

Short Circuit

A short circuit bypasses the normal circuit creating very low resistance. This is a problem, and the result is huge current flowing through the short circuit!

Fuse

Some old houses use fuses for protection. A fuse is simply a thin piece of wire which breaks when a large current flows through it. If a short circuit occurs inside the house, then a large current will flow through the fuse wire causing it to melt and break. Once the wire breaks it needs replacing so that the circuits will function normally again.

Circuit Breaker

Newer houses use circuit breakers for protection. When a large current flows through a circuit breaker it causes a solenoid to pull open a switch, therefore breaking the circuit and stopping the large current from flowing. To make the circuit function again, the switch simply needs to be turned back to the on position.