

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**TITLE 8. CALIFORNIA CODE OF REGULATIONS****General Industry Safety Orders
Section 4306**

(Published on December 2, 2016)

Underhung/Slung (Jump) Saw Guarding

NOTICE IS HEREBY GIVEN that the Occupational Safety and Health Standards Board (Board) proposes to adopt, amend or repeal the foregoing provisions of Title 8 of the California Code of Regulations in the manner described in the Informative Digest, below.

PUBLIC HEARING

The Board will hold a public hearing starting at 10:00 a.m. on **January 19, 2017** in **Room 310** of **County Administration Center, 1600 Pacific Highway, San Diego**. At this public hearing, any person may present statements or arguments orally or in writing relevant to the proposed action described in the Informative Digest.

WRITTEN COMMENT PERIOD

In addition to written or oral comments submitted at the public hearing, written comments may also be submitted to the Board's office. The written comment period commences on **December 2, 2016** and closes at 5:00 p.m. on **January 19, 2017**. Comments received after that deadline will not be considered by the Board unless the Board announces an extension of time in which to submit written comments. Written comments can be submitted as follows:

By mail to Sarah Money, Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833; or

By fax at (916) 274-5743; or

By e-mail sent to oshsb@dir.ca.gov.

AUTHORITY AND REFERENCE

Labor Code Section 142.3 establishes the Board as the only agency in the State authorized to adopt occupational safety and health standards. In addition, Labor Code Section 142.3 requires the adoption of occupational and health standards that are at least as effective as federal occupational safety and health standards.

INFORMATIVE DIGEST OF PROPOSED ACTION/POLICY STATEMENT

OVERVIEW

This rulemaking is the result of an Occupational Safety and Health Standards Board review of guarding requirements for underhung swing cutoff saws, inverted swing cutoff saws, jump saws and underhung saws contained in Section 4306 of the General Industry Safety Orders (GISO). These are types of circular woodworking saws where the blade emerges from underneath the stock or table and swings or slides upward to make the cut. The term jump saw derives from the fact that the blade in making the cut on the work piece “jumps up” from beneath the table to enter the wood.

Section 4306(b) requires blade guarding. Manufacturers provide blade guards in conformance with this standard. These saws are also typically provided with one or more additional point-of-operation guards such as but not limited to: tunnel guards, foot pedals, windshields, wrist restraints, passive detection and two-handed controls.

Staff has identified seven injuries that took place in California, from 2001-2009, involving underhung cutoff saws. The Cal OSHA Form 170A reports for these injuries describe employees coming in contact with the point-of-operation as a result of either the absence of, or ineffectiveness of the point-of-operation guarding. Similarly, a U.S. Department of Labor inspection report citing a 1995 incident which took place in California, describes an employee’s fingers being amputated despite the fact that the blade of the saw was guarded as required by Section 4306(b), and the employee had received operator training.

The inherently hazardous nature of these saws and the accident documentation suggests that blade guarding alone is insufficient to prevent contact. Performance-based point-of-operation guarding (POG) standards are contained in Sections 4184 and 4186. Title 8 point-of-operation guarding standards apply to Section 4306. However, other than a requirement for effective guarding and guarding the blade, point-of-operation guarding is not mentioned in Section 4306. The proposal will clarify that the point-of-operation guarding requirements in Section 4184 and 4186 apply to the underhung type saws in addition to the blade guarding required by Section 4306.

The proposal is intended to also prevent the potential for severe cuts or amputations of the fingers or hands during saw cutting operations or when idling.

The Board evaluated the proposed regulations pursuant to Government Code section 11346.5(a)(3)(D) and has determined that the regulations are not inconsistent or incompatible with existing state regulations. This proposal is part of a system of occupational safety and health regulations. The consistency and compatibility of that system’s component regulations is provided by such things as: (1) the requirement of the federal government and the Labor Code to the effect that the State regulations be at least as effective as their federal counterparts, and (2) the requirement that all state occupational safety and health rulemaking be channeled through a single entity (the Standards Board).

Anticipated Benefits

The proposed rulemaking clarifies the regulatory language to provide specific requirements for guarding these types of saws. The proposed regulatory amendment will protect workers from exposure to severe cuts or amputations that have occurred in the past as a result of contact with the rotating saw blade.

The proposal adds a new subsection (e) to Section 4306 to prevent employee intrusion into the hazardous point-of-operation where the underhung/underslung jump saw blade ascends, cuts the work piece and drops back down below the table. This amendment provides superior protection to operators from dangers associated with circular saw blades that swing or slide as they ascend to make the cut and allows the enclosed saw blade to safely contact the work piece without operator exposure to the hazardous point-of-operation.

The specific changes are as follows:

Section 4306. Underhung Swing Cut-Off Saws, Inverted Swing Cut-Off Saws, Jump Saws, Underslung Saws.

Title 8, Section 4306 contains provisions for effectively guarding the types of saws described by Section 4306. Subsection (b) specifies how the blade is to be guarded and states that the upper half of the saw blade and arbor are to be shielded from contact by a blade guard.

An amendment is proposed to add a new subsection (e) to Section 4306 stating that the saw be provided with point-of-operation guarding in addition to the blade guard that will prevent the operator from being able to inadvertently contact the point-of-operation as the blade ascends, cuts and drops back down below the table.

A Note is proposed that will clarify to the employer the location of GISO point-of-operation guarding standards and design specifications that are required to be applied to the types of saws regulated by Section 4306.

This proposal will ensure that workers are protected from dangers associated with saws that ascend from below the table to make cuts, by providing clear direction in guarding the point of operation of these types of saws.

DISCLOSURES REGARDING THE PROPOSED ACTION

Mandate on Local Agencies and School Districts: None.

Cost or Savings to State Agencies: None.

Cost to any Local Government or School District which must be Reimbursed in Accordance with Government Code Sections 17500 through 17630: None.

Other Nondiscretionary Cost or Savings Imposed on Local Agencies: None

Cost or Savings in Federal Funding to the State: None

Cost Impacts on a Representative Private Person Or Business:

The Board is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

**Statewide Adverse Economic Impact Directly Affecting Businesses and Individuals:
Including the Ability of California Businesses To Compete:**

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses/individuals, including the ability of California businesses to compete with businesses in other states.

The proposed amendment is essentially informational to what is already in existence for guarding these types of saws which are typically provided with one or more point-of-operation guards. Saws that are only equipped with a blade guard may need to have their other point-of-operation guards reinstalled, or be re-equipped with additional point-of-operation guarding such as a tunnel guard by job fabrication or ordering a factory part from the manufacturer. This would be a one-time cost for the employer.

The average cost of a factory built tunnel guard replacement is approximately \$500. A job fabricated tunnel guard constructed of wood, metal or plastic could cost less than \$100. These figures could vary according to the type of POG being replaced and whether it is a factory replacement or is job-fabricated. Factory part replacement costs will vary according to the type of POG, the least expensive being the plastic shield used on some model jump saws at approximately \$150 and the most expensive being the two-handed (handlebar control) trip system at approximately \$1700. Proportionally, the median cost of an underhung/jump saw that may be impacted by this proposal is approximately \$7,000; consequently, any required POG factory part augmentation would be substantially less than the cost of the saw.

Significant Effect on Housing Costs: None.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed regulation does not impose a local mandate. There are no costs to any local government or school district which must be reimbursed in accordance with Government Code Sections 17500 through 17630.

SMALL BUSINESS DETERMINATION

The Board has determined that the proposed amendment may affect small businesses that utilize the type of saw affected by the proposal. The proposed amendment requires some form of point-of-operation guarding such as a tunnel guard, foot pedal, wrist restraints, two-handed trip or passive device as described in Article 54 of the GISO, in addition to the blade guard already

required by Section 4306(b). Manufacturers of the type of saws regulated by Section 4306 have addressed the need for point-of-operation guarding in addition to the mandated blade guard voluntarily. Many manufacturers provide two-handed trip devices, some provide foot pedals and others provide passive protection. The production of jump saws has declined, given the fact that one manufacturer responsible for roughly 20-25 percent of the market share, discontinued production of their jump saws in 2009. However their service life is long and it is reasonable to assume that many saws of this type are operational in California as the Federal OSHA injury data involving this type of saw suggests.

RESULTS OF THE ECONOMIC IMPACT ASSESSMENT/ANALYSIS

The Board estimates the economic impact to be less than \$10 million. The proposed regulation will not have any effect on the creation or elimination of California jobs or the creation of new businesses or the elimination of existing California businesses or affect the expansion of existing California businesses. The proposal provides clear direction in guarding this type of saw. This regulatory proposal will promote worker safety by specifying an effective guard that protects the operator from dangers associated with saws that ascend from below the table to make the cut.

BENEFITS OF THE PROPOSED ACTION

The standard was amended to clarify the necessity for point-of-operation guarding; and to provide guidance in selecting an effective point-of-operation saw blade guard (such as a tunnel guard) to help prevent severe injuries and amputations from inadequately guarded saws of this type. The regulated public will benefit from the proposed action by having consistent guidance in the proper guarding of these types of saws and ensuring the protection of health and safety of California workers. There are no anticipated benefits to the state's environment.

CONSIDERATION OF ALTERNATIVES

In accordance with Government Code Section 11346.5(a)(13), the Board must determine that no reasonable alternative it considered to the regulation or that has otherwise been identified and brought to its attention would either be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law than the proposal described in this Notice.

The Board invites interested persons to present statements or arguments with respect to alternatives to the proposed regulation at the scheduled public hearing or during the written comment period.

CONTACT PERSONS

Inquiries regarding this proposed regulatory action may be directed to Marley Hart (Executive Officer) and the back-up contact person is Michael Manieri (Principal Safety Engineer) at the

Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350,
Sacramento, CA 95833; (916) 274-5721.

**AVAILABILITY OF STATEMENT OF REASONS, TEXT OF THE PROPOSED
REGULATIONS AND RULEMAKING FILE**

The Board will have the entire rulemaking file available for inspection and copying throughout the rulemaking process at its office at the above address. As of the date this notice is published in the Notice Register, the rulemaking file consists of this notice, the proposed text of the regulations, the Initial Statement of Reasons and supporting documents, or other information upon which the rulemaking is based. Copies may be obtained by contacting Ms. Hart or Mr. Manieri at the address or telephone number listed above.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After holding the hearing and considering all timely and relevant comments received, the Board may adopt the proposed regulations substantially as described in this notice. If the Board makes modifications which are sufficiently related to the originally proposed text, it will make the modified text (with the changes clearly indicated) available to the public at least 15 days before the Board adopts the regulations as revised. Please request copies of any modified regulations by contacting Ms. Hart or Mr. Manieri at the address or telephone number listed above. The Board will accept written comments on the modified regulations for at least 15 days after the date on which they are made available.

AVAILABILITY OF THE FINAL STATEMENT OF REASONS

Upon its completion, copies of the Final Statement of Reasons may be obtained by contacting Ms. Hart or Mr. Manieri at the address or telephone number listed above or via the internet.

AVAILABILITY OF DOCUMENTS ON THE INTERNET

The Board will have rulemaking documents available for inspection throughout the rulemaking process on its website. Copies of the text of the regulation in an underline/strikeout format, the Notice of Proposed Action and the Initial Statement of Reasons can be accessed through the Standards Board's website at <http://www.dir.ca.gov/oshsb>.