

### Functional Description

An Eaton AQB-L400 Adapter Kit provides the means for converting the normally male configured primary connections of an AQB-L400/LL400 current limiting circuit breaker to female configured primary connections, normally associated with an AQB-LF400 circuit breaker (Figure 1-5). A close out plate, attached directly to the front of the AQB-L400 circuit breaker with four mounting screws, provides the deadfront cover required to complete the conversion.

The adapter kit itself is comprised of line and load side adapter blocks, six female spring loaded primary connection adapters, a close out plate, and four mounting screws (Figure 1-3).

### PART 2. INSTALLATION/OPERATION

- a. Turn off all power.
- b. Remove LF400 breaker, if applicable.
- c. The standard male type slip connectors shall be removed from the AQB-L400/LL400 circuit breaker. The threaded end of the female connection adapters attaches in their place. The other end of the female connection adapters provides the female slip connections required for the AQB-LF400 configuration.
- d. Mount the tulips to the line and load ends.
  1. Note that 4 tulips are offset mounted on their pads and 2 tulips are centered (Figure 1-4).
  2. The centered tulip assemblies mount to the center pole.
  3. Offset tulip assemblies mount to the left and right poles, with the tulips oriented to the outside of the breaker.
  4. Before tightening the hardware, check the alignment using the adapter block as a template.
  5. If the alignment is correct, tighten the hardware.

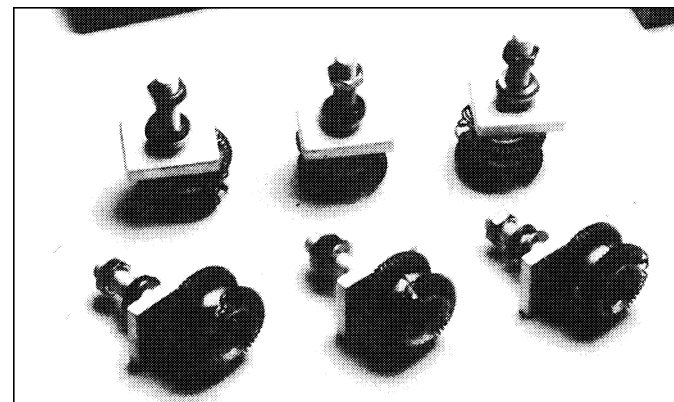


Fig. 1-4. Closeup of Tulips Showing Center and Offset Mountings

### CAUTION

**TO PROPERLY REMOVE THE ADAPTED AQB-L400/LL400 CIRCUIT BREAKER, UNSCREW THE BOLTS LOCATED IN THE ADAPTER BLOCK, NOT THE BREAKER MOUNTING BOLTS LOCATED IN THE BREAKER FRAME.**

- e. The adapter block is mounted to the circuit breaker using breaker mounting bolts.
- f. The modified breaker is mounted to the LF400 mounting blocks using hardware supplied with the adapter block.
- g. After mounting the breaker on the LF400 block, attach the close out plate to the front. Once attached to the front of the AQB-L400/LL400 circuit breaker with four mounting screws, the close out plate insures a deadfront installation. In addition, the close out plate provides front access to the circuit breaker's operating handle, trip unit adjustments, lower breaker mounting bolts and megger holes. Access to the adapter block mounting bolts, however, requires removal of the close out plate.
- h. Since the Eaton Adapter Kit applied to an AQB-L400/LL400 breaker is a direct replacement for an already installed AQB-LF400 breaker, modifications to the existing bus mounting system are not required. An already adapted AQB-L400/LL400 breaker can be mounted on existing blocks, and secured in place with the provided upper and lower adapter block bolts (Figure 1-6).

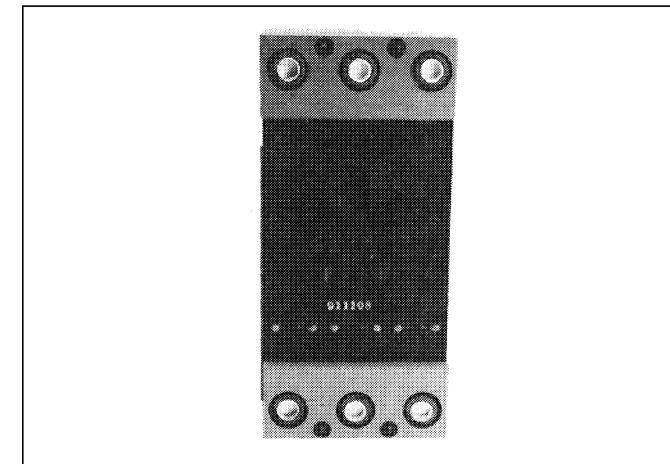


Fig. 1-5. Rear View of Navy Type AQB-L400 Circuit Breaker and Adapter Kit Combination Displaying Female Configured Primary Connections

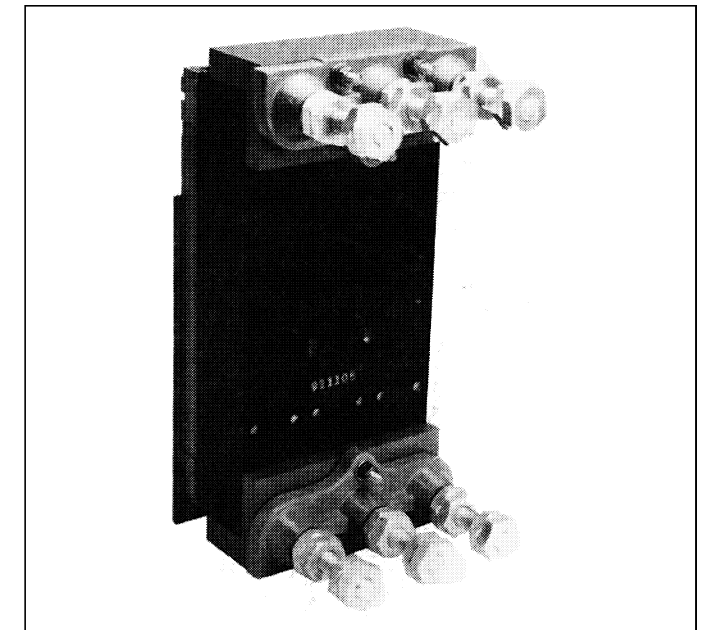


Fig. 1-6. Navy Type AQB-L400 Circuit Breaker and Adapter Kit Combination Plugged Into Male Mounting Blocks

In general, follow the mounting procedures normally used for mounting any AQB-LF400 circuit breaker, when installing the AQB-L400/LL400 circuit breaker and Adapter Kit combination. Follow the instructions and procedures provided with the AQB-L400/LL400 circuit breaker when operating the AQB-L400/LL400 and Adapter Kit combination. Refer to Technical Manual 1240C33H01

### PART 3. REPLACEABLE PARTS

- a. L400/LL400 plus Adapter Kit: See Eaton
- b. Adapter Kit: 6590C82G01
- c. LF400 Mounting Block: 6590C82G03

## Instructions for Use of Eaton Adapter Kit and Navy Type AQB-L400 Molded Case Circuit Breaker Combination in AQB-LF400 Applications

### WARNING

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

**EATON IS NOT LIABLE FOR THE MISAPPLICATION OR MISINSTALLATION OF ITS PRODUCTS.**

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 Eaton 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 Eaton for further information or instructions.

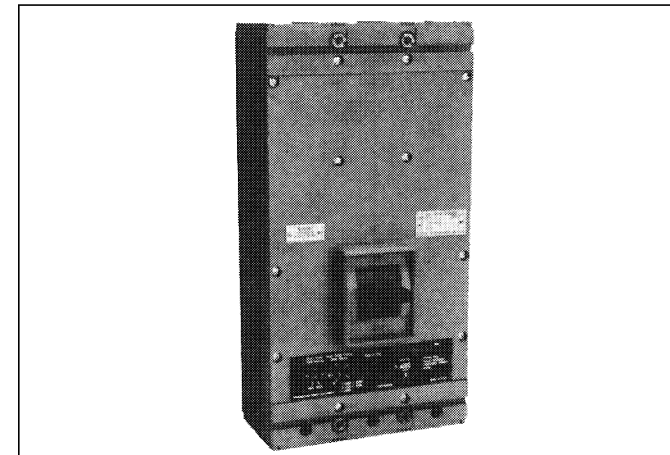


Fig. 1-1 Standard Navy Type AQB-L400 Molded Case Circuit Breaker

### PART 1. INTRODUCTION

#### General Information

The Navy Type AQB-L400 or AQB-LL400 circuit breakers (Figure 1-1), when supplied with a factory installed Eaton AQB-L400 Adapter Kit (Figures 1-2 and 1-3), can be installed directly into Navy Type AQB-LF400 applications. This combination of an AQB-L400/LL400 circuit breaker and the Eaton Adapter Kit provides a direct one to one current limiting type L400 circuit breaker replacement for an already installed fused type LF400 circuit breaker. Existing AQB-L400/LL400 circuit breakers in the field (manufactured prior to August, 1992) may need a factory modification to accept the Adapter Kit. Contact Eaton for details, if there are any questions.

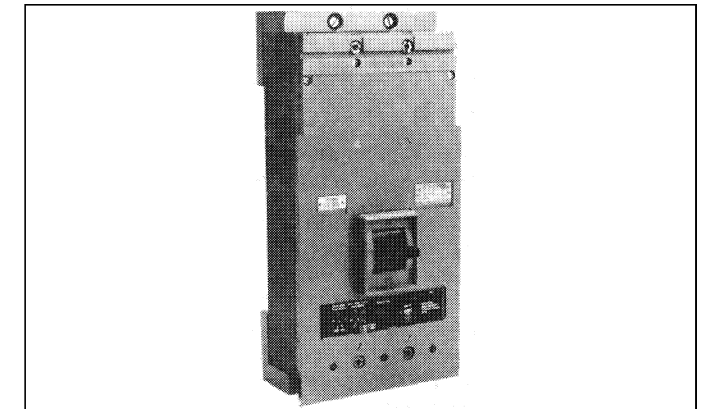


Fig. 1-2. Navy Type AQB-L400 Molded Case Circuit Breaker with Adapter Kit Factory Installed

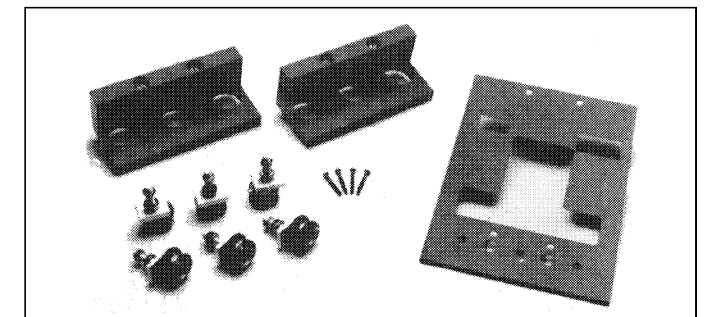


Fig. 1-3. Eaton Adapter Kit Parts Before Installation

**Eaton**

Moon Township, Pennsylvania U.S.A.

Style No. 69C0670H02 Effective October 1997 Printed in U.S.A./CCI