

GEH5040 - Installation Instructions

PowerMark Plus™ Load Centers

Type THQL and THHQL Main Breaker Retainer & Service Barrier Kit Cat# THQLRK



WARNING: Hazard of electrical shock or burn. Turn off power before working inside this equipment.

General

To comply with the National Electrical Code and Underwriters Laboratories, the breaker retainer kit and service barrier must be installed in accordance with the information contained in this sheet and by a qualified electrical contractor and/or licensed electrician.

Introduction

This bulletin provides instructions for installing circuit breaker retainer and Service barrier to PowerMark Plus™ GE Load centers. The catalog number THQLRK is to be installed when a type THQL or THHQL circuit breaker is to be used as the main in a type TL PowerMark Plus™ Load Center, where indicated on the panel rating label. The retainer is used to prevent the electrical hazard posed by the accidental removal of a wired-in main circuit breaker while energized. For troubleshooting or service related questions,

<https://electrification.us.abb.com/products/load-centers>

Contents per Installation

THQLRK - Main Breaker Retainer & Service Barrier Kit

Description	Qty.
RETAINER	1
SCREW, STEEL T-ROLL 8-32X1/2	1
THQL Lug Barrier	2
LABEL	1

NOTICE: These instructions do not purport to cover all details or variations in equipment or to provide for every possible contingency to be met in connection with the installation, operation or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently for the purposes, the matter should be referred to ABB Company. These instructions are intended for use by qualified personnel only.

Installation Instructions

1. Uninstall the Dead front/shield and retain the mounting screws.

2. Insert the Service Barriers (A) onto line side of circuit breaker (D) as shown in **Figure 1**. Two Service Barriers included with the kit, need to assemble to both the poles.

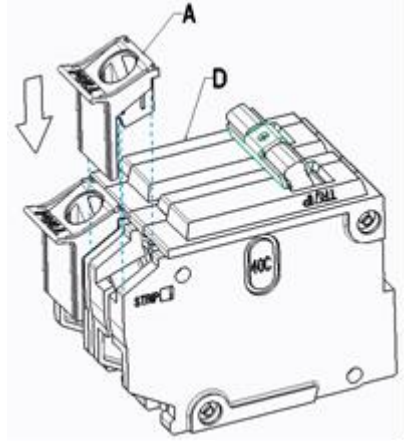


Figure 1: Insert Service Barrier onto Main Circuit Breaker

3. Install the 2-pole main circuit breaker (D) on either side of the two stabs nearest to the main lugs of the load center. See **Figure 2**. Use only a GE type THQL or THHQL two-pole circuit breaker in the "OFF" Position.

4. With the circuit breaker still in the "OFF" position, screw the Retainer (F), with its captive self tapping screw (G), the the hole (E) located in front of the stab. See **Figure 2**. Do not use excessive force to tighten the screw.

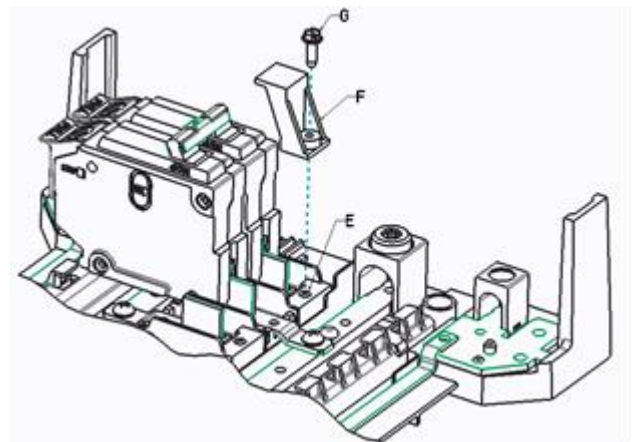


Figure 2: Install Retainer to Secure Breaker

See **figure 3**, load center fully assembled with kit.

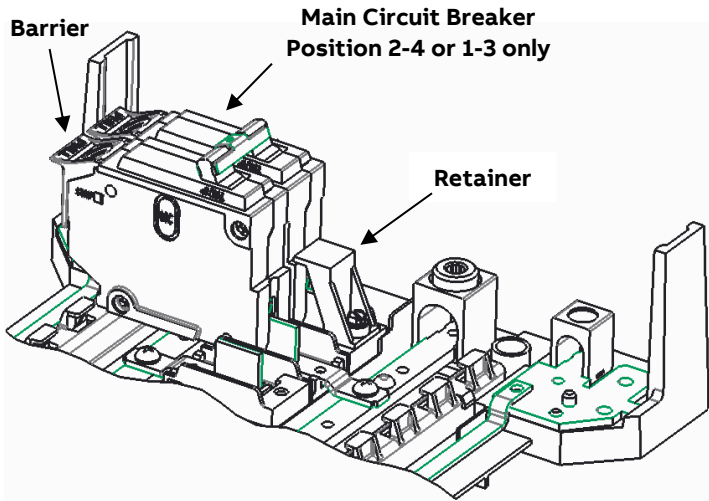


Figure 3: Shows Kit Assembled

5. Remove the backing from the enclosed "SERVICE DISCONNECT" label and attach it to the dead front/shield besides the main circuit breaker opening.
6. Wire the circuit breaker to be used as main. **Fig. 4**
7. The Circuit Breaker is now ready for service.

⚠ WARNING: Service barriers (A) must be correctly installed on the line side of a main device in GE load centers, and MSLC to ensure isolation from live parts.

⚠ WARNING: Installing an incorrect size wire than the specified sizes for each circuit breaker frame will negate the barrier ability to protect personnel from exposed live components.

Location	Conductors
Lug Hole	10 AWG to 2/0 AWG Cu/Al

Table 1: Shows the allowable wire range for the barrier.

The wires must be stripped to the correct length to maintain isolation. Strip the wire to a maximum of 0.595 inches.

After stripping the wires to the required length, the wires can be installed as shown in **Figure 4**. The service barrier must be correctly installed to maintain electrical isolation from accidental contact. Torque the wires according the torque specification on the breaker.

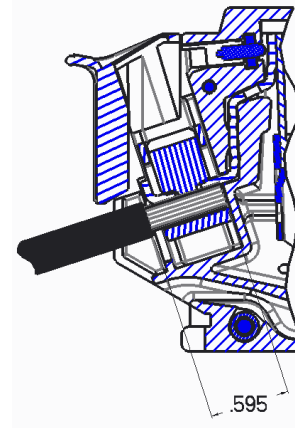


Figure 4: Stripped wire installed.

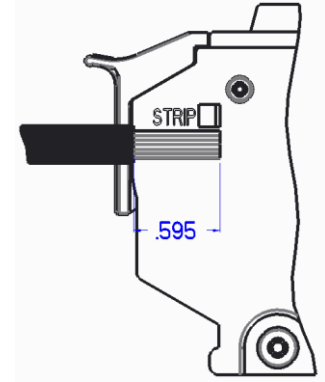


Figure 5: Max. Strip Wire Length.

The strip wire length are measured to the scale provided on side of main circuit breaker, as shown on **Figure 5**. Some THQL (1p and 2p up to 60 Amps) are finger safe and do not require a Service barrier. See **Figure 6**.

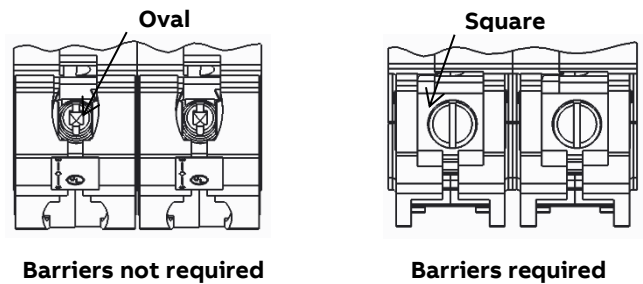


Figure 6: Breakers Where Service Barriers Are Required.

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