

## **4123:1-5-07 Hand tools, hand-held portable powered tools, other hand-held equipment and portable safety containers.**

(A) Reserved.

(B) Reserved.

(C) General requirement.

All hand tools and hand-held portable powered tools and other hand-held equipment whether furnished by the employee or the employer shall be maintained in a safe condition, free of worn or defective parts.

(D) Power saws.

(1) General.

All portable power-driven saws with blades more than two inches in diameter shall be equipped with guards above and below the base plate shoe. The upper guard shall cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for bevel cuts. The lower guard shall cover the saw to the depth of the teeth, except for the minimum arc required to allow proper retraction and contact with the work. When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to covering position. The requirements of this paragraph do not apply to circular saws used in the meat industry for meat-cutting purposes.

(2) Portable chain saws.

(a) Portable chain saws shall have all guards and handles, provided by the manufacturer, in place, all controls functioning properly and mufflers operative.

(b) Electrically powered chain saws shall be provided with proper grounding devices.

(E) Power grinders.

Safety guards used on right angle head or vertical portable grinders shall have a maximum exposure angle of one hundred eighty degrees, and be located so as to be between the operator and wheel during use. The top half of the wheel shall be enclosed at all times.

(F) Pneumatically powered tools.

All pneumatically powered portable tools shall be equipped with an automatic shutoff valve ("dead-man" control) so arranged as to close the air inlet valve when the pressure of

the operator's hand is removed. Each tool shall be equipped with a retainer where accidental ejection is possible.

(G) Grounding.

All electrically powered portable tools with exposed noncurrent-carrying metal parts shall be grounded. Portable tools protected by an approved system of double insulation, or its equivalent, need not be grounded. Where such an approved system is employed the equipment shall be distinctively marked.

(H) Power cut-off and pressure control devices.

(1) Woodworking tools.

Hand-held, power-driven woodworking tools shall be provided with a dead-man control, such as a spring actuated switch, valve, or equivalent device, so that the power will be automatically shut off whenever the operator release the control.

(2) Hand-held powered tools-switches and controls.

(a) All hand-held powered circular saws having a blade diameter greater than two inches, electric, hydraulic or pneumatic chain saws, and percussion tools without positive accessory holding means shall be equipped with a constant pressure switch or control that will shut off the power when the pressure is released. All hand-held gasoline powered chain saws shall be equipped with a constant pressure throttle control that will shut off the power to the saw chain when the pressure is released.

(b) All hand-held powered drills, tappers, fastener drivers, horizontal, vertical and angle grinders with wheels greater than two inches in diameter, disc sanders with discs greater than two inches in diameter, belt sanders, reciprocating saws, saber, scroll, and jig saws with blade shanks greater than a nominal one-fourth inch, and other similarly operating powered tools shall be equipped with a constant pressure switch or control, and may have a lock-on control provided that turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.

(c) All other hand-held powered tools, such as, but not limited to, platen sanders, grinders with wheels two inches in diameter or less, disc sanders with discs two inches in diameter or less, routers, planers, laminate trimmers, nibblers, shears saber, scroll, and jig saws with blade shanks a nominal one-fourth of an inch wide or less, may be equipped with either a positive "on-off" control, or other controls as described by paragraphs (H) (2)(a) and (H)(2)(b) of this rule.

(3) Use of compressed air.

The employer shall instruct the employer that compressed air shall not be used

(I) Jacks.

All jacks shall have the rated load legibly and permanently marked in a prominent location, except jacks supplied as standard equipment in passenger cars.

(J) Block and tackle equipment.

(1) All blocks shall fit the size of rope they carry, and shall be so constructed as not to chafe the rope running through them.

(2) Where ropes are subjected to chafing by dragging across an intervening object, such object shall be padded.

(K) Hand tools, miscellaneous.

Employers shall not issue or permit the use of unsafe hand tools, such as:

(1) Wrenches when jaws are sprung to the point that slippage occurs;

(2) Impact tools, such as drift pins, wedges, and chisels, with mushroomed heads;

(3) Tools with splintered or cracked wooden handles or wooden handles that cannot be kept tight in the tool.

(L) Portable pneumatically powered fastener tools.

(1) Except for portable pneumatically powered fastener tools authorized in paragraph (L)(2) of this rule, two separate and independent releases are required before any such tool activates. They are:

(a) A device on the muzzle that prevents activation except during the time the tool is held firmly against the work surface.

(b) A trigger or similar device that prevents activation except during the time it is held in depressed or active position by the operator.

(2) Fastener tools that do not meet the requirements of paragraph (L)(1) of this rule may be used if they comply with all of the following requirements.

(a) The tool may only be actuated by compressed air with a driving piston having an area no greater than one square inch, with an operating air pressure of no more than one hundred pounds per square inch gauge and with a driving velocity no greater than seventy-five feet per second as measured at the muzzle.

(b) The tool may only accommodate fasteners of the wire staple or pin types with a cross sectional area no greater than .00177 square inches.

(c) The tool may drive only one fastener each time the trigger or operating lever is depressed.

(3) The operator of the tool shall be furnished the personal protective equipment required in paragraph (D) of rule 4123:1-5-17 of the Administrative Code. Such protection shall also be furnished for any other employees required to work in the immediate area and who are exposed to the hazards of the operation.

(4) When not in use the tool shall be disconnected from the compressed air hose.

(5) Air hose.

Hose and hose connections used for conducting compressed air to the tool shall be designed for the pressure and service to which it is subjected.

(6) Pressure regulator.

The tool shall be equipped with a pressure regulator or other device to prevent air pressure on it from exceeding its maximum design capacity.

(M) Portable safety containers.

Portable safety containers shall be provided for handling flammable liquids with a flash point (closed cup) below 138.2 degrees Fahrenheit in quantities of one gallon or more. The containers shall be legibly marked "flammable".

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