

Section 9

TOOLS

9.1 Hand Tools

- (a) Employees shall maintain hand tools in good condition at all times.
- (b) Do not use tool belts and never carry tools in your pockets.
- (c) Never use tools that are worn, cracked or broken.
- (d) Pliers and pipe wrenches shall not be used on nuts and bolts.
- (e) Crescent wrenches shall never be used in place of the proper-type wrench.
- (f) Do not use makeshift tools such as pipe, iron bars or extensions for leverage (cheaters).
- (g) Use the correct size crowbar for each job. Place a block of wood under the head of the crowbar for leverage.
- (h) Never strike hardened steel surfaces with a steel hammer. Use a soft metal hammer or one with a plastic, wooden or rawhide head.
- (i) Cold-chisels, center-punches, etc., shall be dressed to eliminate mushrooming.
- (j) Keep a knife sharp and in a sheath or holder when carrying it on a job. Do not use it for stripping traveling cable; use cable strippers instead. When using a knife, always cut away from your body.
- (k) Avoid placing a tool box where another person may trip over it.
- (l) Split or loose handles in hammers or sledges shall be replaced with new and properly fitted handles before being used. Handles shall never be wired or taped.
- (m) Always keep screwdrivers properly dressed and their handles in good condition.

- (n) Never use a screwdriver as a punch, wedge, pinch bar, pry or chisel.
- (o) Files shall never be used unless they have a proper handle, and never as a pry.
- (p) Always use the proper tool for the job it was intended.

Figure 9a

Use only properly dressed chisels



Wrong



Wrong



Right

9.2 Portable Electric Tools and Lights

- (a) Electrically powered tools cause the same types of incidents as hand tools, but the injuries are usually more severe.
- (b) Power tools, portable lights or cord sets shall be protected by GFCIs.
- (c) If the insulation on an electric tool or cord is broken, cracked, missing or damaged, destroy and discard the tool or cord.

- (d) Never tamper with or remove three-prong grounding plugs or pins. This eliminates the grounding protection. When grounded outlets are not available — as may be found in older buildings — adapter plugs shall be used with the grounding wire secured to a positive ground. (Note: The cover plate screw may not give a positive ground, use your meter or GFCI tester to test for positive ground.)
- (e) Always use a GFCI when plugged in even when using double insulated tools.
- (f) Double-insulated tools may be used if they are distinctively marked with the words “Double Insulated,” or the symbol shown in Figure 9b.
- (g) When using extension cords, make sure the cord is plugged into a grounded outlet of correct voltage and the cord is capable of carrying the expected load. Extension cords shall conform to OSHA Standards and be Company-approved. 110-volt extension cords shall be durably marked with the size (12-3 or 14-3 AWG) and type as noted in the chart below:

Figure 9b



Figure 9c Approved Markings for Extension Cords

Hard Service				Junior Hard Service		
S	SO	ST	SE	SJ	SJE	SJT
	SOO	STO	SEO	SJO	SJEO	SJTO
		STOO	SEOO	SJOO	SJEOO	SJTOO

- (h) Flexible cords shall be used in continuous lengths without splice or tape. Hard service flexible cords No. 14 or larger may be repaired or spliced. The splice and insulation characteristics shall be equal or greater than the original cord.
- (i) Electric cords shall not be run through holes in walls, ceilings or floors. If run through doorways, windows, or similar openings, they shall be protected from damage.

- (j) Metal or plastic electrical boxes, commonly referred to as “handy” boxes, shall not be used to make extension cords and multipliers. Do not “field engineer” electrical components. Such components and assemblies are not approved for that use.
- (k) Portable lights shall be equipped with guards to prevent accidental contact with the bulb. Unless guards and handles are properly grounded, they shall be made from non-conductive materials.
- (l) Portable lights shall not be suspended by their electric cords, unless cords and lights are designed for this means of suspension.
- (m) Work areas, walkways and similar locations shall be kept clear of all cords so as not to create a hazard to employees or subject cords to damage.
- (n) Do not lift or lower portable electric tools by the power cord; use a handline. Never throw tools, equipment or material from one work level to another.
- (o) Keep all cords coiled when not in use. To prevent cord damage do not wrap cords tightly around tools.
- (p) Hand-held power tools shall not be equipped with a “dead man” control. It may have a lock-on control provided turn off can be accomplished by a single motion of the same finger or fingers that turn it on.
- (q) Power operated cutting tools shall have a functional brake.
- (r) Avoid forcing tools; let the tool do the work.
- (s) Unplug power when adjusting or cleaning the tool.
- (t) Never use electrical tools for purposes other than intended.
- (u) Keep guards in place and properly adjusted.
- (v) Have a firm footing and be properly braced when using power tools.

9.3 Powder Actuated Tools

Powder actuated tools are prohibited on all worksites.