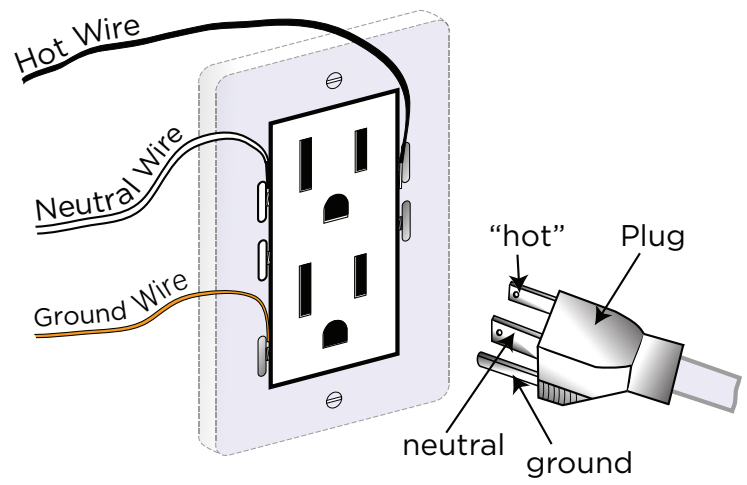


Electrical Receptacle Problems

The electrical receptacle not only provides vital access to the electrical power that makes your house hum, but it also warrants deeper consideration for reasons of safety. Pillar To Post® inspectors have seen it all when it comes to incorrect receptacle wiring. But before we discuss safety, let's start with a quick tour of this component and its mate, the plug.



Grounded Receptacle

Have you ever wondered why your electrical receptacles have holes of different sizes and shape? To accommodate the plug is the obvious answer. But there is more to this relationship than meets the eye. Hidden behind the receptacle is a series of wires that must be properly connected for the receptacle's safe functioning. On a modern electrical receptacle that accommodates a three-pronged plug, each hole serves a specific purpose: the round hole is for the ground pin on the plug; the small slot takes the small blade on the plug and connects to the "hot" wire in the receptacle (the wire that can cause a shock); the large slot takes the large blade and connects to the "neutral" wire in the receptacle.

Specific wires have to be connected to the proper terminals for an receptacle's safe function. Correct installation is so important that our Pillar To Post inspectors spot-check receptacles with a tester during every inspection.

Reverse Polarity

The large slot and small slot on an electrical receptacle, and the different-sized blades on a plug, designate their respective polarizations, and ensure that the plug goes in the receptacle only one way, a safety feature that reduces the chances of shock. For instance, a light-bulb socket has exposed electrical connections, the threads being the most exposed part. But polarized socket threads are attached to the neutral wire to prevent someone from getting a shock when changing a light bulb.

If the electrical receptacle itself is mis-wired with reverse polarity, the lamp socket threads described above will become "hot." If you touch the threads in the socket, or on the bulb as you screw it into the socket, you may get a shock.

Receptacle Not Grounded

Pillar To Post inspectors may discover modern style receptacles with the circular ground holes but with no ground wire connected. In older homes, sometimes the cable leading to the receptacle does not have a ground wire, yet the receptacle has nonetheless been upgraded to a modern grounded type. Some plug-in electrical devices need this ground connection for their built-in safety features. If the receptacle appears to be grounded but is not, the device's safety features will not work.

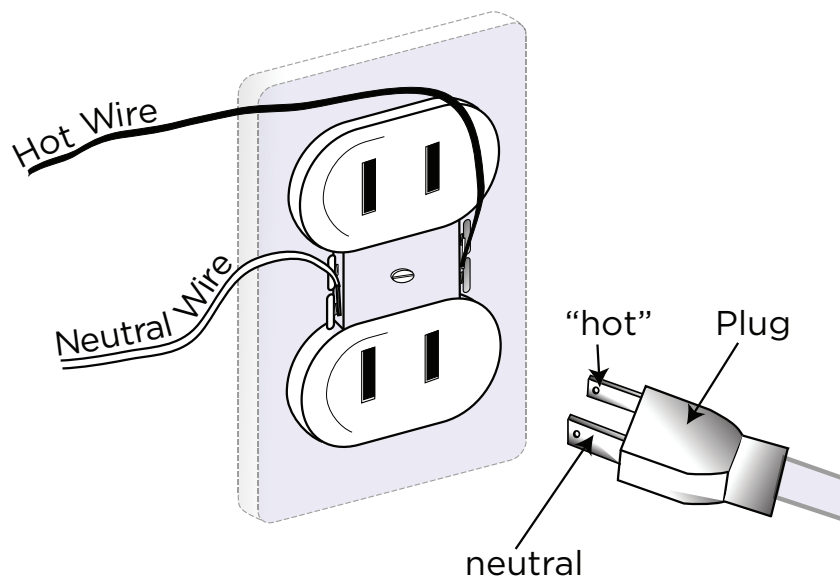
Old Receptacles

In older homes some receptacles may have no ground slot at all. This does not represent a defect or safety concern, but you will not be able to plug in an electrical appliance that has a ground pin on the plug. Today, most plug-in appliances are not the grounded style and, therefore, do not use or have a ground pin on the plug because they are a double insulated design. In these cases, the old ungrounded receptacle will work fine.

If you think it might be a good idea to simply cut off the ground pin to accommodate a receptacle without a ground hole, think again. This procedure is doubly unsafe because it not only bypasses the grounding safety feature, but also it bypasses the polarizing feature since a de-pinned plug can be inserted into the receptacle either way.

Easy to Fix

An electrician can fix these receptacle problems easily. Receptacles are a minor consideration in the grand scheme of your home, but safe installation is important.



Ungrounded Receptacle