

JOB ROLE – Consumer Energy Meter Technician

Sector: Power
(Qualification Pack Code : PSS/Q0107)



PSS Central Institute of Vocational Education
Shyamla Hills, Bhopal – 462013, Madhya Pradesh, India

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Unit 2: Handling of tools and equipments

Session 1: Tools and Equipment

Content

Title	Slide No.
Session Objective	4
Introduction	5-6
Tools and equipment	7-12

Session Objectives

1. The student will be able to understand and safely use lineman pliers, wire strippers, and a utility knife
2. Identify common hand tools used by electricians
3. Use hand tools more competently

Introduction

When you work with appliance repair, you need to be familiar with working with tools. You may already be familiar with the typical wrenches and screwdrivers, but in appliance repair, you'll need to know more—such as voltage meters and even single and multiphase compressor testers. That's why it's necessary to be sure that you are equipped with enough knowledge to properly use the tools you'll need, remember to take them when you are working on a job.

For the basic tools that everyone has in their toolbox, if you are going into repair work, you need to have the necessary skills and knowledge to successfully and safely make the repairs.



Various tools and equipments are required for maintaining as well as erections of various electrical components and it is very necessary to know about various tools and equipments to operate it safely.

Tools and equipment

The various tools and equipment used by a Electrical/electronic Technician while working with electrical circuits are explained here:

Screw driver: Used to turn, tighten or remove screws



Ratchets: Used to allow motion in only one direction and preventing the motion in opposite direction, used to tighten nuts of various sizes



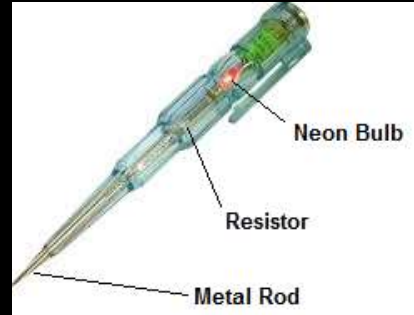
Spanner/ Wrenches: Used to provide grip to apply torque for turning objects such as nut or a bolt. A spanner with variable diameter to tighten nuts and bolt of various sizes



Wire cutter and pliers: Wire cutter is used for stripping and cutting wires and Plier is used to hold objects like nuts and bolts firmly also used for cutting metal wires



Tester: Used to verify presence of electric voltage in an equipment



Hammer: Used to drive nails in walls and wood, fit parts, or forge metal and breaking different materials.



Ladder: Used to climb upwards to reach higher places (6 to 7 feet) in tall units of a control panel.

Utility Knife: Used to cut various objects such as wires, cords, tapes and so on



Crimping Tool : Used to join wires with metal or plastic objects.



Voltmeter: Used to measure potential difference between two points in the electric circuit.



Ammeter : Used to measure current flow in a circuit.



Megger: Used to measure leakage in wires and earth resistance.



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