


# ELECTIRCAL TOOLS AND EQUIPMENT

Every electrician needs basic hand tools to perform everyday tasks, Fortunately, today's basics are better than older models, providing more comfort and safety than their predecessors. Manufacturers have made tools more 'ergonomically correct,' and improved designs help cut down on hand and wrist injuries often caused by repetitive movement. Plus, they make it easier to perform the same motion over and over because the tools just feel more comfortable. While today's designs may provide more safety and comfort, they're still the basic hand tools electricians have been using for years.

TOOLS	USES
SCREWDRIVERS	
<div>Standard/Flat Screwdriver</div> <div></div>	<div>Blade tip is wedge-shaped and resembles a negative (-) sign. This is used to drive screws with a single slot ahead</div>

## Phillips Screwdriver



Has a cross tip resembling a positive (+) sign. This is used to drive screws with cross slot heads.

## Stubby Screwdriver



Comes in either Standard or Philips screwdriver with short shank or blade and a shorted handle used to turn screws in tight space where standard screwdriver cannot be used.

## Allen Screwdriver



Could be in the shape of a screwdriver or a wrench. Its function is to drive screw with hexagonal slot head.

## HAMMERS

### Claw Hammer



A hammer with one side of the head split and curved, used for extracting nails.

### Mallet (rubber head)



A kind of hammer, often made of rubber or sometimes wood, that is smaller than a maul or beetle, and usually has a relatively large head.

### Ballpeen Hammer



A hammer with a rounded end opposite the face, a type of peening hammer used in metalworking.

## PLIERS

### Combination Pliers (Lineman's Pliers)



This is used for gripping, holding, and cutting electrical wires and cables and even small nails. They are usually used by linemen in doing heavy tasks.

### Side Cutting Pliers



Type of pliers is used for cutting fine, medium and big wires and cables.

### Long Nose Pliers



Used for cutting and holding fine wires. This can reach tight space or small opening where other pliers cannot reach and used in making terminal loops of copper wires.

## OTHER HAND TOOLS

### Wire Stripper



A tool used for removing insulation of medium sized wires ranging from gauge #10 to gauge #16.

### Electrician's Knife



Used by linemen to remove insulation of wire and cables in low and high voltage transmission lines.

### Portable Electric drill



A small drilling machine with a chuck capacity of  $\frac{1}{4}$ ll to  $\frac{3}{8}$ ll. It is used in making holes on metal sheets and concrete walls.

### Hacksaw

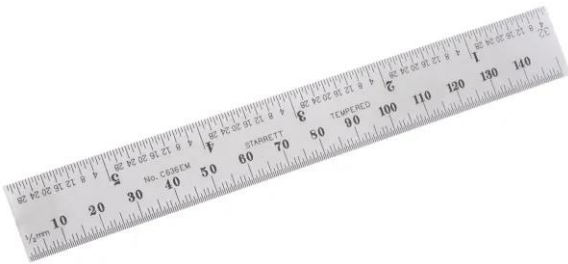


Tool is used to cut metal conduit and armored cable.

## MEASURING TOOLS



**Pule-push rule** is a measuring tool used in measuring long distance length.



**Rule** – measuring tool used in measuring short distances length.



Measuring tool used in measuring gauge of wire.



**Micro caliper-** used in measuring diameter, thickness and lengths of solid bodies.



**Clamp ammeter-** used in measuring current. Probes measure voltage. It allows technicians to clamp the jaws around a wire, cable or other conductor at any point in an electrical system.



**Multimeter** – used in measuring the voltage, current and resistance.