
THIRD READING

Bill No: AB 2047
Author: Bauer-Kahan (D), et al.
Amended: 8/28/26 in Senate
Vote: 21

SENATE JUDICIARY COMMITTEE: 11-2, 6/23/26

AYES: Umberg, Allen, Ashby, Caballero, Durazo, Laird, Reyes, Stern, Wahab,
Weber Pierson, Wiener

NOES: Niello, Valladares

SENATE PUBLIC SAFETY COMMITTEE: 5-1, 6/30/26

AYES: Arreguín, Caballero, Cortese, Pérez, Wiener

NOES: Seyarto

SENATE APPROPRIATIONS COMMITTEE: 5-2, 8/13/26

AYES: Cervantes, Cabaldon, Grayson, Richardson, Wahab

NOES: Seyarto, Dahle

ASSEMBLY FLOOR: 58-19, 5/26/26 - See last page for vote

SUBJECT: Firearms: 3-dimensional printing blocking technology

SOURCE: Everytown for Gun Safety Action Fund

DIGEST: This bill makes it unlawful to sell or transfer a three-dimensional printer in California that is not equipped with firearm blocking technology that meets minimum performance standards developed by the Department of Justice (DOJ); requires the DOJ, beginning July 1, 2027, to check on a quarterly basis whether ASTM International has published industry standards for equipping three-dimensional printers with firearm blocking technology, and if the DOJ determines that ASTM International has published or adopted such industry standards, requires the DOJ to publish written guidance or regulations within 24 months after making that determination; requires this guidance to describe minimum performance standards for three-dimensional printer firearm blocking technology

before a printer can lawfully be sold or offered for sale in the state; specifies that, if the DOJ determines as of July 1, 2029 that ASTM International has not published industry standards for firearm blocking technology for three-dimensional printers, the DOJ has no further responsibility to ascertain whether ASTM International has published or adopted industry standards; exempts from its provisions printers used exclusively for the manufacturing of properties (props) in the entertainment industry or a person who distributes or causes the distribution of digital firearm manufacturing codes solely for the bona fide purpose of, among other things, developing refining and testing the functionality of a firearm blocking technology; and permits the DOJ to adopt regulations that provide for additional exceptions, as specified.

Senate Floor Amendments of 8/28/26 amend the definitions of “firearm” and “firearm blocking technology”, ass a definition for “machine gun conversion device” clarify that the requirements upon the Department of Justice (DOJ) apply when it determines that ASTM International has published or adopted industry standards for firearm blocking technology for three-dimensional printers that demonstrate that it is technologically feasible to equip three-dimensional printers in order for those printers to be lawfully sold or offered for sale in California; permit, rather than require, the DOJ to provide for a self-attestation or self-certification process by which manufactures must certify that the three-dimensional printers they sell in California incorporate firearm blocking technology that meets the DOJ’s minimum performance standards; makes it unlawful to sell, offer for sale, or transfer for consideration a three-dimensional printer in California that is not equipped with firearm blocking technology that meets the minimum performance standards; clarifies that these provisions do not apply to printer used exclusively for manufacturing props for the entertainment industry and to a person who distributes or causes to be distributed a digital firearm manufacturing code solely for the bona fide purpose of developing or testing the functionality of firearm blocking technology or maintaining an updated library of digital firearm manufacturing code files solely for that bona fide purpose.

ANALYSIS:

Existing law:

- 1) Establishes the Firearm Industry Responsibility Act (FIRA) to prohibit firearm industry members from dealing in abnormally dangerous firearm-related products. Requires a firearm industry member to comply with the firearm industry standard of conduct, and makes it a violation of the firearm industry standard of conduct for a firearm industry member to fail to comply with

specified provisions, including establishing, implementing, and enforcing reasonable controls. (Civil [Civ.] Code, §§ 3273.50 et seq.)

- 2) Specifies that a firearm-related product includes a “firearm manufacturing machine,” and defines, for the purposes of FIRA, “firearm manufacturing machine” to mean a three-dimensional printer, as defined, a computer numerical control (CNC) milling machine, or a similar machine, that is marketed or sold, or is reasonably designed or intended to be used, to manufacture or produce firearms, firearm components, or firearm accessories. (Civ. Code § 32783.50(d).)
- 3) Authorizes a person who has suffered harm because of a firearm industry member’s conduct, the Attorney General, a city attorney, and a county counsel to bring an action in court under FIRA for a violation of the firearm industry standard of conduct. (Civ. Code § 3273.52.)
- 4) Permits a civil action to be brought against a person who knowingly distributes or causes to be distributed, by any means, including the internet, any digital firearm manufacturing code to any other person in this state who is not a federally licensed firearms manufacturer, a member of the Armed Forces, or any law enforcement agency or forensic laboratory, as specified, or who commits specified criminal acts related to firearms. (Civ. Code § 3273.61.)
- 5) Prohibits a person from selling, offering to sell, transferring, advertising, or marketing a CNC milling machine or three-dimensional printer in a manner that knowingly or recklessly causes another person in the state to engage in conduct prohibited by Penal Code section 29185, or in a manner that otherwise knowingly or recklessly aids, abets, promotes, or facilitates conduct prohibited by that section.
 - a) Creates a rebuttable presumption that a person is engaged in this prohibited conduct if they offer to sell, advertise, or market a CNC milling machine or three-dimensional printer in a manner that, under the totality of the circumstances, is targeted at purchasers seeking to manufacture firearms or that otherwise affirmatively promotes the machine or printer’s ability to manufacture firearms, and the person sells or transfers the CNC milling machine or three-dimensional printer without verifying that the purchaser or transferee in this state is a federally licensed firearms manufacturer or not otherwise prohibited, as specified. (Civ. Code § 3273.62.)

- 6) Makes it unlawful to knowingly, willfully, or recklessly cause another person to engage in the unlawful manufacture of firearms, or to knowingly, willfully, or recklessly aid, abet, promote, or facilitate the unlawful manufacture of firearms. (Civ. Code § 3273.625.)
- 7) Defines “firearm” to mean a device, designed to be used as a weapon, from which is expelled through a barrel, a projectile by the force of an explosion or other form of combustion. (Pen. Code § 16520.)

This bill:

- 1) Establishes the “California Firearm Printing Prevention Act,” and defines for the Act the following:
 - a) “ASTM International” to mean ASTM International, formerly American Society for Testing Materials;
 - b) “Department” to mean the Department of Justice;
 - c) “firearm” to mean the definition of firearm in subdivisions (a) and (b) of Penal Code section 16520;
 - d) “firearm blocking technology” to mean 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 a machine gun conversion device;
 - e) “machine gun conversion device” to mean a part or combination of parts designed for use in converting a semiautomatic weapon into a machine gun, to include a “pistol converter” as defined in Penal Code section 17015; and
 - f) “Three-dimensional printer” to have the same meaning as defined in Civil Code section 3273.60.
- 2) Requires, no later than July 1, 2027, that the DOJ check on a quarterly basis whether ASTM International has published industry standards for equipping three-dimensional printers with firearm blocking technology.
- 3) Requires the DOJ, if the DOJ determines that ASTM International has published or adopted industry standards for firearm blocking technology for

three-dimensional printers and that those standards demonstrate that it is technologically feasible to equip three-dimensional printers with firearm blocking technology, to publish written guidance or regulations within 24 months, and requires this written guidance or regulations to describe minimum performance standards for firearm blocking technology that shall be equipped in three-dimensional printers in order for those printers to be lawfully sold or offered for sale in California. Requires, in accordance with the California Administrative Procedure Act, that this written guidance or regulations be developed in consultation with stakeholders.

- 4) Requires the DOJ's written guidance or regulations pursuant to 12), above, to be informed by the ASTM International industry standards, and permits the written guidance or regulations to incorporate some or all of the ASTM International industry standards. Permits the DOJ's written guidance or regulations to provide additional or alternative definitions, standards, processes, or requirements other than what is included in the industry standards published by ASTM International to promote the purposes of these provisions, and permits them to consider and incorporate industry standards for firearm blocking technology for three-dimensional printers published or adopted by a state governmental entity outside of California, as applicable.
- 5) Permits the DOJ's written guidance or regulations to provide for a self-attestation or self-certification process by which manufacturers of three-dimensional printers must certify to the DOJ that each three-dimensional printer make and model that the manufacturer sells, offers for sale, or intends to sell in California incorporates firearm blocking technology that meets the minimum performance standards published by the DOJ.
- 6) Requires, commencing one year after the DOJ has published its written guidance or regulations for firearm blocking technology, that a manufacturer of any three-dimensional printer ensure that the three-dimensional printer is equipped with firearm blocking technology that meets the minimum performance standards in the DOJ's guidance or regulations before the manufacturer sells, offers to sell, or transfers for consideration a three-dimensional printer to any person in California.
- 7) Makes unlawful, commencing one year after the DOJ has published its written guidance or regulations for firearm blocking technology, to sell, offer for sale, or transfer for consideration a three-dimensional printer in the state of

California that is not equipped with firearm blocking technology that meets the minimum performance standards set forth in the DOJ's guidance or regulations.

8) Exempts from these provisions:

a) Printers used exclusively for the manufacturing of properties (props) in the entertainment industry; or

b) A person who distributes, or causes the distribution of, digital firearm manufacturing code, as defined in Section 3273.60, solely for the bona fide purpose of developing, refining, and testing the functionality of firearm blocking technology or maintaining an updated library of digital firearm manufacturing code files solely for that bona fide purpose.

9) Specifies that, if the DOJ determines on July 1, 2029 that ASTM International has not published industry standards for firearm blocking technology for three-dimensional printers, the DOJ shall not be required to make any further determinations under these provisions.

10) Permits the DOJ to promulgate regulations and develop forms and publications to implement the requirements of this bill, and permits the DOJ to update the minimum performance standards, including to reflect any future updates ASTM International makes to the industry standards described in Section 3273.633. Permits the DOJ to adopt regulations that provide for exceptions to these provisions, if those exceptions are consistent with the purpose of these provisions to prevent the use of three-dimensional printers to illegally produce firearms and machine gun conversion devices.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

According to the Senate Appropriations Committee:

Costs to DOJ to establish and operate this program overall are unquantifiable and will require the hiring of personnel and securing technological expertise outside DOJ's existing scope and capabilities (General Fund).

SUPPORT: (Verified 8/28/26)

Everytown for Gun Safety Action Fund (source)

American Academy of Pediatrics

Asian American Christian Collaborative

Beverly Hills High School Students Demand Action

Brady California

Brady United Against Gun Violence
California Chapter of the American College of Emergency Physicians
California Medical Association (CMA)
California Police Chiefs Association
CFT – a Union of Educators & Classified Professionals, AFT, AFL-CIO
Chapman University Students Demand Action
City of Alameda
City of Los Angeles
City of Santa Rosa
Former City Attorney Mike Feuer, City of Los Angeles
Giffords
GLMA: Health Professionals Advancing LGBTQ Equality
Indivisible Mid-peninsula
Jewish California
Moms Demand Action for Gun Sense in America
Newtown Action Alliance
Prosecutors Alliance Action
Riverside County Democratic Party
San Diegans for Gun Violence Prevention
San Diego City Attorney
San Diego County School Board Association
Students Demand Action At UC Davis
Students Demand Action for Gun Sense in America
UCLA Students Demand Action
Youth Alive!

OPPOSITION: (Verified 8/28/26)

3D Printing Nerd
ACLU California Action
California Rifle and Pistol Association, Inc.
Citizens Privacy Coalition of Santa Clara County
Community Manufacturing Initiative
Democratic Socialists of America - San Diego
Electronic Frontier Foundation
Esaero, Inc.
Fight for the Future
Free Software Foundation
Fulu Foundation
Gray Area
Gun Owners of California, Inc.

Ifixit
Inspired Flight Technologies
Invisible Pack Inc.
Make Good Inc.
Mantis Composites Inc.
Matterhackers
National Rifle Association - Institute for Legislative Action
Noisebridge Hackerspace
Oakland Privacy
Privacy Rights Clearinghouse
Prusa Usa, Inc.
Root Access Hackerspace
Secure Resilient Future Foundation
See3d, Inc.
Software Freedom Conservancy
Streamline Aerospace
Sudo Room Hackerspace
Thangs Inc.
Trust Automation
Zone 5 Technologies
West3d LLC

ARGUMENTS IN SUPPORT:

According to Everytown for Gun Safety, the sponsor of this bill:

The 3D printed gun crisis is not a faraway or abstract problem. It's happening here in California, right now. And at the rate it's increasing, this crisis will get much worse if we don't use every tool we have. In just the six month span between September 2025 - February 2026, numerous instances of 3-D printed firearm manufacturing were uncovered by law enforcement agencies all around California. These incidents often include teenagers too young to legally purchase the types of firearms they are printing at home.

- In September 2025, Yuba County Sheriffs uncovered a "fully operational 3D-printing workshop" run by three men aged 19-38 and seized 8 handguns, several 3-D printed handgun frames, four assault weapons, one rifle, and assorted firearms parts.
- In October 2025, the Santa Clara County DA's Gun Violence Task Force arrested a man who was on probation for domestic violence running a ghost gun manufacturing operation out of his apartment. The press release paints an alarming picture: "When task force members entered the

prohibited person's home, they found the 3D gun printer still working inside a closet, two loaded weapons, three nearly finished weapons, and 35 machine gun conversion devices. All of the weapons were considered "ghost guns" – made and sold with no serial number to avoid tracing and detection."

- In November 2025, Santa Rosa Police detectives found an 18-year-old running a ghost gun manufacturing operation in his apartment, less than two years after arresting a 14-year-old illegally manufacturing a ghost gun with a 3-D printer.
- In February 2026, 3D-printed firearms were recovered in at least four more newsworthy incidents, spread around the state:
 - Law enforcement in Santa Rosa seized over 165 guns and three 3D printers from a 22-year-old ghost guns manufacturer.¹⁸
 - Victor Valley sheriffs found a 3D-printed assault rifle, over 130 Polymer80 jigs, 3D printer materials and a 3D printing guide for different firearms in a Lucerne Valley ghost guns arrest involving a man who was previously indicted and pled guilty for manufacturing guns for a gun trafficker.¹⁹
 - A San Jose teenager was arrested with 27 finished or near-finished 3D-printed firearms, including DIY machine guns, and two 3D printers near his sneaker collection in his bedroom.
 - A Daly City narcotics and identity theft investigation led to uncovering a San Francisco residence with several 3D-printed firearms, rifle components, and a 3D printer. [...]

3D-printing firearms is the next wave of the ghost guns crisis, a problem California has been battling for years. The threat is evolving and our policy solutions need to evolve too. AB 2047 gives us a chance to get a step ahead of the criminals running underground ghost gun selling operations and the teenagers tempted to use a home 3-D printer in their bedroom or basement to print a deadly weapon. [...]

While California's recent laws have focused on prohibition and deterrence, AB 2047 provides an opportunity for prevention using new technology to stop 3D gun printing at its source. We can't fully address this emerging threat to our foundational gun laws and public safety without an intervention at the manufacturing stage. And there's good news on this front: the technology already exists to equip printers to identify and block these dangerous firearm print jobs. AB 2047 will simply ensure that printer

manufacturers actually deploy these technological solutions and stop the spread of DIY firearms before it accelerates any further.

Specifically, AB 2047 creates a new requirement that 3D printers sold in California must be equipped with firearm printing blocking technology by March 2029. The law will primarily be enforced through civil mechanisms similar to the existing Firearm Industry Responsibility Act (Civil Code section 3273.50 et seq.) and existing laws allowing for civil actions to enjoin Unlawful Firearm Manufacturing (Civil Code section 3273.60). The bill sets out a staged implementation process to evaluate and certify the underlying components of firearm printing blocking technology before imposing any kind of requirement on 3D printer manufacturers.

ARGUMENTS IN OPPOSITION:

According to the California Rifle & Pistol Association, which opposes AB 2047:

While framed as preventing unlawful manufacturing, this bill represents a costly, impractical, and constitutionally problematic burden on innovation, small businesses, and lawful hobbyists.

Key concerns:

- **Technological Impracticality and Ineffectiveness:** Detection algorithms and software controls can be evaded by technically skilled individuals through modifications, open-source alternatives, or altered files. Criminals will simply ignore the mandates or obtain printers out-of-state, while law-abiding makers and innovators face unnecessary barriers.
- **Burdensome Regulation and Costs:** Mandatory certification, attestations, testing, and quarterly DOJ lists will drive up prices for 3D printers, harm small businesses and California's emerging tech sector, and stifle hobbyist innovation in areas far beyond firearms (prototyping, education, manufacturing).
- **Constitutional Issues:** The bill imposes prior restraints and technological mandates on tools that have substantial lawful uses, raising serious Second Amendment concerns under Bruen and due process issues. It effectively creates a de facto ban on non-compliant printers for most consumers.
- **Bureaucratic Overreach:** Placing the DOJ in charge of certifying complex software algorithms and policing printer sales adds layers of red tape

without meaningfully addressing criminal activity, which is already illegal under existing manufacturing prohibitions.

ASSEMBLY FLOOR: 58-19, 5/26/26

AYES: Addis, Aguiar-Curry, Ahrens, Alvarez, Arambula, Ávila Farías, Bains, Bauer-Kahan, Bennett, Berman, Boerner, Bonta, Bryan, Calderon, Caloza, Carrillo, Connolly, Elhawary, Fong, Gabriel, Garcia, Gipson, Mark González, Haney, Harabedian, Hart, Irwin, Jackson, Kalra, Krell, Lee, Lowenthal, McKinnor, Nguyen, Ortega, Pacheco, Papan, Patel, Pellerin, Petrie-Norris, Quirk-Silva, Ramos, Ransom, Michelle Rodriguez, Rogers, Blanca Rubio, Schiavo, Schultz, Sharp-Collins, Solache, Soria, Stefani, Valencia, Ward, Wicks, Wilson, Zbur, Rivas

NOES: Alanis, Castillo, Chen, Davies, DeMaio, Dixon, Ellis, Flora, Gallagher, Jeff Gonzalez, Hadwick, Hoover, Johnson, Macedo, Patterson, Sanchez, Ta, Tangipa, Wallis

NO VOTE RECORDED: Lackey, Muratsuchi, Celeste Rodriguez

Prepared by: Ian Dougherty / JUD. / (916) 651-4113
8/30/26 14:16:30

**** END ****