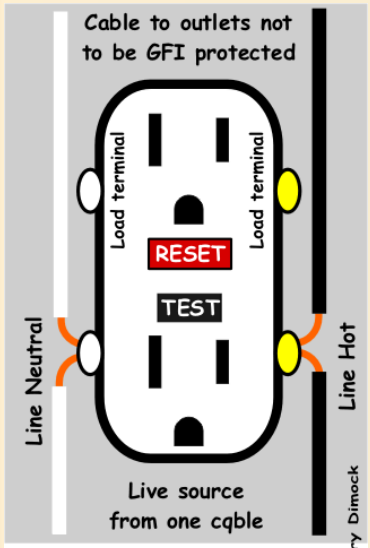
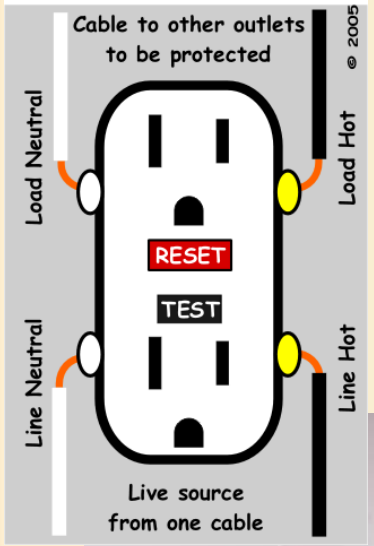
WALSH SAFETY HUDDLE # 37 – GFCI's/ Lock-out - Tag-Out

- **INTRODUCTION**
  - Electricity is an essential source of energy for most construction-related operations. Working safely with electricity is possible if you are trained in, understand, and follow some basic rules of thumb.
  - Prevention is key - proper measures MUST be taken
    - Electrocution can cause serious injury and/or result in death
    - Electricity can ignite fires and cause property damage
- **PREVENTION**
  - All those who work on or around energized electrical equipment should be properly trained
  - Use ground fault circuit interrupters (GFCI's) on all job sites. Refer how to ID a GFCI outlet.
  - Plan ahead to insure proper equipment is being used
  - OSHA regulation 1926.404 (f)(6) requires that the path to ground from circuits, equipment, and enclosures shall be permanent and continuous: Following visuals of maintained path to ground
    - Example: Compliant + Non-compliant extension cords Review jackets and ground prongs, mention stress relief
    - Non-compliant power hand tool, cracked housing, no ground ECT.
    - Always use heavy duty grounded extension cords of the three (3) wire type
- **PREPARATION**
  - Inspect extension cords/power cords and test GFCI's
    - Make sure ground prongs are intact
    - Make sure jacket is in good condition & no conductors are exposed
    - Make sure all electrical equipment is in satisfactory condition
    - Test GFCI operation periodically
  - Inspect all power tools to insure proper grounding
    - Make sure electrical tools are properly grounded or double insulated
    - Always inspect tools and equipment for frayed cords and defective plugs before use
    - Make sure all equipment is in good condition before being put into service
  - Properly secure/de-service any faulty equipment
- **LOCK-OUT/TAG-OUT**
  - Electrical power must be isolated from workers when electrical equipment is inspected, serviced, or repaired.
  - Equipment is locked out and tagged out before any preventive maintenance or servicing is performed.
  - Lockout is used after the equipment reaches "zero" energy and a lock is installed which prevents the power from being turned ON. The lock makes it physically unable to operate without removing the lock.
  - Tagout is the process of placing a danger tag on the source of electrical power which indicates that the equipment may not be operated until the danger tag is removed.
    - Tagout has the same importance and purpose as lockout and is used alone only when a lock does not fit the disconnect device. The danger tag shall be attached at the disconnect device with a tag tie or equivalent and shall have space for the worker's name, craft, and other required information.
  - A lock -out tag -out is used when:
    - **Servicing electrical equipment that does not require power to be ON to perform the service**
    - **Removing or bypassing a machine guard or other safety device**
    - **The possibility exists of being injured or caught in moving machinery**
    - **Clearing jammed equipment**
    - **The danger exists of being injured if equipment power is turned ON**
  - **Any LOTO applications shall be performed by trained personnel, covered by management JHA.**
- **ELIMINATION**
  - Electrical hazards cannot be eliminated, but with proper education and engineering, the hazards can be controlled
  - Working around electricity does not have to be dangerous if you follow the rules and procedures for working safely with electricity – ***AVOID A HAIR RAISING EXPERIENCE***

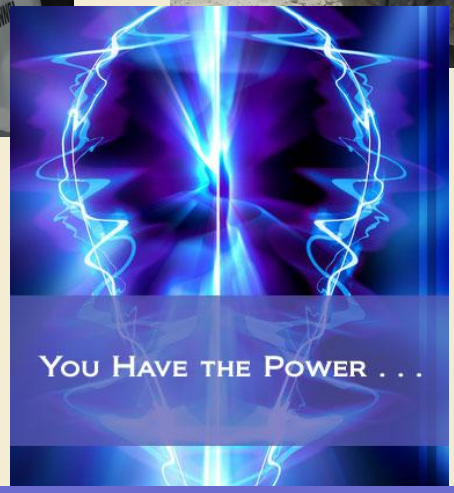
This training is intended to satisfy portions of 29 CFR 1926.21(b)(2), 1926.400 Subpart K, and 1910.147(c)(7)

LOTO and Assured Grounding

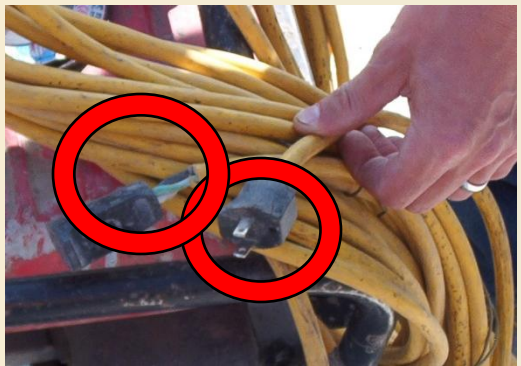




Auto-screed prevention?



…To Prevent Electrocutions



Safety Huddle 37

Walsh Construction