

ENGINEERING TEST MANUAL

REQUIREMENTS FOR FULL-SIZE AND
NON-FULL SIZE BABY CRIBS &
REQUIREMENTS FOR CUTOUTS

16 CFR PARTS 1508 and 1509

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ENGINEERING LABORATORY DIVISION
DIRECTORATE FOR ENGINEERING SCIENCES
CONSUMER PRODUCT SAFETY COMMISSION

FULL-SIZE AND NON-FULL-SIZE BABY CRIBS
 TESTING MANUAL APPROVAL RECORD

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TABLE OF CONTENTS

	Page
FULL-SIZE AND NON FULL-SIZE BABY CRIBS TESTING MANUAL APPROVAL RECORD.....	1
I. INTRODUCTION.....	1
A. BACKGROUND.....	1
B. SCOPE.....	1
C. APPLICABLE DOCUMENTS.....	1
II. GENERAL PROCEDURES.....	1
A. SAFETY PRECAUTIONS.....	1
B. EQUIPMENT CALIBRATION AND ACCURACY.....	2
C. EQUIPMENT.....	2
1. General Equipment.....	2
2. Specified Equipment.....	2
D. SAMPLE IDENTIFICATION.....	3
E. TEST SEQUENCE.....	3
F. DATA ACQUISITION AND REPORT FORMAT.....	3
G. LABORATORY EQUIPMENT.....	3
H. PERSONNEL AND TEST REPORT CERTIFICATION... ..	3
III. TEST CRITERIA AND PROCEDURES.....	3
A. CRIB ASSEMBLY.....	3
B. INTERIOR DIMENSIONS FOR FULL-SIZE AND NON-FULL SIZE CRIBS.....	4
C. CRIB SIDE AND END PANEL HEIGHT.....	5
D. SPACING OF CRIB COMPONENTS.....	5
E. HARDWARE.....	7
F. CONSTRUCTION AND FINISHING.....	7

III.	TEST CRITERIA AND PROCEDURES CONT'D.....	
	G. MATTRESSES FOR NON-FULL SIZE CRIBS ONLY...	8
	H. ASSEMBLY INSTRUCTIONS.....	9
	I. IDENTIFYING MARKS AND WARNINGS.....	10
	J. REQUIREMENTS FOR CRIB SIDE OR END PANEL CUTOUTS.....	13
IV.	FIGURES.....	22 - 26A
V.	REPORTING REQUIREMENTS FOR FULL-SIZE AND NON-FULL-SIZE BABY CRIB TESTS.....	27
VI.	APPENDIX.....	28
	A. CPSC TEST REPORT FOR FULL-SIZE BABY CRIBS	
	B. CPSC TEST REPORT FOR NON-FULL-SIZE BABY CRIBS	
	C. 16 CFR PART 1508 REQUIREMENTS FOR FULL-SIZE BABY CRIBS	
	D. 16 CFR PART 1509 REQUIREMENTS FOR NON-FULL-SIZE BABY CRIBS	
	E. 16 CFR PARTS 1508 AND 1509 AMENDMENTS TO REQUIREMENTS FOR FULL-SIZE AND NON-FULL-SIZE BABY CRIBS PARAGRAPH 1508.11/1509.13 REQUIREMENTS FOR CUTOUTS	

INTRODUCTION

A. Background

The Consumer Product Safety Commission (CPSC) promulgated requirements for Full-Size and Non-Full-Size Baby Cribs with effective dates of February 1, 1974 and August 10, 1976, respectively. Also, CPSC promulgated requirements for cutouts with an effective date of June 1983.

The regulations provide performance criteria and test procedures but do not provide specific details of how each test is to be conducted and reported.

In order to provide a uniform system of testing and reporting within CPSC this Engineering Test Manual has been developed. Additional guidelines with regard to potential problems which might be encountered in performing the compliance tests, have also been incorporated into this document.

B. Scope

This Engineering Test Manual sets forth the detailed test procedures, test equipment, test sequence, report format, and test personnel certification to be utilized within the Commission in the compliance testing of Full-Size and Non-Full-Size Baby Cribs.

C. Applicable Documents

1. 16 CFR Part 1508 Full-Size Baby Crib, Dated November 15, 1973.
2. 16 CFR Part 1509 Non-Full-Size Baby Crib, dated February 6, 1976.
3. 16 CFR Part 1508 and 1509 Admendments for Full-Size and Non-Full-Size Crib Paragraph 1508.11/1509.3 Requirements for cutouts.

II. GENERAL PROCEDURES

A. Safety Precautions

The Test Analyst shall be responsible for the safety, competence and training of all testing personnel. All tests shall be conducted in such a manner as to provide the maximum protection to these individuals conducting the tests.

B. Equipment Calibration and Accuracy

All equipment used in the performance of the tests shall be maintained in conformance with the Headquarters Laboratory Calibration and Maintenance program. For all cases the equipment utilized will provide the accuracy and precision necessary to withstand the scrutiny of possible legal actions.

C. Equipment

The following list prescribes the equipment to be used in the performance of the test as well as any equipment or apparatus specified in the standard(s).

1. General Equipment

- a. Spring force gauge, 25 lb. full scale, \pm .25 lb., or equivalent.
- b. Measuring steel tape.
- c. Level.
- d. Vernier or dial caliper.
- e. 20 lb. weight.

2. Specified Equipment

- a. Block A: A rectangular block, 2 3/8" Wide by 4" High by 4" Long (see Figure 1).
- b. Block B: A rectangular block, 2 1/2" Wide by 3 1/4" High by 3 1/4" Long (see Figure 2).
- c. Loading wedge: Refer to Figure 3 of this manual.
- d. Head form probe: Refer to Figures 5 & 6.

D. Sample Identification

A "sample" includes all items received under one sample number and may consist of several subsamples. If the sample has not been marked by the field, each subsample shall be permanently marked so that the identification will remain throughout the tests. Such markings shall not affect the results of the tests.

E. Test Sequence

The tests shall be performed in the order they appear in this manual.

F. Data Acquisition and Report Format

The CPSC Test Report for Full-Size and Non-Full-Size Baby Cribs (see Appendix) shall be used for reporting of all results. A copy of all field screening test reports and any data acquisition forms shall be sent to the Headquarters Engineering Laboratory.

G. Laboratory Environment

All tests shall be conducted in ambient laboratory conditions (60° to 80°F).

H. Personnel and Test Report Certification

All reports shall be prepared on the form specified herein and shall be certified as to the accuracy and conformance to all the requirements of this Test Manual by the Test Analyst. The Test Analyst shall be a suitably trained expert and certified by the Director of the CPSC Headquarters Engineering Laboratory. Prior to tests, the Test Analyst shall insure that all test operators are familiar with the procedures of this manual.

III. TEST CRITERIA AND PROCEDURES

A. Crib Assembly

Prior to test, the cribs shall be properly assembled as per assembly instructions accompanying the crib. If the instructions are not supplied by manufacturer, the crib shall be assembled appropriately by the test analyst.

B. Interior Dimensions for Full-Size and Non-Full
Sized Baby Cribs

Prior to test determine whether the crib is Full-Size or Non-Full-Size by definition:

1. Full-Size Crib has the following interior dimensions:

Length: 49 3/4" to 55"
Width: 25 3/8" to 30 5/8"

2. Full-Size Cribs - Requirements

Note that cribs that fall within full-size dimensions must have interior dimensions between 27 3/8" to 28 5/8" in width and between 51 3/4" to 53" in length in order to comply with two requirements for full-sized cribs. The reason for this is so that a standard size crib mattress will fit the interior dimensions of the crib so that no hazardous gaps are present between the mattress and the sides or ends of the crib. There are no types of full-size cribs that are excluded from these requirements.

3. Non-Full-Size Crib has the following dimensions:

Length: Larger than 55" or smaller than 49 3/4"
or
Width: Larger than 30 5/8" or smaller than 25 3/8"
or both

4. Non-Full Size Cribs:

Below are the exclusions for the non-full size cribs;

- a. Mesh/net/screen cribs and other nonrigidly constructed baby cribs.
- b. Cradles (both rocker and pendulum types).
- c. Car beds.
- d. Baby baskets and bassinets (also known as junior cribs).

FULL & NON-FULL SIZE CRIBS

In order to determine the interior width measure between the innermost surfaces of the crib side rails. In order to determine the interior length measure between the innermost surfaces of the crib end panels, slats, rods, or spindles.

Both measurements are made at the level of the mattress support spring in each of its adjustable positions and no more than two inches horizontally from the crib corner posts or from the first spindle to the corresponding point of the first spindle at the other end of the crib. If a crib has contoured or decorative spindles, in either or both sides or ends, the measurement shall be determined from the largest diameter of the first turned spindle within a range of four inches above the mattress support spring in each of its adjustable positions, to a corresponding point in the first spindle or innermost surface of the opposite side of the crib.

C. Crib Side Rail and End Panel Height Dimensions

1. Measure the crib side rail and end panel heights from the top of the side rail and end panel in their lowest position to the top of the mattress support in its highest position. Record these measurements in the Test Report Form.

2. Measure the crib side rail and end panel heights from the top of the side rail and end panel in its highest position to the top of the mattress support in its lowest position. Record these measurements in the Test Report Form.

D. Spacing of Crib Components

1a. Measure the spacing between adjacent uniformly spaced components such as slats, spindles, and/or corner posts with a ruler. The distance shall not exceed $2 \frac{3}{8}$ inches.

1b. For non-uniformly spaced components such as contoured or irregular slats or spindles use a ($2 \frac{3}{8}$ " X 4" X 4") "A" block for this test. The minimum dimension of the block shall not pass through the space between the components.

2a. Place the crib on its side in a horizontal position supported at its ends as depicted in Figure 4. Make sure that the crib is level. Place the loading wedge depicted in Figure 3 between two crib components midway between the top and bottom horizontal rails as shown in Figure 4. Gradually apply a 20 pound weight to the wedge. Measure the spacing between adjacent uniformly spaced components such as slats, spindles, and/or corner posts at a point immediately above and below the loading wedge. The distance between any adjacent components should not exceed $2 \frac{1}{2}$ inches.

2b. For non-uniformly spaced components* such as contoured or irregular slats or spindles use a (2 1/2" X 3 1/4" X 3 1/4") "B" block for this test. The minimum dimension of the block shall not pass through the space between the components on either side of the loading wedge.

Return the crib to its normal in-use position.

3. The crib component spacing requirement is also applied to spindles, slats, and other fully bounded openings near the top of the crib end panels (refer to Figure A below).

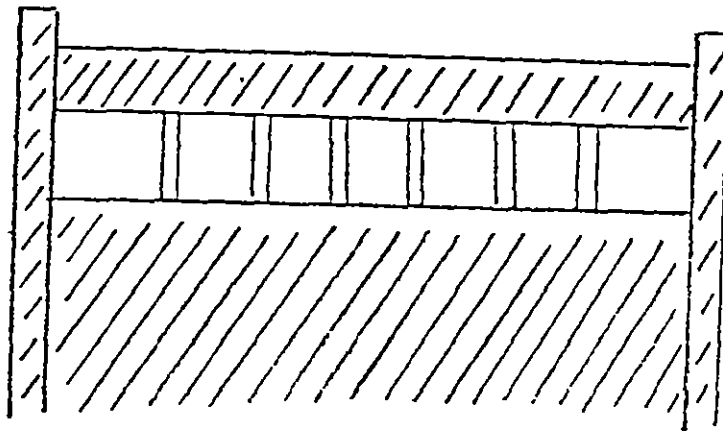


FIGURE A CRIB END PANEL WITH FULLY BOUNDED OPENINGS

Fully bounded openings near the top of the end panel do not present the same hazard pattern as do slats that are at mattress level. At mattress level the hazard presented by slats that are too widely spaced is that of an infant's body sliding between the slats. A fully bounded opening 20 inches above the mattress support would not present such a hazard, but if it were large enough to admit a child's head, it could present a head entrapment hazard.

Therefore, the Commission decided that the component spacing requirement of 2 3/8" would apply to fully bounded spaces above mattress level. This issue is discussed in the preamble of the final requirements for full-size baby cribs.

1. The fully bounded openings we have seen have contoured spindles. Spacing of such openings should be tested with the block which measures 2 3/8" X 4" X 4". Apply the end of the block which measures 2 3/8" X 4" to the openings with the 2 3/8" both horizontal and then vertical. The block should not fit through openings in either orientation.

*Non-uniformly spaced components refers to irregularly shaped crib slats whether parallel to each other or not.

2. If you encounter any cribs with fully bounded openings with straight slats or spindles, measure the distances between components with a ruler. No distances should exceed 2 3/8". Also, conduct the tests as described in Section 2a and 2b on the crib endboards with fully bounded openings.

E. Hardware

1. Inspect crib hardware for mechanical hazards* that could pinch, bruise, lacerate, crush, break, amputate, or that could otherwise, injure portions of the human body when the crib is subjected to reasonable foreseeable damage or abuse. Photograph any observed potential hazards.

2. Ascertain that the release mechanism of sides and/or end panels locking or latching devices is not activated when a force of less than 10 pounds is applied or that the mechanism requires two distinct actions for release. Apply force along the line of action of the latch mechanism, using the force gauge. If a force of less than 10 pounds releases the latching or locking device, record the force in the Test Report Form.

3. Check that no wood screw is used in the assembly of any stationary sides, drop rails, folding rails or stabilizing bars to crib ends or components that must be removed by the consumer in the normal disassembly of a crib.

F. Construction and Finishing

1. Inspect all wood surfaces for splinters and take a photograph. Record the results in the Test Report Form.

2. Inspect all wood parts for splits, cracks, or other defects which might lead to structural failure and photograph. Record the results in the Test Report Form.

3. In the case of Full-Size Baby Cribs ascertain that end panels and sides or any attachments have no horizontal bar, ledge, projection, or other surface accessible to a child inside the crib capable of being used as a toehold (>3/8") located less than 20 inches above the mattress support in its lowest position, when the side rail is in its highest position.

Also, toeholds > 3/8" in depth on fully bounded openings as depicted in Figure A on page 6 on crib endboards should be at least 20" above the mattress support in its lowest position in order to preclude toeholds accessible to the child.

* Refer to page 7A for test procedures.

E.1. Hardware (Continued)

a. Small Parts Tests C.F.R. Part 1501-"Method For Identifying Toys And Other Articles Intended For Use By Children Under 3 Years Of Age Which Present Choking, Aspiration, Or Ingestion Hazards Because Of Small Parts," shall be used to determine any small part hazards. The results shall be noted in the comments section of the Test Report.

b. Use and Abuse Tests The Test Analyst and the Test supervisor shall evaluate each crib and determine the appropriate Use and Abuse Tests. The results of such tests shall be noted in the comment section of the Test Report.

c. Sharp Points and Sharp Edges Eventhough CFR 1500.48(b)(2) (sharp points) and CFR 1500.49(b)(2) Exempts these tests for Non-Full-Size and Full-Size Cribs, these test methods may be used at the discretion of the Test Analyst and the Test Supervisor to measure the extent of possible laceration or puncture hazards. The results of these tests shall be noted in the Test Report.

An exception to this requirement is the lower horizontal bar of the crib rail which may have a vertical dimension that extends no higher than 3 inches above the mattress support when in its lowest position.

In no case will any gap vertical between the top surface of the mattress support and the bottom of the lower horizontal rail of both the sides and the end panels be permitted. For purposes of this paragraph, any ledge or projection with a depth dimension greater than 3/8 inch shall constitute a toehold. Indicate compliance or indicate the violative dimensions in the Test Report Form.

4. In the case of a Non-Full-Size Baby Crib, measure and ascertain that the end panels and sides have no horizontal bar, ledge, projection or other surface accessible to the child inside the crib that could be used as a toehold (any ledge or projection with a depth or dimension greater than 3/8", located less than 16 inches above the mattress support when in the lowest adjustable position and when the crib side is in its highest adjustable position). Indicate compliance or indicate the violative dimensions of crib panel or side rail height above the mattress support in the Test Report Form and photograph the location of the violation. Also, toeholds > 3/8" on fully bounded openings as depicted in Figure A on page 6 on crib endboards should be at least 16" above the mattress support in its lowest adjustable position in order to preclude toeholds accessible to the child.

G. Mattresses for Non-Full-Size Cribs Only

1. Place the crib side in its highest adjustable position and the mattress support in its lowest adjustable position to make this measurement. Measure and make sure that the mattress supplied with a nonfull-size crib has, in a noncompressed state, a thickness that will provide a minimum effective crib side height dimension of at least 20 inches, as measured from the upper surface of the mattress to the upper surface of the crib side and/or end panel.

After determining by measurement the minimum effective side height dimension, record this measurement in the Test Report Form.

Measure and make sure that the mattress supplied with a nonfull-size crib has, in a noncompressed state, a thickness that will provide a minimum effective crib side height dimension of at least 3 inches as measured from the upper surface of the mattress to the upper surface of the crib side and/or end panel. Place the crib side in its lowest adjustable position and the mattress support in its highest adjustable position to make the measurement.

After determining by measurement the minimum side height dimension, record this measurement in the Test Report Form.

2. Measure and make sure that the dimensions of the mattress supplied with a non-full-size baby crib when placed in the center of the crib, in a non-compressed state at any of the adjustable positions of the mattress support, does not leave a gap of more than 1/2 inch at any point between the perimeter of the mattress and the inside perimeter of the crib. When the mattress is placed against the inside perimeter of the crib the resulting gap must not exceed one inch.

After determining by measurement the maximum gap dimensions, record these measurements in the Test Report Form.

H. Assembly Instructions Criteria

If the crib is shipped other than completely assembled, inspect that the following instructions are given in the instruction manual:

1. An assembly drawing.
2. A list and description of all parts and tools required for assembly.
3. A full-size diagram of the required bolts and other fasteners.
4. Be so written that an unskilled person can correctly assemble the crib without making errors that would result in improper and unsafe assembly.
5. Include cautionary statement concerning the secure tightening and maintaining of bolts and other fasteners.
6. Contain a cautionary statement that when a child's height reaches 35 inches, the child should be placed in a youth bed.
7. Contain the warning relative to mattress size for full-size cribs described in section 1.3.
8. Contain a warning relative to mattress size for the non-full-size baby crib that specifies the dimensions of any mattress to be used with the crib as determined under Section 1.4.

Also, attach a copy of the assembly instructions in the Crib Test Report.

1. Identifying Marks and Warnings

Ascertain if the cribs and their retail cartons are clearly marked as follows:

1. The name and the place of business (city and state), of the manufacturer, importer, distributor, and/or seller; and

2. A model number, stock number, catalog number, item number, or other symbol expressed numerically, in code or otherwise, such that only articles of identical construction, composition, and dimensions shall bear identical markings.

Describe any non-compliance in the comments section of the report.

3. In the case of full-size cribs, ascertain if the following warning appears on the retail carton and on the inside of the head end panel or on the top surface of the mattress support in a type size of at least one-fourth inch:

"CAUTION: Any mattress used in this crib must be at least 27 1/4 inches by 51 5/8 inches with a thickness not exceeding 6 inches", or:

"CAUTION: Any mattress used in this crib must be at least 60 centimeters by 131 centimeters with a thickness not exceeding 15 centimeters."

The marking shall appear in block letters, shall contrast sharply with the background (by color, projection, and/or indentation), and be clearly visible and legible. The dimensions of the mattress shall be taken from seam to seam or edge to edge where appropriate.

Describe any non-compliance in the comments section of the report.

4. In the case of a non-full-size crib, ascertain if the following caution statement appears on an inside surface of a non-full-size baby crib in a type size of at least 1/8 inch:

a. For rectangular cribs:

"CAUTION: Any mattress used in this crib must be at least _____ inches long by _____ inches wide and not more than _____ inches thick."

The blanks are to be filled with dimensions complying with Sections G1 and G2.

b. For nonrectangular cribs:

"CAUTION: Check proper fit of mattress. Should be not more than _____ inches thick. The maximum gap between mattress and inside of crib border (or edge) should be no more than 1 inch."

The blank is to be filled in with a dimension complying with Section G1.

c. The dimensions to be inserted in the blanks in the caution statements in Section 4 (a) and (b) shall be determined by the manufacturer according to the provisions of section 5. The markings shall appear in block letter, shall contrast sharply with the background (by color, projection, and/or indentation), and shall be clearly visible and legible.

Describe any non-compliance in the comments section of the report.

5. Ascertain that markings on the cribs are of a permanent nature, such as paint-stenciled, die-stamped, molded, or indelibly stamped directly thereon or permanently affixed, fastened, or attached by means of a tag, token, or other suitable medium.

The markings shall not be readily removable or subject to obliteration during normal use of the article or when the article is subjected to reasonably foreseeable damage or abuse.

Describe any non-compliance in the comments section of the report.

6. Inspect that the retail cartons of cribs clearly indicate:

a. The name and place of business (mailing address, including zip code) of the manufacturer, importer, distributor, and/or seller; and

b. The model number, stock number, catalog number, item number, or other symbol described in Section 1.2 of this document.

Describe any non-compliance in the comments section of the report.

7. Inspect that all non-full-size and full-size cribs and their retail cartons bear a conspicuous label stating that the article conforms to applicable regulations promulgated by the Consumer Product Safety Commission. The label need not be permanently attached to the article and carton nor is any particular wording required for the statement. The label on the article must be conspicuous under normal conditions of retail display.

All non-full-size baby cribs and their retail cartons introduced into interstate commerce for a period of 2 years after August 10, 1976, must bear such a label.

All full-size cribs and their retail cartons introduced into interstate commerce on or after February 1, 1974 through January 31, 1976 must bear this label.

Describe any non-compliance in the comments section of the report.

J. Requirements for Cutouts Along the Upper Edges of an End or Side Panel

1. Place the neck of the headform probe shown in Photo #1A and #1B below into any cutout located along the upper edges of an end or side panel of the crib. A cutout is a partially-bound opening (refer to Figure #5).

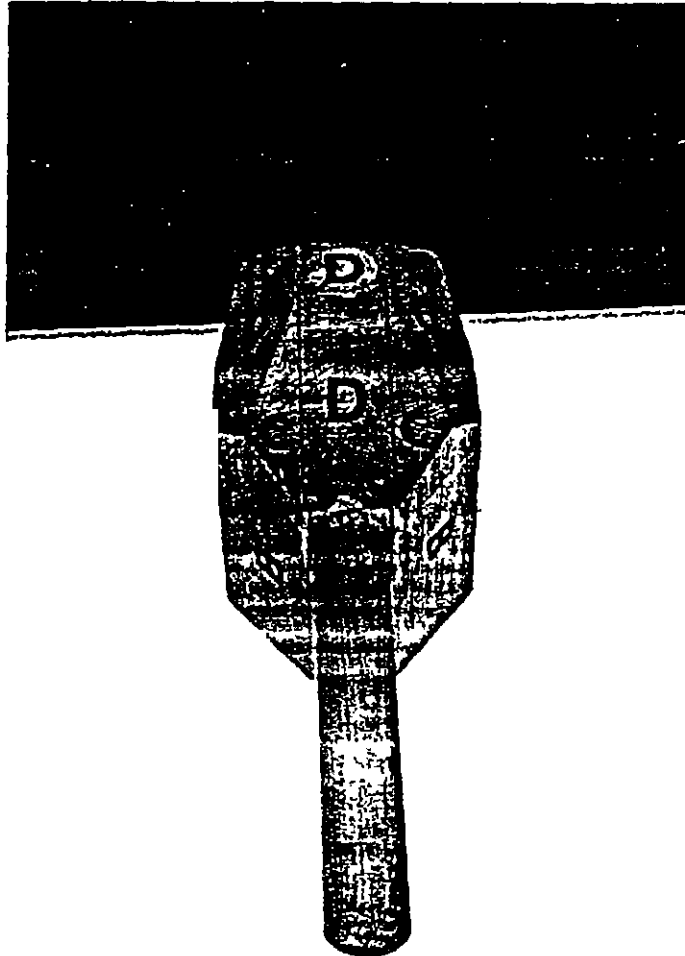


PHOTO #1A

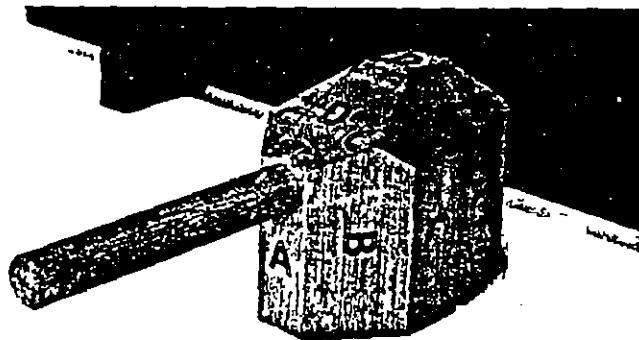


PHOTO #1B

I. Cont'd:

The axis of the neck shall be horizontal and at right angles to the plane of the panel at the point of contact. The head portion of the probe shall be on the outer side of the panel (see PHOTO #2 below).

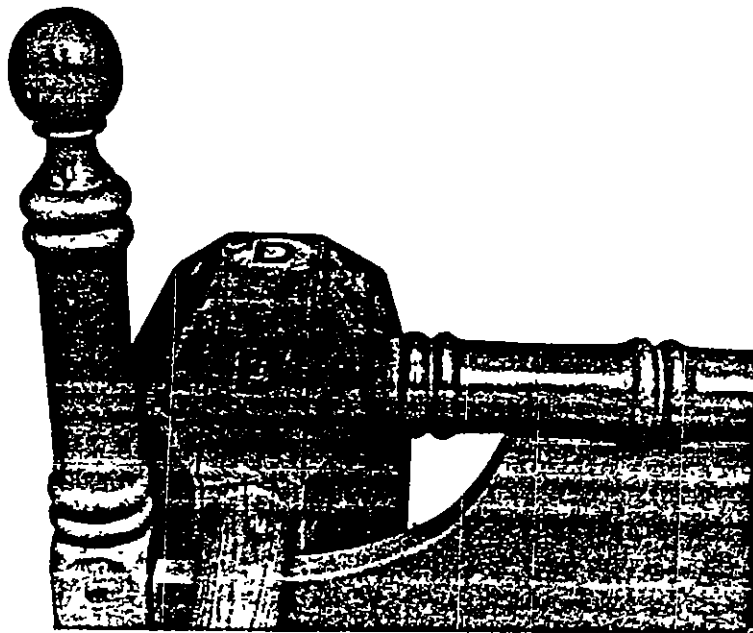


PHOTO #2

2. With the neck resting on the panel at any point* within the cutout area and with the front of the probe pointing downwards, draw the head of the probe toward the panel until surface "A" makes contact with the outer side of the panel (see Figure #5 below and Photo #2).

* For compliance purposes the Commission may test at all points that could result in a failure.

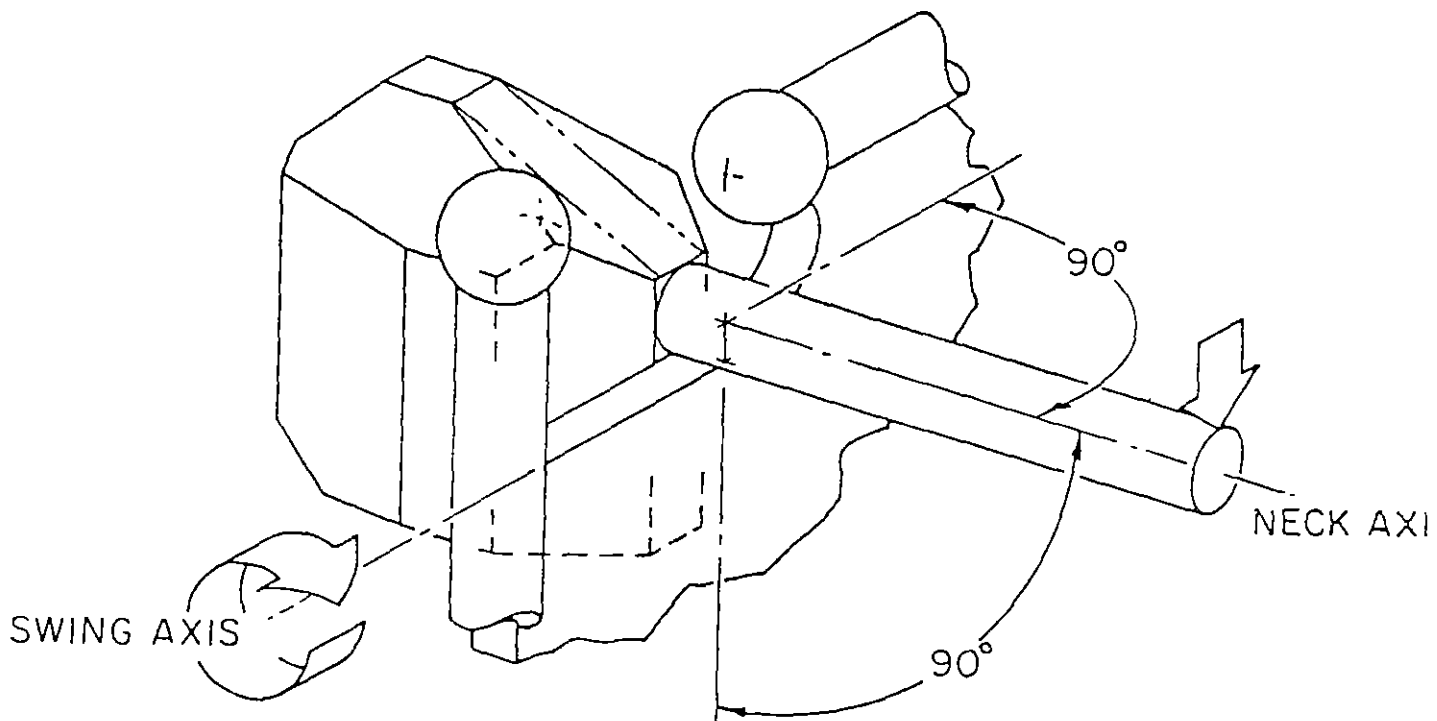


FIG 5

3. Push down on the neck to make the head of the probe swing upwards through the cutout in the panel (see PHOTO #3 below). The probe shall not be rotated about the major axis of the neck (refer to Figure #5 which depicts the neck axis). The arc through which the head is swung shall be in a vertical plane and shall stop when the major axis of the neck attains an upright position or is prevented from obtaining an upright position by an obstruction (refer to PHOTO #3 below). During this test contact shall be maintained between surface "A" (or at least one of the edges "AB") and the neck of the headform probe and the panel.

If, during the swing to the upright position, an edge or surface other than surface "D" is contacted, sideways motion of the headform shall not be restrained. However, the arc through which the headform is swung shall remain vertical (refer to Figure 7).

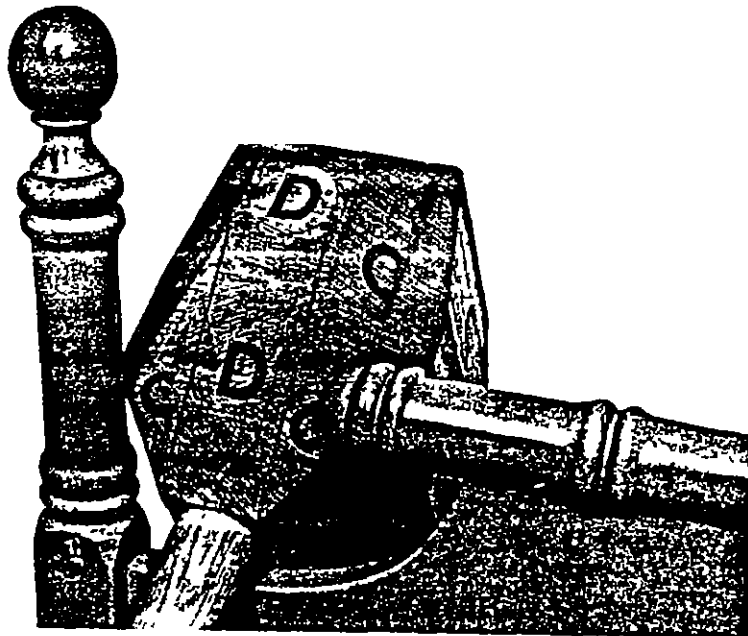


PHOTO #3 - Note that edge "B C" on the left side and surface "C" contact the panel which causes the crib panel to fail the test.

4. During the tests described in Sections 1, 2, and 3, no portion of the panel shall contact:

a. Simultaneously more than one of surfaces "B", "C" or edges* "B C", "C C", or "C D", in any combination if they are on opposing sides of the head form.

b. Any surfaces "D".

*Edges are identified by the letter designations for the surfaces that lie on either side of the edge.

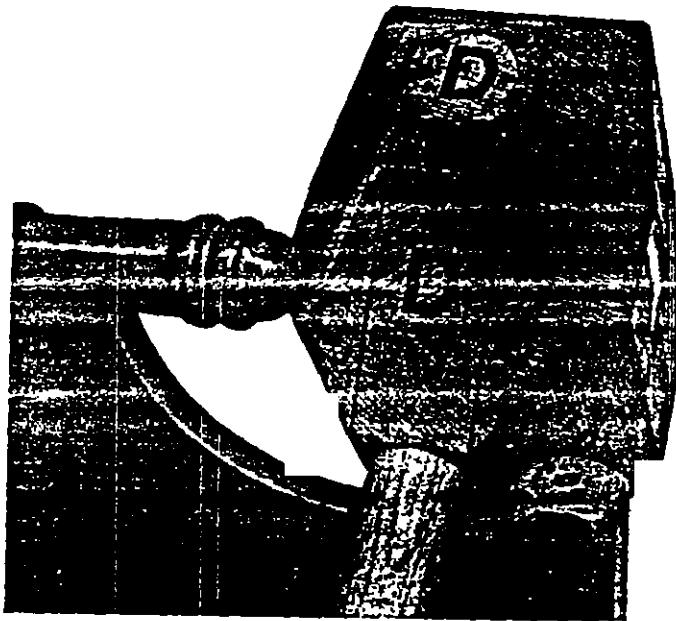


PHOTO #4 - Note that surface "C" on the left side of the head form probe and surface "B" on the right side contact the crib panel which causes the crib panel to fail the test for cutouts.

5. The following test is only for V-shaped cutouts located along the upper edges or side panel.

A cutout is considered V-shaped when the side boundaries or the tangents to the side boundaries are not parallel (see Photo #5 below).

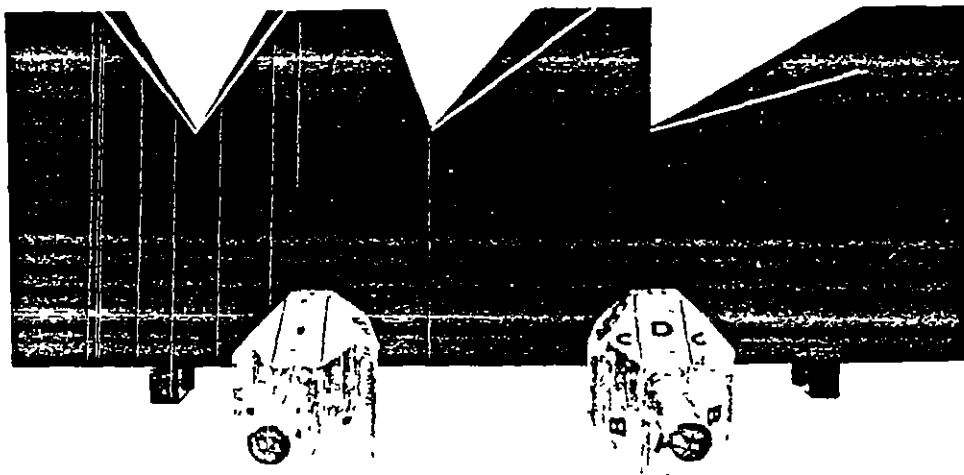


Photo #5 - Showing three V-shaped cutouts on a simulated crib panel.

Place the neck of the head form probe into the V-shaped cutout. The axis of the neck shall be horizontal and at right angles to the plane of the panel at the point of contact. The head portion of the probe shall be on the outer side of the panel. With the neck resting on the panel at any point with the cutout area and the front of the probe pointing downwards, draw the head probe toward the panel until surface "A" makes contact with the outer side of the panel (see Photo #6 below).

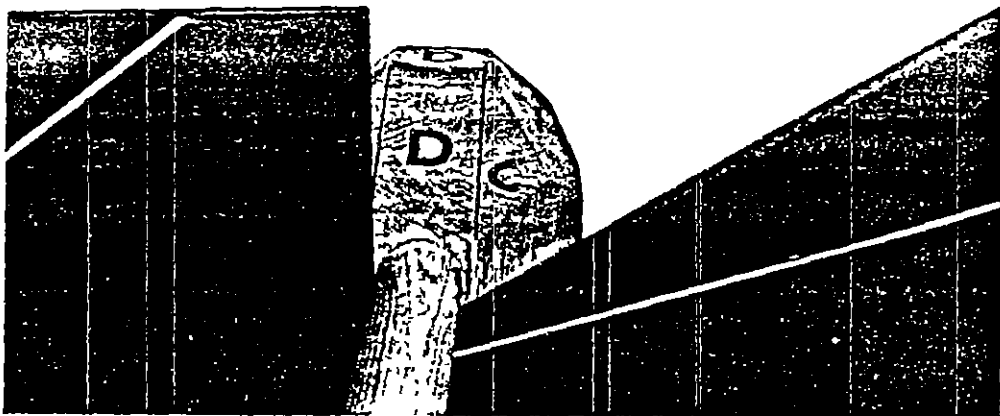


PHOTO #6

Upon completion of the swing to the upright position as described in III.J.1, 2, & 3 rock the head form probe sideways parallel to the plane of the panel while maintaining contact between surface "A" or an edge "A B" and the panel. Rotate the neck toward the most nearly vertical leg of the V and the head away from this leg of the V. This will result in the probe sliding toward the bottom of the cutout. The maximum angle through which the head form is rocked shall be determined by contact with the panel by a surface or edge other than "A" or "A B" or until one of the surfaces "B" is in a vertical plane (refer to Photos #7 and #7a).

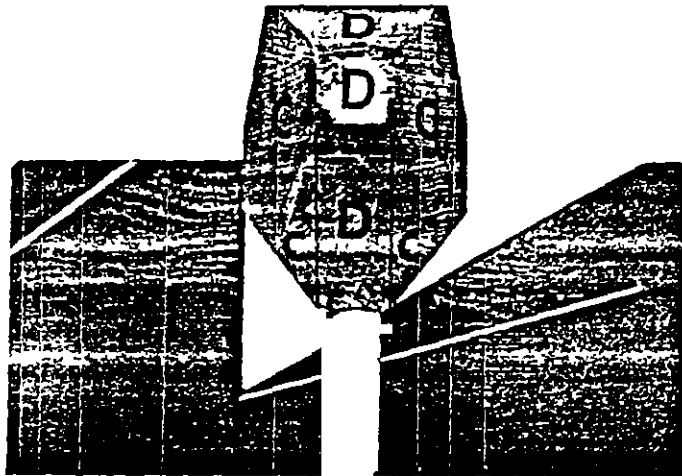


PHOTO #7

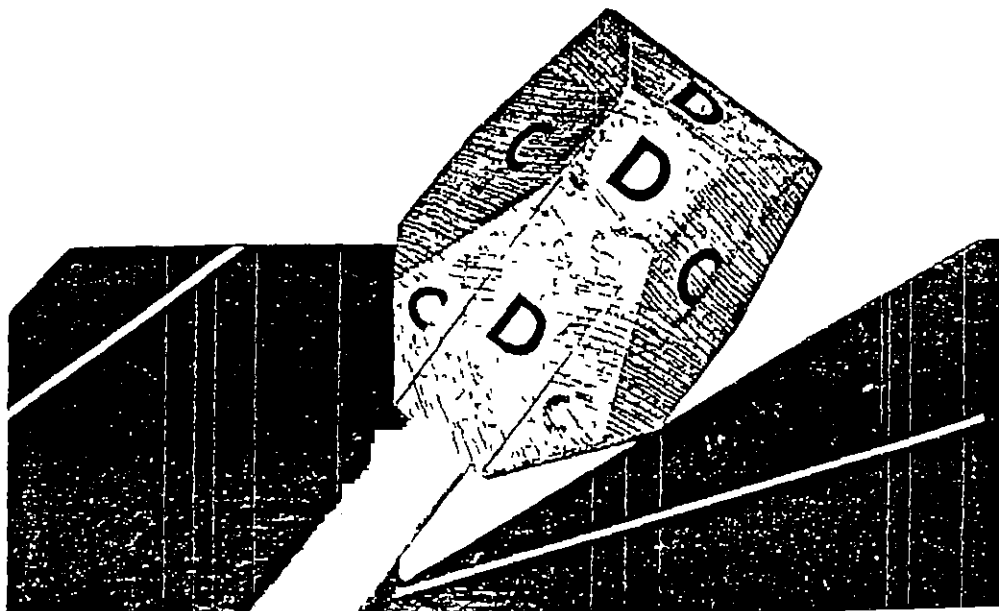


PHOTO #7A

6. During the test described above both before and during the rocking test, no portion of the panel shall contact:

a. Simultaneously more than one of surfaces "B", "C" or edges "B C", "C C" or "C D" in any combination if they are on opposing sides of the head form.

Or

b. Any surfaces "D"

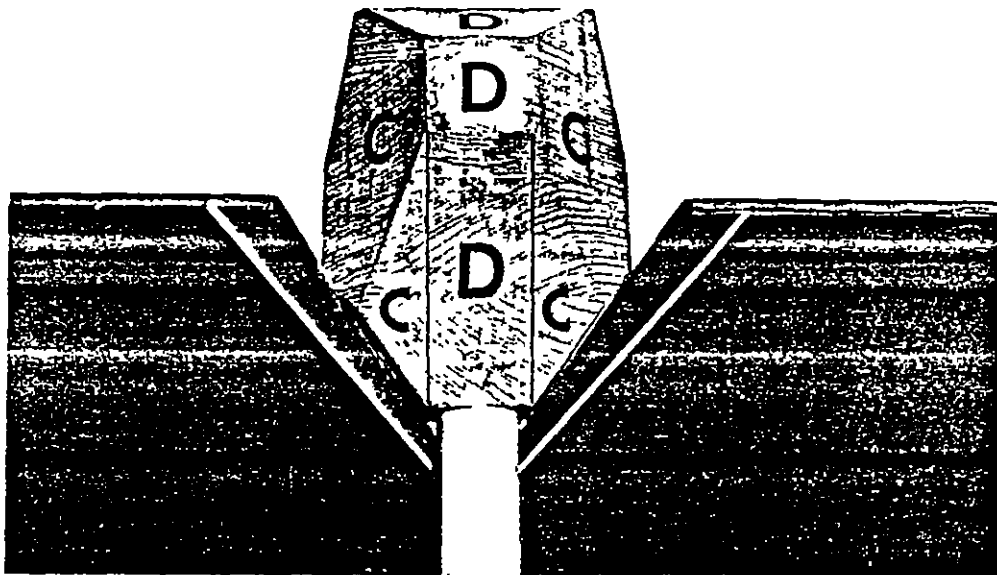
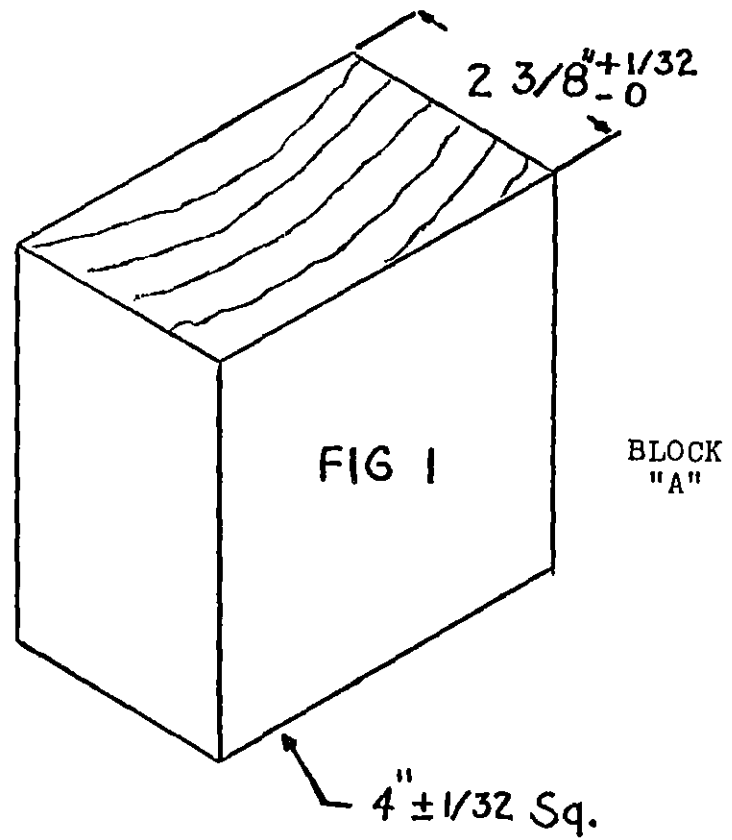
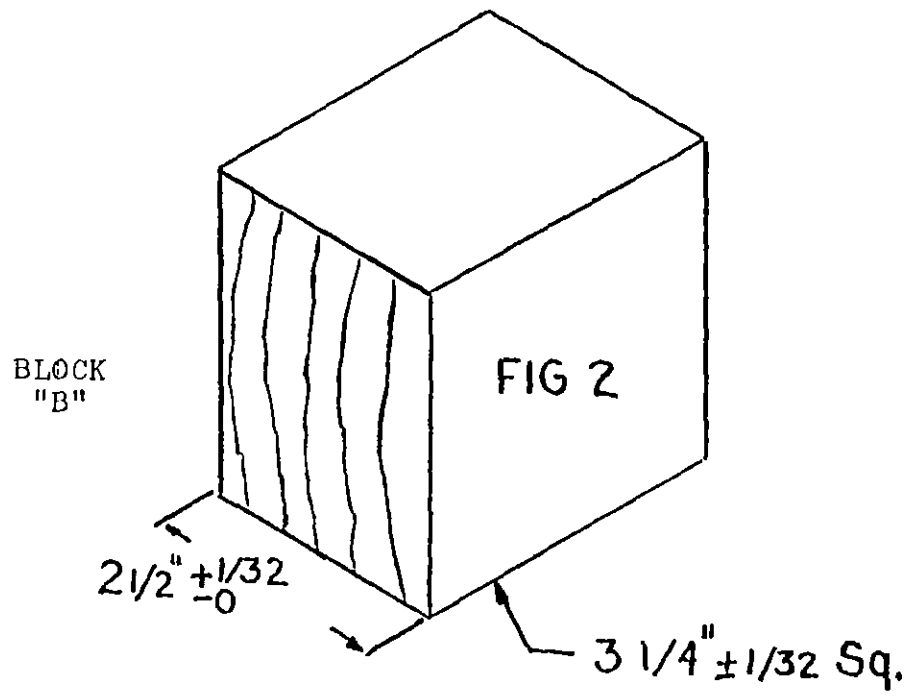
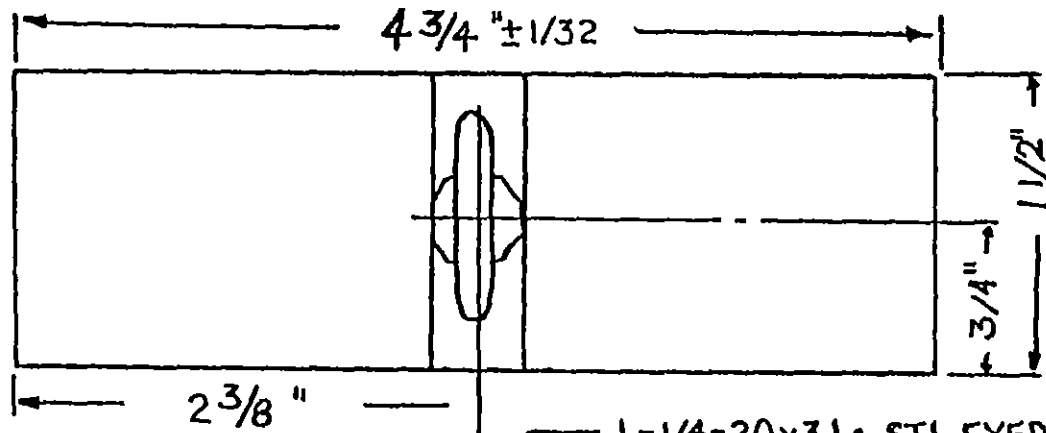


PHOTO #8A

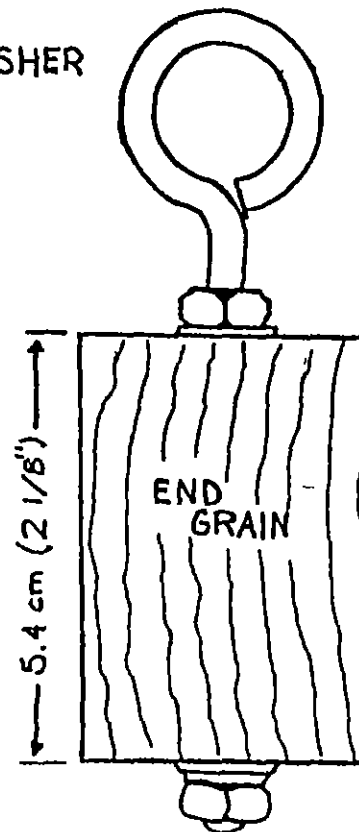
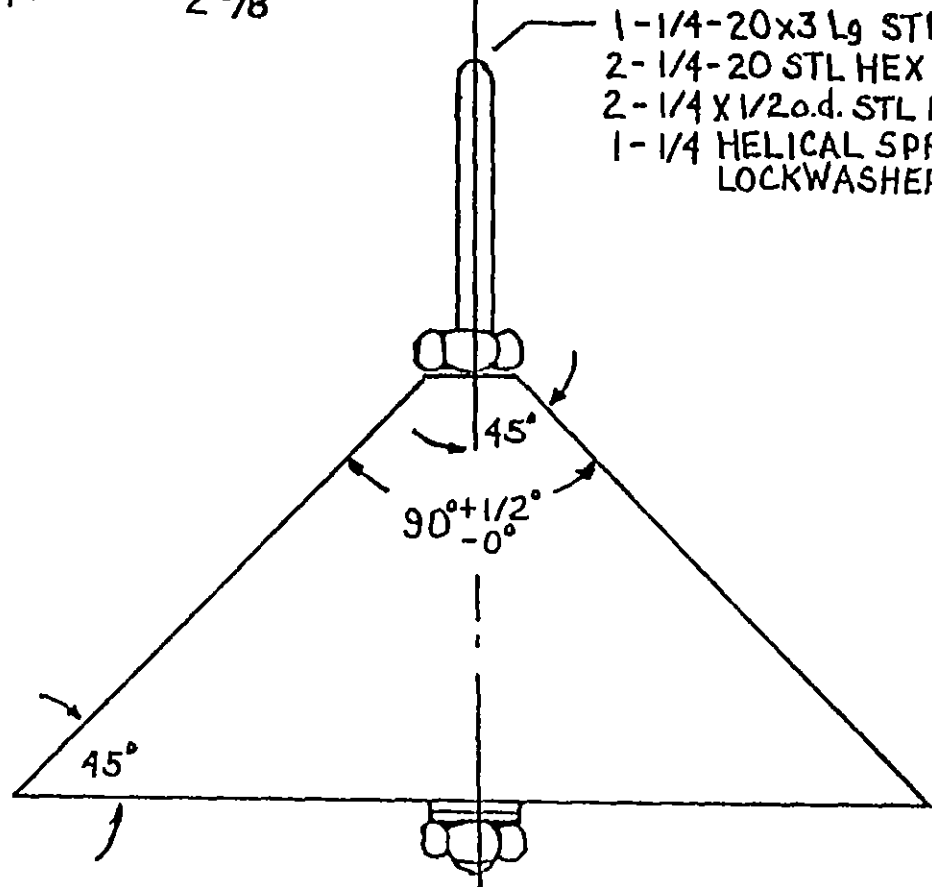
For this V-cutout the rocking test was not required because surface "B" on the left and right side of the probe contacted the panel causing the V-cutouts to fall.

IV. FIGURES





- 1-1/4-20x3 Lg STL EYEBOLT
- 2-1/4-20 STL HEX NUT
- 2-1/4 X 1/2 o.d. STL PLAIN WASHER
- 1-1/4 HELICAL SPRING STL LOCKWASHER



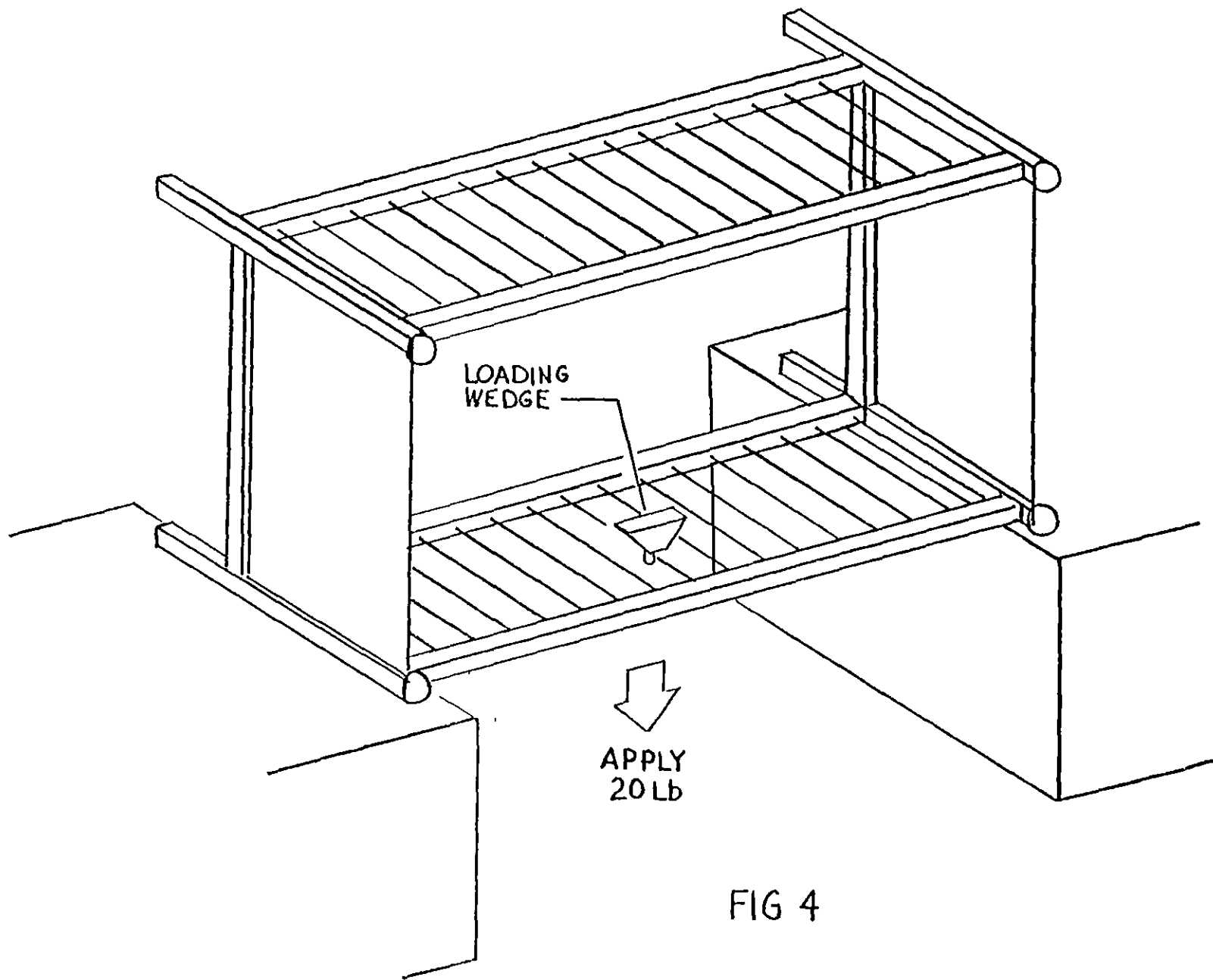


FIG 4

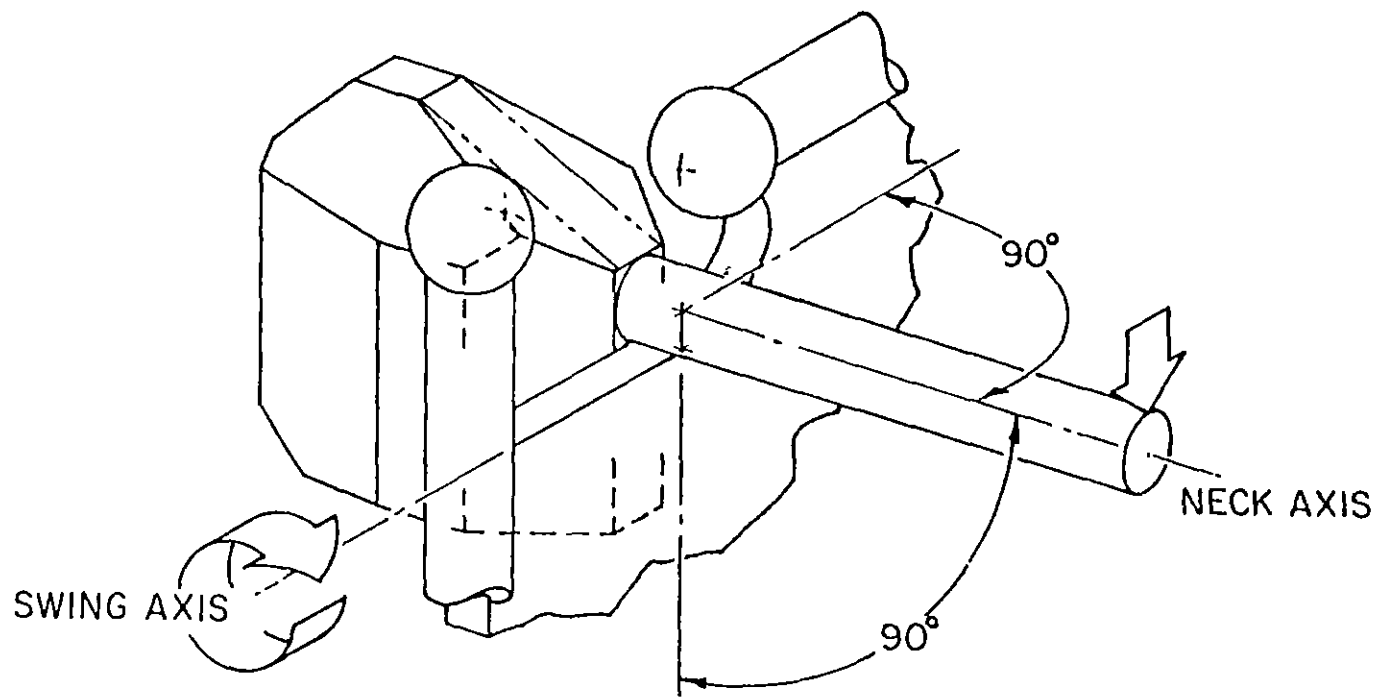


FIG 5

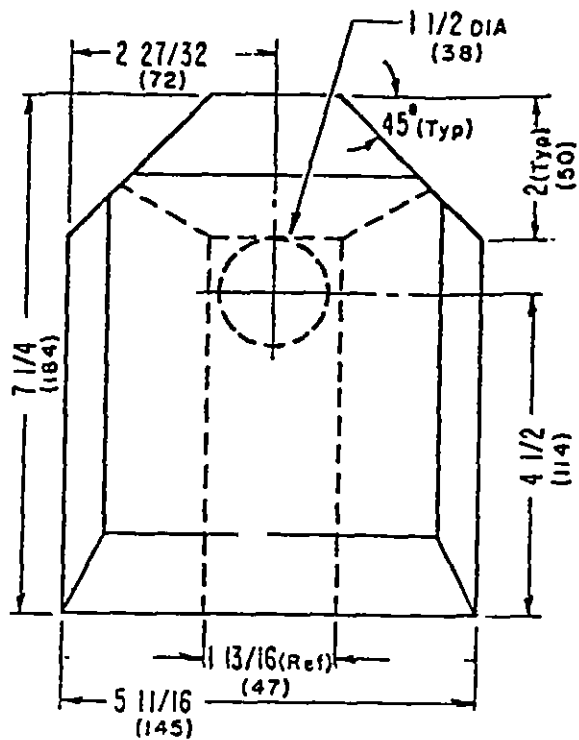
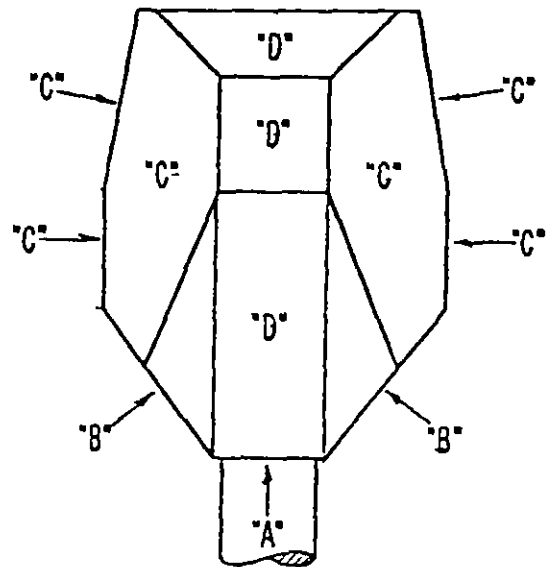
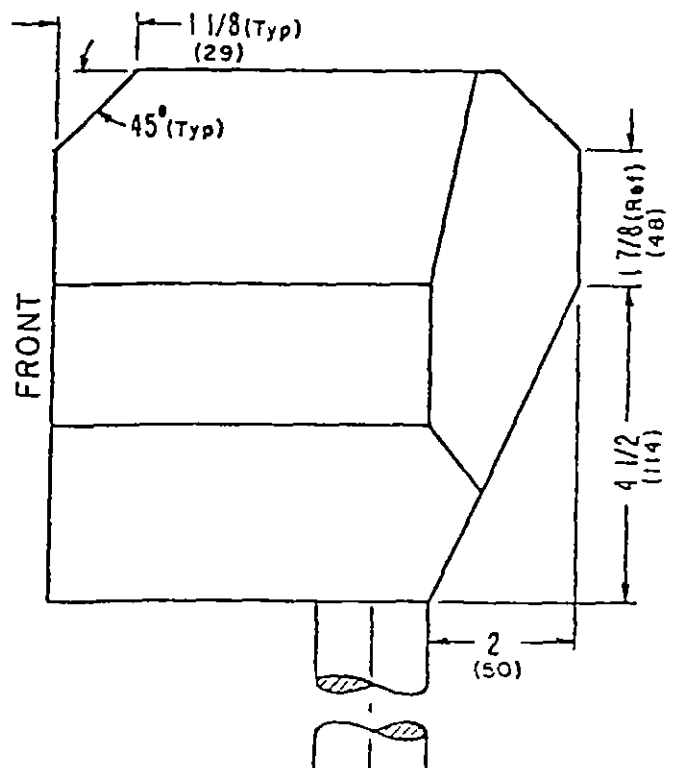
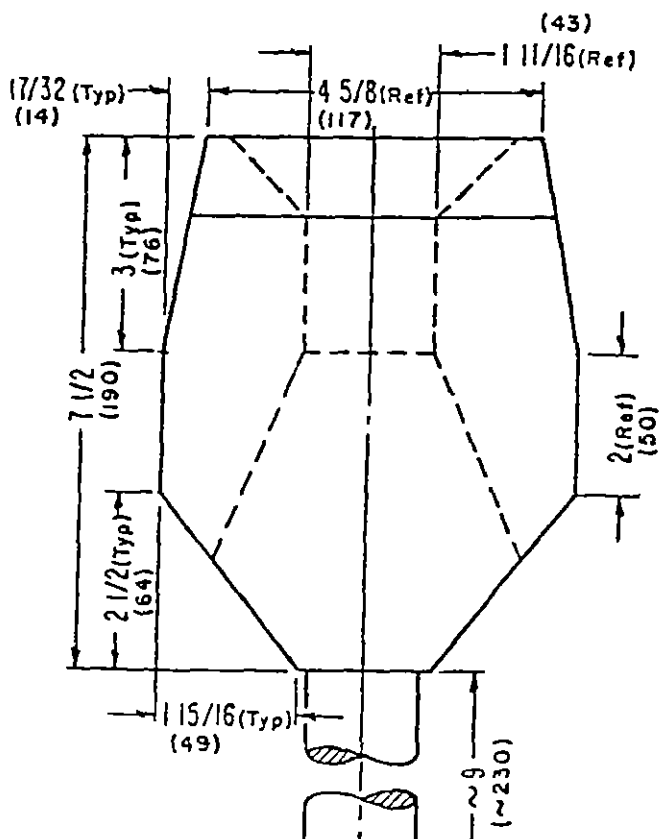


FIG 6-HEADFORM PROBE

DIMENSIONS ARE SHOWN IN INCHES AND WILL BE USED FOR COMPLIANCE PURPOSES. MILLIMETERS, SHOWN IN PARENTHESIS, ARE FOR CONVENIENCE ONLY.



REAR VIEW—
IDENTIFYING SURFACES



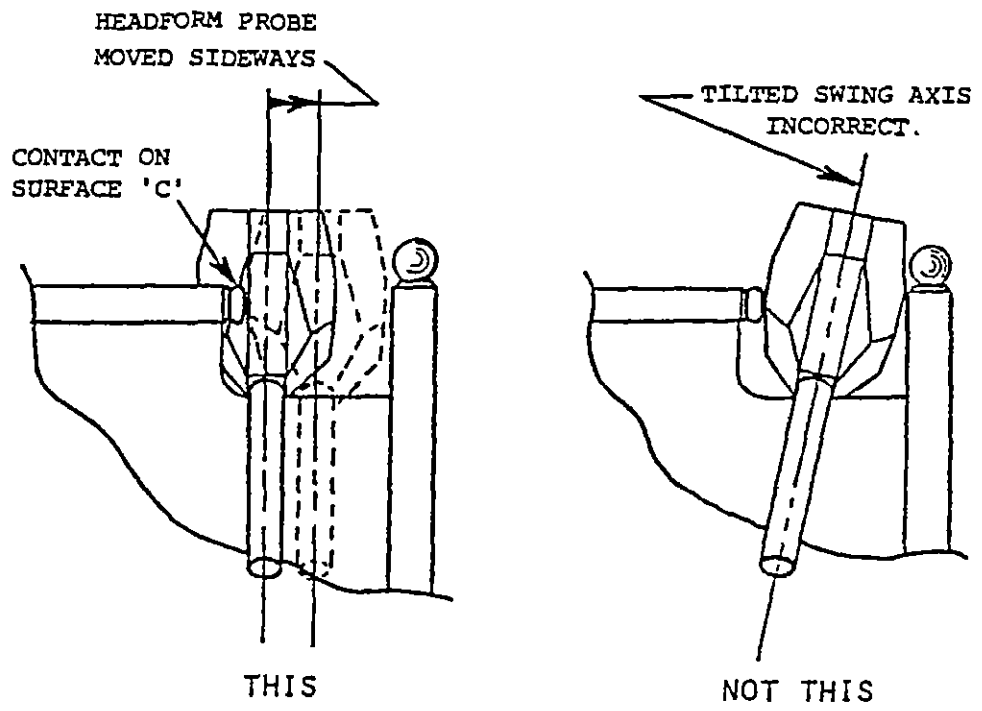


FIGURE 7

V. REPORTING REQUIREMENTS FOR FULL-SIZE
AND NON-FULL-SIZE BABY CRIBS

The Full-Size and Non-Full-Size Baby Cribs report form used to report the results shall be per Appendix A and B. The names of the test personnel involved shall be inserted and final approval and responsibility shall rest with a certified test analyst. All test conductors or analysts shall be approved by the certified test analyst.

VI. APPENDIX

- A. CPSC Test Report for Full-Size Baby Cribs
- B. CPSC Test Report for Non-Full-Size Baby Cribs
- C. 16 CFR Part 1508 Requirements for Full-Size Baby Cribs.
- D. 16 CFR Part 1509 Requirements for Non-Full-Size Baby Cribs
- E. 16 CFR Part 1508.11 and CFR Part 1509.13

CPSC TEST REPORT FOR FULL-SIZE BABY CRIBS

REFERENCE PARAGRAPH		REQUIREMENT	MEASUREMENT MEETS CRITERIA (YES/NO)			
TEST MANUAL	REGULATION		SUB 1	Adjust Posit.	Length inches	width inch
III. A. B.	1508.1 (a)	<u>Interior dimension:</u> Length 51 3/4 to 53" Width 27 3/8 to 28 5/8"	#1-low			
	1508.3 (a)		#2			
			#3			
			#4			
			#5			
III. C1	(b)	<u>Crib Side Rail Height (H)</u>	Side R.	Left	Right	
		1.Support highest, rail lowest H > 9 in.	#1			
		2.Support lowest, rail highest H > 26 in.	#2			
			#1			
C2	(b)	<u>Crib End Panel Height (H)</u>	End Panel-head	foot		
		1.Support highest, rail lowest H > 9 in.	#1			
		2.Support lowest, rail highest H > 26 in.	#2			
			#1			
III. D1	1508.4 (a)	<u>Component Spacing</u>	End Panel	Side Rail		
		Spacing \leq 2 3/8"				
D2	(b)	Spacing \leq 2 1/2" above and below wedge when a 20 lb. weight is applied.				
III. E1	1508.6 (a)	<u>Hardware</u>				
		Elimination of pinching, bruising, laceration, crushing breaking, amputation, etc.				
E2	(b)	Locking or latching device	Side Rail	Force (lbs)		
		Activating Force \geq 10 lb. force or two distinct actions	#1			
E3	(c)	No wood screws in assembly of stationary sides, drop side rails, folding rails, or stabilizing bars to crib ends or other components that must be removed by the consumer during normal disassembly	#2			

Comments:

CPSC TEST REPORT FOR FULL-SIZE BABY CRIBS

REFERENCE PARAGRAPH		REQUIREMENT	MEASUREMENT	
TEST MANUAL	REGULATION		MEETS CRITERIA (YES/NO)	COMMENTS
			SUB 1	
III. F.	1508.7	<u>Construction & Finishing</u>		
1.	(a)	No splinters on wood surfaces		
2.	(b)	No splits or cracks in wood parts or other defects which might lead to structural failure.		
	(c)	No toehold >3/8" i.e. horizontal bar, ledge projection or other surfaces inside crib <20" above mattress in lowest position & side rail highest (except lower horizontal bar of crib rail may have vertical dimension ≤3" above mattress support in low position. No gap between top surface of mattress support & bottom of lower horizontal rail.		
III. H	1508.8	<u>Assembly Instructions</u>		
		Other than completely assembled		
1.	(a)	Assembly drawing.		
2.	(b)	Parts list, description of parts and tools.		
3.	(c)	Full size diagram of fasteners		
		<u>Instructions</u>		
4.		1. for unskilled.		
5.		2. tighten bolts.		
6.		3. caution for child 35" & over in height.		
7.		4. warning for mattress size.		
III. I.	1508.9	<u>Identification Marks & Warnings</u>		
1.	(b)	1. Name & place of business (crib & carton)		
2.		2. Model number (crib & carton)		
3.	(c)	Cautionary statement in letter size ≥1/4" (carton, & crib, or mattress support)		
4.	(d)	Permanent crib markings		
		1. Name & place of business (carton)		
5.	(e)	2. Model number (carton)		
III. J.	1508.11	<u>Requirements for Cut-outs</u>		
	(c)	During the test described in Paragraph (b) of this section. no portion of the panel shall contact;		
	1.	Simultaneously, more than one of surfaces "B", "C", or edges "BC", "CC", or "CD", in any combination if they are on opposing sides of headform.		
	2.	Any of surfaces "D".		

CPSC TEST REPORT FOR
NON-FULL-SIZE BABY CRIBS

DATE: _____

MANUFACTURER: _____

SAMPLE NO. _____

SUB ITEM NO. _____

MODEL OR STYLE: _____

APPROVAL RECORD

Engineering Technician_____
Date_____
Test Analyst_____
Date_____
Supervisor_____
Date

CPSC TEST REPORT FOR NON-FULL-SIZE BABY CRIBS

REFERENCE PARAGRAPH		REQUIREMENT	MEASUREMENT				
TEST MANUAL	REGULATION		MEETS CRITERIA (YES/NO)				
			SUB 1	ADJUST POSIT.	LENGTH Inches	WIDTH Inches	
111. B.	1509.2 (b)	1. <u>Interior dimension:</u> Length larger than 55" or smaller than 49 3/4" Width larger than 30 5/8" or smaller than 25 3/8"		#1-low			
				#2			
				#3			
				#4			
				#5			
111. C1	1509.3	<u>Crib Side Rail Height (H)</u>		Side R.	left	right	
			(a)	1. Support highest, rail lowest H > 5 in.	#1		
				#2			
			(b)	2. Support lowest, rail highest H > 22 in.	#1		
		#2					
C2		<u>Crib End Panel Height (H)</u>		End panel-Head	Foot		
			(a)	1. Support highest, rail lowest H > 5 in.	#1		
				#2			
			(b)	2. Support lowest, rail highest H > 22 in.	#1		
		#2					
111. D 1a,2a	1509.4	<u>Component Spacing</u> Spacing \leq 2 3/8", spacing $<$ 2 1/2" above and below wedge when a 20 lb. weight is applied		End Panel	Side Rail		
			(a)				
1b,2b		(b) Non-uniformly spaced components					
111. E 1	1509.7	<u>Hardware</u> Elimination of pinching, bruising, laceration, crushing, breaking, amputation, etc.					
			(a)				
			2	(b) Locking or latching device Activating Force \geq 10 lb. force or		Side Rail	Force (lb)
3	(c) Two distinct actions No wood screws used in the assembly of stationary sides, drop side rails, folding rails, or stabilizing bars to crib ends or other components that must be removed by the consumer during the normal disassembly.						

CPSC TEST REPORT FOR NON-FULL-SIZE BABY CRIBS

REFERENCE PARAGRAPH		REQUIREMENT	MEASUREMENT MEETS CRITERIA (YES/NO)			
TEST MANUAL	REGULATION		SUB	COMMENTS		
III. F. 1 2 4	1509.8	(a) <u>Construction & finishing</u> No splinters on wood surfaces				
		(b) No splits or cracks in wood parts or other defects which might lead to structural failure.				
		(c) No toehold > 3/8" i.e. horizontal bar, ledge, projections or other surfaces inside of crib < 16" above mattress support in its lowest position with crib side in highest position.				
III. G. 2	1509.9	(a) <u>Mattresses</u> <u>Crib-side height</u> 1. side highest, mattress support lowest. Effective crib side height $\geq 20"$.		Side R.	Left	Right
			#1			
			#2			
		(b) 2. side lowest, mattress support highest. Effective crib side height $\geq 3"$.		#1		
			#2			
		<u>Crib-end panel height</u>		End Panel Head Foot		
		1. side highest, mattress support lowest. Effective crib end panel height $\geq 20"$		#1		
			#2			
		2. side lowest, mattress support highest. Effective crib end panel height $\geq 3"$.		#1		
			#2			
		(b) <u>Mattress dimension</u> Maximum gap* with mattress centered $\leq 1/2"$. Maximum gap* with mattress against side $\leq 1"$.		Maximum Gap (inches)		

Comments:

*Between the perimeter of the mattress and the inside perimeter of the crib

CPSC TEST REPORT FOR NON-FULL-SIZE BABY CRIBS

REFERENCE PARAGRAPH		REQUIREMENT	MEASUREMENT MEETS CRITERIA (YES/NO)			
TEST MANUAL	REGULATION		SUB 1	COMMENTS		
III. H.	1509.10	<u>Assembly Instructions</u>				
1	(a)	Include assembly drawings				
2	(b)	Include list and description of parts; tools for assembly				
3	(c)	Include full-size diagram of required bolts, fasteners				
4	(d)	Are written to preclude unsafe assembly by unskilled				
5	(e)	Include cautionary statements concerning fastener tightening; maintenance				
6	(f)	Contain cautionary statements of non-use by child ≥ 35 " tall				
8	(g)	Contain warnings specifying dimensions of substitute mattress which would comply with 1509.9				
III. I.	1509.11	<u>Identification Marks & Warnings</u>				
1	(a)	1.Manufacturer's name & location.				
2		2.Model stock number.				
4	(b)	Caution statements $\geq 1/8$ " type				
		*1.Mattress size; correctly stated (rectangular cribs)		Length	Width	Thick
		**2.Mattress gap (non-rectangular cribs)		Thickness		Gap
		3.Legibility of caution statements				
5	(c)	Marking method; permanent nature.				
6	(d)	Retail carton indicates: 1.Name and place of business (address and zip) 2.Model or stock number as per 1509.11 (a) (2)				
7	(e)	Crib or carton conspicuous label with CPSC regulation				

*Refer to paragraph 1509.9(a.)&(b.)

**Refer to paragraph 1509.9(a.)

Comments:

CPSC TEST REPORT FOR NON-FULL-SIZE BABY CRIBS

REFERENCE PARAGRAPH		REQUIREMENT	MEASUREMENT MEETS CRITERIA (YES/NO)		
TEST MANUAL	REGULATION		SUB 1	COMMENTS	
III. J.	1509.13 (c)	<p><u>Requirements for Cut-outs</u> During the test described in section J. of this manual, no portion of the panel shall contact:</p> <ol style="list-style-type: none"> 1. Simultaneously more than one of surfaces "B", "C" or edges "BC", "CC" or "CD" in any combination if they are on opposing sides of the headform. 2. Any of surfaces of "D" <p>(NOTE: If the panel does not meet the criteria for cut-outs list the edges or surface which contact the headform probe and photograph the headform probe contacting these surfaces.)</p>			

Comments: