NP ARMS functional tester

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Functional test kit

The functional test kit (see Figure 1 and Figure 2) is a handheld battery-powered tester capable of testing the trip elements of an NP ARMS device.

![Figure 1. NP ARMS Functional Test Kit](image)

To check battery power

Connect cable to unit and depress PUSH TO TEST button; both green battery voltage LEDs should illuminate.

Battery

![Figure 2. Test Kit Style No. 70C1056G56](image)

Note: Holding down the PUSH TO TEST button instead of using a momentary touch will cause premature battery drain.

When to test

CM52 network protectors with the integrated NP ARMS can be tested prior to startup and during your normal maintenance period. You should test the NP ARMS function prior to your normal relay testing.

Note: A three-phase network protector test set is required to be used in conjunction with the NP ARMs tester.

⚠️ CAUTION

**TESTING A CIRCUIT BREAKER WHILE IN SERVICE AND CARRYING LOAD CURRENT IS NOT RECOMMENDED. TESTING THAT RESULTS IN THE TRIPPING OF THE CIRCUIT BREAKER SHOULD BE DONE ONLY WITH THE CM52 IN THE TEST POSITION.**

Note: The cable has an interlock feature and must be connected to the tester to enable battery power.
Test procedure

1. Ensure that the breaker is in the TEST position.
   a. Verify that breaker is closed, or close the breaker.
   b. Using the network protector test set, energize the protector (relay mode).
   c. Place ARMS device on protector in maintenance mode.

2. Confirm that the “blue” maintenance mode LED on the IDM-ARMS is ON.

3. Confirm that the stack light is flashing “blue.”

4. Remove the Lexan® cover of the IDM-ARMS (breaker cover does not have to be removed).

5. Remove port cover of the IDM-ARMS.

6. Connect the harness assembly to the port and the handheld test device.

7. Set switch to POWER UP, then verify the battery test LEDs by touching the PUSH TO TEST button.

8. Move switch to MAINT MODE, and touch the PUSH to TEST button.

9. Verify that the network protector breaker has tripped.

10. Confirm that the maintenance mode trip light on the IDM-ARMS is ON.

11. To verify lock-out, move the outside handle from OPEN to CLOSE; the network protector should not close.

12. Reset the NP ARMS device.

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