

# Test Equipment

# Objectives

- **Explain the purpose and use of the electrical safety analyzer**
- **Define Preventive Maintenance, Corrective Maintenance and Calibration**
- **Explain the operation of a line isolation monitor**
- **Explain the purpose and usage of an isolation transformer**
- **Explain the operation and usage of a ground fault interrupter**

# Safety Analyzer Functions

- **Receptacle polarity**
- **Line Voltage**
- **Current Draw**
- **Ground resistance**
- **Chassis leakage**
- **Lead leakage**
- **Lead isolation**
- **Self test**

# Preventive Maintenance

“Performance of non- functional repairs, component replacement, cleaning and general service in order to prevent improper or inadequate operation.”

# Corrective Maintenance

“The repair of equipment faults on an as needed basis.”

# Calibration

“The assessment and correlation of instrument performance against standards traceable to the National Institute of Standards and Technology.”

## **Corrective Maintenance can result from:**

The unit is found to have a problem during a PM.

The end user reports a problem

**Calibration** can sometimes be part of a PM if specified by the manufacturer, or part of corrective maintenance if a part or component being replaced requires it

# CALIBRATED

Calibration Date: 1/14/2005

Date of Next  
Inspection: 1/2006

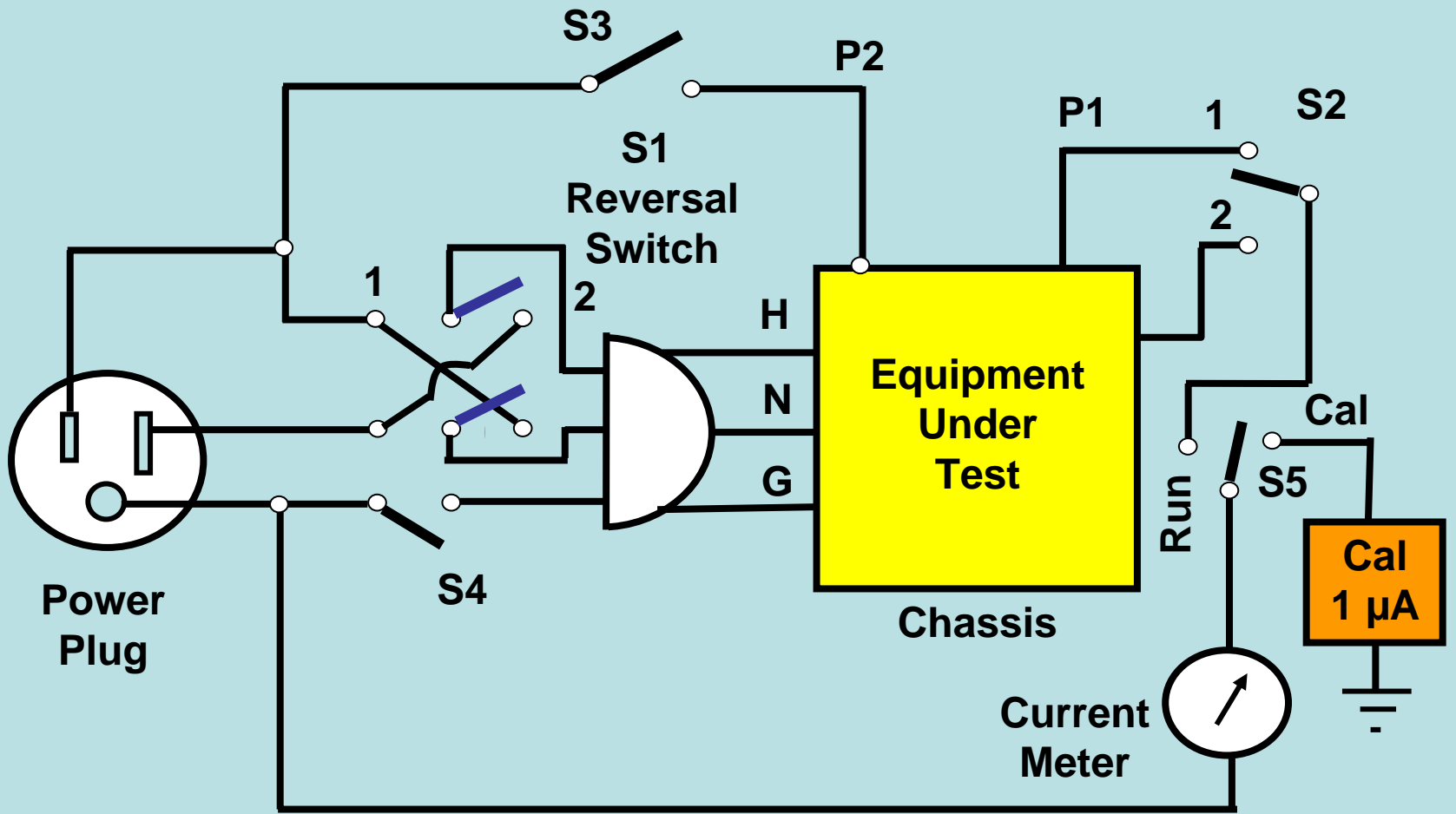
Inspected By: John Smith

# **Major Inspection**

**Electrical Safety + Performance Test + Preventive Maintenance**

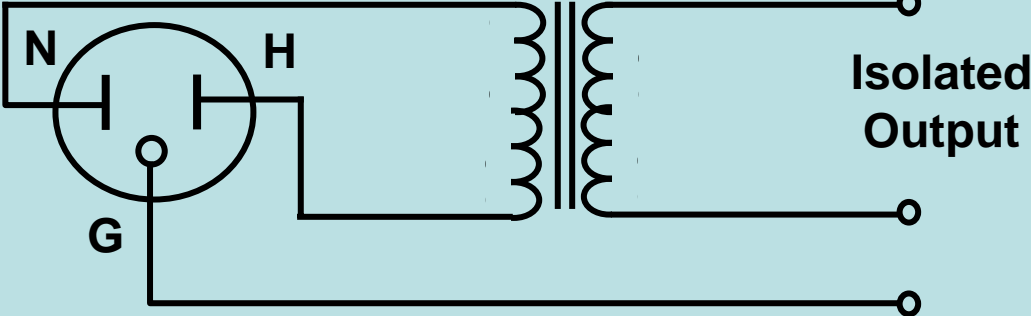
# **Minor Inspection**

**Performance Test + Preventive Maintenance**



**Block Diagram of a generic Safety Analyzer**

**Receptacle**



**Isolation Transformer**

