



# Spectra Series™ Power Panelboards

## Circuit Breakers and Modules



**WARNING:** Danger of electrical shock or injury. Turn OFF power ahead of the panelboard or switchboard before working inside the equipment or removing any component. Do not remove circuit protective devices or any other component until the power is turned OFF.

### General

These instructions apply to the following catalog numbers:

- Circuit breaker modules AMC6QD and AMC4QD
- Circuit breaker frames TQD and THQD

### Installation

- 1. Phase balancing for two-pole devices in three-phase systems.** To balance the panelboard load, remove the screws on the appropriate bus clip, reposition the bus clip as shown in Figure 1, then install and tighten the screws to 27–32 in-lb.

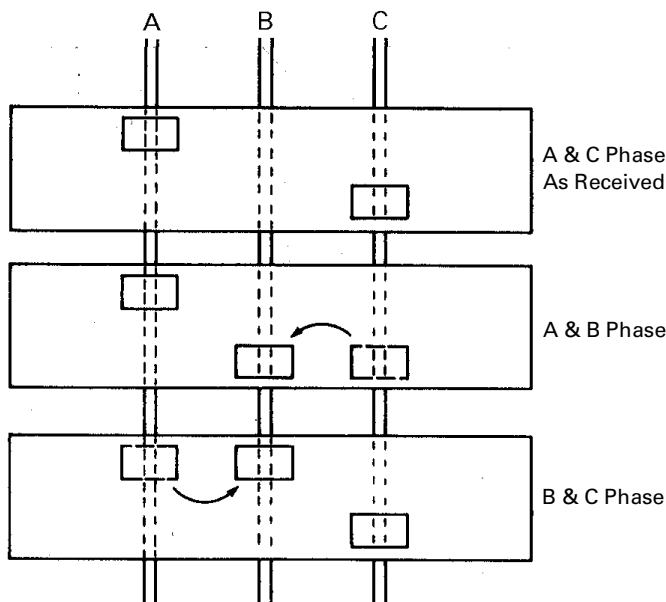


Figure 1. Repositioning the bus clip to balance the load.

- 2. Prepare the module.** Remove the protective caps or insulating tape only from the tops of the stud posts to which the circuit breaker is to be attached, as shown in Figure 2. Fasten the filler supports, as shown in Figure 3, with #10-32 x 3/4" hex-head screws tightened to 15–20 in-lb.

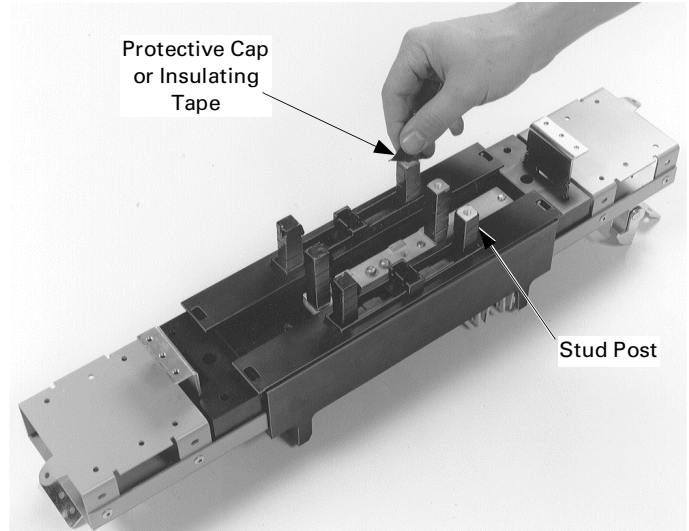


Figure 2. Removing the caps or tape from the stud posts of the breaker module.

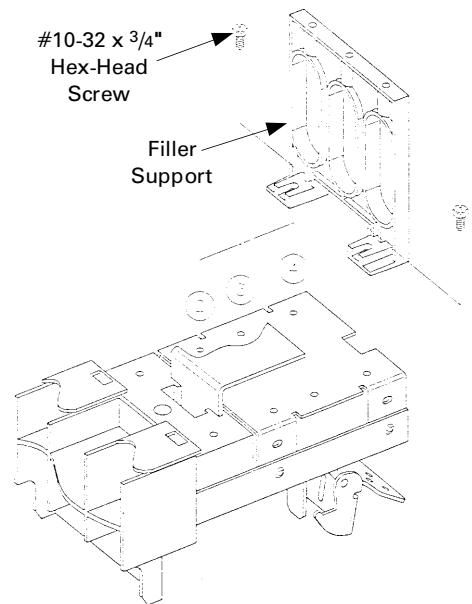


Figure 3. Fastening the filler supports in position.

- 3. Install the circuit breaker.** Place the ON side of the breaker over the stud posts, as shown in Figure 4. Fasten the breaker to the module with 1/4-20 x 3/4" screws with conical washers and #10-32 x 2 3/4" screws. After all screws are in place, tighten the 1/4-20 screws to 40–50 in-lb and the #10-32 screws to 25–30 in-lb.

For double-branch devices, repeat this procedure for the other breaker. Any combination of TQD or THQD circuit breakers may be used.

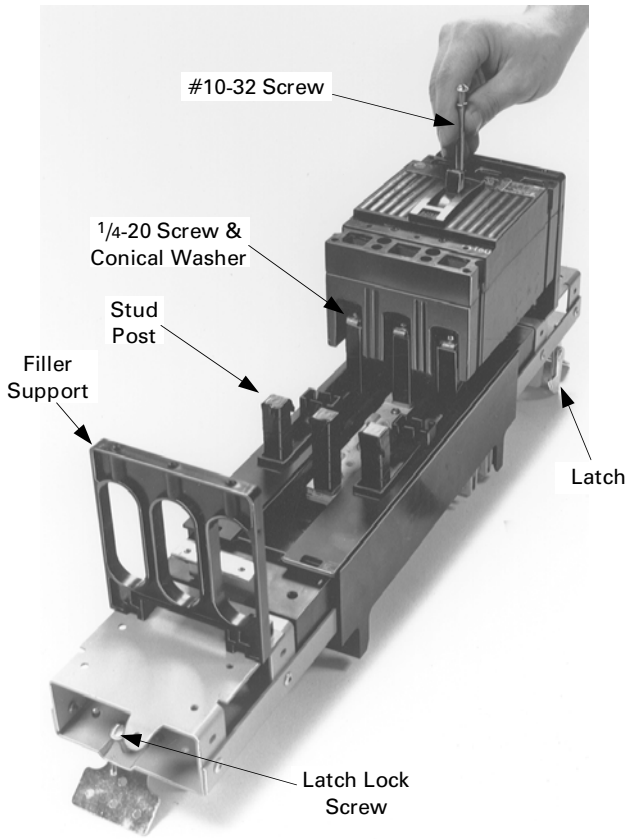


Figure 4. Installing the breaker on the module.

**4. Position the module.** Loosen the latch lock screws and fully retract the latches. Line up the guide fingers on both ends of the module with the notches in the panelboard interior rails, as shown in Figure 5. Allow no space between units.

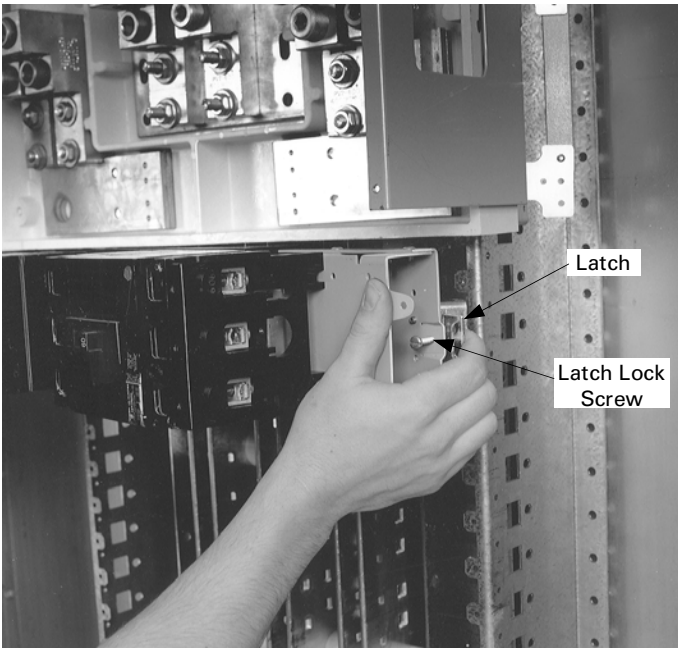


Figure 5. Positioning the breaker module.

**5. Install the module.** Latch one side of the circuit breaker module. Release the rail latch. Pivot the module onto the bus bars and engage the second latch. Release the rail latch. Tighten the rail latch screws to 25 in.-lbs, as shown in Figure 6.

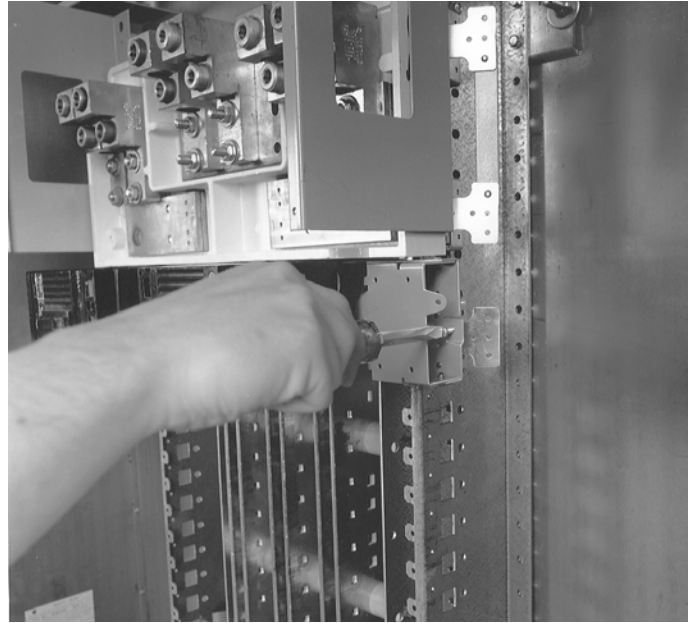


Figure 6. Installing the breaker module.

**6. Wire the circuits.** Refer to the label on the circuit breaker for the proper tightening torque levels.

**7. Filler plate kits.** Install filler plate kits, as listed in Table 1.

Filler Plate Cat. No.	Module Type
AFP3QDD	AMC6QD
AFP2QDD	AMC4QD

Table 1. Filler plate kit for each breaker module type.

### **Attention – Procedure for Aluminum Terminations**

1. Strip the insulation, being careful to not nick the wire.
2. Clean the wire strands with a wire brush.
3. Thoroughly coat the stripped conductor with a suitable antioxidant compound, such as ALNOX or PENETROX A13.
4. Insert the conductor and tighten the connector screw to the torque indicated on the rating label.



These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the GE Company.



**GE Industrial Systems**