

Electricity: Home Wiring Problems

Ignorance may be bliss but not with electricity. Most people fear electricity because they do not understand it. While we have no intention here of giving you a crash course in the principles of electricity, we do wish to calm some of your fears by explaining one simple precept.

Electricity flows from a source, through a conductor (wire) and, finally, to an outlet (light bulb or motor). If you wish to avoid electrical "shocks," you need remember only one thing—Always shut down the source of electrical current (wall switch fuse, or circuit breaker), before beginning work. If you are working with an electrical appliance, all that is necessary is the act of unplugging it from the wall outlet. After that is done, electrical flow to the appliance is impossible.

If you are working on a wall outlet or switch or ceiling fixture, you must first locate your fuse box or circuit-breaker box. Locate the fuse that controls the area you are working on by trial and error (see Recipe 54 on Changing Blown Fuses). Once you have located the proper fuse or circuit breaker, unscrew the fuse and/or throw the arm of the circuit breaker, whichever applies in your case. This will prevent electrical flow to the area where you are working.

A final test for the presence of "hot" wires (those actually carrying current), can be made with a "tester." For good measure, you can avoid possible dangers of a hot wire by shutting down the power for the entire house. This control is located in your basement.

The following items, though not a complete list, will be adequate for all your household electrical work.

BASIC TOOLS NEEDED FOR ELECTRICAL WORK

- Set of Screwdrivers
- Long-nosed pliers, Linemen's pliers, Adjustable pliers
- Assortment of sheet metal screws, nuts, bolt
- Pocketknife
- Diagonal cutters
- Assortment of wire nuts
- Assortment of fuses, if necessary
- Soldering iron, medium-small point
- Voltage tester with light
- Small hand drill with assortment of bits
- Wire strippers
- Roll of electrical tape
- Coil of solder, resin core
- Solder paste or flux (non-acid)

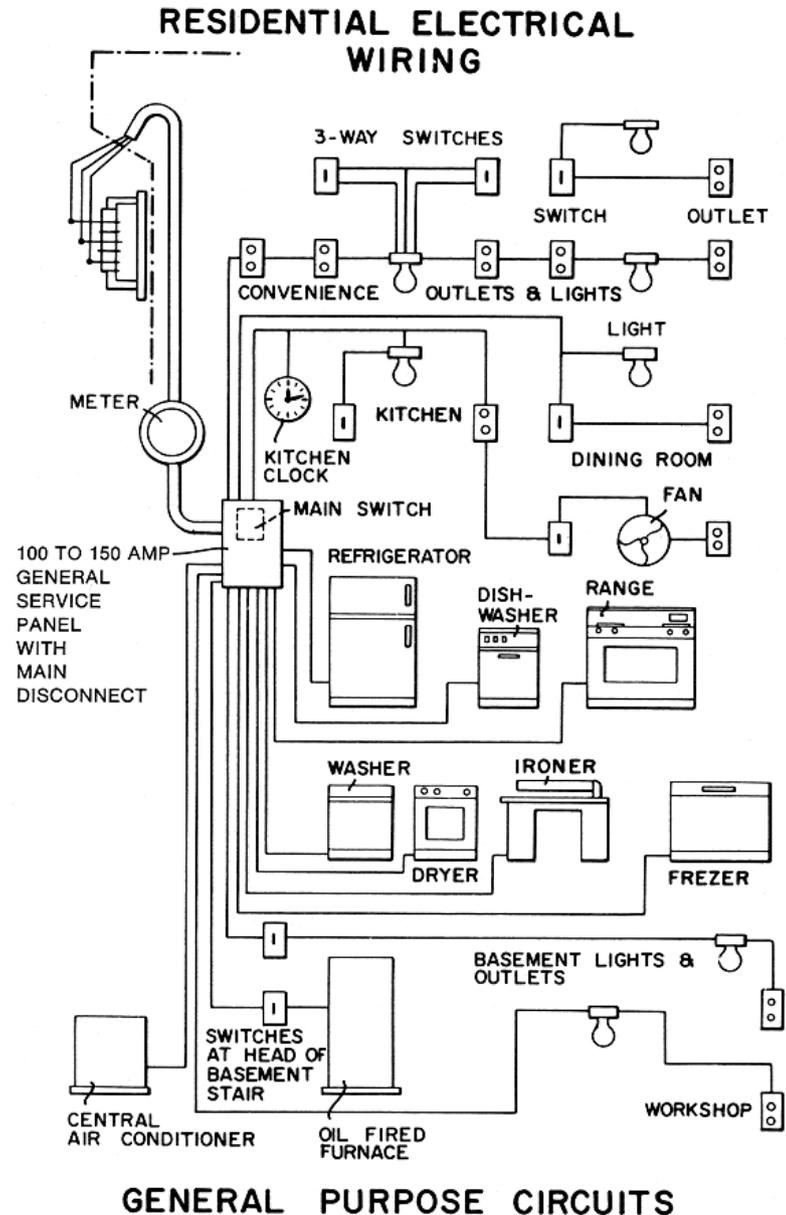


Figure E.
Residential Electrical Wiring