Instructional Leaflet **IL0131157EN** Effective March 2022

Secondary terminal block extension bracket used with Magnum low-voltage circuit breakers

⚠ WARNING

(1) ONLY QUALIFIED ELECTRICAL PERSONNEL SHOULD BE PERMITTED TO WORK ON THE EQUIPMENT

(2) ALWAYS DE-ENERGIZE PRIMARY AND SECONDARY CIRCUITS IF A CIRCUIT BREAKER CANNOT BE REMOVED TO A SAFE WORK LOCATION

(3) DRAWOUT CIRCUIT BREAKERS SHOULD BE LEVERED (RACKED) OUT TO THE DISCONNECT POSITION.

(4) ALL CIRCUIT BREAKERS SHOULD BE SWITCHED TO THE OFF POSITION AND MECHANISM SPRINGS DISCHARGED.

FAILURE TO FOLLOW THESE STEPS FOR ALL PROCEDURES DESCRIBED IN THIS INSTRUCTION LEAFLET COULD RESULT IN DEATH, BODILY INJURY, OR PROPERTY DAMAGE.

⚠ WARNING

THE INSTRUCTIONS CONTAINED IN THIS IL AND ON PRODUCT LABELS MUST BE FOLLOWED. OBSERVE THE FIVE SAFETY RULES.

- **DISCONNECTING;**
- **ENSURE THAT DEVICES CANNOT BE ACCIDENTALLY RESTARTED;**
- **VERIFY ISOLATION FROM THE SUPPLY;**
- **EARTHING AND SHORT-CIRCUITING; AND;**
- **COVERING OR PROVIDING BARRIERS TO ADJACENT LIVE PARTS.**

DISCONNECT THE EQUIPMENT FROM THE SUPPLY. USE ONLY AUTHORIZED SPARE PARTS IN THE REPAIR OF THE EQUIPMENT. THE SPECIFIED MAINTENANCE INTERVALS AS WELL AS THE INSTRUCTIONS FOR REPAIR AND EXCHANGE MUST BE STRICTLY ADHERED TO PREVENT INJURY TO PERSONNEL AND DAMAGE TO THE SWITCHBOARD.

Section 1: General information

The secondary terminal block extension bracket is used to complement the secondary terminal blocks located on the top of the cassette. The extension bracket can hold up to three additional terminal blocks, with each cassette capable of supporting an extension bracket on both the left and right sides of the cassette. This allows for an additional six terminal blocks to complement the secondary connector.

The extension bracket can be used to connect the optional third form C aux switch (on Magnum PXR breakers) or the optional cell switches, as examples.

This product is intended for use in Magnum circuit breakers with PXR or Digitrip trip units.

Note: All images show mounting the secondary extension bracket on the right side cassette. A similar procedure can be followed for mounting on the left side of the cassette.

Required tools

- Phillips screwdriver (#2)
- 10 mm socket
- Crimping tool
- Wire cutters

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Kit parts identification

Refer to **Figure 1** for visual identification of the parts listed below in MEXTBKT:

(A) Extension bracket (one)

(B) Cassette screws (two)

(C) Retaining bracket (one)

(D) Retaining bracket screw (one)

(E) Quick-disconnect connector (eighteen)

(F) Terminal block (three)

(G) Terminal blanks (two)

(H) 35 inch wires (eighteen - not shown)

(I) Blank terminal block label sheet (one - not shown)

Included in separate MEXTBWKIT:

(J) 55 inch wires (eighteen - not shown)

(E) Quick-disconnect connector (eighteen)

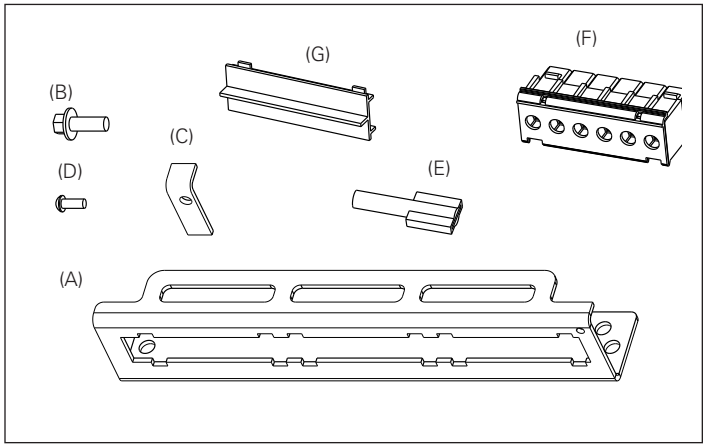

Figure 1. Contents of kit.

Section 2: Installation of the secondary extension bracket

To install the secondary extension bracket, proceed with the following steps:

Step 1: Remove the screw on the side of the cassette supporting the secondary terminal bracket. If installing an extension bracket on both sides, only remove one side at a time.

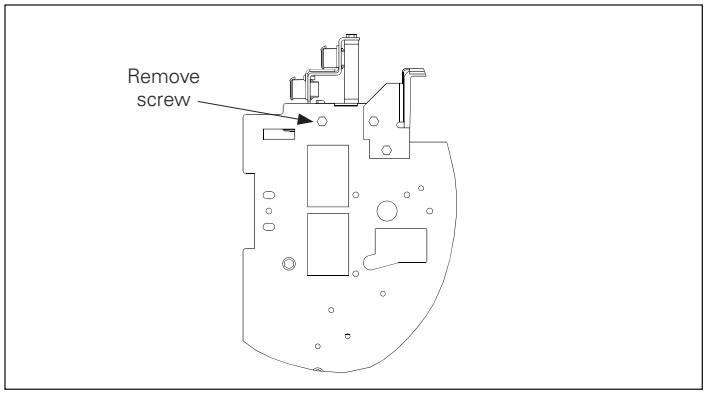

Figure 2. Step 1.

Step 2: Locate the two holes on the side of the cassette that the secondary extension bracket will mount to.

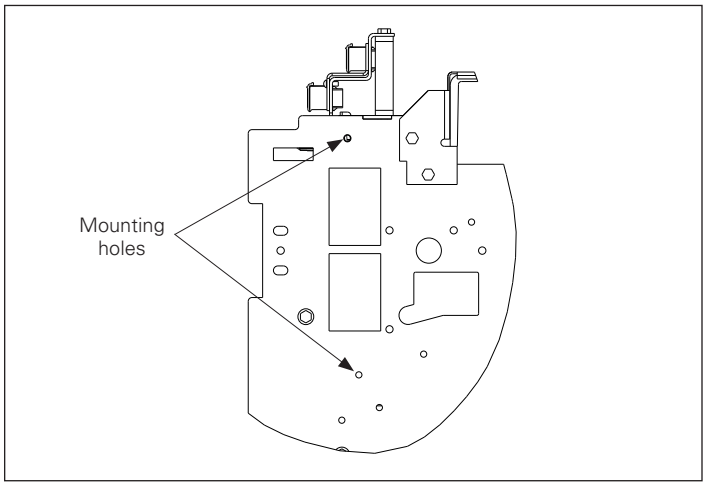

Figure 3. Step 2.

Step 3: Mount the extension bracket **(A)** to the side of the cassette as shown with the cassette mounting screws **(B)**. The screw removed in Step 2 can be re-used, or two new screws have been provided. The upper bolt will go through the inner hole at the top of the extension bracket and the lower bolt will go through the outer hole at the bottom of the extension bracket. Ensure the top screw threads in to support the secondary bracket on the top of the cassette.

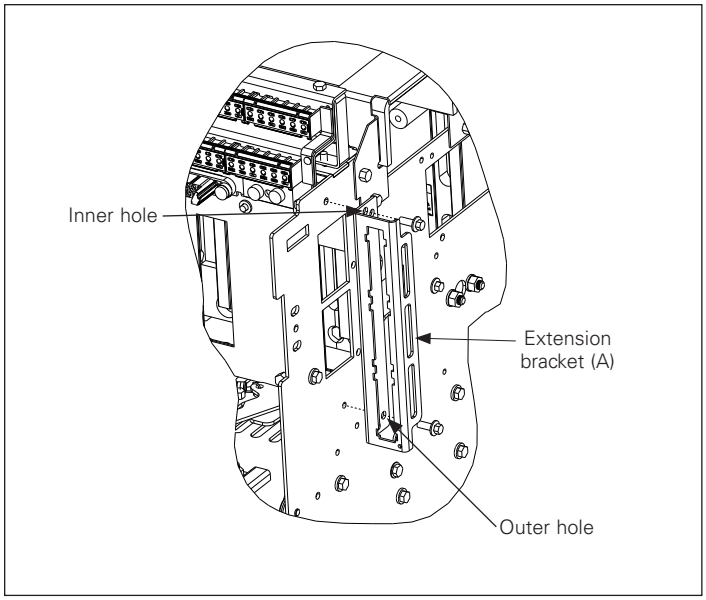

Figure 4. Step 3.

Step 4: Populate the extension bracket with either terminal blocks **(F)** or blanks **(G)** as desired. Position the terminal blocks so that the their hinged door opens inward, towards the breaker. Then insert the tabs of the terminal blocks or blanks into the cutouts of the extension bracket, and slide towards the top if mounted on the right side of the cassette and towards the bottom if mounted on the left side of the cassette. Ensure all gaps are filled with blanks or terminal blocks.

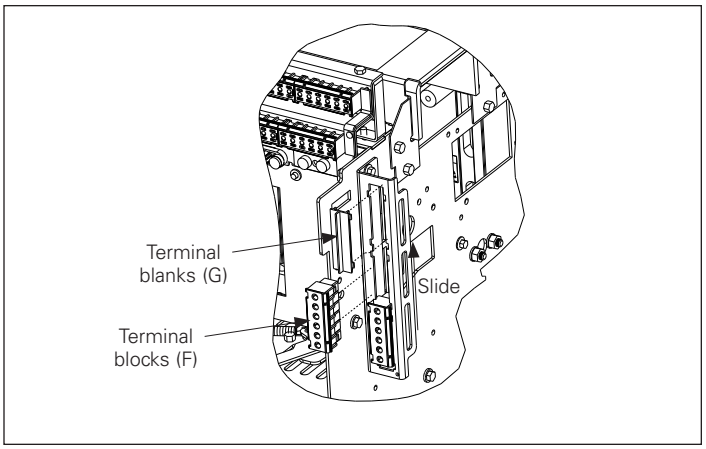

Figure 5. Step 4.

Step 5: Install the retaining bracket **(C)** and screw **(D)** as shown. Ensure that all terminal blocks and blanks are slid all the way to the top if mounted on the right side of the cassette and to the bottom if mounted on the left side of the cassette to lock them into position.

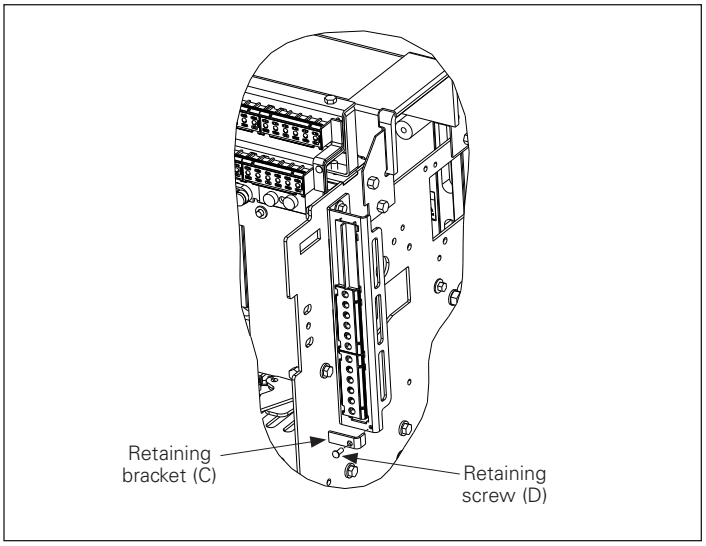

Figure 6. Step 5.

Note: Wire length has been provide for mounting on the left side of a cassette for all configurations and mounting on the right side of a cassette for three-pole and four-pole configurations. If mounting on the right side of a cassette is desired for a six-pole or eight-pole cassette, order MEXTBWKIT to receive additional wire for the increased length.

Step 6: If the secondary extension bracket is used to connect wires from a cell switch, skip this step and proceed directly to Step 7. If the secondary extension bracket is used to connect wires from the secondary connector, complete this step as outlined below.

If desired, measure the wire lengths from the position of the secondary connector pin to the terminal blocks. Measure an additional 1.5 inches to ensure no tight bends. Trim the bare end of the wire to the new length. Strip the bare end of the wire 0.25 inches.

Crimp the quick-disconnect connectors on the bare end of the wires. Connect the quick-disconnect connectors to the back of the terminal blocks. Use provided blank labels **(I)** to label the terminal blocks. Connect the other end to the secondary connector positions called out for the accessory.

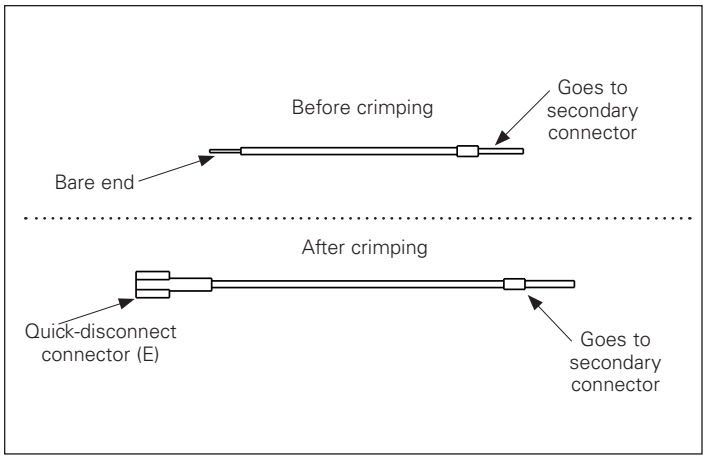

Figure 7. Step 6.

Step 7: If the secondary extension bracket is being used to connect wires from a cell switch, connect the quick-disconnect connectors on the leads from the cell switch to the corresponding terminal blocks. Apply labels as described in the instructions provided with the cell switch.

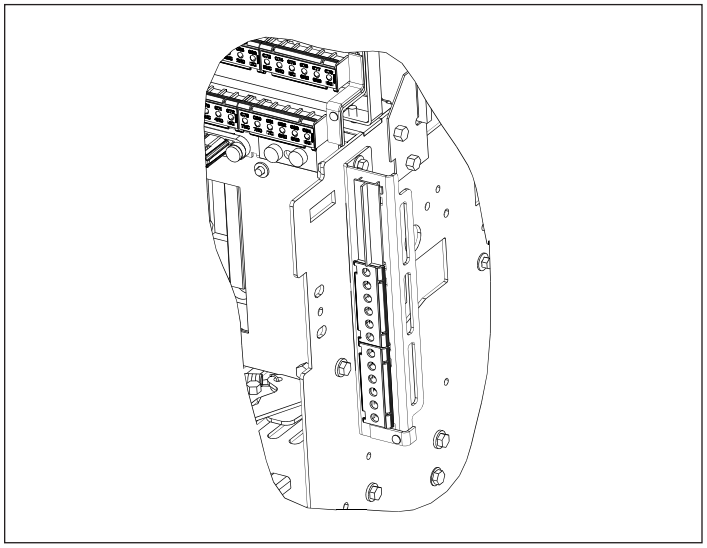

Figure 8. Sample configuration.

Secondary terminal block extension bracket used with Magnum low-voltage circuit breakers

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