

rotation so that the portion of the reflective material below the axis of the abrading brush is horizontal.

(iv) Shape the cup brush by hand to the specified 0.5 (approx. 13mm) diameter. Any stray wire bristles projecting more than 1/32 in. (approx. 1 mm) beyond the tip of the bulk of the bristles should be clipped off. Adjust the position of the brush so that its axis is centered over the mid-point in the width of the retroreflective material.

(v) Adjust the rotational velocity of the bicycle wheel to obtain a linear velocity of 0.23 m/sec (9 in./sec) measured at the mid-point in the width of the retroreflective material. Adjust the force to obtain a force normal to the surface under the brush of 2 N (0.45 lbf).

(vi) Apply the abrading brush to the retroreflective material on the wheel rim, and continue the test for 1000 complete revolutions of the bicycle wheel.

[43 FR 60034, Dec. 22, 1978, as amended at 45 FR 82628, Dec. 16, 1980; 46 FR 3204, Jan. 14, 1981; 68 FR 52691, Sept. 5, 2003]

§ 1512.19 Instructions and labeling.

A bicycle shall have an instruction manual attached to its frame or included with the packaged unit.

(a) The instruction manual shall include at least the following:

(1) Operations and safety instructions describing operation of the brakes and gears, cautions concerning wet weather and night-time operation, and a guide for safe on-and-off road operation.

(2) Assembly instructions for accomplishing complete and proper assembly.

(3) Maintenance instructions for proper maintenance of brakes, control cables, bearing adjustments, wheel adjustments, lubrication, reflectors, tires and handlebar and seat adjustments; should the manufacturer determine that such maintenance is beyond the capability of the consumer, specifics regarding locations where such maintenance service can be obtained shall be included.

(b) A bicycle less than fully assembled and fully adjusted shall have clearly displayed on any promotional display material and on the outside surface of the shipping carton the fol-

lowing: (1) A list of tools necessary to properly accomplish assembly and adjustment, (2) a drawing illustrating the minimum leg-length dimension of a rider and a method of measurement of this dimension.

(c) The minimum leg-length dimension shall be readily understandable and shall be based on allowing no less than one inch of clearance between (1) the top tube of the bicycle and the ground plane and (2) the crotch measurement of the rider. A girl's style frame shall be specified in the same way using a corresponding boys' model as a basis.

(d) [Reserved]

(e) Every bicycle subject to the requirements of this part 1512 shall bear a marking or label that is securely affixed on or to the frame of the bicycle in such a manner that the marking or label cannot be removed without being defaced or destroyed. The marking or label shall identify the name of the manufacturer or private labeler and shall also bear some form of marking from which the manufacturer can identify the month and year of manufacture or from which the private labeler can identify the manufacturer and the month and year of manufacture. For purposes of this paragraph, the term *manufacture* means the completion by the manufacturer of a bicycle of those construction or assembly operations that are performed by the manufacturer before the bicycle is shipped from the manufacturer's place of production for sale to distributors, retailers, or consumers.

[43 FR 60034, Dec. 22, 1978, as amended at 60 FR 62990, Dec. 8, 1995]

§ 1512.20 Separability.

If any section or portion thereof of this part 1512 or its application to any person or circumstance is held invalid, the remainder of the section(s) and its (their) application to other persons or circumstances is not thereby affected.

Subpart B—Policies and Interpretations [Reserved]

FIGURE 1 TO PART 1512—BICYCLE FRONT FORK CANTILEVER BENDING TEST RIG

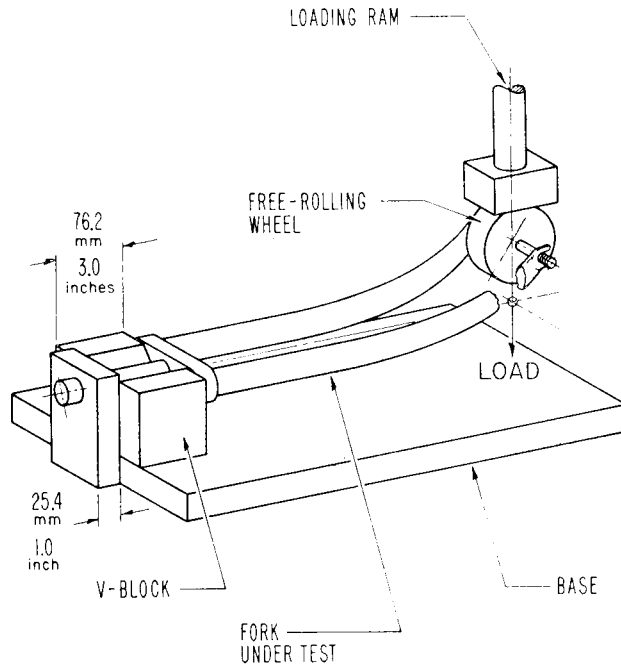


FIG 1-BICYCLE FRONT FORK
CANTILEVER BENDING TEST RIG

FIGURES 2 AND 3 TO PART 1512—HANDLEBAR STEM LOADING AND ENTRANCE 8 OBSERVATION ANGLES

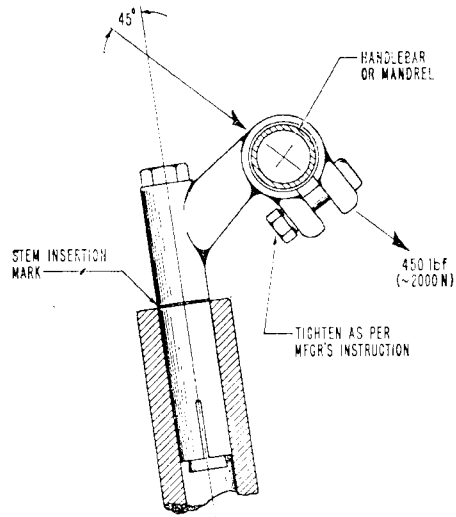
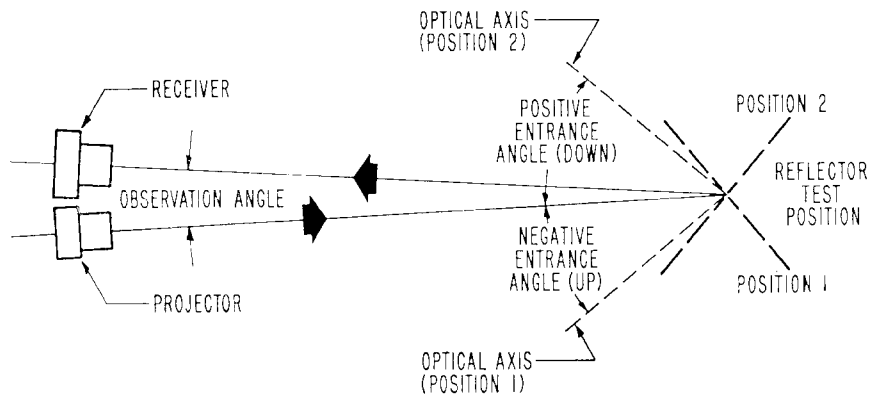


FIG 2—HANDLEBAR STEM LOADING



Side View

FIG 3—ENTRANCE & OBSERVATION ANGLES
[FIG 4—REVOKED]

FIGURE 5 TO PART 1512—TYPICAL HANDBRAKE ACTUATOR SHOWING GRIP DIMENSION

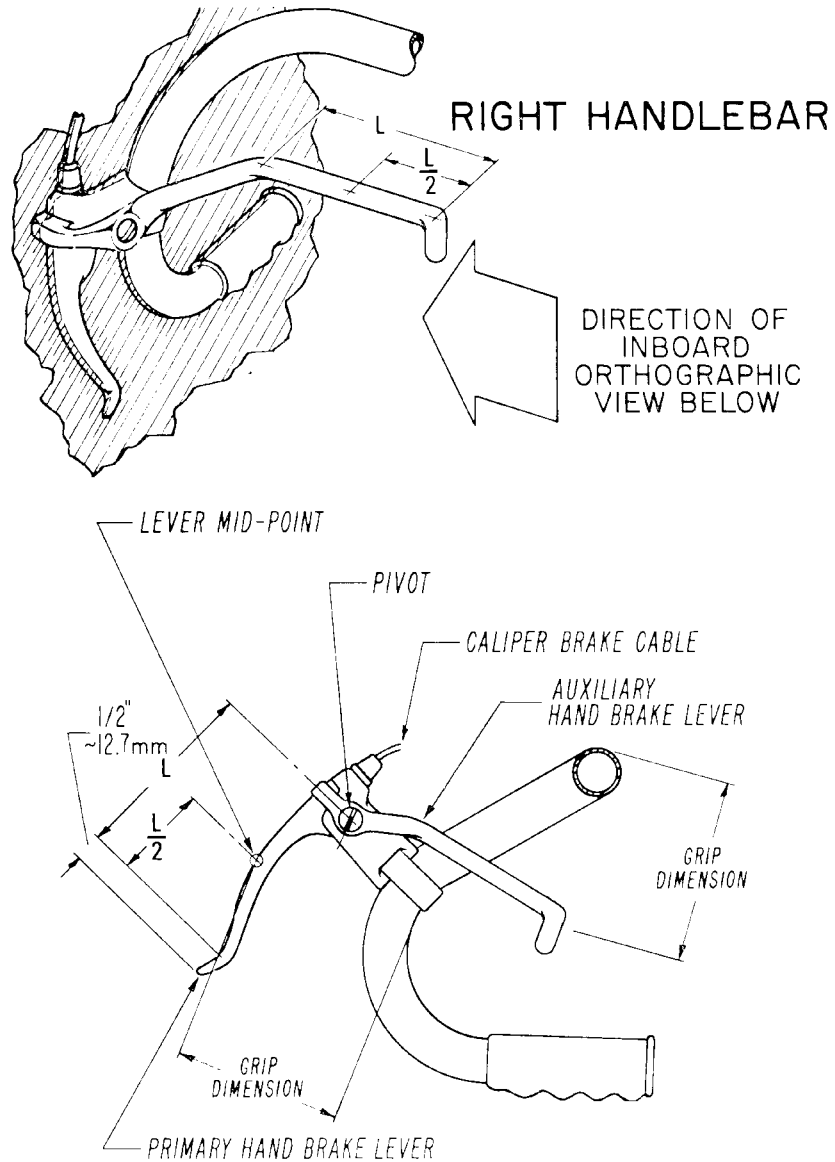


FIG. 5-TYPICAL HANDBRAKE ACTUATOR SHOWING GRIP DIMENSION

FIGURES 6 AND 7 TO PART 1512—TOE CLEARANCE AND CHAIN GUARD REQUIREMENTS

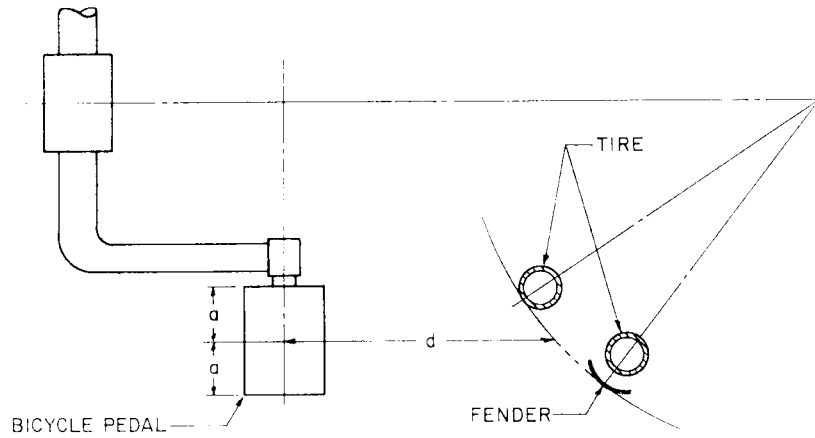


FIG 6—TOE CLEARANCE

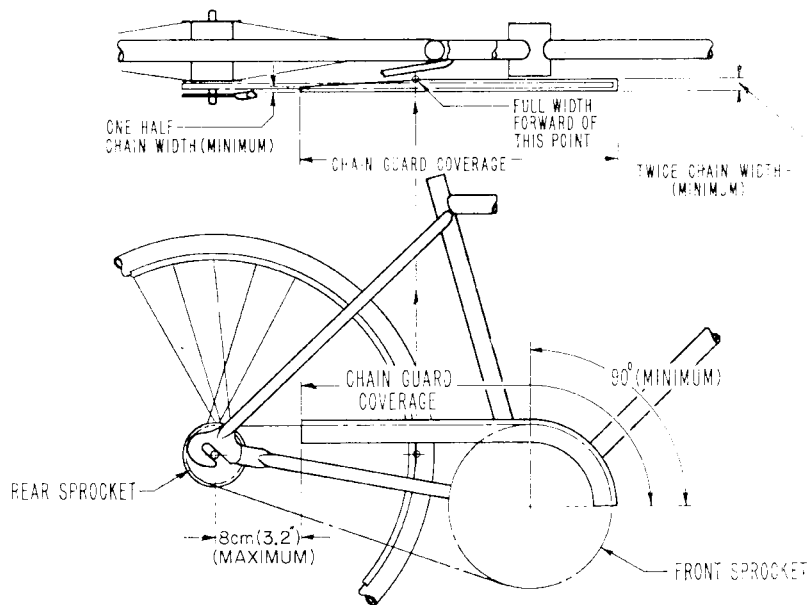


FIG 7—CHAIN GUARD REQUIREMENTS

FIGURE 8 TO PART 1512—REFLECTORIZED BICYCLE WHEEL RIM ABRASION TEST DEVICE

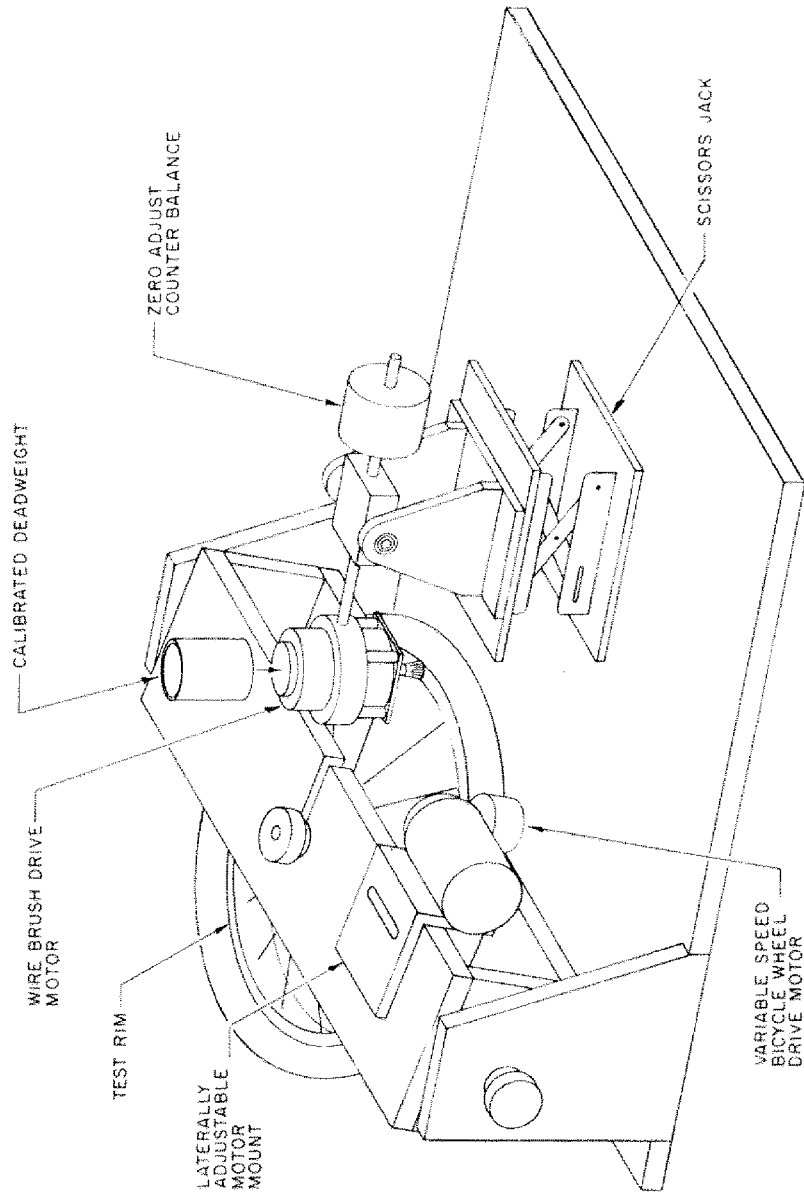


FIG 8--REFLECTORIZED BICYCLE WHEEL RIM ABRASION TEST DEVICE

Consumer Product Safety Commission

§ 1513.1

TABLE 1 TO PART 1512—MINIMUM CANDLEPOWER PER INCIDENT FOOT-CANDLE FOR CLEAR REFLECTOR ¹

Observation angle	Front, rear, and side reflectors; entrance angle in degrees			Pedal reflectors; entrance angle in degrees		
	0	10 up/down	20 left/right	0	10 up/down	20 left/right
0.2	27.0	18.0	9.0	7.5	6.0	3.0
0.3				6.0	4.8	2.4
1.5	.28	.20	.12	.28	.20	.12

¹ Amber values shall be 5/8 × clear values. Red values shall be 1/4 clear values.

TABLE 2 TO PART 1512—MINIMUM CANDLEPOWER PER INCIDENT FOOT-CANDLE FOR CLEAR REFLECTOR ¹

Observation angle	Front, rear, and side reflectors; entrance angle in degrees		
	30 left/right	40 left/right	50 left/right
0.2	8.0	7.0	6.0
1.5	.12	.12	.12

¹ Amber values shall be 5/8 × clear values. Red values shall be 1/4 × clear values.

TABLE 3 TO PART 1512—MINIMUM ACCEPTABLE VALUES FOR THE QUANTITY A DEFINED IN THE RETROREFLECTIVE TIRE AND RIM TEST PROCEDURE

Observation angle (degrees)	Entrance angle (degrees)	Minimum acceptable value of A	
		Meters	Feet
0.2	-4	2.2	7.25
.2	20	1.9	6.27
.2	40	1.3	4.29
1.5	-4	.22	.73
1.5	20	.19	.63
1.5	40	.13	.43

[43 FR 60034, Dec. 22, 1978, as amended at 45 FR 82631, Dec. 16, 1980; 46 FR 3204, Jan. 14, 1981]

TABLE 4 TO PART 1512—RELATIVE ENERGY DISTRIBUTION OF SOURCES

Wave length (nanometers)	Relative energy
380	9.79
390	12.09
400	14.71
410	17.68
420	21.00
430	24.67
440	28.70
450	33.09
460	37.82
470	42.87
480	48.25

Wave length (nanometers)	Relative energy
490	53.91
500	59.86
510	66.06
520	72.50
530	79.13
540	85.95
550	92.91
560	100.00
570	107.18
580	114.44
590	121.73
600	129.04
610	136.34
620	143.62
630	150.83
640	157.98
650	165.03
660	171.96
670	178.77
680	185.43
690	191.93
700	198.26
710	204.41
720	210.36
730	216.12
740	221.66
750	227.00
760	232.11

PART 1513—REQUIREMENTS FOR BUNK BEDS

Sec.

- 1513.1 Scope, application, and effective date.
- 1513.2 Definitions.
- 1513.3 Requirements.
- 1513.4 Test methods.
- 1513.5 Marking and labeling.
- 1513.6 Instructions.

FIGURE 1 TO PART 1513—WEDGE BLOCK FOR TESTS IN § 1513.4 (a), (b), AND (c)

FIGURE 2 TO PART 1513—TEST PROBE FOR NECK ENTRAPMENT

FIGURE 3 TO PART 1513—MOTION OF TEST PROBE ARRESTED BY SIMULTANEOUS CONTACT WITH BOTH SIDES OF "A" SECTION OF PROBE AND BOUNDARIES OF OPENING

FIGURE 4 TO PART 1513—NECK PORTION OF "B" SECTION OF PROBE ENTERS COMPLETELY INTO OPENING

APPENDIX TO PART 1513—FINDINGS UNDER THE FEDERAL HAZARDOUS SUBSTANCES ACT

AUTHORITY: 15 U.S.C. 1261(f)(1)(D), 1261(s), 1262(e)(1), 1262(f)-(i).

SOURCE: 64 FR 71907, Dec. 22, 1999, unless otherwise noted.

§ 1513.1 Scope, application, and effective date.

(a) *Scope, basis, and purpose.* This part 1513 prescribes requirements for bunk beds to reduce or eliminate the risk that children will die or be injured from being trapped between the upper