Instructional Leaflet **IL0131174EN** Effective December 2021

Breaker operations counter in IZM low voltage circuit breaker

⚠ 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.

Section 1: General information

The operations counter is a mechanical device used to provide a record of the number of circuit operations. It can be viewed through the breaker's front cover.

Required tools

- 1/4-inch drive socket
- 10 mm socket
- Phillips head screwdriver (#2 recommended)
- Small chisel
- Small flat file

Kit parts identification

Refer to **Figure 1** for visual identification of the parts listed below.

(A) Lock mounting plate (one)

(B) Counter actuator (one)

(C) Counter (one)

(D) Return spring (one)

(E) M3.5 x 8 self-threading screws (two)

(F) M3 x 6 self-threading screws (three)

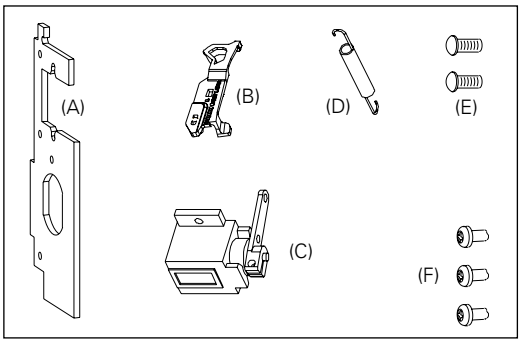

Figure 1. Contents of Kit

Section 2: Installation of breaker operations counter

Proceed with the following four steps.

Step 1: Remove the front cover by unscrewing the hex-head captive bolts (four for three-pole, six for four-pole) that join the cover to the breaker housing using a 10 mm 1/4-inch drive socket. Then hold the charge handle down approximately 45 degrees to pull off the cover.

Step 2: Remove the knockout opening for the counter by laying the front cover face up on a firm flat surface. Strike sharply at score marks with a chisel or similar tool. File the hole opening smooth.

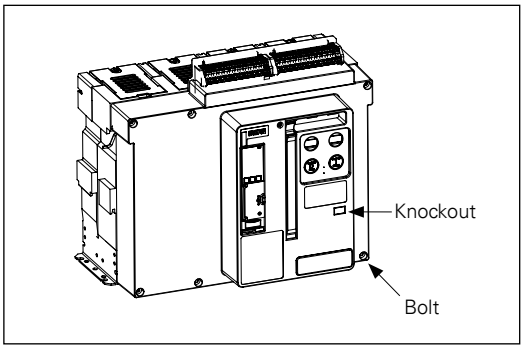

Figure 2. Steps 1 and 2

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Step 3: Ensure that the counter angles at 14 degrees above horizontal in free state, and note the arm orientation to the counter.

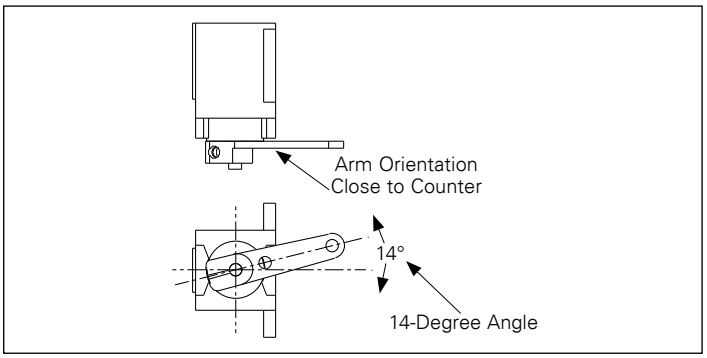

Figure 3. Step 3

Step 4: Install the counter **(C)** to the mounting bracket **(A)** using two M3.5 x 8 screws **(E)**. Torque the screws to 5–8 in-lbs.

Remove **and discard** the existing bracket (if equipped), and install the counter and bracket assembly to the mechanism as shown using the three M3 x 6 screws **(F)**.

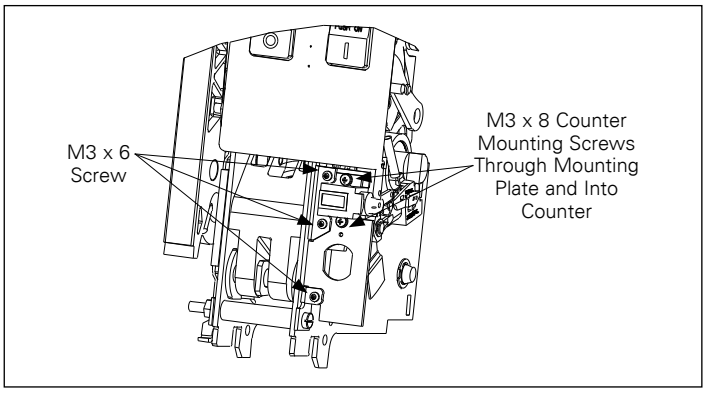

Figure 4. Step 4

Step 5: Assemble the counter spring **(D)** onto counter actuator **(B)**, and hook the other end to the bottom hole of flag wireform. Align the counter actuator onto the charge flag actuator. Make sure the counter arm sits into the slot of the counter actuator.

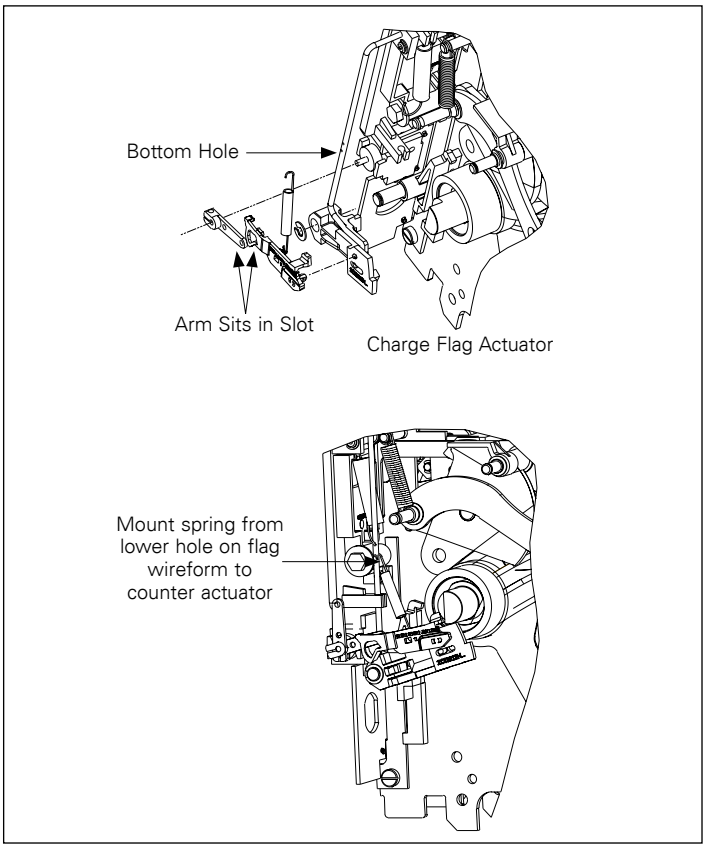

Figure 5. Step 3

Step 6: Check the counter functions with the assembly.

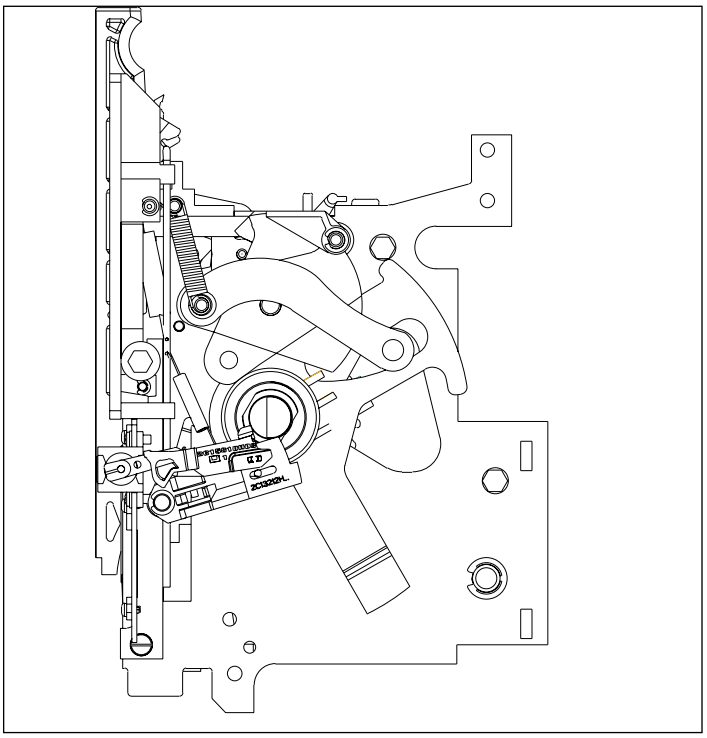

Figure 6. Step 6

Step 7: Reinstall front cover removed in Step 1.

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Printed in Germany
Publication No. IL0131174EN
Effective December 2021

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