

Hazard Review

- **Cuts, abrasions**
- **Eye Injury**
- **Electric shock**
- **Repetitive strain injuries**
- **Strains**

Related Safe Work Practices

- **Electrical Safety, General**
- **Ladders**
- **Lifting and Body Mechanics**
- **Scaffolding, Rolling**

Personal Protective Equipment

- **Appropriate gloves**
- **Hearing protection (as needed)**
- **Safety glasses with side impact shields**
- **Safety face-shields (as needed)**

Authority

- **CCR Title 8 Section 1707, 3428**

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This safe work practice has been broken down into two sections:

- A. General
- B. Specific Power Tools
 - Jackhammer
 - Nail Gun

The General section provides information that applies to just about every situation. The section on Specific Power Tools gives information that may be specific or unique to a particular tool.

A. GENERAL

Before

1. Read and follow the appropriate manufacturer's operating manual, or ensure you have received training on the safe use of the power tool.
2. Don the personal protective equipment as noted above to prevent personal injury.
3. Keep tools clean and inspect them for wear regularly.
4. Ensure that the tools are sharpened (blades, drill bits, router bits, etc.)
5. Only authorized personnel shall be permitted to operate power tools.
6. ORDINARY VOLTAGES used for shop and operation of electrical hand tools CAN BE FATAL! A current of only ONE-TENTH OF AN AMPERE, and sometimes less, CAN KILL!

During

1. Guards shall not be removed.
2. Guards shall not be prevented from operating automatically by pins, wedges, or other devices that hold them back in an inoperative position.
3. Saws, drills, grinders, etc., with hazardous defects, shall be removed from service until repairs are complete.
4. Worn or damaged equipment shall be repaired or replaced immediately.
5. Safety equipment shall be left in place.
6. Electric tools must be provided with a GROUNDING or "third" wire connection, or be of the double-insulated type.
7. Power cords shall be checked regularly for breaks and worn spots, especially at the socket and/or point of attachment to the tool. Never use the power cord to lift or lower tool.
8. Ensure protection from rain, steam, oil, excessive moisture, metallic dust, or sawdust.
9. Boxes, fittings and lamp holders installed in damp or wet locations shall be weatherproof.
10. Hand-held power tools must be equipped with a constant pressure switch that shuts off when the pressure is released, or with a trigger lock.

11. Plug tools into GFCI protected receptacles.
12. When working on ladders or scaffolding, be sure to secure your tools so that they can't fall off and injure someone below (see *Ladders* and *Scaffolding, Rolling*).
13. Use tools in a well-lighted area.
14. Don't work with your body in an awkward position. Some tools are poorly designed and force you to work with unnecessary strain on your wrist, arm, shoulder or back. Try to use tools with better designs. Also make sure you have enough space to work, and can keep your body at a comfortable angle to the work.
15. Keep tools where they belong. Don't leave them on a ladder, scaffolding or overhead workspace where they may fall on someone or trip them up.
16. Carry tools properly. Use a tool belt, especially if climbing on ladders. Tools shall not be carried in hands while climbing.

B. SPECIFIC POWER TOOLS

Jackhammer¹

- Cover jackhammer handles with heavy rubber grips to reduce vibration and user fatigue. Anti-vibration gloves are recommended.
- Hearing and eye protection with side shields are required when using or working within 20 feet of an operating jackhammer.
- Check valves and connections carefully, including air hoses, couplings and connector's for leaks and damage.
- Be especially careful when laying down the tool, so that the trigger can't accidentally activate.
- Use proper lifting procedures when loading or unloading jackhammers. Use your leg muscles to lift the machine into an operating position. Take rest breaks as needed. Get help if the load is too heavy (see *Lifting and Body Mechanics*).
- Keep a good grip on the equipment and watch your footing when hammering. Allow the tool to do the work by using a light enough grip to maintain control.
- Never point the hammer at anyone and keep hands and fingers away from the jackhammer bit.
- Before disconnecting the jackhammer turn off the air at the base control valve. Always disconnect the air supply before inserting or removing tools and bits.

¹ Department of Public Works, Bureau of Street and Sewer Repair, Code of Safe Practices, Jackhammer, undated (see file 1624-003.doc)

- Watch for flying debris from jack hammering operations. Be aware of wind direction and try to work upwind. When two jackhammers are in use, workers should work back-to-back; to prevent face cuts from flying chips.
- If the job is near a sidewalk or other thoroughfare, place suitable screens to protect passersby from flying debris.
- Keep all bystanders, children, and pets out of the work area.
- Never use compressed air to blow dirt, dust, or chips from hands, face, clothing or work surfaces.

Nail Guns²

- Before you fill it up with more nails, un-jam it or perform service on it, disconnect the nail gun from the air source.
- Hold your opposite, free hand at least a foot away from the gun when you are nailing a piece.
- Never point the gun at another person or towards yourself.
- Don't overextend your reach when using the gun. Keep the gun as close to your body as you safely can; holding the gun away from your body can cause undue strain on your arms and shoulders. When reaching, always maintain a slight bend in your elbow.

² "Home Safety Tips: Nail Gun Safety", , www.essortment.com/home/homesafetynail_syzz.htm, 5/2/07.