



## 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 AMC4GB and AMC6GB
- Circuit breaker frames SGDA, SGHA, SGLA and SGPA

### Installation

- 1. Prepare the circuit breaker(s).** Before installing the breakers, install line-end mounting screws into the ON side of each breaker. Place the breaker vertically on a flat surface with the ON side up and the OFF side down, as shown in Figure 1. Install #10-32 pan-head screws into the ON-side holes on the top of the breaker. Install #10-32 inserts into the ON-side holes on the bottom of the breaker. Using two screw drivers, tighten both the insert and the screw to 20–25 in-lb.

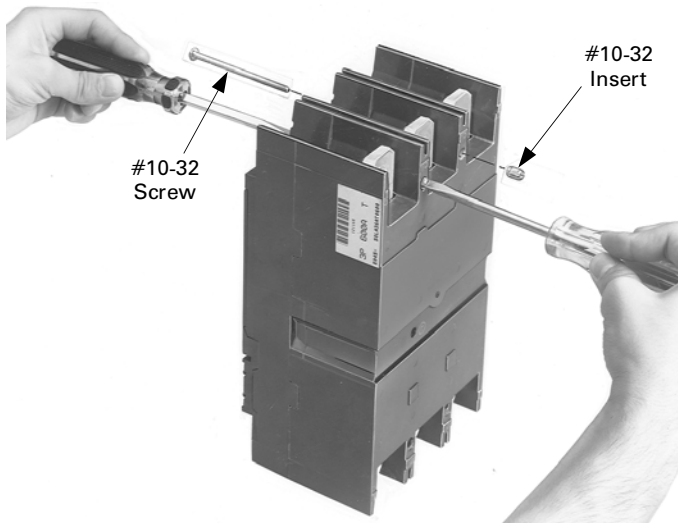


Figure 1. Installing line-end mounting screws in the breaker.

- 2. Phase balancing for two-pole devices on three-phase systems.** Reposition the bus clip assembly from A or C phase to B phase, as shown in Figures 2 and 3. Remove the screws in the bus clip assembly and move the bus clip to the B-phase position. Fasten the bus clip assembly in the new location with the slotted hex-head SEMS screws provided and tighten to 27–32 in-lb.

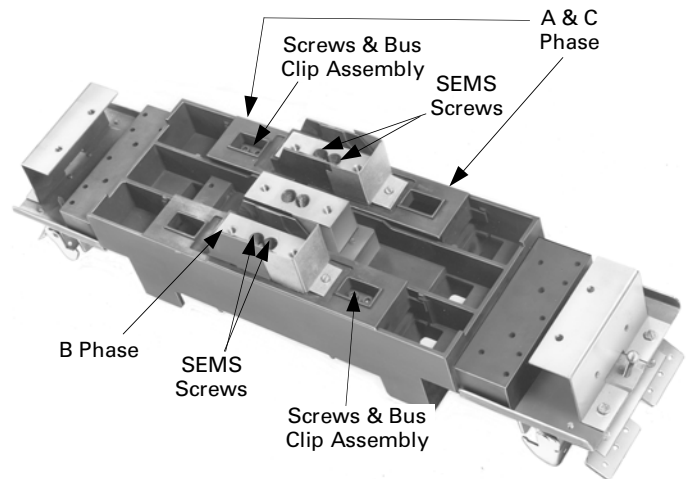


Figure 2. Repositioning the bus clip assembly.

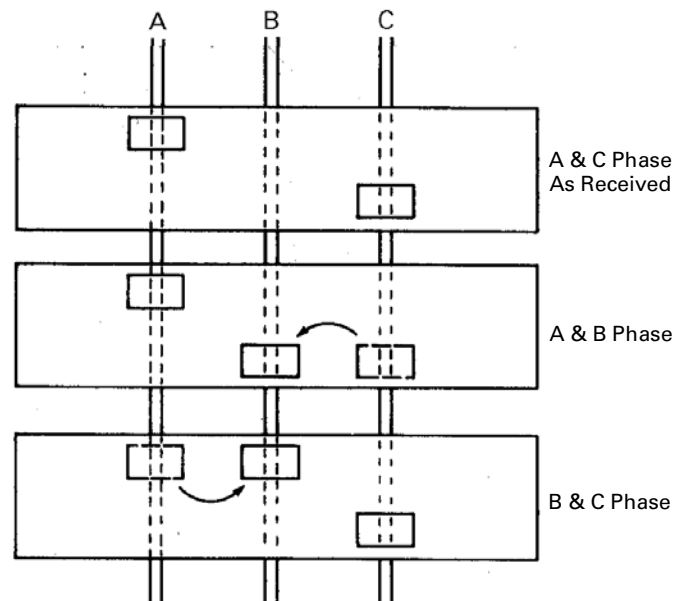


Figure 3. Phase diagram showing locations of bus clips.

3. **Prepare the breaker module (for two breakers only).** Before installing the breakers on the module, remove the barriers and screws, as shown in Figure 4.

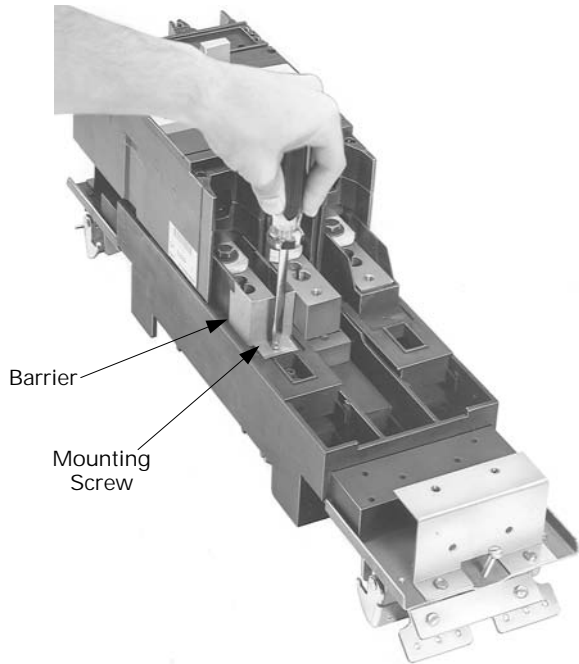


Figure 4. Preparing the breaker module for a two-breaker installation.

4. **Install the circuit breaker(s).** Place the Belleville washers and hex-head screws into the line straps of the circuit breaker, as shown in Figure 5. Position the ON side of the breaker on the module, as shown in Figure 5. Align the hex-head screws in the stud-post holes and tighten to 90–110 in-lb. Fasten the OFF side of the breaker to the mounting brackets with the round-head SEMS screws and flat washers and tighten to 40–50 in-lb. Repeat the procedure for a second breaker.

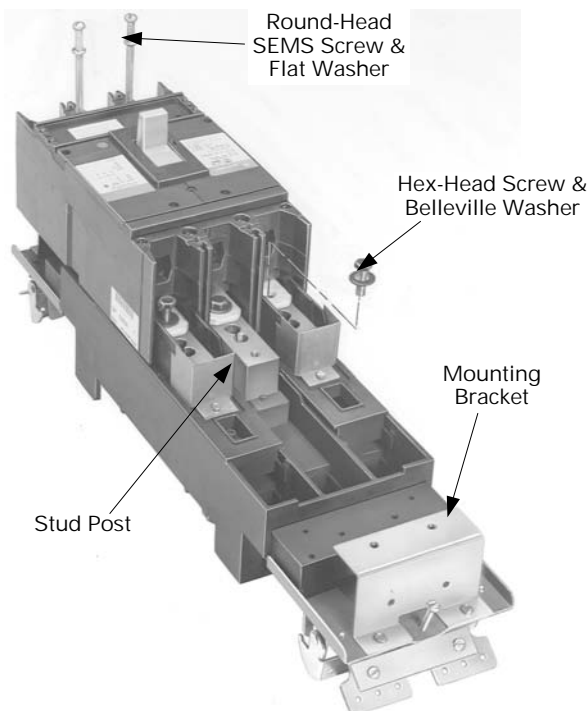


Figure 5. Installing the breaker on the module.

5. **Install the center barrier.** The center barrier *must* be installed after the breaker has been secured to the module. Slide the center barrier onto the breaker, as shown in Figure 6 for a single breaker and in Figure 7 for two breakers. Secure the center barrier with two thread-cutting screws into each breaker and tighten to 10 in-lb. Figure 8 shows a complete two-breaker installation.

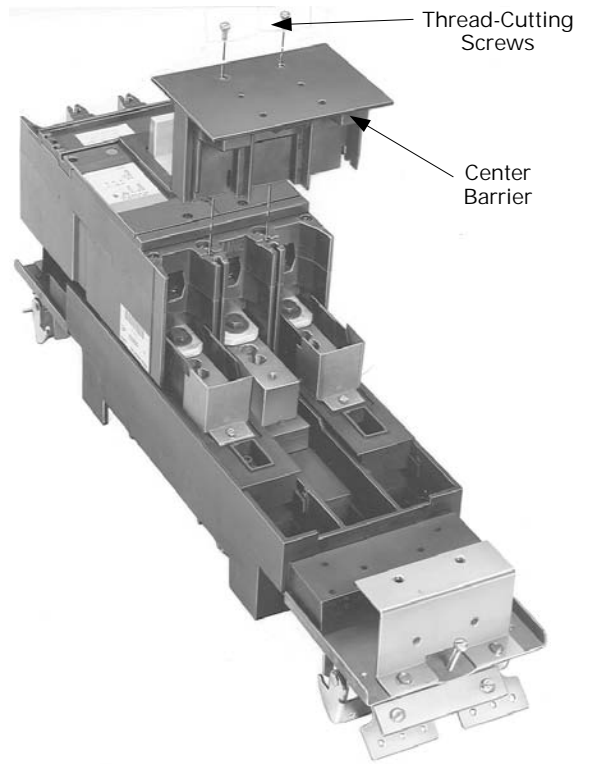


Figure 6. Installing the center barrier with one breaker on the module.

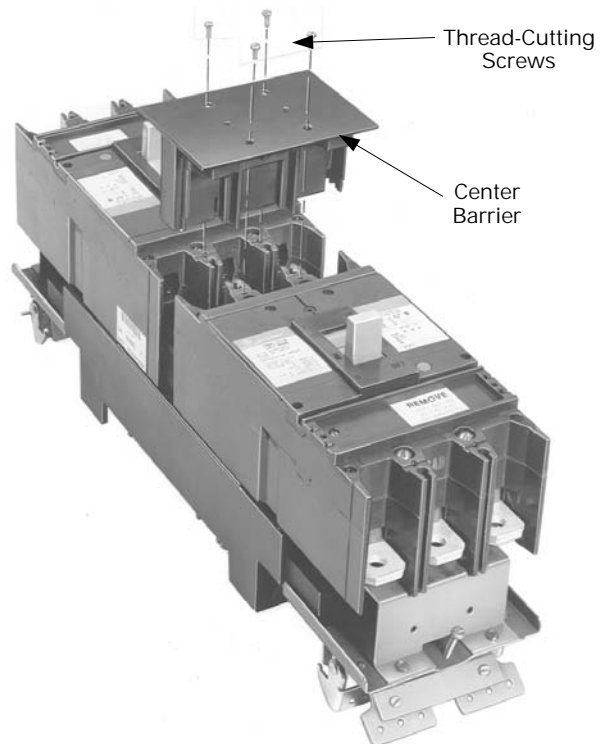


Figure 7. Installing the center barrier with two breakers on the module.

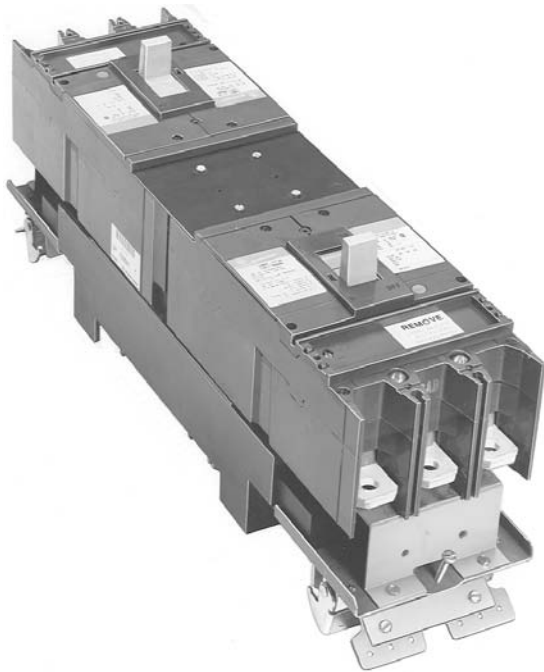


Figure 8. Completed center barrier installation with two breakers.

**6. Install the module.** Fully retract the latches and hook one side of the breaker module to the interior rail, as shown in Figure 9. Release the latch. Pivot the module onto the bus bars and engage the second latch. Release the latch. Tighten the latch screws to 25 in-lb, as shown in Figure 10.

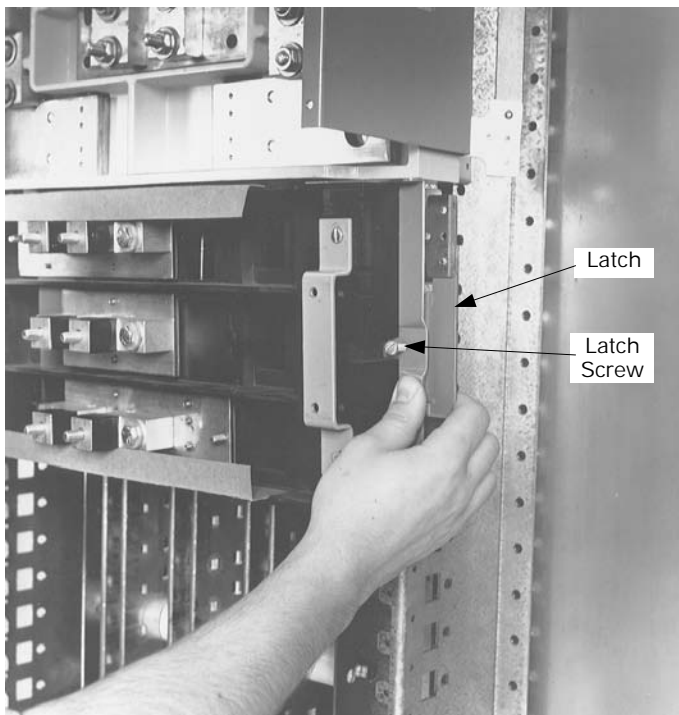


Figure 9. Positioning the breaker module on the interior rail.

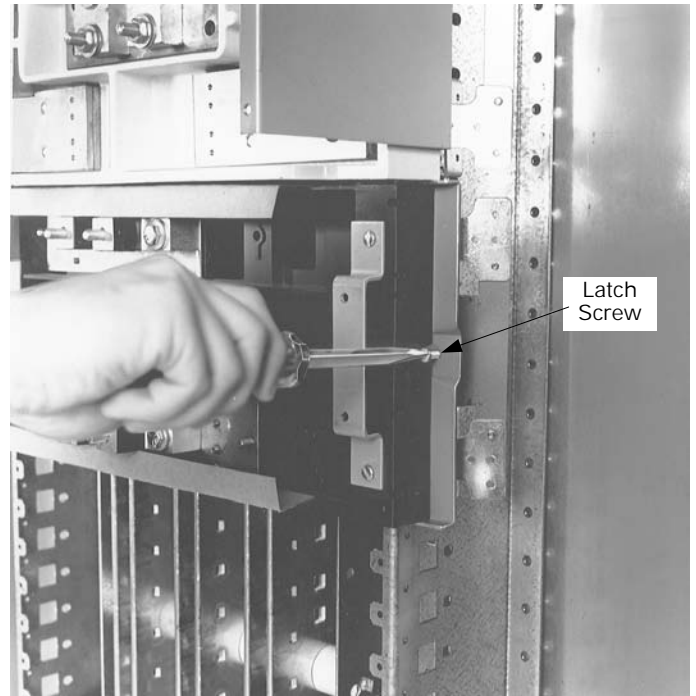


Figure 10. Securing the module to the interior.

- 7. Wire the circuits.** Refer to the label on the circuit breaker for the proper tightening torque.
- 8. Filler plate kits.** Install filler plate kit AFP4SGC on the module.

### **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 indicated torque 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**