GEH-4679

Installation Instructions
for
Ground Fault System Performance Test Instructions and Test Record
for Type THPR and THPC HPC Switches with Integral Ground Fault Protection when used as Service Equipment.
See page 2 for test record.

Ground Fault Protection Systems

Performance Testing of Type THPR and THPC Switches

1. Check the interconnections from the neutral current transformer to terminal block on the switch (3-phase, 4-wire systems or 1-phase, 3-wire). See Figure 1.

2. Verify proper line side orientation of neutral sensor. See Figure 1.

3. Verify that neutral is grounded on the line side and that no other ground points exist which would bypass the neutral sensor. See Figure 2.

4. Test Ground Fault Protection System by either:
   a. Use of red test button (if present on switch):
      1. Connect 120 V, 60HZ external control power of at least 200 VA to terminals L and N — see Figure 1.
      2. Follow test instructions provided with switch (or already attached to enclosure door); or,
   b. Wrap 20 turns of #14 AWG wire around the integral phase current sensor.
      1. Inject a current equal to approximately 125% of the ground fault pickup setting divided by 20 turns. By setting the gf pickup to the low end of the range, the test current can be kept lower.
      2. Expected result—switch trips.
      (Note: A high current test set may also be used to inject primary current—obtain instructions GEI-48907 from the General Electric Company).

   Observe for correct operation of the switch when one or more of the above tests is performed.

5. Record the results of the tests on the Performance Test Record on the reverse side. Initial for verification of steps 1, 2 and 3 in spaces provided in Figure 1 and 2. When performance test is completed, give form to those in charge of the building's electrical installation to be available to the authority having jurisdiction.

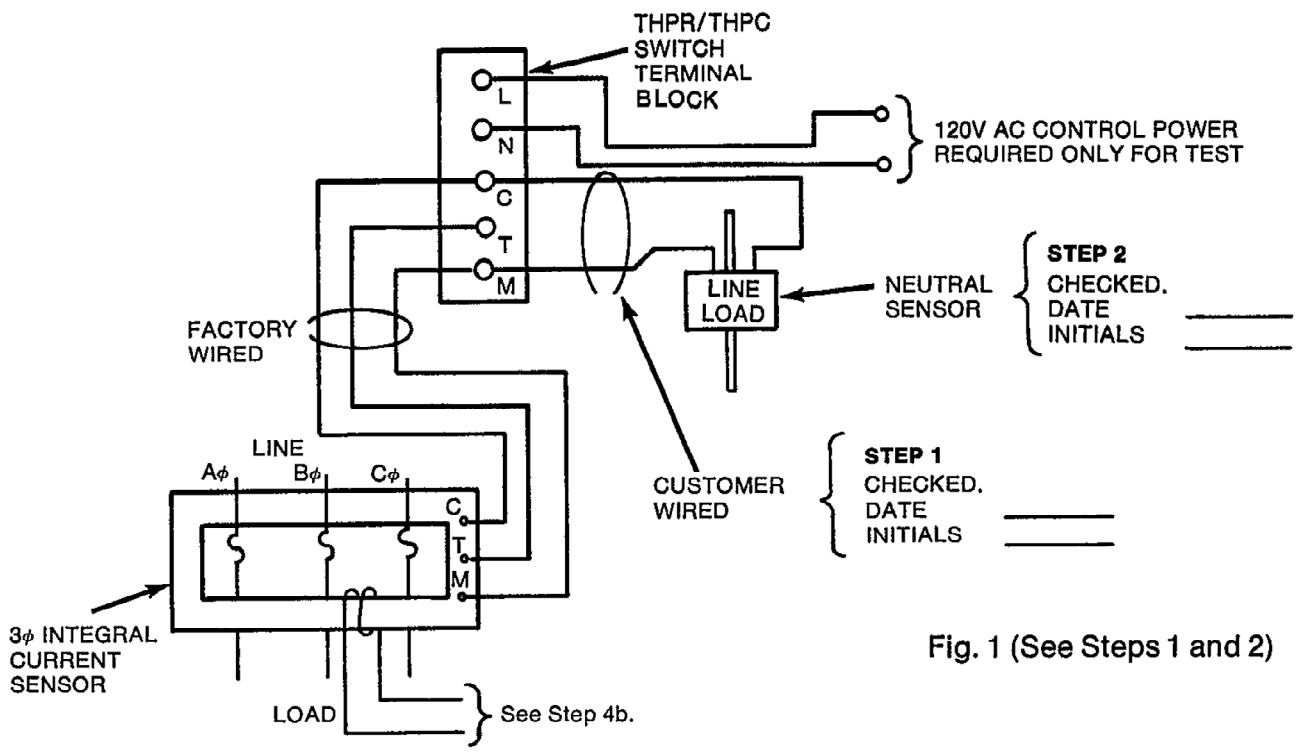

Fig. 1 (See Steps 1 and 2)

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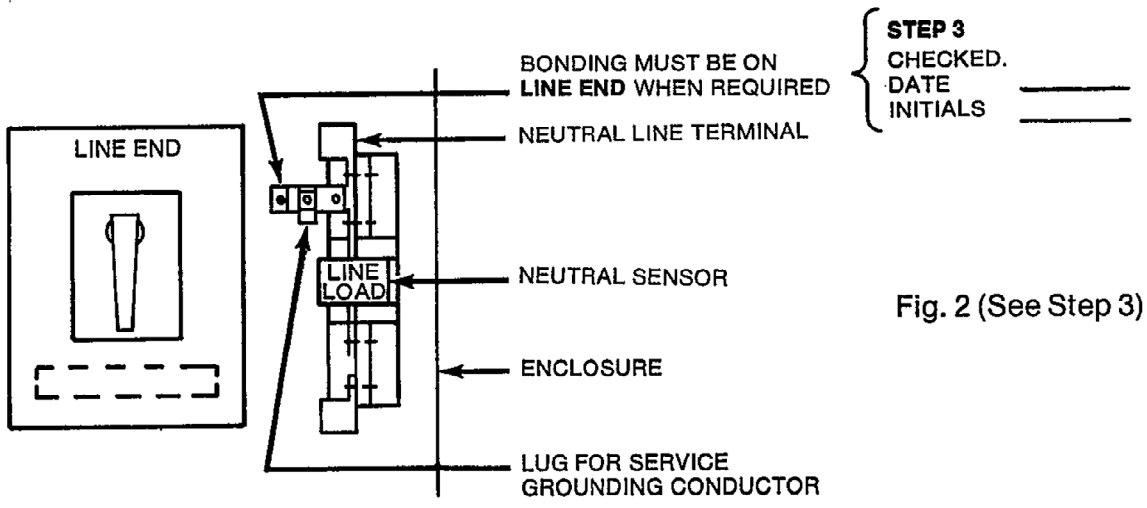

Fig. 2 (See Step 3)

This test form should be retained by those in charge of the building's electrical installation in order to be available to the authority having jurisdiction.

Switch Catalog Number _____ Amps _____ Volts _____

Customer Name _____

Location _____

Additional Description (if needed) _____

_____

_____

_____

TEST RECORD

	Ground Settings			Tripping Results	
Test Number	**Pickup Amperes**	**Time Delay Band (min/int/max)**	**Test Current (Amps)**	**Does Switch Trip?**	**Measured Time for Switch to Open**

CONCLUSIONS:

The test results are satisfactory. _____

The test results are not satisfactory. _____

(Explain) _____

Tests performed by: _____ Test Date: _____

_____ Witnessed By: _____

_____

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company. These instructions are intended for use by qualified personnel only.

For further information call or write your local General Electric Sales Office or...

Distribution Equipment Division
41 Woodford Avenue
Plainville, CT 06062 U.S.A.

Outside the U.S. and Canada write: Export Sales and Services, 570 Lexington Avenue, New York, NY 10022 U.S.A.

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