

Check components of electrical system

By [Bill Garwood](#)

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Few, if any, of us make a habit of inspecting our electrical systems for safety. The truth is that an unsafe electrical system can result in fire or shock, and there are some simple ways that you can help ensure the safety of your electrical system.

You should look for the following components but not touch the wires. Leave that work to professionals.

Your electrical system is made up of the following components.

1. The electrical panel box: Your electrical panel box is that (usually gray) box on the wall that contains switches (breakers) or fuses.
2. Wiring: The wiring in your house is usually hidden behind walls, in attics or in basements and crawl spaces where you may not often go.
3. Switches and outlets: We turn on switches, and lights come on. We plug appliances, tools and light fixtures into receptacles for power.
4. The service drop or service lateral: The service drop is the cable that goes from the pole at the street and connects to your house. The service lateral performs the same service as the service drop but is installed underground and usually cannot be seen.

What should I look for?

1. Your panel box: To inspect an electrical panel box, just open its door. If areas in the box look burned or there is excessive rust inside the box, these may be indications of other problems. If you are resetting breakers or replacing fuses frequently, this is also an indication that something is wrong.
2. Wiring: Although most of your wiring is not visible, you may be able to see some in the ceiling of the basement or crawl space or in the attic. Watch out for junction boxes that do not have covers. All junction boxes should have a cover. Look for any wires that are exposed.
3. Switches and outlets: Switches and outlets wear out over time. If you have to wiggle a plug in an outlet to make it work, the outlet is worn out and should be replaced. If you see charring on an outlet, that outlet may be worn out and need replacement. If lights do not always come on when you turn on the switch or lights flicker on and off when you wiggle the switch, the switch is worn out and should be replaced.
4. Service or lateral drop: You will not be able to see the underground (lateral) drop; however, the overhead (service drop) is clearly visible. Look at the connection of the overhead cable to your house. The cable is made up of two wires covered with black plastic and a third, bare wire, usually aluminum (silver-colored). The silver wire should be firmly connected to your house so that the black wires are not stressed. There should be a small sag (drip loop) in the black wires where they connect to your house.

It is important to remember that all electrical work should be performed by qualified people. The state licenses and regulates electricians. You should get the following information when hiring an electrician:

- References from previous customers.
- How long they have been in business.
- Copies of their license, liability insurance, worker's comp and bonding.
- Written guarantees on their work.