COMMON PROBLEM SEEN IN BRANCH CIRCINITS

A house is wired to comply with NEC code, specifically the Arc Fault and GFCI protection requirements.

Two AFCI breakers are nuisance tripping.

Common Causes

- Neutrals have been spliced together (vs. separating each circuit set of neutrals).
- Breakers are sensing a fault in the circuitry.
- Therefore AFCI breakers are tripping.

EXAMPLE:

Last time this happened, two additional electricians were needed to remove outlets. switches and junction box covers and to check wiring; causing additional hours on the iob.



In addition, circuit breaker manufacturers may not provide credit on these breakers because there is nothing wrong with them.

ADDITIONAL USES

FINDING BREAKERS AND FUSES

FINDING WIRES BEHIND WALLS/CEILINGS/FLOORS







FINDING WIRES BENEATH THE GROUND/PAVEMENT

FINDING DEAD SHORTS IN A CIRCUIT





SURETRACE™ CIRCUIT TRACER KITS



61-955

61-959

IDEAL INDUSTRIES, INC. Svcamore, Illinois 60178, U.S.A. · 800-435-0705 www.idealcircuit-tracer.com · www.idealind.com P-5477 2/17

SURETRACE[™] **CIRCUIT TRACER**

YOUR TROUBLESHOOTING SOLUTION FOR AFCI/GFCI/COMBO BREAKER PROTECTED BRANCH CIRCUITS



FINDING COMMON SPLICE ERRORS CAUSING NUISANCE TRIPPING OF **AFCI/GFCI/COMBO BREAKERS**



Also finds:

- Dead shorts in branch circuits
- Wires behind walls/ceilings/floors
- · Wires beneath the pavement/ground
- Breakers and fuses

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SOLUTION USING THE SURETRACE™ CIRCUIT TRACER

STEP 1: ATTACH CLIPS

Attach Transmitter alligator clips to the affected breaker neutrals. (The two neutrals of the AFCI/GFCI/ Combo Breakers that are nuisance tripping).



STEP 2: SCAN

Scan each electrical location switch, outlet, light fixture, etc.), with the Receiver in the 3rd sensitivity mode setting until you identify the highest numeric reading on the Receiver.

The highest numerical value on the Receiver indicates the location of the incorrectly spliced conductors.



STEP 3: SEPARATE NEUTRALS

Identify the incorrect splice, separate each circuit's neutral conductors, and re-splice each neutral circuit's connections.



IMPORTANT:

This tracer is intended for the use of qualified electricians. Follow NFPA 70E Standard for Electrical Safety in the Workplace when using this tester. Always consult the instruction manual provided with the tester for operational limitations and procedures associated with a specific tester.

