



North Shore Safety, Ltd.
Safety Through Innovation



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INSTALLATION AND TESTING PROCEDURE

IMPORTANT!

THIS DEVICE MUST BE INSTALLED BY A QUALIFIED PERSON WHO UNDERSTANDS ELECTRICAL CIRCUITS.

Please read all the information on this sheet.

WARNING

Ground Fault Circuit Interrupter (GFCI) is a safety device under normal use and it is not intended to promote activity of elevated risk. Use only within the specified operating parameters (Failure to do so may result in bodily injury). Consult a licensed electrician for assistance on installation and repairs. Do not use this GFCI if it fails to function as instructed. Never attempt to tamper with this device. This GFCI should never be used as a main switch to connect or disconnect power. (Power should be disconnected at main power feed or by secondary switch located at the primary feed of GFCI). This GFCI is not an over-current protection device. (An appropriate current breaker should be used in series at primary power feed). This GFCI does not provide protection against shocks caused by holding both circuit conductors. This GFCI does not provide protection against electrical shocks generated by the conductors supplying power to the device. **Note: primary feed to GFCI is live even when GFCI is tripped. (Unit should be unplugged before servicing load side of GFCI.)**

- Do not use this device to feed power to life support apparatus.
- To minimize nuisance tripping:
 - Do not use on swimming pool equipment installed before 1965 NEC code.
 - Limit load cable to 100 feet.
- Installation must comply with local and national electrical codes (NEC).

What is a GFCI?

A GFCI is a device designed to interrupt power when a ground fault (a current that takes a path to ground) exceeds a predetermined value. The interruption of this power is fast in order to prevent serious injuries.

Why do we need a GFCI?

The human body is conductive to electricity. However, we were not meant to do so. Electric shocks can be fatal. Any electrical tool or appliance is a potential shock hazard especially when used near wet locations. That's where a GFCI is needed the most and can save your life. This is why most electrical codes require GFCI protection in kitchens, bathrooms, garages, outdoor outlets, laundry rooms, workshops, and portable power in wet location or confined space, etc.. North Shore Safety's GFCI PlugGard will offer such protection. Its safety scope surpasses its peers to include open neutral protection, fault indication, and power status.

How does a GFCI operate?

The GFCI constantly monitors the current balance of the conductors supplying power to the load. When a ground fault occurs, by a leakage or by shock, the imbalance of current is sensed and the GFCI trips when the ground fault exceeds 0.006 Amp. The tripping action must be within a fraction of a second to prevent serious injuries.

What a GFCI cannot do:

- Will not protect line side.
- Will not protect you when touching two current carrying conductors of opposite polarity (GFCI sees this as a load).
- Will not protect you when touching a line of another circuit.
- Will not detect overcurrent.

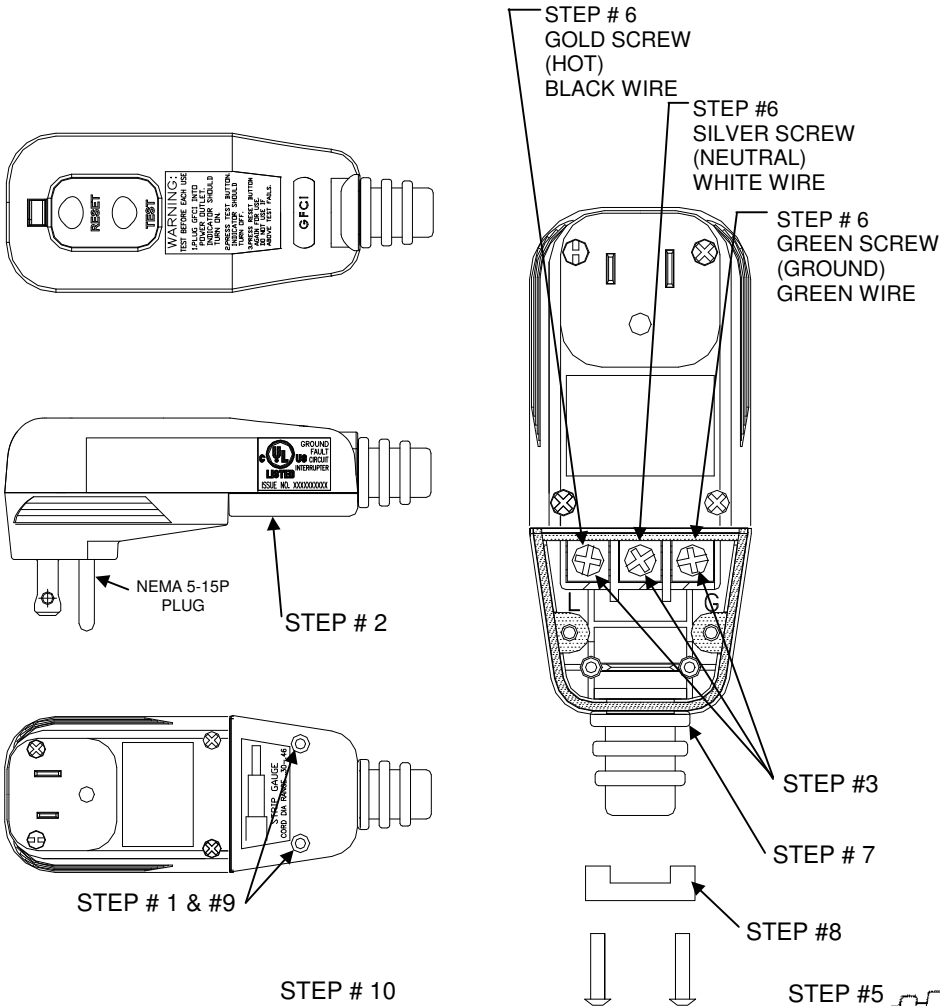
NORTH SHORE SAFETY'S TWO-YEAR LIMITED MANUFACTURERS WARRANTY

North shore safety warrants to the consumer its Plug-Gard Ground Fault Circuit Interrupter (GFCI) to be free from defects in materials and workmanship under normal use and service for a period of two years from date of manufacture. North Shore Safety, at its option, will repair or replace the defective GFCI without charge within a two year period from date of manufacture provided that the defect occurred during normal use. Defective unit must be returned prepaid, with a description of the problem, to Quality Assurance Dept., North Shore Safety, Ltd. 7335 Production Drive, Mentor, OH 44060. Please include \$10.00 for shipping and handling cost.

North Shore Safety will not be liable, directly or indirectly, for installation or removal of this device, or for any personal injury, or property damages, or incidental, indirect, or consequential damages of any kind, as a result of a defective device. The exclusive remedy under this warranty is the repair or replacement of the defective device. In no case shall North Shore Safety's liability exceed the purchase price. This warranty is void if this device is not properly installed, tampered with, not used according to label instructions and ratings, opened, or abused.

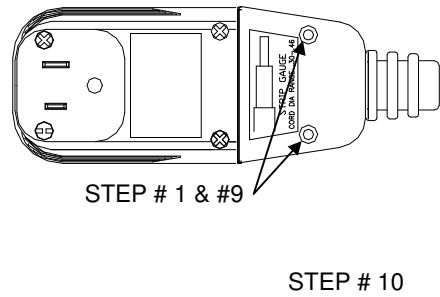
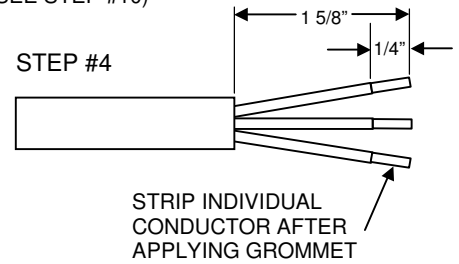
WIRING INSTRUCTIONS

IMPORTANT! THIS DEVICE MUST BE INSTALLED BY A QUALIFIED PERSON WHO UNDERSTANDS ELECTRICAL CIRCUITS.



INSTALLATION INSTRUCTIONS:

1. REMOVE SCREWS AS SHOWN IN STEP # 1
2. REMOVE COVER TO EXPOSE TERMINAL STRIP (SEE STEP #2)
3. BACK TERMINAL SCREWS OFF TO ACCEPT WIRES
4. PREPARE CABLE TO STEP # 4 DRAWING (SEE NOTE #2 ON ACCEPTABLE CABLE TYPES)
5. APPLY CORD GROMMET (SEE TABLE FOR SIZE): USE OF HAND SOAP WILL ASSIST INSTALLATION
6. INSERT WIRES INTO TERMINAL STRIP AS SHOWN IN STEP #6 (MUST BE CORRECT ORIENTATION) THEN SECURE SCREW TERMINALS
7. LOAD CABLE AND GROMMET TO HOUSING SLOT AS SHOWN IN STEP # 7
8. SECURE CORD ASSEMBLY TO HOUSING WITH CABLE STRAIN RELIEF (SEE STEP # 8)
9. REINSTALL HOUSING COVER WITH SCREWS SHOWN IN STEP # 1 AND # 9
10. TEST PER TESTING AND TROUBLESHOOTING PROCEDURE (SEE STEP #10)

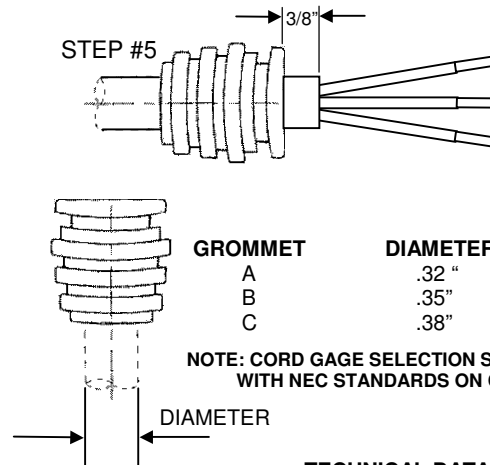


TESTING AND TROUBLESHOOTING PROCEDURE

1. Apply rated power to GFCI.
2. Press and release RESET button, GREEN LED should turn ON and appear in window above reset button. (For Auto Power-Up model, GREEN LED will automatically turn on and appear in window when power is restored)
3. Press Test Button, GREEN LED (Power) turns off and disappears from window. Press and release reset button, GREEN LED turns on and reappears in window.
4. CHECKING FOR CORRECT WIRING:

If GFCI is wired to protect a cord receptacle, plug a household lamp into the protected cord receptacle. Press and release the RESET button, lamp should turn on. Press the TEST button. Lamp should turn off. If lamp stays on when pressing TEST button, or if lamp does not illuminate when pressing RESET button, unplug GFCI, check and correct your wiring connections. Repeat steps 1-4. If problem persists, **do not use this GFCI**. Consult a qualified electrician.

If GFCI is wired to protect equipment, press and release RESET button. Verify that equipment power is on. Press TEST button. Equipment power should turn off. If equipment power does not come on when pressing and releasing RESET button, or if power stays on when pressing TEST button, unplug GFCI, check and correct your wiring connections. Repeat steps 1-4. If problem persists, **do not use this GFCI**. Consult a qualified electrician.



GROMMET	DIAMETER	CABLE
A	.32"	18-3
B	.35"	16-3 & 14-3
C	.38"	12-3

NOTE: CORD GAGE SELECTION SHOULD BE IN ACCORDANCE WITH NEC STANDARDS ON CORD GAGE AMPACITY

TECHNICAL DATA:

LISTED:	U.L. and c U.L.
RATED SUPPLY VOLTAGE:	120 VAC
RATED CURRENT:	UP TO 15 AMPS OR CABLE RATING
RESET TYPE:	AUTOMATIC OR MANUAL
OPERATING FREQUENCY:	60 Hz
TYPE:	CLASS A
GROUND TRIP CURRENT:	4-6 mA
OVERLOAD CURRENT:	90 AMP 125 VAC
INSULATION VOLTAGE:	1,500 VRMS – 1 MINUTE
ENDURANCE OPERATIONS:	3000 OPERATIONS

NOTE: 1) MANUAL CONFIGURATION SHOULD BE SPECIFIED WHEN AUTOMATIC POWER-UP WOULD CREATE AN UNSAFE CONDITION AFTER RESTORATION OF CIRCUIT POWER.
2) CABLE MUST BE INDOOR / OUTDOOR 3-CONDUCTOR CABLE OF TYPE, ST, SJT, SE, SJE, SO or SJO