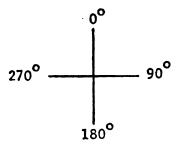
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microphone. The 0° orientation corresponds to the muzzle of the pistol pointing at the microphone. The 90° , 180° , and 270° orientations are measured in a clockwise direction when looking down on the pistol with its barrel horizontal, as illustrated by the following figure:



- (2) The hammer and trigger orientations are obtained by rotating the pistol about the axis of the barrel, when the pistol is in the 90° or 270° orientation, so that the hammer and the trigger are each respectively closest to and in the same horizontal plane with the microphone.
- (3) Fire 10 shots at each of the six orientations, obtaining readings on the oscilloscope of the maximum peak voltage for each shot. Average the results of the 10 firings for each of the six orientations.
- (4) Using the orientation that yields the highest average value, convert the value to sound pressure levels in decibels relative to 20 micronewtons per square meter using the response to the calibrated measuring microphone.

§1500.48 Technical requirements for determining a sharp point in toys and other articles intended for use by children under 8 years of age.

(a) Objective. The sharp point test prescribed by paragraph (d) of this section will be used by the Commission in making a preliminary determination that points on toys and other articles intended for use by children under 8 years of age, and such points exposed in normal use or as a result of reasonably foreseeable damage or abuse of such toys and articles, present a potential risk of injury by puncture or laceration under section 2(s) of the Federal Hazardous Substances Act (15

- U.S.C. 1261(s)). The Commission will further evaluate points that are identified as presenting a potential risk of puncture or laceration injury to determine the need for individual product regulatory action.
- (b) Scope—(1) General. The sharp point test of paragraph (d) of this section is applicable to toys or other articles that are introduced into interstate commerce on or after December 22, 1978. The sharp point test shall be applied to any accessible portion of the test sample before and after subjecting the test sample to the use and abuse tests of §§1500.51, 1500.52, and 1500.53 (excluding the bite test-paragraph (c) of each section).
- (2) Exemptions. (i) Toys and other children's articles that are the subject of any of the following regulations are exempt from this §1500.48: The regulations for bicycles, non-full-size baby cribs, and full-size baby cribs (parts 1508, 1509, and 1512, of this chapter).
- (ii) Toys that by reason of their functional purpose necessarily present the hazard of sharp points and that do not have any nonfunctional sharp points are exempt from this §1500.48: Provided, Each toy is identified by a conspicuous, legible, and visible label at the time of any sale, as having functional sharp points. An example of such toys is a toy sewing machine with a needle.
- (iii) Articles, besides toys, intended for use by children that by reason of their functional purpose necessarily present the hazard of sharp points and that do not have any nonfunctional sharp points are exempt from this §1500.48. An example of such articles is a ball-point pen.
- (c) Accessibility—(1) General. Any point that is accessible either before or after these tests of §§1500.51, 1500.52, and 1500.53 (excluding the bite test—paragraph (c) of each section) are performed shall be subject to the sharp point test of paragraph (d) of this section.
- (2) Accessible points. (i) An accessible point for a toy or article intended for children 3 years of age or less is one that can be contacted by any portion forward of the collar of the accessibility probe designated as probe A in figure 2 of this section.

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- (ii) An accessible point for a toy or article intended for children over 3 years up to 8 years of age is one that can be contacted by any portion forward of the collar of the accessibility probe designated as probe B in figure 2 of this section.
- (iii) An accessible point for a toy or article intended for children of ages spanning both age groups is one that can be contacted by any portion forward of the collar of either probe A or B, as shown in figure 2 of this section.
- (3) Insertion depth for accessibility. (i) For any hole, recess, or opening having a minor dimension (The minor dimension of an opening is the diameter of the largest sphere that will pass through the opening.) smaller than the collar diameter of the appropriate probe, the total insertion depth for accessibility shall be up to the collar on the appropriate probe. Each probe joint may be rotated up to 90 degrees to simulate knuckle movement.
- (ii) For any hole, recess, or opening having a minor dimension larger than the collar diameter of probe A but less than 7.36 inches (186.9 millimeters), when probe A is used, or a minor dimension larger than the collar diameter of probe B but less than 9.00 inches (228.6 millimeters), when probe B is used, the total insertion depth for accessibility shall be determined by inserting the appropriate probe with the extension shown in figure 2 in any direction up to two and one-quarter times the minor dimension of the probe, recess, or opening, measured from any point in the plane of the opening. Each probe joint may be rotated up to 90 degrees to simulate knuckle movement.
- (iii) For any hole, recess, or opening having a minor dimension of 7.36 inches (186.9 millimeters) or larger when probe A is used, or a minor di-mension of 9.00 inches (228.6 millimeters), or larger when probe B is used, the total insertion depth for accessibility is unrestricted unless other holes, recesses, or openings within the original hole, recess, or opening are encountered with dimensions specified in paragraph (c)(3) (i) or (ii) of this section. In such instances, the appropriate paragraphs (c)(3) (i) or (ii) of this section shall be followed. If both probes are to be used,

- a minor dimen-sion that is 7.36 inches (186.9 millimeters or larger shall determine unrestricted access.
- (4) Inaccessible points. Points shall be considered inaccessible without testing with a probe if they lie adjacent to a surface of the test sample and any gap between the point and the adjacent surface does not exceed 0.020 inch (0.50 millimeter) either before or after the tests of §§1500.51, 1500.52, and 1500.53 (excluding the bite test—paragraph (c) of each section) are performed.
- (d) Sharp point test method—(1) Principle of operation. The principle of operation of the sharp point tester shown in figure 1 of this section is as follows (Detailed engineering drawings for a suggested sharp point tester are available from the Commission's Office of the Secretary.): A rectangular opening measuring 0.040 inch (1.02 millimeters) wide by 0.045 inch (1.15 millimeters) long in the end of the slotted cap establishes two reference dimensions. Depth of penetration of the point being tested determines sharpness. If the point being tested can contact a sensing head that is recessed a distance of 0.015 inch (0.38 millimeter) below the end cap and can move the sensing head a further 0.005 inch (0.12 millimeter) against a 0.5-pound (2.2-newton) force of a return spring, the point shall be identified as sharp. A sharp point tester of the general configuration shown in figure 1 of this section or one yielding equivalent results shall identify a sharp point. In conducting tests to determine the presence of sharp points, the Commission will use the sharp point tester shown in figure 1 of this section and the accessibility probes designated as A or B in figure 2 of this section.
- (2) *Procedure*. (i) The sample to be tested shall be held in such a manner that it does not move during the test.
- (ii) Part of the test sample may need to be removed to allow the sharp point testing device to test a point that is accessible by the criteria of paragraph (c) of this section. Such dismantling of the test sample could affect the rigidity of the point in question. The sharp point test shall be performed with the point supported so that its stiffness approximates but is not greater than the point stiffness in the assembled sample.

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(iii) Using the general configuration shown in figure 1 of this section, the adjustment and operation of the sharp point tester is as follows: Hold the sharp point tester and loosen the lock ring by rotating it so that it moves towards the indicator lamp assembly a sufficient distance to expose the calibration reference marks on the barrel. Rotate the gaging can clockwise until the indicator lamp lights. Rotate the cap counterclockwise until an equivalent of five divisions (the distance between the short lines on the cap) have passed the calibration reference mark. Lock the gaging cap in this position by rotating the lock ring until it fits firmly against the cap. Insert the point into the gaging slot in all directions in which it was accessible by the criteria of paragraph (c) of this section, and apply a force of 1.00 pound (4.45 newtons). A glowing light identifies the point as sharp.

- (iv) The test instruments used by the Commission in its tests for compliance with this regulation shall have gaging slot opening dimensions no greater than 0.040 inch by 0.045 inch and shall have the sensing head recessed a depth of no less than 0.015 inch. The force applied by the Commission when inserting a point into the gaging slot shall be no more than 1.00 pound.
- (e) For the purpose of conformance with the technical requirements prescribed by this §1500.48, the English figures shall be used. The metric approximations are provided in parentheses for convenience and information only.

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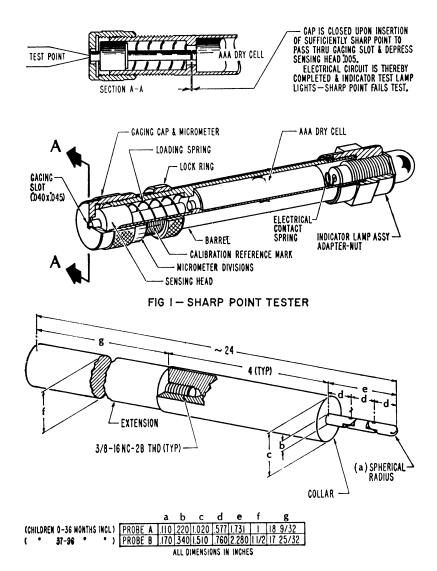


FIG 2-ACCESSIBILITY PROBES

§ 1500.49 Technical requirements for determining a sharp metal or glass edge in toys and other articles intended for use by children under 8 years of age.

(a) Objective. The sharp edge test method prescribed by paragraph (d) of this section will be used by the Com-

mission in making a preliminary determination that metal or glass edges on toys and other articles intended for use by children under 8 years of age, and such edges exposed in normal use or as a result of reasonably forseeable damage or abuse of such toys and articles, present a potential risk of injury by