



Spectra Series™ Power Panelboards

Type ANK Neutrals (Model 2)

Installation



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. Equipment is to be installed and maintained by properly trained and qualified personnel only.

1. Mount the neutral at either location in the end of the panelboard enclosure marked NEUTRAL on the 1/4-20 mounting studs, as shown in Figure 1. Secure with the flat washer, lock washer, and nut provided and tighten to 27–32 in-lb.

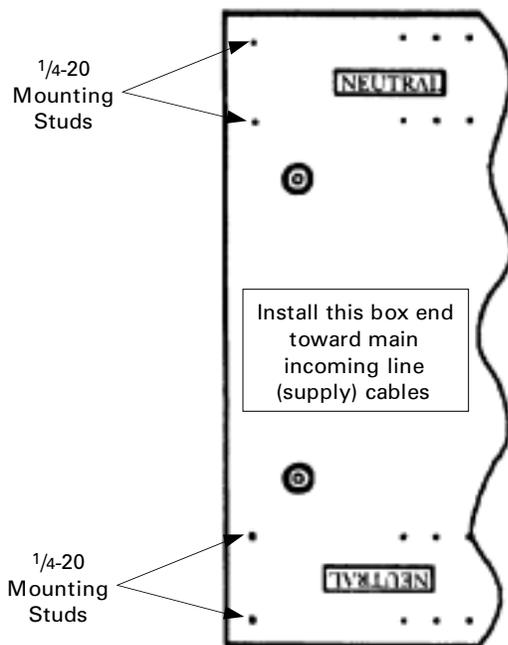


Figure 1. Mounting locations on the panelboard enclosure.

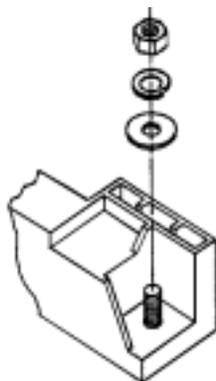


Figure 2. Securing the neutral to the panelboard.

2. Fasten the opposite end of the neutral to the enclosure with two 10-32 x 11/16" thread-forming screws provided. Tighten to 27–32 in-lb. Figure 3 shows the neutral mounted to the back wall of the enclosure.

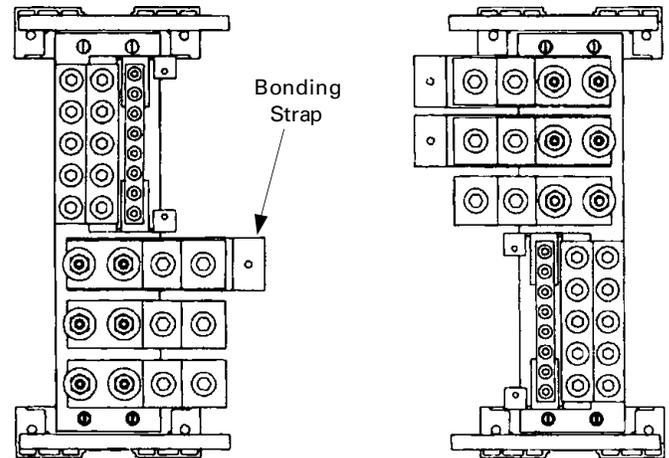


Figure 3. Neutral mounted to the back wall of the enclosure.

3. When a bonding strap is required for service entrance applications, first loosen the wire connector nuts at the positions indicated in Figure 3. Slide the bond strap provided with the neutral under the connector, then retighten the nuts to 200–250 in-lb.

NOTE: If the box is painted, scratch through the paint in the area where the bonding strap is in contact with the enclosure.

4. Secure the bond strap to the enclosure with the 10-32 x 3/8" SEMS screw provided. Tighten to 27–32 in-lb. The installation of the neutral is now complete.

Neutral with Ground-Fault Sensor

5. To mount a neutral with ground-fault sensor, complete steps 1–4. To test the installation, do the following:
 - 800–1200 A: Loosen the 3/8-16 nuts, as shown in Figure 4, and remove the connector strap. After testing, reassemble and tighten the nuts to 14 ft-lb.
 - 400–600 A: loosen the 3/8-16 nuts, as shown in Figure 5, and remove the sensor. After testing, reassemble and tighten the nuts to 14 ft-lb.

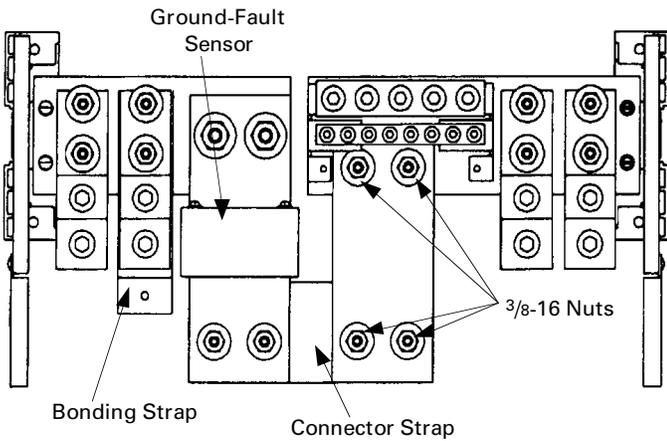


Figure 4. 800-1200 A neutral with ground-fault sensor.

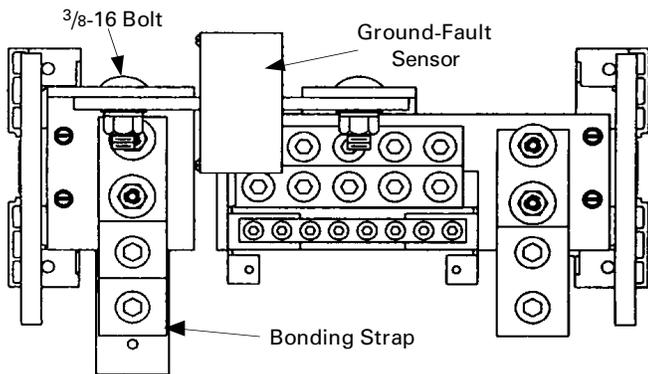


Figure 5. 400-600 A neutral with ground-fault sensor.

Ground-Fault Sensor Connection

The ground fault wires are in one of two configurations depending on the circuit breaker type. One has the wires exiting the circuit breaker and ending at the ring terminals; go to step 8. The other requires a connection of the receptacle and the plug, which are keyed for ease of installation; follow steps 6 to 8.

6. Align the connector receptacle and the plug, as shown in Figure 6. Mate the plug with the receptacle by pushing them together until the plug retention clip locks into the receptacle.

7. Run the ground fault sensor connector wires through to the neutral ground-fault sensor assembly.
8. Connect the black wire to the ground-fault sensor terminal labeled BLACK. Connect the white wire to the ground fault sensor terminal labeled WHITE. Secure the ring terminal with the star washer and pan head screw, as shown in Figure 7.

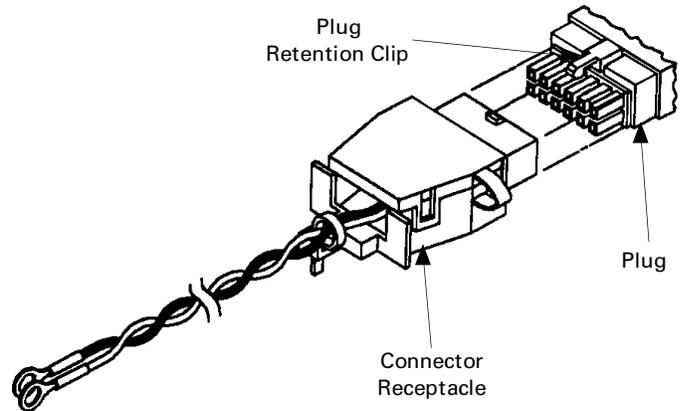


Figure 6. Attaching the connector receptacle and plug.

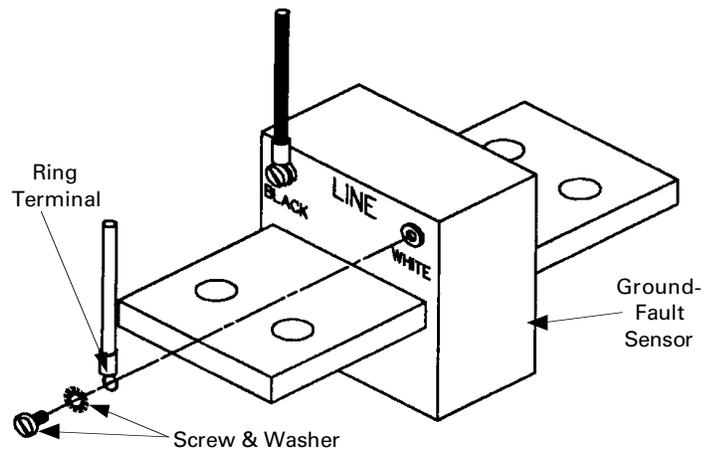


Figure 7. Attaching the wires to the ground-fault sensor.

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

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