Installation Instructions for 2-Pole, 3-Pole and 4-Pole Plug-in Support Blocks For L-Frame Circuit Breakers and Molded Case Switches

**WARNING**

CONTACT WITH ENERGIZED EQUIPMENT CAN RESULT IN DEATH, SEVERE PERSONAL INJURY, OR SUBSTANTIAL PROPERTY DAMAGE. DO NOT ATTEMPT TO INSTALL OR PERFORM MAINTENANCE ON EQUIPMENT WHILE IT IS ENERGIZED. ALWAYS VERIFY THAT NO VOLTAGE IS PRESENT BEFORE PROCEEDING WITH THE TASK, AND ALWAYS FOLLOW GENERALLY ACCEPTED SAFETY PROCEDURES.

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The user is cautioned to observe all recommendations, warnings, and cautions relating to the safety of personnel and equipment as well as all general and local health and safety laws, codes, and procedures.

The recommendations and information contained herein are based on Cutler-Hammer experience and judgement, but should not be considered to be all-inclusive or covering every application or circumstance which may arise. If any questions arise, contact Cutler-Hammer for further information or instructions.

1. INTRODUCTION

General Information

Plug-in support blocks (Fig. 1-1) are for rear-connected applications such as switchboards and allow ease of installation and front removal of the circuit breaker. Plug-in support blocks can be installed for use at either the line or load end, or both ends of the circuit breaker.

This instruction leaflet (IL) gives detailed procedures to install the plug-in support blocks. For this IL, plug-in support block has been abbreviated to support block.

2. INSTALLATION

The installation procedure consists of: drilling the mounting panel and bus; installing the mounting block; assembling the male slip connectors to the circuit breaker conductors; and mounting the circuit breaker. To install the plug-in support block, perform the following procedures:

- If required, drill bus to accept support block conductor studs. Refer to installation engineering drawings for details.

2-2. Refer to drilling plan (Fig. 2-1) or Fig. 2-2. Drill holes and cut mounting surface to accept support blocks. Factory mounting plates are available.

2-2. Remove outer nuts from support block conductor studs (Fig. 2-3).
2-3. Remove nuts and lockwashers from mounting studs.

2-4. Position support blocks on mounting surface (Fig. 2-3 shows upper and lower installation).

2-5. Put lockwashers on support block mounting studs (3 places per plug-in support block). Screw retaining nuts onto mounting studs (Fig. 2-3). Torque to 16-18 lb-ft (21.70-24.41 N.m).

2-6. Screw outer nuts onto support block conductor studs. Adjust inner and outer nuts (2 per stud) up to bus. Torque to 30-35 lb-ft (40.68-47.46 Nm).

**Note:** Line end terminal cover can be removed to facilitate installation of male slip connectors, see Fig. 2-4. Replace cover after installation of slip connectors.

2-7. Assemble male slip connectors to circuit breaker conductors (Fig. 2-4). Secure each slip connector using flat washer, lockwasher, and nut provided. Torque to 8-10 lb-ft (10.85-13.56 Nm).

2-8. Mount the circuit breaker (Fig. 2-5). Press line and load male slip connectors into support block female slip connectors.

2-9. Thread circuit breaker mounting screws into support blocks and tighten to secure circuit breaker. Torque to 4-6 lb-ft (5.43-8.14)
Fig. 2-1. L-Frame 3 Pole Plug-in Support Block Drilling Plan
Fig. 2-2. L-Frame 4-Pole Plug-in Block Drilling Plan
Fig. 2-2. Installation of Upper and Lower Plug-in Support Blocks

Note: Current carrying parts are omitted from the center pole for two pole circuit breakers.
Fig. 2-4. Installing Male Slip Connectors (Line End Shown)

Fig. 2-5. Mounting the Circuit Breaker (Line End Shown)