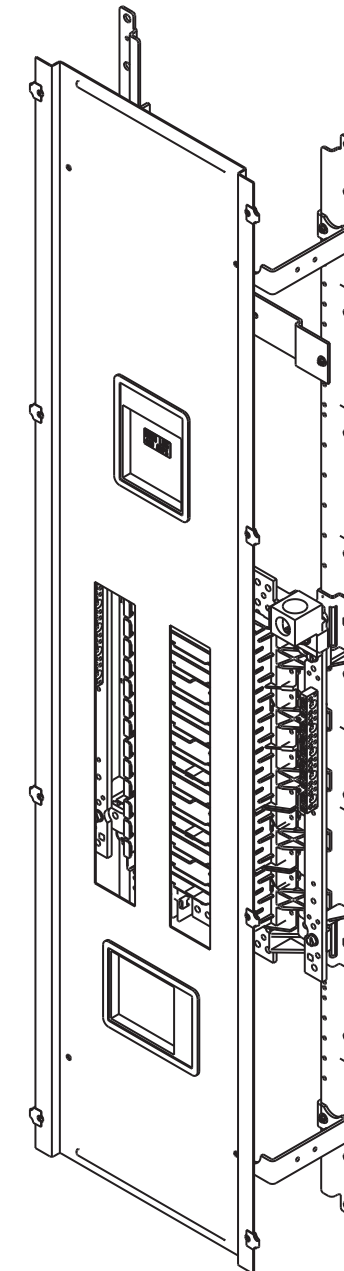


# SIEMENS

## 42NLK54B 200% Neutral Lug Kit for 30, 42, 54 or 66 Circuit P1-400 Panels (for use in Revised P1 Panelboards ONLY)<sup>1</sup>

Installation  
Instructions



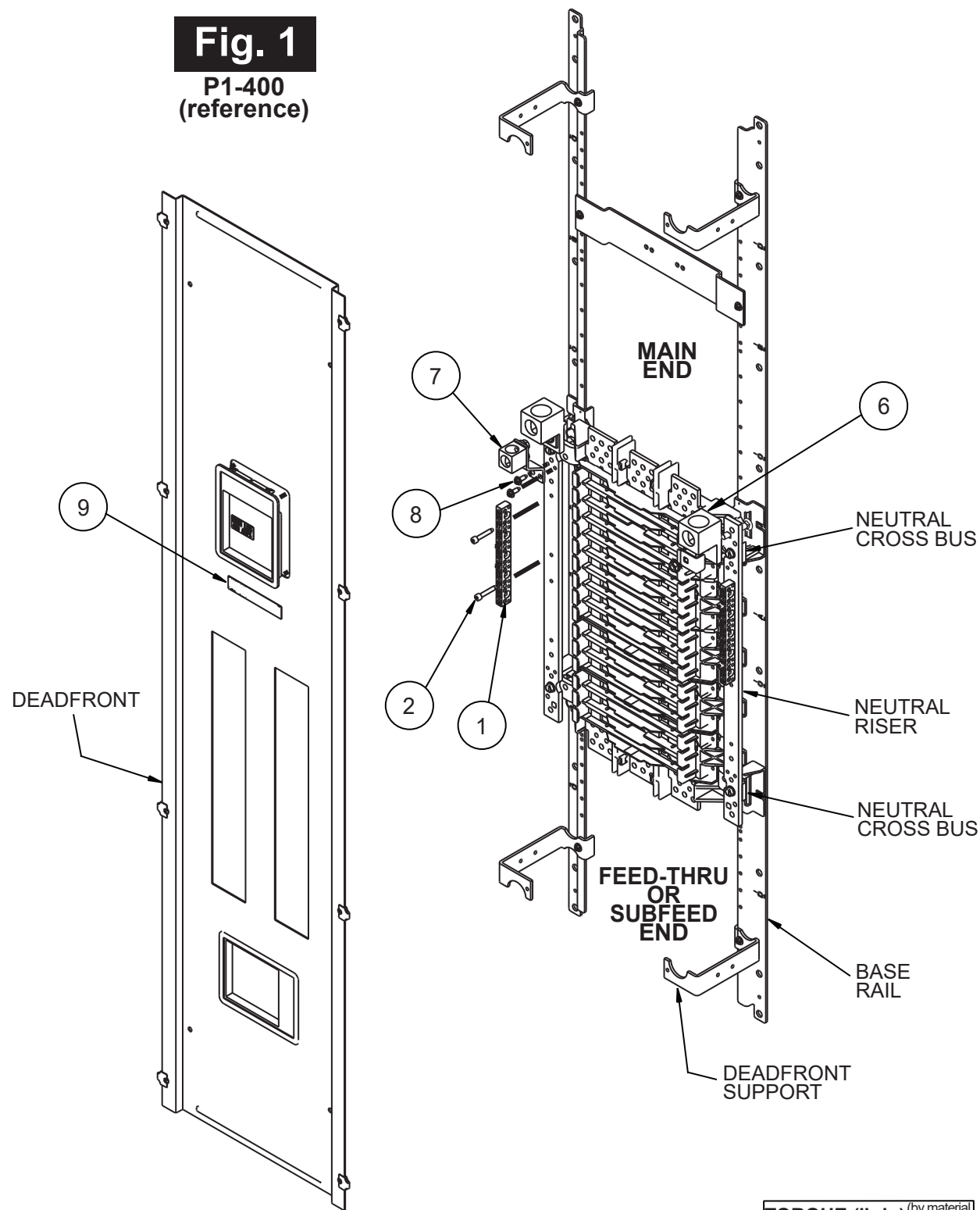
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<sup>1</sup> To confirm, note the part number of the panel (marked on the interior label). If it ends in an "N" or a "T" it is a "Revised P1" and is compatible with this kit. (For example: P1E42MC250A is an Original P1; P1E42MC250AT is a Revised P1)

**Fig. 1**

**P1-400  
(reference)**



**THIS KIT CONTAINS THE FOLLOWING ITEMS:**

ITEM	DESCRIPTION	QTY	TORQUE (lb-in) <small>(by material &amp; thickness)</small>	
			ALUMINUM	COPPER
1	NEUTRAL STRIP LUG, COPPER, LONG	4	N/A	N/A
2	#10-24 x 1-1/8" SOCKET CAP SCREW, THREAD-FORMING	8	30	50
3	1/4"-20 x 1" CARRIAGE BOLT	1	N/A	N/A
4	ANTI-TURN PLATE	1	N/A	N/A
5	1/4"-20 BELLEVILLE WASHER NUT	1	72	72
6	600 kcmil LUG WITH ANTI-TURN	1	N/A	N/A
7	SERVICE GROUND ELECTRODE ASSEMBLY	1	N/A	N/A
8	#10-24 x 9/16" HEX WASHER HEAD SCREW, THREAD-FORMING	2	30	50
9	200% NEUTRAL LABEL	1	N/A	N/A

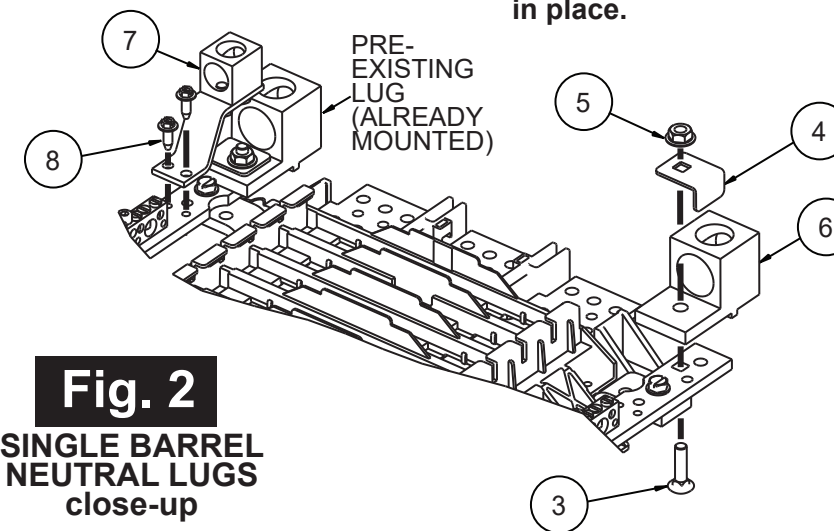
# Installation Instructions

The following instructions are for the installation of a Siemens 200% rated neutral kit in a Revised P1, 400 amp Panelboard. The parts provided in this kit are for connection to a 1-phase 3-wire system or a 3-phase 4-wire system. Kit **42NLK54B** is for 200% rated neutrals, sometimes required for panels supplying loads with high harmonic loads, such as personal computers. Caution: The 200% neutral requires that the line cable and connectors be doubled; for example, instead of (1) cable for 400 amp panel use (2) cables instead. This kit provides a single 600 kcmil line lug to be used in conjunction with the 600 kcmil neutral line lug supplied with the main lug or main breaker assembly installed in the panelboard to meet the double cabling requirement.

NOTE: For use with 30, 42, 54 or 66 circuit panels. (Use only 2 of the 4 Neutral Strip Lugs for 30-circuit panels.)



1. Lock off all power supplying this equipment before working on it.
2. Remove the deadfront.
3. Remove the existing Neutral Strip Lugs and replace them with the copper Neutral Strip Lugs (Item 1) provided in this kit. Use the #10-24 x 1-1/8" Socket Cap Screws (Item 2) to fasten them to the Neutral Risers.
4. Determine which of the line neutral lug positions does not have a 600 kcmil lug installed. If there is a smaller lug mounted there, remove it. Insert the 1/4"-20 x 1" Carriage Bolt (Item 3) through the square hole on the Neutral Riser from below, then place the 600 kcmil lug (Item 6) and the Anti-turn Plate (Item 4), as shown in Fig. 2. Finish with the 1/4"-20 Belleville Washer Nut (Item 5).
5. To mount the Service Ground Electrode Assembly (Item 7) -- if required for service equipment applications -- position the lug assembly on top of the Neutral Riser and align the two thru-holes with those on the Neutral Riser. Fasten with two of the #10-24 x 9/16" thread-forming screws (Item 8).
6. Torque all connections to the values specified on the Hardware Tightening Torque label affixed to the rear of the deadfront.
7. Attach main cables to the lugs and branch cables to the Neutral Strip Lugs. If no torque values are specified on the connectors, refer to the Hardware Tightening Torque label affixed to the rear of the deadfront.
8. Place 200% Neutral Label (Item 9) on the front of the deadfront (or the rear if no room on the front).
9. Before energizing the panel, ensure that all connections have been properly torqued, that the deadfront is installed and that all fillers are in place.



**Fig. 2**  
**SINGLE BARREL  
NEUTRAL LUGS  
close-up**