

# JOB ROLE – FIELD TECHNICIAN - OTHER HOME APPLIANCE

Sector – Electronics  
(Qualification Pack Code: ELE/Q  
3104)



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

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# **UNIT 6: MAINTAIN HEALTH AND SAFETY**

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# Unit Objectives

The student will be able to:

- Describe the term hazard,
- Describe the causes of hazard and their remedies,
- Demonstrate the use of fire extinguisher,
- Describe the basic first aid procedure,
- Perform the artificial respiration.

# Introduction

When installing the components one may have to deal with the hazards associated with the assembly process. Therefore, one must be aware of the hazards. Many hazards can be avoided by taking appropriate precautions. This will ensure safety at workplace.



Risk of electric shock in control panel

# What are Hazard ?

- Hazard is the **risk at workplace.**
- Number of reasons for hazard at workplace are **overloading,** **fire in the wire,** **electric shock,** **chemical hazard.**



Overloading



Fire in wire



Electric Shock



Chemical hazard

# Causes of Hazard

Hazard may occur because of following points:

- Exposure to high electromagnetic fields.
- Electric shock due to incorrect grounding.
- Defective or inadequate insulation.
- Electrical wire due to incorrect wiring or fault.



Defect in insulation



Improper wiring

# Cautions at Workplace

- Ensure the power tools to be used in the assembly process must be of correct rating.
- Do not use damaged electric tools.
- Inspect and test the installed electrical equipment regularly.
- Check rating and physical condition of the components and cables.



Testing the system



Correct earthing  
in the system



- Use the standard techniques for assembling the components.
- Use correct equipment for safety purpose.

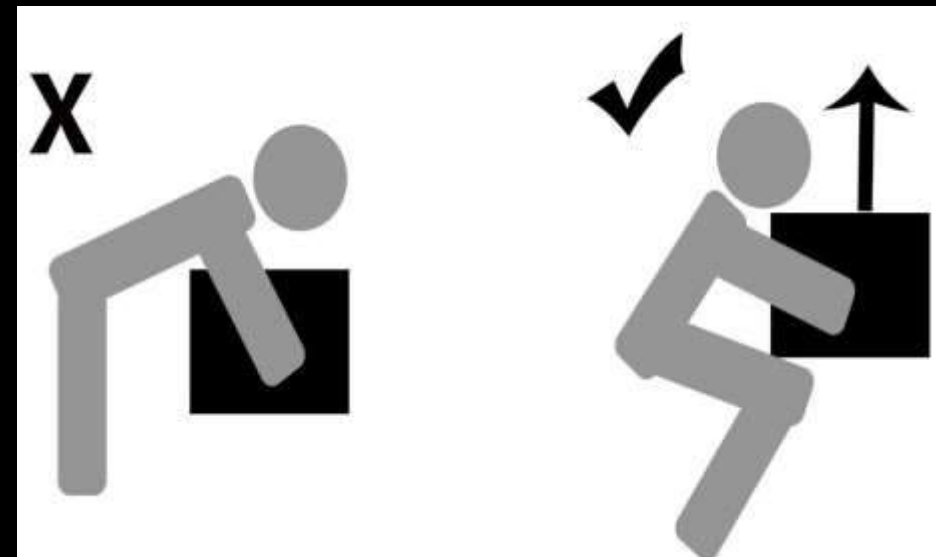
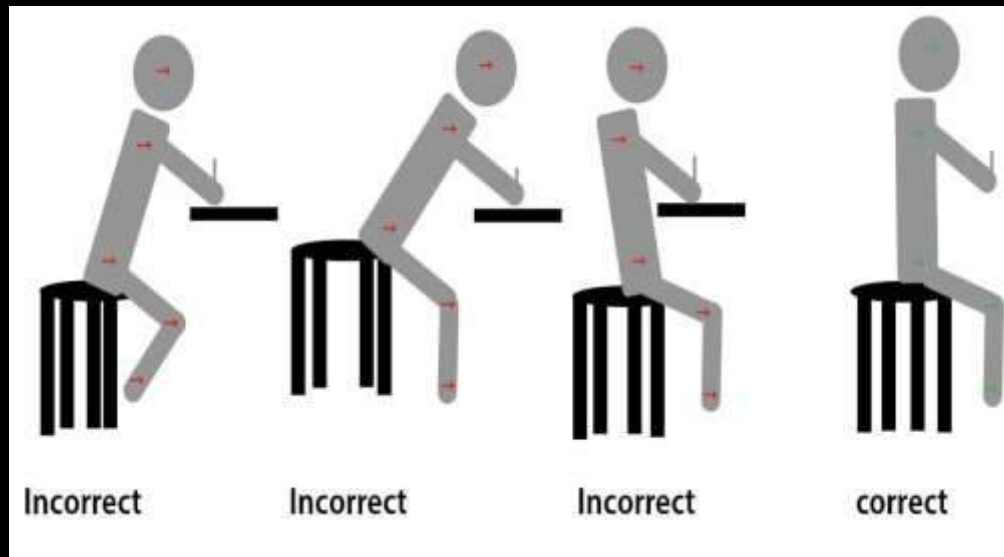


Safety Gears



# Correct Working Posture

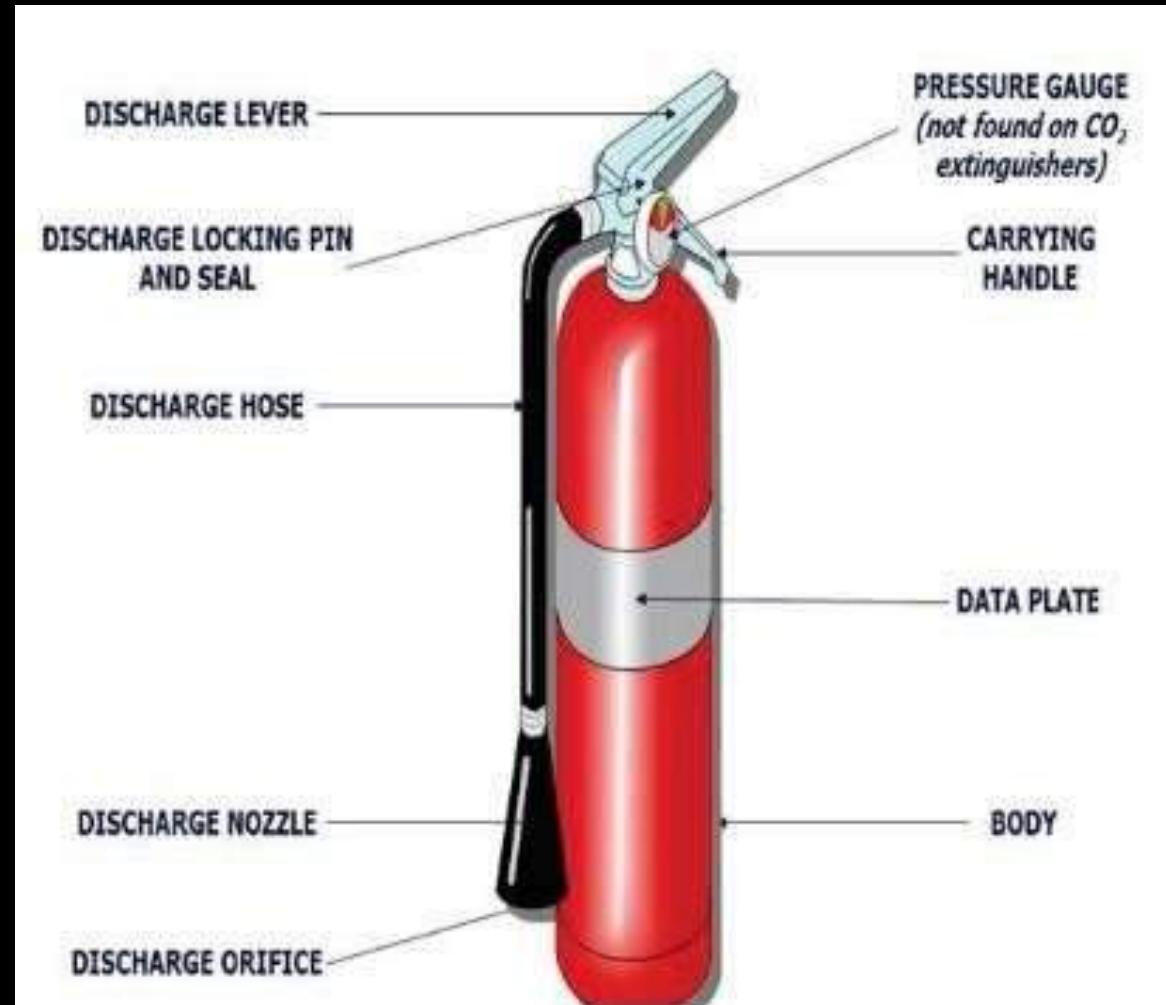
- Technician should maintain correct postures while working.



Incorrect and Correct Posture

# Fire Extinguisher

- A fire extinguisher is a protection device used to cease fire.



Parts of Fire Extinguisher

# Steps to operate fire extinguisher.

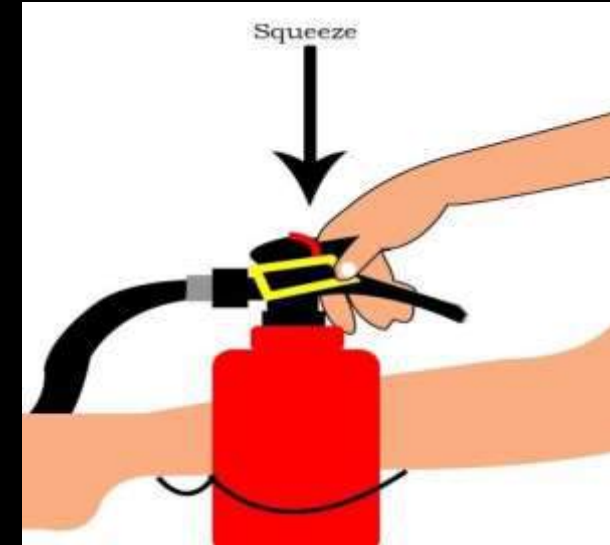
- Step 1 - **Remove the pin.**
- Step 2 - **Break the seal.**
- Step 3 - **Squeeze the lever.**



Step 1.



Step 2.



Step 3.

- P – Pull the pin
- A – Aim the nozzle
- S – Squeeze the handle
- S – Sweep from side to side



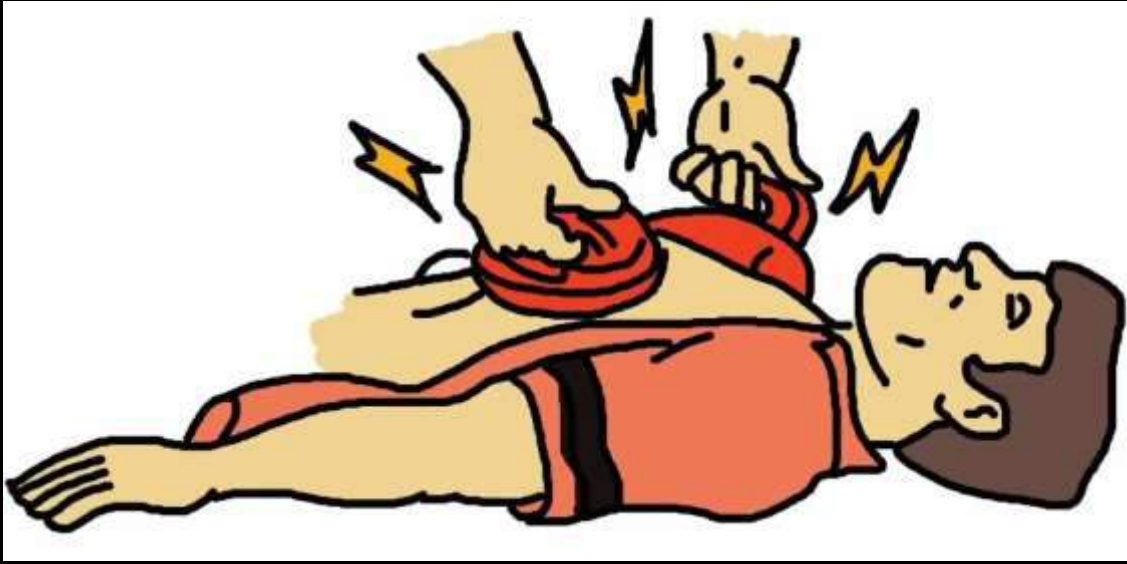


# Basic First Aid

- First aid is the primary requirement in the event of an accident.



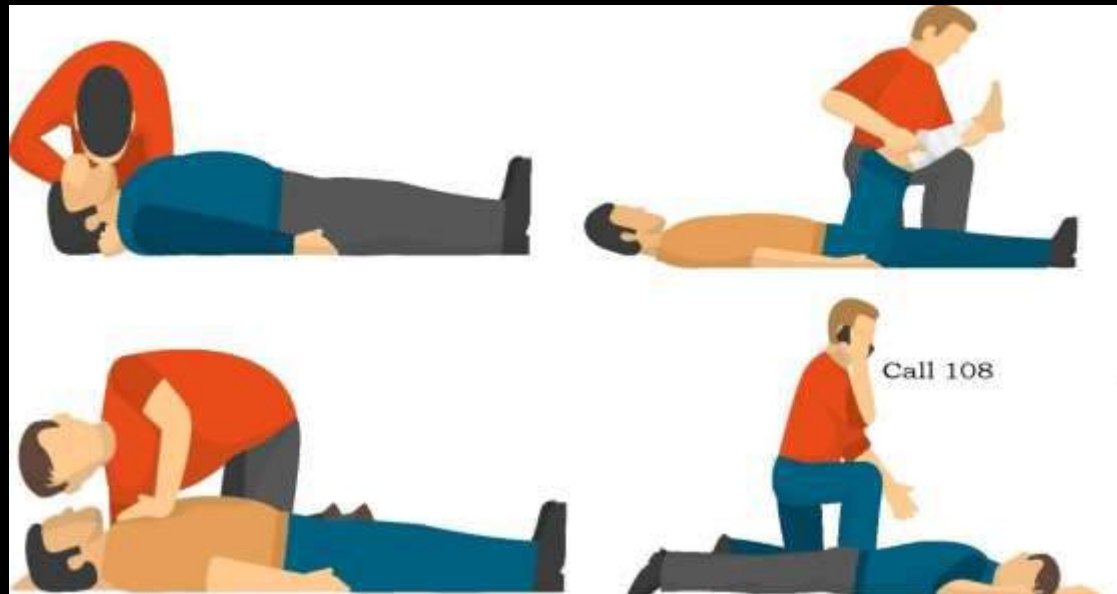
First Aid Kit



Defibrillation for the victim



Burn injury



First Aid for the victim

# Artificial Respiration

- It is given when a person's respiration fails. Different methods of artificial respiration are as follows:

- Mouth to Mouth



- Mouth to Nose





- Holger-Nelson system

- Schafer's system

- Sylvester's system



# Summary

- Hazard is the risk at workplace.
- Hazard can be avoided by following necessary remedies and precautions.
- A fire extinguisher is a protection device used to cease fire.
- First aid is the primary requirement in the event of an accident.
- Artificial respiration will be given, when a person's respiration fails.

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