



Spectra Series™ Power Panelboards

Bolt-On Circuit Breaker Kit Catalog Numbers AMCB6TEDL

Application

For use with circuit breaker type TED136 and current limiter TEDL36 (015, 020, 030, 060, 100).

For Use with Circuit Breaker Cover Kit Catalog Number AFP3TED.

Replacement Hardware Kit Number AHKBTEDL1.

Refer to instruction sheet GEH-4671, supplied with the TEDL current limiter, for installation of the current limiter to the breaker. Figure 1 shows all the parts included in this kit, which are listed in Table 1.

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.

In the following instructions and figures, numbers in brackets refer to the items in Table 1.

- 1. Confirm the contents of the kit.** This kit is used to install a TED-frame SPECTRA branch circuit breaker with a TEDL current limiter into a SPECTRA APNB bolt-on style interior. The vertical space required for each kit is 4.125 inch (3X).

Item	Description	Part #	Qty.
1	Thread-forming screw, 10-32 x 7/16"	192A6976P189	4
2	Circuit breaker and current limiter mounting bracket	252B3573P3	2
3	Antiturn clip	252B3613P1	3
4	A & C phase strap	252B3618G1	2
5	A & C phase strap	252B3618G2	2
6	B phase strap	252B3618G3	2
7	Cupwasher, #8	254V644P1	8
8	Shakeproof screw, #10-32 x 1/2"	264V291P3	6
9	Screw, #8-32 x 3 1/8"	264V322P2	8
10	Conical spring washer, 1/8"	75A105503P101	3
11	Instruction sheet	DEH40386	1
12	Nut, 1/4-20	N245P21B6	3
13	Carriage bolt, 1/4-20 x 1 1/2"	N657P21024B6	3

Table 1. Parts list for kit AMCB6TEDL.

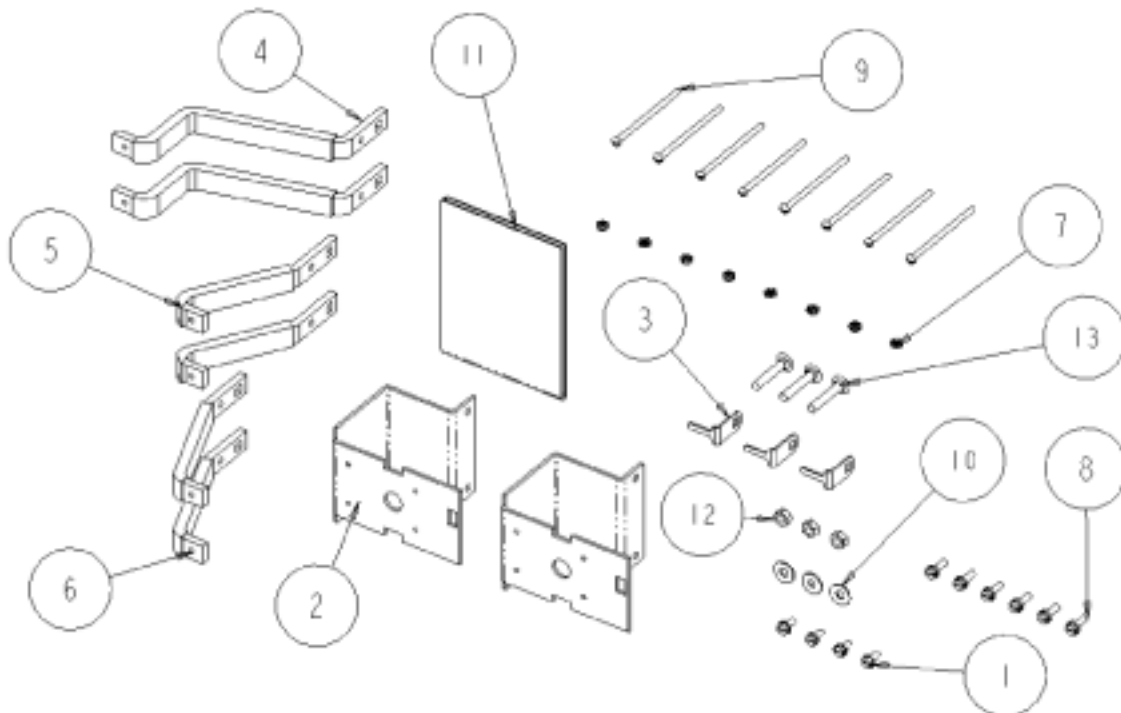


Figure 1. Parts included in the circuit breaker mounting kit AMCB6TEDL.

2. Assemble the antiturn clips onto the carriage bolts. Slide the antiturn clip [3] over the corresponding square shank of the carriage bolt [13], as shown in Figures 2a and 2b. Install these parts onto the interior bus bars, as shown in Figure 2c.

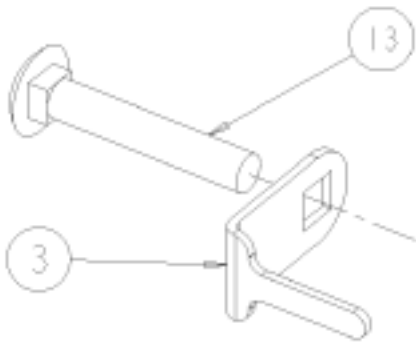


Figure 2a. Sliding the antiturn clip over the carriage bolt.

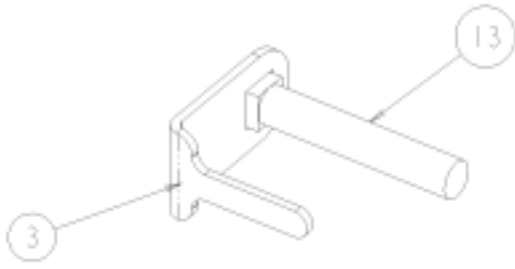


Figure 2b. Antiturn clip in position on the bolt.

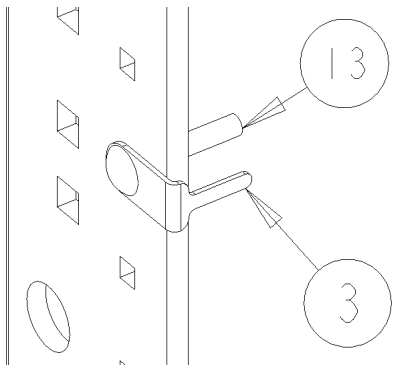


Figure 2c. Carriage bolt and clip installed on the interior bus bar. (Note that this is an isometric view from the left.)

3. Locate the proper side of the interior to mount the straps. Locate the side of the panel interior bus at which the distance from the vertical bus face to the inner face of the bus support rail is 2.75 inches, as shown in Figure 3. The circuit breaker straps will be mounted on this side of the vertical bus. The assembly views show the 2.75-inch distance on the right. When the 2.75-inch distance is on the left, the proper view is upside down.

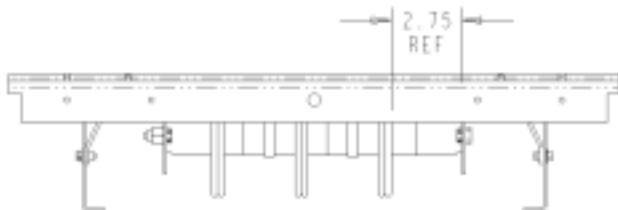


Figure 3. Locating the proper side of the interior to mount the straps.

4. Mount the strap assembly. Position the carriage bolt and antiturn clip assembly from step 2 as shown in Figures 4a and 4b. Place the straps [4, 5, 6] as shown in Figures 4c and 4d. Leave the connection finger-tight at this time.

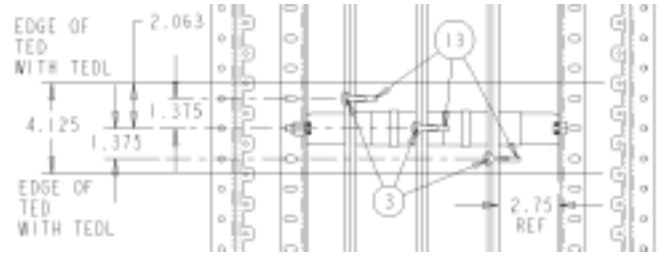


Figure 4a. Carriage bolt and antiturn clip assembly.

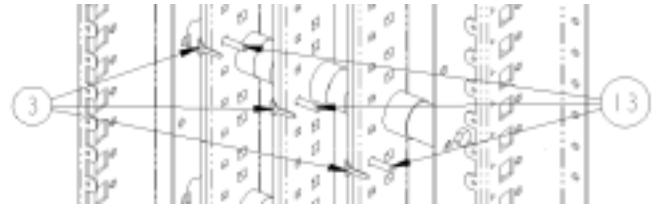


Figure 4b. Isometric view of Figure 4a.

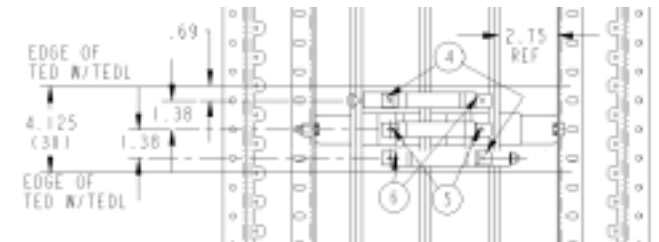


Figure 4c. Installing the straps.

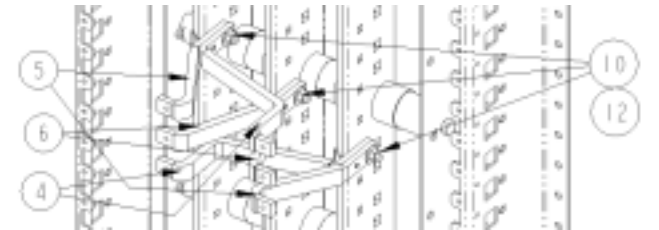


Figure 4d. Isometric view of Figure 4c.

5. Install the circuit breaker mounting bracket. Fasten the circuit breaker mounting bracket [2] to the panel side rail using the thread-forming screws [1], as shown in Figures 5a and 5b. Tighten the thread-forming screws to 30 in-lb.

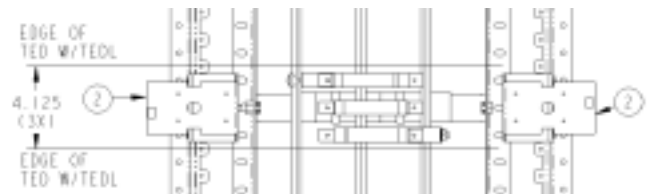


Figure 5a. Mounting bracket installation.

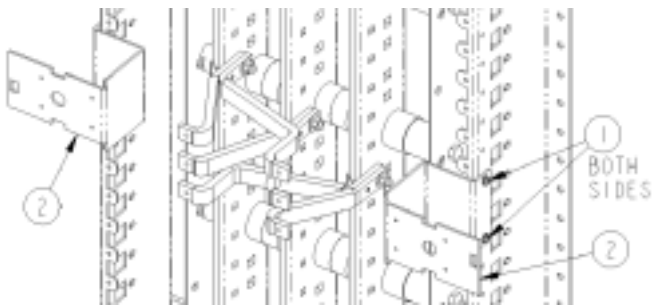


Figure 5b. Isometric view of Figure 5a.

6. Install the circuit breakers and current limiters. Since these assemblies are for branch operations, mount the breaker so that the line or ON-side terminals rest on the straps and the opposite side rests on the mounting bracket. Align the holes in the circuit breaker housing with the corresponding holes in the mounting bracket. Fasten the breaker to the bracket with the machine screw [7] and washer [9], and tighten to 50 in-lb. Join the circuit breaker terminals to the threaded holes in the straps with the shakeproof #10-32 screws [8]. Tighten each terminal connection to 75 in-lb. The straps may require minor adjustments for proper alignment of the mounting holes.

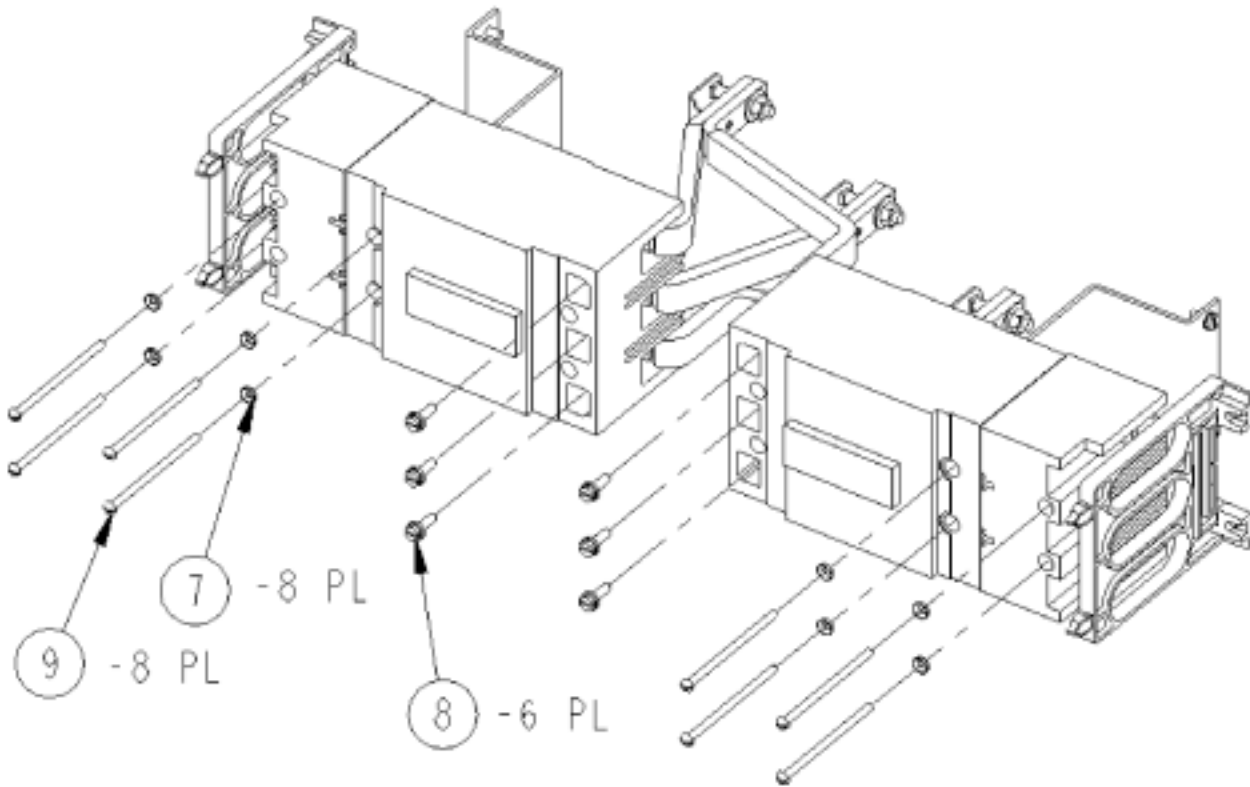


Figure 6. Mounting the circuit breakers and current limiters.

7. Tape unused straps. Apply multiple wrappings of insulation to the unused strap contact surfaces, as shown in Figure 7. A UL or CSA Recognized 105° C thermoplastic tape (OANZ2) is required. Overlap more than one-half of the preceding turns, as shown, to achieve a minimum tape thickness of 0.028 inch. This insulation thickness requires two complete layers of overlapping turns.

8. Tighten the bolted connections. Tighten the bolted strap connections at the vertical bus to 65 in-lb. It may be necessary to remove an adjacent circuit breaker to allow access to the bolted connections at the vertical bus.

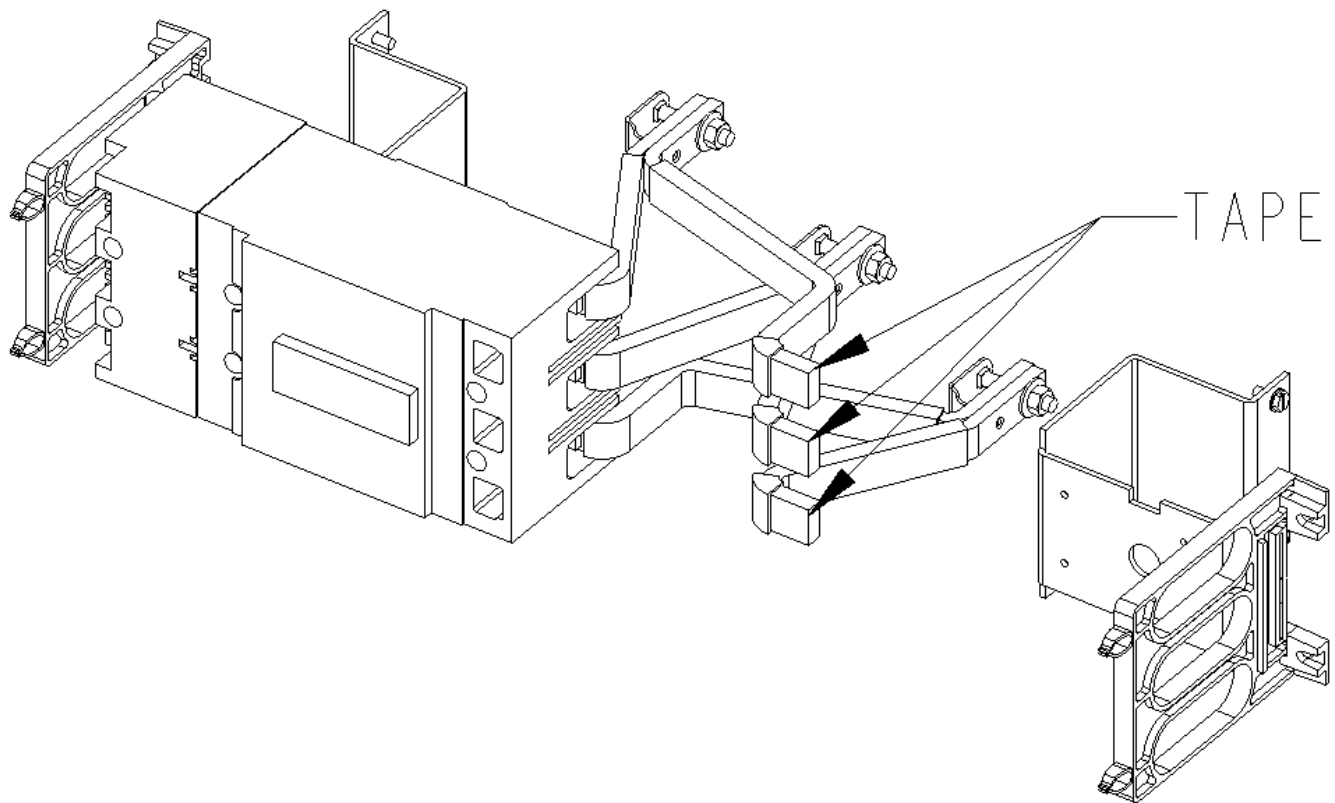


Figure 7. Taping unused straps.

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.



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