

AMENDED IN SENATE JULY 02, 2026
AMENDED IN SENATE JUNE 15, 2026
AMENDED IN ASSEMBLY MAY 18, 2026

CALIFORNIA LEGISLATURE— 2025–2026 REGULAR SESSION

ASSEMBLY BILL

NO. 2047

**Introduced by Assembly Member Bauer-Kahan
(Coauthors: Assembly Members Patel, Rogers, and Stefani)
(Coauthor: Senator Grayson)**

February 17, 2026

An act to add Title 21.1 (commencing with Section 3273.631) to Part 4 of Division 3 of the Civil Code, ~~and to add Section 29187 to the Penal Code~~, relating to firearms.

LEGISLATIVE COUNSEL'S DIGEST

AB 2047, as amended, Bauer-Kahan. Firearms: 3-dimensional printing blocking technology.

Existing law makes it a crime to knowingly or willfully cause another person to engage in the unlawful manufacture of firearms or knowingly or willfully aiding, abetting, prompting, or facilitating the unlawful manufacture of firearms, including the manufacture of assault weapons or .50 BMG rifles or the manufacture of any firearm using a 3-dimensional printer, as specified.

This bill would require, on or before September 1, 2028, the department to publish written guidance on performance standards for firearm blueprint detection algorithm for use by 3-dimensional printer manufacturers, as specified.

This bill would require, on or before March 1, 2029, any business that produces or manufactures 3-dimensional printers for sale or transfer in California to submit to the department an attestation for each make and model of printer they intend to make available for sale or transfer in California, confirming, among other things, that the manufacturer has equipped that make and model with a firearm blueprint detection algorithm. The bill would require, on or before June 1, 2029, the department to publish a list of all the makes and models of 3-dimensional printers whose manufacturers have submitted complete self-attestations and would require the department to update the list no less frequently than on a quarterly basis and to make the list available on the department's internet website. The bill, beginning on December 1, 2029, would prohibit the sale or transfer of 3-dimensional printers that are not equipped with firearm blocking technology and that are not listed on the department's list, except as specified. The bill would authorize a civil action to be brought against a person who sells, offers to sell, or transfers a printer without the firearm blocking technology.

~~This bill would also make it a crime to knowingly disable, deactivate, uninstall, or otherwise circumvent any firearm blocking technology installed in a 3-dimensional printer with intent to manufacture firearms or to knowingly distribute, sell, or transfer for consideration in California one or more modified versions of a 3-dimensional printer identified on the Department of Justice's list of 3-dimensional printers eligible for sale in California, with the intent to facilitate the unlawful manufacture of firearms. By creating a new crime, this bill~~

~~would impose a state-mandated local program.~~

This bill would make these provisions severable.

~~The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.~~

~~This bill would provide that no reimbursement is required by this act for a specified reason.~~

Digest Key

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: *yes**no*

Bill Text

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Title 21.1 (commencing with Section 3273.631) is added to Part 4 of Division 3 of the Civil Code, to read:

TITLE 21.1. Firearm Printing Prevention Act

3273.631. This title shall be known, and may be cited, as the California Firearm Printing Prevention Act.

3273.632. As used in this title, the following definitions shall apply:

(a) “Department” means the Department of Justice.

(b) “Firearm” has the same meaning as defined in subdivision (a) of Section 16520 of the Penal Code.

(c) “Firearm blocking technology” means hardware, firmware, or other integrated technological measures capable of ensuring a three-dimensional printer will not proceed to any print job unless the underlying three-dimensional printing file has been evaluated by a firearms blueprints detection algorithm and determined not to be a printing file that would produce a firearm or illegal firearm parts.

(d) “Firearm blueprint detection algorithm” means a software service that evaluates three-dimensional printing files, whether in the form of stereolithography (STL) files or other computer-aided design files or geometric code, to determine if the files can be used to program a three-dimensional printer to produce a firearm or illegal firearm parts, and flag any such files to prevent their use to manufacture a firearm or illegal firearm parts.

(e) “Firearm precursor part” has the same meaning as defined in Section 16531 of the Penal Code.

(f) “Firmware design” means integration of a firearms blueprint detection algorithm directly into a three-dimensional printer’s firmware, such that any geometric code received by the printer must be evaluated by the algorithm before the printer will proceed to print, and such that the printer will reject print jobs identified by the algorithm because they would direct the printer to print firearms or illegal firearm parts.

(g) “Illegal firearm parts” means a firearm precursor part and any part designed and intended for use in converting a semiautomatic weapon into a machine gun, including, but not limited to, a pistol convertor.

(h) “Integrated pre-print software design” means a limitation of a three-dimensional printer’s operation to accept geometric code for printing exclusively from a single slicer or other preprint software, which may be the manufacturer’s proprietary software, and integration of a firearms blueprint detection algorithm into that preprint software, such that any STL file or other computer-aided design file must be evaluated by the algorithm before the software will proceed to produce geometric code, and such that the software will not produce geometric code for files that are identified by the algorithm because they would direct the printer to print firearms or illegal firearm parts.

(i) “Pistol convertor” has the same meaning as defined in Section 17015 of the Penal Code.

(j) “Software controls process” means a system designed to stop a three-dimensional printer from initiating any print job unless the underlying three-dimensional printing file has been evaluated by a firearms blueprints detection algorithm and determined not to be a printing file that would produce a firearm or illegal firearm parts.

(k) “Three-dimensional printer” has the same meaning as subdivision (d) of Section 3273.60.

3273.633. (a) (1) On or before September 1, 2028, the department shall publish written guidance on performance standards for firearm blueprint detection algorithms for three-dimensional printer manufacturer use in complying with Sections 3273.635 and 3272.636. The department may adopt some or all of any set of performance standards created by a nongovernmental entity, including, but not limited to, an academic consortium or a global standard-setting nonprofit, including, for example, ASTM International. To the extent performance standards created by a nongovernmental entity meet all the requirements set forth in this section, the department’s performance standards may provide that compliance with the nongovernmental entity’s standards shall constitute compliance with this title.

(2) The department may seek input from relevant stakeholders and technical experts in the process of preparing written guidance on performance standards for firearm blueprint detection algorithms. Stakeholder input may include, but is not limited to, identification of design files that should be used to evaluate if an algorithm is reaching a false-positive result that erroneously identifies the design file as a firearm or illegal firearm part blueprint.

(b) The performance standards shall require that firearm blueprint detection algorithms have the capacity, with a high degree of accuracy, to do all of the following:

(1) Evaluate three-dimensional printing files, whether in the form of STL files or other computer-aided design files or geometric code.

(2) Detect and identify any such files that can be used to program a three-dimensional printer to produce a firearm or illegal firearm parts.

(3) Flag any disallowed files for print rejection by a software control process.

(c) The performance standards shall require that, at a minimum, firearm blueprint detection algorithms have the capacity to utilize information from an inventory of disallowed firearm blueprint files that have been commonly shared on internet forums to detect those files and modified versions of those files.

(1) In order to meet the requirements of this subdivision, the standards may require blueprint detection algorithms to receive updated information from an inventory of firearm blueprint files and illegal firearm parts blueprint files, including, but not limited to, a library maintained by any state agency or out-of-state agency, academic institution, or nongovernmental entity.

(2) An individual with authorized access to a file library identified in paragraph (1) for the purpose of developing or vetting firearm blocking technology shall be immune from liability for violation of subdivision (a) of Section 3273.61 for reviewing or testing files in the file library.

(d) The performance standards shall include standards for acceptable false-positive and false-negative rates in detection algorithm performance but shall not require that a firearm blueprint detection algorithm produce a false-negative rate of zero corresponding to *a* perfect success rate at detecting disallowed files, using standardized test methodologies and benchmark datasets where applicable.

(e) The performance standards shall require that the firearm blueprint detection algorithm have the capacity to implement regular updates to the set of disallowed firearm files it has the capacity to detect, to an extent and with a frequency that reasonably considers the rate of innovation for the design and availability of new firearm blueprint files, consistent with evolving threat landscapes, technology maturity, and operational ~~feasibility~~.
feasibility.

(f) The performance standards shall include a process for periodically reviewing emerging detection software techniques, including, but not limited to, advanced forms of image recognition and volumetric search functionality.

3273.634. (a) (1) On or before September 1, 2028, the department shall publish written guidance on performance standards for software controls processes for three-dimensional printer manufacturer use in complying with Sections 3273.635 and 3273.636. The department may adopt some or all of any set of performance standards created by a nongovernmental entity, including, but not limited to, an academic consortium or a global standard-setting nonprofit, including, for example, ASTM International. To the extent performance standards created by a nongovernmental entity meet all the requirements set forth in this section, the department's performance standards may provide that compliance with the nongovernmental entity's standards shall constitute compliance with this title.

(2) The department may seek input from relevant stakeholders and technical experts in the process of preparing written guidance on performance standards for software controls processes, including from persons who provide software, firmware, or other services integral to establishing software controls processes for three-dimensional printers.

(b) The performance standards shall require that software controls processes have the capacity, to a high degree of reliability, to substantially reduce the likelihood of foreseeable circumvention attempts intended to evade a firearms blueprint detection algorithm.

(c) The performance standards shall include minimum standards on developer testing to confirm an acceptably low level of evasion with identified design files for firearms and illegal firearm parts, but shall not require that a software controls process produces a perfect success rate at preventing a user from evading a firearms blueprint detection algorithm.

(d) The performance standards shall set out options for design forms that may be used for a software controls process integration into a three-dimensional printer, including that the standards-setting process shall consider all of the following:

(1) Firmware design.

(2) Integrated preprint software design.

(3) Any other form, including, but not limited to, handshake authentication design or other design forms directed towards compatibility with open-source architecture, if the software controls process meets all performance requirements of the standard and is both of the following:

(A) At least as effective in ensuring no print jobs can proceed unless they are evaluated by a firearm blueprint detection algorithm as the design forms described in paragraphs (1) and (2).

(B) At least as resistant to being defeated by a technically skilled user as the design forms described in paragraphs (1) and (2).

(e) The performance standards shall include both of the following:

(1) For firmware design, guidance for how vendors are required to demonstrate that their technology will ensure a printer directs potential print jobs to the algorithm before printing can occur.

(2) For integrated preprint software design, guidance for how vendors shall demonstrate that printers will accept print jobs exclusively through authorized and validated software systems and will not accept print jobs from unauthorized software pathways, including attempts by users seeking to evade a detection algorithm.

3273.635. (a) (1) On or before March 1, 2029, any business that produces or manufactures three-dimensional printers for sale or transfer in California shall submit to the department an attestation form for each make and model of printer they intend to make available for sale or transfer in California.

(2) The self-attestation shall include all of the following information:

(A) The make and model of the three-dimensional printer.

(B) Confirmation that the manufacturer has equipped that make and model with a firearm blueprint detection algorithm.

(C) Confirmation that the manufacturer has equipped that make and model with a software controls process.

(D) Confirmation of testing the functionality of the firearm blocking technology once installed according to paragraph (4).

(3) If the self-attestation form is incomplete or contains information indicating the make and model of printer identified may not be effectively equipped with firearm blocking technology, the Attorney General has authority to investigate and inspect the submission, including, but not limited to, requesting sample models from the manufacturer to verify the attestation of compliance and requesting further information about the type of firearm blueprint detection algorithm or software controls process used by the manufacturer. Any make and model of three-dimensional printer actively under investigation and inspection shall be identified as having an incomplete attestation on the list described in subdivision (b).

(4) The self-attestation form may include instructions to manufacturers of three-dimensional printers on how to test functionality of firearm blocking technology, how to affirm that testing has occurred on a specified percentage of printers for each model, and how to submit the self-attestation form to the department.

(b) (1) On or before June 1, 2029, the department shall publish a list of all the makes and models of three-dimensional printers whose manufacturers have submitted complete self-attestations pursuant to subdivision (a) and any makes and models of three-dimensional printers that have an incomplete attestation on file.

(2) The ~~lists~~ *list* shall be updated no less frequently than on a quarterly basis and made accessible on the department's internet website. Retailers or distributors of three-dimensional printers shall consult the ~~lists~~ *list* posted on the department's internet website to ensure their inventory for sales in California consists of three-dimensional printers in compliance with this title.

(3) It shall be an affirmative defense to any action against a retailer, distributor, importer, wholesaler, or other individual transferor of a three-dimensional printer for an alleged violation of Section 3273.636 that the retailer, distributor, or other individual transferor only sold or transferred the three-dimensional printer after verifying that the make and model was listed by the department on the published list described in this section, and not designated as having an incomplete attestation.

3273.636. (a) Any business that produces or manufactures three-dimensional printers for sale or transfer in California shall take both of the following steps:

- (1) Before any three-dimensional printer is offered, sold, transferred, or distributed to any person or business in California, the manufacturer shall equip the three-dimensional printer with firearm blocking technology, as described in Sections 3273.633 and 3273.634.
 - (2) Before any three-dimensional printer is offered, sold, transferred, or distributed to any person or business in California, the manufacturer shall submit a self-attestation of installation of firearm blocking technology to the department, as described in Section 3273.635.
- (b) Any business that sells, offers to sell, distributes, or transfers for consideration a three-dimensional printer in California shall consult the list published by the department described in subdivision (b) of Section 3273.635.
- (c) It shall be unlawful to sell or transfer for consideration a three-dimensional printer in California that does not meet both of the following requirements:
- (1) The three-dimensional printer shall be equipped with firearm blocking technology.
 - (2) The three-dimensional printer shall be listed by the department on the published list described in subdivision (b) of Section 3273.635 as having a complete attestation on file.
- (d) This section shall not apply to the following products:
- (1) Printers manufactured for and sold exclusively to a state-licensed firearms manufacturer, as defined in subdivision (g) of Section 29185 of the Penal Code.
 - (2) Printers manufactured for and sold exclusively to the State of California or law enforcement agencies of the United States for the manufacturing of firearms for law enforcement or military purposes.
 - (3) Printers manufactured for and sold exclusively to aerospace, biomedical, automotive, or chemical or mechanical engineering companies or government contractors that are not also sold on the consumer retail market.
 - (4) Printers manufactured for and sold exclusively to entertainment industry stagecraft and propmaking studios.
 - (5) Printers sold or transferred in private transactions that were originally purchased before the publication of the list described in paragraph (1) of subdivision (b) of Section 3273.635.
- (e) A civil action may be brought against a person who does either of the following:
- (1) (A) Sells, offers to sell, or transfers for consideration a three-dimensional printer in California that is not equipped with firearm blocking technology.
 - (B) It shall be an affirmative defense to any action against a retailer, distributor, wholesaler, importer, or other individual transferor of a three-dimensional printer for an alleged violation of this section that the retailer, distributor, wholesaler, importer, or other individual transferor only sold or transferred the three-dimensional printer after verifying that the make and model was listed by the department on the published list described in this section, and not designated as having an incomplete attestation.
 - (2) Knowingly files an attestation in subdivision (a) of Section 3273.635 containing false information. The filing of a civil action under this section shall not preclude potential criminal prosecution for perjury, as defined in Section 118 of the Penal Code.
- (f) (1) A person who has suffered harm in California as a result of a violation of this section may bring an action in a court of competent jurisdiction to establish that a person has violated this section, and may seek compensatory damages as well as injunctive relief sufficient to prevent the person and any other defendant from further violating the law.

(2) The Attorney General, a county counsel, or a city attorney may bring an action in a court of competent jurisdiction to establish that a person has violated this section, and may seek a civil penalty not to exceed twenty-five thousand dollars (\$25,000) for each violation, as well as injunctive relief sufficient to prevent the person and any other defendant from further violating the law.

(3) A prevailing plaintiff shall be entitled to recover reasonable attorney's fees and costs.

(g) The remedies provided by this section are cumulative and shall not be construed as restricting any other rights, causes of action, claims, or defenses available under any other law.

(h) This section shall become operative on December 1, 2029.

3273.637. The department may promulgate regulations and develop forms and publications to implement this title.

~~SEC. 2. Section 29187 is added to the Penal Code, to read:~~

~~29187. (a) It is unlawful to knowingly disable, deactivate, uninstall, or otherwise circumvent any firearm blocking technology installed in a three-dimensional printer with intent to manufacture firearms or to knowingly distribute, sell, or transfer for consideration in California one or more modified versions of a three-dimensional printer identified on the Department of Justice's list of three-dimensional printers eligible for sale in California, as described in Section 3273.635 of the Civil Code, with the intent to facilitate the unlawful manufacture of firearms, as defined in Section 29186.~~

~~(b) A violation of this section is a misdemeanor.~~

~~(c) This section does not preclude prosecution under any other law providing for a greater penalty.~~

~~SEC. 3.~~ **SEC. 2.** The provisions of this act are severable. If any provision of this act or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

~~SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.~~