardware removed during disassembly.

15. Tighten all hardware to the torque values on the back of the dead front.

16. Replace the panelboard front cover using the hardware removed during disassembly.

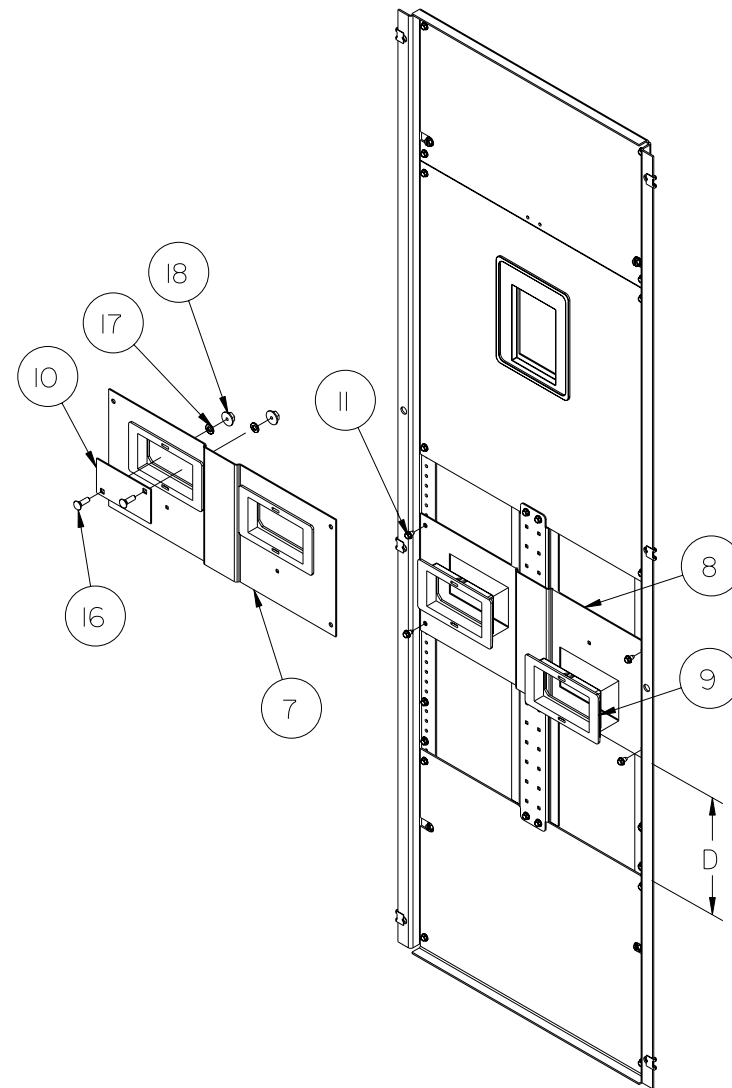


Figure 4

## P3 Panelboard Kit BBKQ2 For Branch Mounting of QJ Breakers

## Installation Instructions

# Installation Instructions

The following instructions are for installation of one or two Siemens QJ circuit breakers as branch devices in a Type P3 panelboard. The parts provided in this kit connect QJ 2-pole breakers to 1-phase systems, or 2-pole or 3-pole breakers to 3-phase systems. The breakers are not included in this kit and must be purchased separately. This kit requires 6" of branch unit space. The dead front will need a blank filler plate if this kit does not completely fill the unit space of any removed branch module(s). These dead front filler kits are DFFP3 for 3" gaps and DFFP6 for 6" gaps.



**⚠ 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. Remove the panelboard front cover and dead front.
3. Refer to fig.1 - This kit requires 6" of branch unit space. Determine the location where the kit is to be installed. The kit positioning dimension D in fig. 1, must be a multiple of 3" (0", 3", 6", 9", etc.). This measurement can be taken directly from a neutral barrier, if present, or from a bus support in panels without a neutral. Note that 0.25" must be added to D for measurements taken from a bus support (0.25", 3.25", 6.25", 9.25", etc.)
4. If an existing branch module occupies the location chosen for this kit, remove all of its devices, components and parts

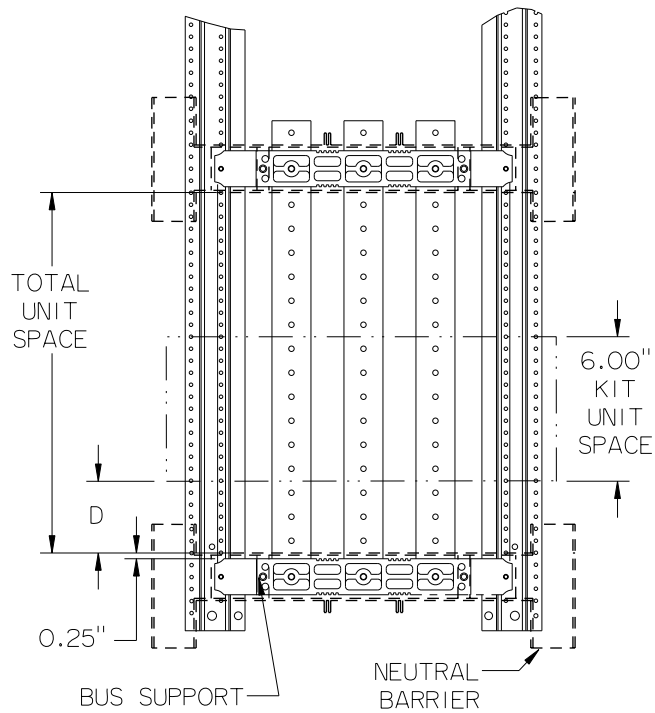


Figure 1

## THIS KIT CONTAINS THE FOLLOWING ITEMS

ITEM #	DESCRIPTION	QTY.
1	QJ Breaker Support	2
2	QJ Outer Connector Type A	1
3	QJ Outer Connector Type B	2
4	QJ Center Connector	1
5	QJ Branch Barrier	1
6	Branch Neutral Lug	2
7	QJ Branch Dead Front Plate Type A	1
8	QJ Branch Dead Front Plate Type B	1
9	QJ Breaker Dead Front Adaptor	2
10	QJ Provision Filler Plate	1
11	8-32 X 9/32" Self-threading Screw	8
12	1/4-20 X 5/8" Self-threading Screw	6
13	1/4-20 X 3/4" Self-threading Screw	4
14	1/4-20 X 1" Self-threading Screw	6
15	1/4-20 X 2-1/2" Machine Screw	4
16	#10 Carriage Bolt	2
17	Flat Washer	2
18	Nut	2

NOTE: Separate instructions are provided for kit installation for each system and panel type. Each application uses some, but not all of the above listed parts. Instructions for breaker installation and panel re-assembly are located on page 4.

## INSTALLATION IN 1-PHASE PANELS

5. Refer to fig. 2. - Fasten the breaker supports (item 1) to the base rails in the center of the 6" kit unit space, with four 8-32 Screws (item 11). Fasten the Type A outer connector (item 2) and the Type B outer connector (item 3) to the panel bus with four 1/4-20 X 1" Screws (item 14).
6. Keeping the connectors aligned with each other and perpendicular to the panel bus, tighten all screws to the torque values specified on the back of the dead front.
7. Position each breaker with its load-side mounting hole aligned with the upper hole in the breaker support (item 1). Bring the breaker line pads into contact with the connectors. Fasten each breaker to its support with one 1/4-20 X 2-1/2" machine screw. (item 15). Do not tighten until the bus connections are made. Fasten each breaker's line pads to the connectors with two 1/4-20 X 5/8" Screws (item 12).
8. If this kit is installed in a panel with a neutral, fasten the two branch neutral lugs (item 6) to any of the eight indicated sites on the upper and lower neutral cross bus parts with four 1/4-20 X 3/4" Screws (item 13).

9. Tighten all screws to the torque values specified on the back of the dead front.

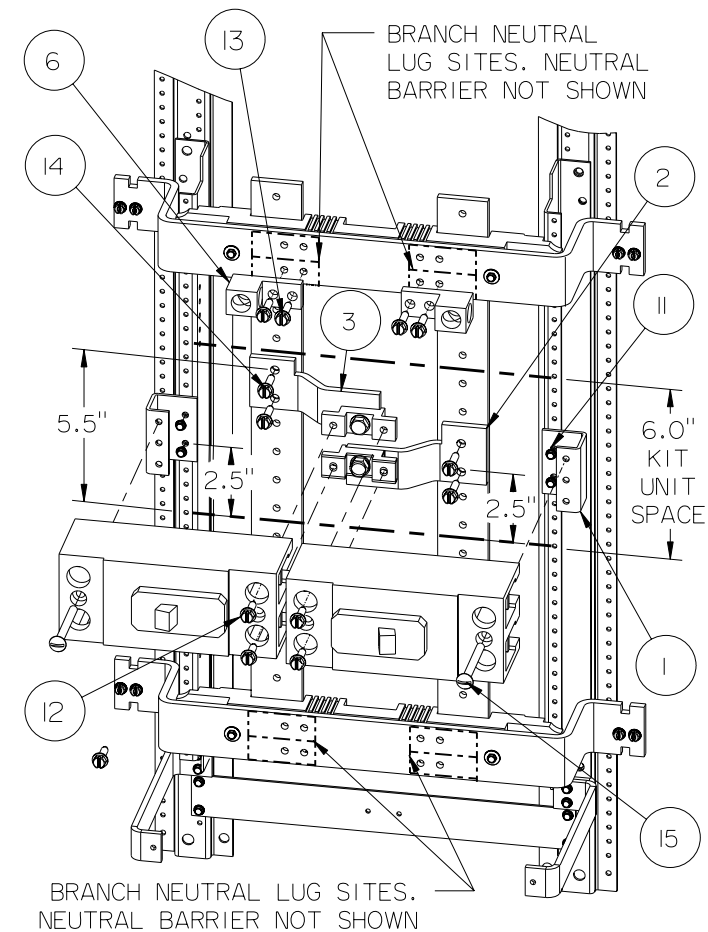


Figure 2

## INSTALLATION IN 3-PHASE PANELS

5. Refer to fig. 3. - Fasten the breaker supports (item 1) to the base rails in the center of the 6" kit unit space with four 8-32 Screws (item 11). Fasten the center connector (item 4) to the middle panel bus with two 1/4-20 X 1" screws (item 14). Tighten the screws to the torque values on the back of the dead front. Install the QJ branch barrier (item 5), centered over the installed connector (item 4). Insert the barrier's two mounting pins completely into the corresponding holes on the middle panel bus. Position two Type B outer connectors (item 3) at the two ends of the barrier (item 5) and fasten them to the outer panel bus parts with four 1/4-20 X 1" screws (item 14).
6. Keeping the connectors aligned with each other and perpendicular to the panel bus, tighten all screws to the torque values on the back of the dead front.
- 7A. TO INSTALL 3-POLE BREAKERS, Position each breaker with its two load-side mounting holes aligned with the outer two holes in a breaker support (item 1). Bring the breaker line pads into contact with the connectors. Fasten each breaker to its support with two 1/4-20 X 2-1/2" machine screws (item 15). Do not tighten until the bus connections are made. Fasten each breaker's line pads to the connectors with two 1/4-20 X 5/8" Screws (item 12).

7B. TO INSTALL 2-POLE BREAKERS, breakers must be placed in the highest position on the left side of the unit space and in the lowest position on the right side of the unit space so that the operating handles fall into the same positions as the 3-pole breakers shown in Fig. 3. Position a left side mounted breaker, with its load side mounting hole aligned with the upper hole in the left side breaker support (item 1). Bring the line side breaker pads into contact with the upper two connectors (upper item 3 & item 4). Position a right side mounted breaker, with its load side mounting hole aligned with the lower hole in the right side breaker support. Bring the line side pads into contact with the lower two connectors (item 4 & lower item 3). Fasten each breaker to its support with one 1/4-20 X 2-1/2" machine screw (item 15). Do not tighten until the bus connections are made. Fasten each breaker's line side pads to the connectors with two 1/4-20 X 1" screws (item 14).

8. If this kit is installed in a panel with a neutral, fasten the two branch neutral lugs (item 6) to any of the eight indicated sites on the upper and lower neutral cross bus parts with four 1/4-20 X 3/4" Screws (item 13).

9. Tighten all screws to the torque values specified on the back of the dead front.

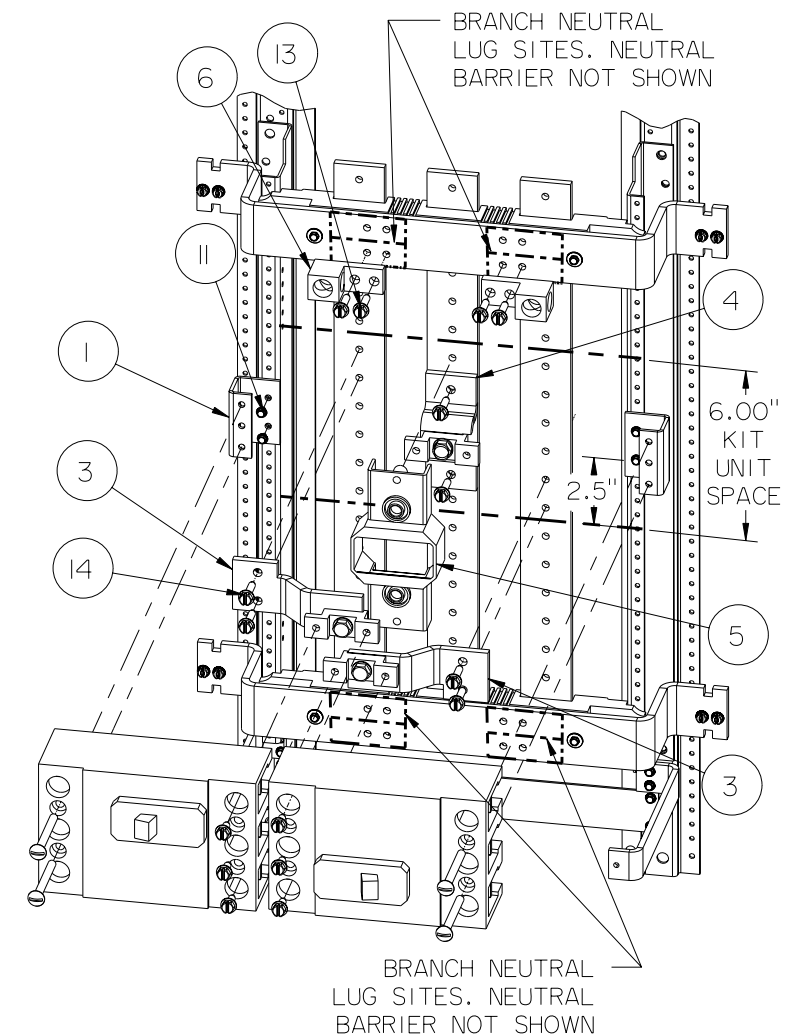


Figure 3