

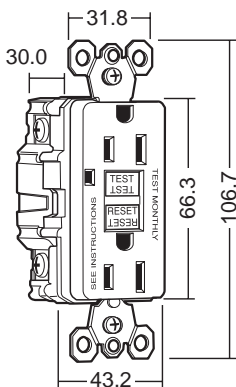


USA / Canada

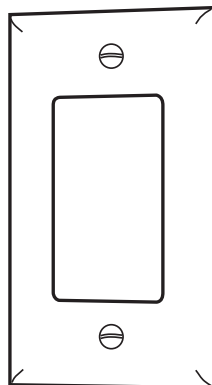
GFCI Receptacles and Covers 15A and 20A Versions

Typical Specifications

- Receptacle: Straight Blade Duplex GFCI
- 2 Pole, 3 Wire Grounding
- Ratings: 20A, 125VAC Feed Thru, 15A, 125VAC or 20A, 125VAC FACE
- 3rd Party Compliance: cULus Listed, Standard UL498, Federal Specification WC596 (15A).
- Standard CSA-C22.2 No. 42, General Use Receptacles, CSA-C22.2 No. 144 GFCIs.
- Conforms to NEMA WD-1, WD-6.



1594 shown
Dimensions for all
GFCI receptacles



Color matching standard
wallplate, supplied with
each GFCI receptacle
(74.3 x 119.0 x 6.0)mm



Vertical
1 Self-Closing Lid



Horizontal
1 Self-Closing Lid

To learn more about B-I-A please visit us at our
WEB site: www.BiaGmbH.com



Innovative features speed installation and ensure durability.

Captive screws make for easier installation.

High-impact-resistant, thermoplastic construction for superior strength and durability.

Trip indicator light makes it easy to identify tripped condition.

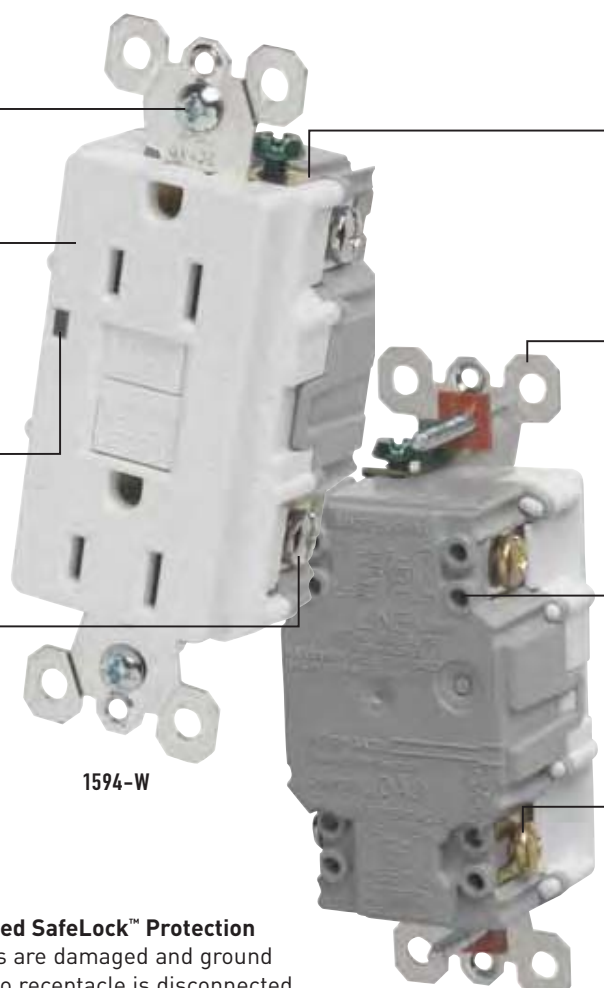
Side or internal screw-pressure-plate back wire termination takes #14 - #10 AWG stranded or solid, copper or copper-clad conductors.

Grooved channel and back wire clamp allow for fast installation of ground wires.

Extra-long strap for better sheet rock contact eliminates "floaters" yet takes standard wall plate.

Two back wire holes per termination add wiring flexibility, eliminate pigtail, and save box space.

Line and load terminals backed out, ready to wire.



1594-W



GFCIs with patented SafeLock™ Protection





If critical components are damaged and ground fault protection is lost, power to receptacle is disconnected.

Prevents line-load reversal miswire: If miswired, GFCI cannot be RESET.

Improved resistance to surge, corrosion and electrical power line noise.

To learn more about B-I-A please visit us at our WEB site: www.BiaGmbH.com



					3rd Party Compliance				
Catalog Number	Rating		Colors	Description	NEMA				
	A.	VAC				UL943/C22.2 No. 144	UL498/C22.2 No. 42	FSUL/ WC596	UL20/C22.2 No. 111
GFCI Receptacles									
1594-*	15	125	Brown, I, LA, W, BK, GRY, RED	Spec Grade 15 Amp Duplex	5-15R	•	•	•	
2094-*	20	125	Brown, I, LA, W, BK, GRY, RED	Spec Grade 20 Amp Duplex	5-20R	•	•		
2084-*	20	125	I, LA, W, BK	Spec Grade 20 Amp Dead Front		•	(UL508/C22.2 No. 14)		
1594-HG*	15	125	Brown, I, LA, W, GRY, RED	Hospital Grade 15 Amp Duplex	5-15R	•	•	•	
2094-HG*	20	125	Brown, I, LA, W, GRY, RED	Hospital Grade 20 Amp Duplex	5-20R	•	•		
GFCI with Auto-Ground Receptacles									
1594-S*	15	125	I, LA, W	Spec Grade 15 Amp Duplex	5-15R	•	•	•	
2094-S*	20	125	I, LA, W	Spec Grade 20 Amp Duplex	5-20R	•	•		
Decorator Combination Switch/GFCI Receptacles									
1594-SWT*CC5	Switch:	15	120	I, LA, W, BK	Spec Grade 15 Amp Single Pole Switch	5-15R	•	•	•
	GFCI:	15	125						
1594-2SWT*CC5	2 Switches:	15	120	I, LA, W, BK	Spec Grade 15 Amp Two Single Pole Switches	5-15R	•	•	•
	GFCI:	15	125						
Decorator Combination Nightlight/GFCI Receptacles									
1594-NTL*CC6	15	125	I, LA, W, BK	Spec Grade 15 Amp	5-15R	•	•		
2094-NTL*	20	125	I, LA, W, GRY, RED	Spec Grade 20 Amp	5-20R	•	•		
1594-HGNTL*	15	125	Brown, I, LA, W, GRY, RED	Hospital Grade 15 Amp	5-15R	•	•		
2094-HGNTL*	20	125	Brown, I, LA, W, GRY, RED	Hospital Grade 20 Amp	5-20R	•	•		
Tamper-Resistant GFCI Receptacles									
1594-TR*CC6	15	125	I, LA, W, BK	Spec Grade 15 Amp Duplex	5-15R	•	•		
1594-HGTR*	15	125	Brown, I, LA, W, GRY, RED	Hospital Grade 15 Amp Duplex	5-15R	•	•		
2094-TR*CC6	20	125	Brown, I, LA, W, GRY, RED, BK	Spec Grade 20 Amp Duplex	5-20R	•	•		
2094-HGTR*	20	125	Brown, I, LA, W, GRY, RED	Hospital Grade 20 Amp Duplex	5-20R	•	•		
Illuminated GFCI Receptacles Light is on when power is available									
1594-*L	15	125	Brown, I, LA, W	Spec Grade 15 Amp Duplex	5-15R	•	•	•	
2094-*L	20	125	Brown, I, LA, W, GRY	Spec Grade 20 Amp Duplex	5-20R	•	•		
1594-HG*L	15	125	Brown, I, LA, W, GRY, RED	Hospital Grade 15 Amp Duplex	5-15R	•	•	•	
2094-HG*L	20	125	Brown, I, LA, W, GRY, RED	Hospital Grade 20 Amp Duplex	5-20R	•	•		

*** Color Designation**

—	Brown	W	White
I	Ivory	GRY	Gray
LA	Light Almond	RED	Red
BK	Black		

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1594-NTLWCC6

The first LED Nightlight/GFCI Combination — perfect for bathrooms.

- Sealed nightlight with Lexan® lens prevents tampering
- LED illumination with a 20-year life expectancy means no bulbs to change
- Photocell turns nightlight on in dark, off in daylight

The first Switch/GFCI Combination Devices — ideal for remodeling.

- User-preferred, up-and-down switching
- Available in one- and two-switch models
- More function in a single-gang box or space
- 15A single-pole switches rated for 1/2 HP motor loads — perfect for bath and kitchen vent fans or garbage disposals



1594-SWTWCC5



1594-2SWTWCC5



2094-SW

The Auto-Ground GFCI speeds commercial-building installation.

- Rugged, specification grade design fights callbacks and ensures durability
- Standard auto-ground clip ensures solid ground connection to metal box

Illuminated GFCI makes spotting use of back-up power easy.

- Green light on when power is available
- Green light turns off when unit has tripped or power has failed



2094-HGWL



1594-TRWCC6

The first Tamper-Resistant GFCI helps keep children safe.

- Patented internal sliding shutters prevent children from sticking objects into the receptacle
- UL Listed shutter system

Installing and Testing a GFCI Receptacle

Part No. 34205 / Rev. C

15A 120V 60Hz
20A 120V 60Hz

Please read this leaflet completely before getting started.

CAUTION

- To prevent severe shock or electrocution, always turn the power OFF at the service panel before working with wiring.
- Use this GFCI receptacle with copper or copper-clad wire. Do not use it with aluminum wire.
- Do not install this GFCI receptacle on a circuit that powers life support equipment because if the GFCI trips, it will shut down the equipment.
- For installation in wet locations, protect the GFCI receptacle with a weatherproof cover that will keep both the receptacle and any plugs dry.
- Must be installed in accordance with national and local electrical codes.

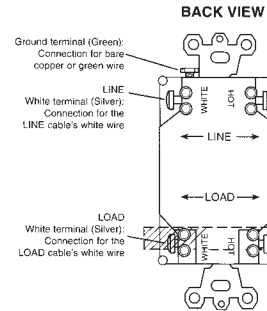
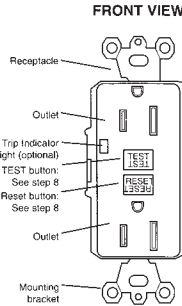
1. What is a GFCI?

A GFCI receptacle is different from conventional receptacles. In the event of a ground fault, a GFCI will trip and quickly stop the flow of electricity to prevent serious injury.

Definition of a ground fault: Instead of following its normal safe path, electricity passes through a person's body to reach the ground. For example, a defective appliance can cause a ground fault.

A GFCI receptacle does not protect against circuit overloads, short circuits, or shocks. For example, you can still be shocked if you touch bare wires while standing on a non-conducting surface such as a wood floor.

2. The GFCI's features



Screw (terminal) colors:
Green = ground terminals
Silver = white terminals
Brass = hot terminals

LINE Hot terminal (Brass): Connection for the LINE cable's black wire
LOAD Hot terminal (Brass): Connection for the LOAD cable's black wire

3. Should you install it?

Installing a GFCI receptacle can be more complicated than installing a conventional receptacle.

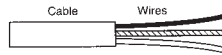
Make sure that you:

- Understand basic wiring principles and techniques.
- Can interpret wiring diagrams.
- Have circuit wiring experience.
- Are prepared to take a few minutes to test your work, making sure that you have wired the GFCI receptacle correctly.

If you do not fully understand these instructions, you should seek the assistance of a qualified electrician.

4. LINE vs. LOAD

A cable consists of 2 or 3 wires.

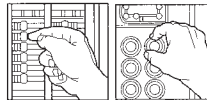


LINE cable: Delivers power from the service panel (breaker panel or fuse box) to the GFCI. If there is only one cable entering the electrical box, it is the LINE cable. This cable should be connected to the GFCI's LINE terminals only.

LOAD cable: Delivers power from the GFCI to another receptacle/outlet in the circuit. This cable should be connected to the GFCI's LOAD terminals only. The LOAD terminals are under the yellow sticker. Do not remove the sticker at this time.

5. Turn the power OFF

Plug an electrical device, such as a lamp or radio, into the receptacle on which you are working. Turn the lamp or radio on. Then, go to the service panel. Find the breaker or fuse that protects that receptacle. Place the breaker in the OFF position or completely remove the fuse. The lamp or radio should turn OFF.



Next, plug in and turn ON the lamp or radio at the receptacle's other outlet to make sure the power is OFF at both outlets. If the power is not OFF, stop work and call an electrician to complete the installation.

6. Identify cables/wires

IMPORTANT:

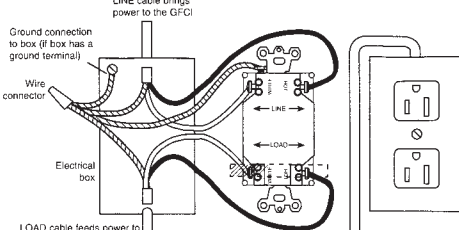
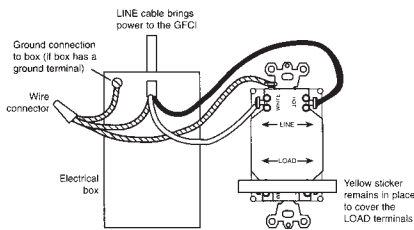
Do not install the GFCI receptacle in an electrical box containing (a) more than 4 wires (not including the ground wires) or (b) cables with more than two wires (not including the ground wire). Contact a qualified electrician if either (a) or (b) is true.

- If you are replacing an old receptacle, pull it out of the electrical box without disconnecting the wires.
- If you see one cable (2-3 wires), it is the LINE cable. The receptacle is probably in position C (see diagram to the right). Remove the receptacle and go to step 7A.
- If you see two cables (4-6 wires), the receptacle is probably in position A or B (see diagram to the right). Follow steps a-e of the procedure to the right.

7. Connect the wires (choose A or B)...only after reading other side completely

A: One cable (2 or 3 wires) entering the box

B: Two cables (4 or 6 wires) entering the box



About wire connections:

Screw Terminal Wire - 1 inch
Back Wire Holes Wire - .6 inch

Side Wire
Clockwise, 2/3 of the way around screw

Back Wire
1. Insert wire to bottom of hole.
2. Securely tighten screw beneath wire hole to retain inserted wire.

About wire connections:

Screw Terminal Wire - 1 inch
Back Wire Holes Wire - .6 inch

Side Wire
Clockwise, 2/3 of the way around screw

Back Wire
1. Insert wire to bottom of hole.
2. Securely tighten screw beneath wire hole to retain inserted wire.

Connect the LINE cable wires to the LINE terminals:

- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the ground wire (only if there is a ground wire):

- For a box with no ground terminal (diagram not shown): Connect the LINE cable's bare copper (or green) wire directly to the ground terminal on the GFCI receptacle.
- For a box with a ground terminal (diagram shown above): Connect a 6-inch bare copper (or green) 12 or 14 AWG wire to the ground terminal on the GFCI. Also connect a similar wire to the ground terminal on the box. Connect the ends of these wires to the LINE cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:

- Fold the wires into the box, keeping the ground wire away from the White and Hot terminals. Screw the receptacle to the box and attach the wall plate.
- Go to step 8.

Connect the LINE cable wires to the LINE terminals:

- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the LOAD cable wires to the LOAD terminals:

- Remove the yellow sticker to reveal the LOAD terminals
- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the ground wires as shown above (only if there is a ground wire):

- Connect a 6-inch bare copper (or green) 12 or 14 AWG wire to the ground terminal on the GFCI. If the box has a ground terminal, also connect a similar wire to the ground terminal on the box. Connect the ends of these wires to the LINE and LOAD cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:

- Fold the wires into the box, keeping the ground wire away from the White and Hot terminals. Screw the receptacle to the box and attach the wall plate.
- Go to step 8.

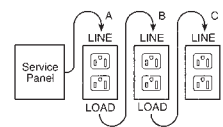
Procedure: box with two cables (4-6 wires)

- Detach one cable's white and hot wires from the receptacle and cap each one separately with a wire connector. Make sure that they are from the same cable.
- Reinstall the receptacle in the electrical box, attach the wall plate, then turn the power ON at the service panel.
- Determine if power is flowing to the receptacle. If so, the capped wires are the LOAD wires. If not, the capped wires are the LINE wires.
- Turn the power OFF at the service panel, label the LINE and LOAD wires, then remove the receptacle.
- Go to step 7B.

Placement in circuit:

The GFCI's place in the circuit determines if it protects other receptacles/outlets in the circuit.

Sample circuit:



Placing the GFCI in position A will also provide protection to "load side" receptacles/outlets B and C. On the other hand, placing the GFCI in position C will not provide protection to receptacles/outlets A or B. Remember that receptacles/outlets A, B, and C can be in different rooms.

8. Test your work

Why perform this test?

- If you miswired the GFCI, it may not prevent personal injury or death due to a ground fault (electrical shock).
- If you mistakenly connect the LINE wires to the LOAD terminals, the GFCI will still operate like an ordinary receptacle, but it will not interrupt a ground fault.

Procedure:

- Turn the power ON at the service panel. Press the RESET button fully. The RESET button should stay in. If the RESET button does not stay in, go to Troubleshooting. If the RESET button stays in, plug a lamp or radio into the GFCI (and leave it plugged in) to verify that the power is ON. If there is no power, go to Troubleshooting.
- Press the TEST button in order to trip the device. This should stop the flow of electricity, making the radio or lamp shut OFF and the GFCI's red Trip Indicator Light (if present) come on. Note that the RESET button will pop-out. If the power stays ON, go to Troubleshooting. If the power goes OFF, you have installed the GFCI receptacle correctly. To restore power, press the RESET button.
- If you installed your GFCI using step 7B, plug a lamp or radio into surrounding receptacles to see which one(s), in addition to the GFCI, lost power when you pressed the TEST button. Do not plug life saving devices into any receptacles that lost power. Place a "GFCI Protected" sticker on every receptacle that lost power.
- Press the TEST button (then RESET button) every month to assure proper operation.

TROUBLESHOOTING

Turn the power OFF and check the wire connections against the appropriate wiring diagram in step 7A or 7B. Make sure that there are no loose wires or loose connections. Also, it is possible that you reversed the LINE and LOAD connections. LINE/LOAD reversal will be indicated by power remaining ON at the GFCI and by the RESET button not staying in when pressed. Reverse the LINE and LOAD connections if necessary. Start the test from the beginning of step 8 if you rewired any connections to the GFCI.

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