

Reversed Polarity by Finn Home Inspectors

Reverse polarity on an electrical receptacle is a hazard.

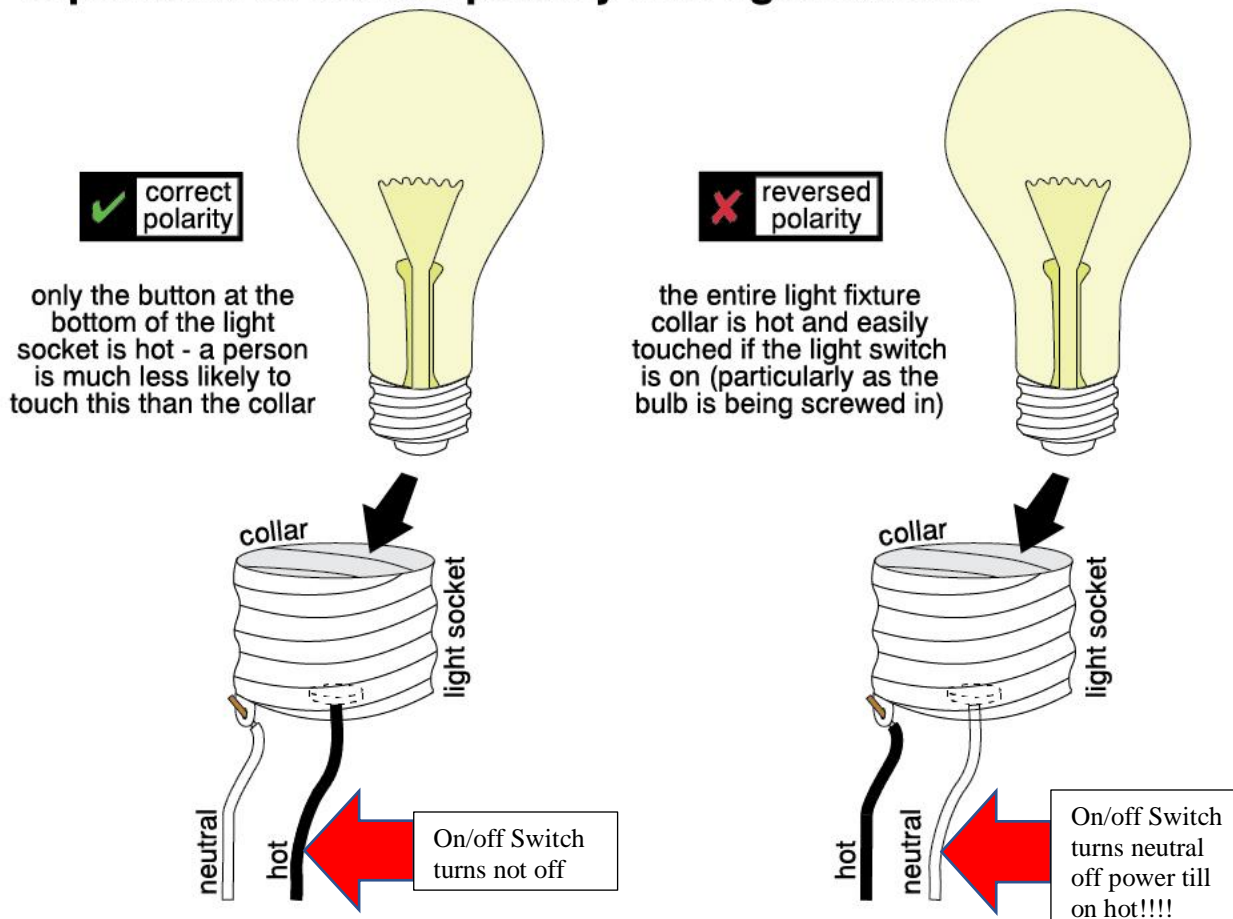
It indicates that the hot and neutral wires to the receptacle have been reversed when they were installed. Lights and other electrical devices you plug in will work but are not the way they were designed to be powered and not the way they were configured for UL testing. They are not safe.

One example is a light fixture, see figure below. The hot, power input side, is supposed to be in the base, and the neutral would be the threaded area. Now, if reversed the threaded area will be hot, and when the light is turned off, the threaded area will still be electrically charged and could electrocute someone. With electronics even if the device is turned off, the electronics could be damaged with a voltage surge.

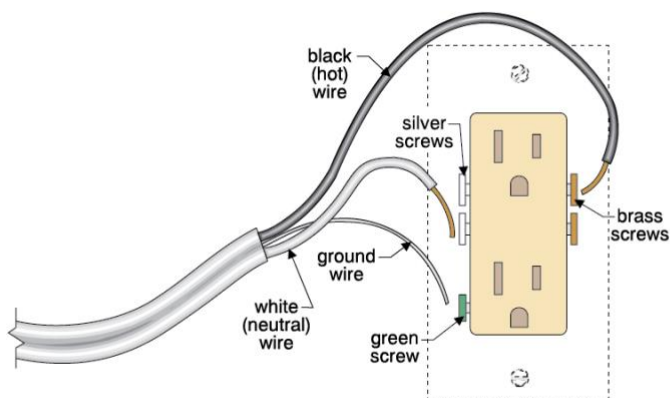
Correcting reversed polarity is easy for an electrician, they will just need to reverse where the two wires attach to the back of the receptacle. Depending on how receptacles were wired, correcting one could correct the rest of the ones on the circuit, or make them have reversed polarity, the electrician will figure that out.

Diagram from Carson/Dunlop.

Importance of correct polarity with light fixtures



Color coding for typical 120 volt circuit



Left figure-
If the polarity is reversed the white wire would be on the brass colored screw where the black wire should be. The black wire would be on the silver colored screw where the white wire should be.

With reversed polarity the wider slot would be electrically "hot" rather than the narrow slot, reversing UL testing of appliance your using.