Instruction Manual for Spectra Breaker Test Kit (SPTK1)

Applicable to Spectra RMS Circuit Breakers without Displays Only

General

The Spectra Breaker Test Kit is designed for testing of the basic Spectra RMS Molded Case Circuit Breaker (E, F, G & K Frame). The Test Kit tests the operation of the circuit breaker actuator and mechanism by simulating a trip in the electronics of the circuit breaker.

The Test Kit consists of a housing with a cable assembly attached. Two pushbuttons are provide on the unit: battery test and trip test.

> **Note**: Do NOT use the Spectra Breaker Test Kit with Spectra MVT trip units (Spectra breakers with 4 Button LCD displays) or other trip units.

The Test Kit has three 9V batteries, which are field replaceable.

Following steps shall be used to check the Spectra Breaker.

STEP1: Push the Battery test push button to the ON position. If the led lights then the battery is OK.
If LED does not light please replace the batteries.

STEP 2: Remove load from the spectra Circuit breaker.

> **WARNING**: Danger of electrical shock or injury. Turn OFF the power ahead of equipment before installing or removing any device.

STEP 3: Remove the installed rating plug as follows:

Rating Plug Removal

To remove the rating plug it is recommended that a tool be used to minimize the risk of damage. A suitable removal tool is GE Cat. No. TRTOOL (AUGATT114-1 IC remover or equivalent).

Squeeze the two rating plug tabs to release the lock and pull firmly upwards while maintain pressure on the tabs. IF no tool is available , grasp the two ends of the rating plug tabs with two small (1/8" maximum width bade) flat head screwdrivers and gently pry out.

NOTE: Protection to the breaker is maintained at a much lower rating (7-15% of sensor rating) when the rating plug is pulled out. If the breaker is carrying more than 7% of the sensor rating load current when the rating plug is removed, the breaker may trip.

STEP 4:
Install the test rating plug catalog number SRPT1 (supplied with test kit and available separately). Make sure that Test Kit rating plug is properly inserted.

Rating Plug Installation

Inspect for Physical Damage. With no rating plug in the circuit breaker the following should be inspected:

a) **The plastic cover of the circuit breaker around the rating plug opening should be in good condition: no gouges or breaks.**
b) **The red rejections pin in the rating plug cavity should be inspected. It should be standing straight up.**
c) **The digiclips should be inspected to verify that they are not bent.**

STEP 5: Connect the phone plug end (coming out from Spectra Breaker Test Kit) to the jack on the test rating plug SRPT1.

STEP 6: Reset the Spectra Circuit breaker by moving the handle to the off position. Move the handle to the on position.

STEP 7: Push the Trip test button to the ON position on the Spectra Test Kit. The breaker should trip. If the breaker does not trip the actuator may be replaced and the test repeated. If the breaker still does not trip the circuit breaker should be replaced.

> **CAUTION**: The use of Test Rating Plug catalog number SRPT1 in a breaker carrying load will result in tripping at loads of 10% or higher.

Fig 1: Spectra Breaker Test Kit

STEP8: Remove the phone jack from the Spectra Breaker rating plug.

STEP9: Remove the Spectra Test Rating Plug using the procedure of step 3.

STEP10: Install the proper rating plug using the Instruction of Step 4.

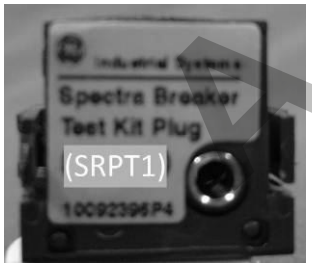

Fig 2: Test Rating Plug

that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the GE Company.

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