

List of Subjects in 49 CFR Part 572

Motor vehicle safety, Incorporation by reference.

In consideration of the foregoing, NHTSA is proposing to amend 49 CFR part 572 as follows:

PART 572—ANTHROPOMORPHIC TEST DUMMIES

1. The authority citation for part 572 would continue to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117 and 30166; delegation of authority at 49 CFR 1.50.

2. 49 CFR part 572 would be amended by adding a new subpart S, consisting of §§ 572.160–572.167, to read as follows:

Subpart S—Hybrid III Six-Year-Old Weighted Child Test Dummy

Sec.

- 572.160 Incorporation by reference.
- 572.161 General description.
- 572.162 Head assembly and test procedure.
- 572.163 Neck assembly and test procedure.
- 572.164 Thorax assembly and test procedure.
- 572.165 Upper and lower torso assemblies and torso flexion test procedure.
- 572.166 Knees and knee impact test procedure.
- 572.167 Performance test conditions.

Subpart S—Hybrid III Six-Year-Old Weighted Child Test Dummy**§ 572.160 Incorporation by reference.**

(a) The following materials are hereby incorporated into this subpart by reference:

(1) A drawings and specifications package entitled “Drawings and Specifications for the Hybrid III Six-Year-Old Weighted Child Test Dummy (H-III6CW) [a date will be inserted in the final rule]”, consisting of:

- (i) Drawing No. 127–1000, Head Assembly;
- (ii) Drawing No. 127–1015, Neck Assembly;
- (iii) Drawing No. 167–2000, Upper Torso Assembly;
- (iv) Drawing No. 167–3000, Lower Torso Assembly;
- (v) Drawing No. 127–4000, Leg Assembly;
- (vi) Drawing No. 127–5000, Arm Assembly; and
- (vii) The Hybrid III Six-Year-Old Weighted Child Parts List.

(2) A procedures manual entitled “Procedures for Assembly, Disassembly, and Inspection (PADI) of the Hybrid III Six-Year-Old Weighted Child Test Dummy [a date will be inserted in the final rule]”;

(3) SAE Recommended Practice J211–1995, titled “Instrumentation for Impact

Tests—Parts 1 and 2”, dated March, 1995;

(4) SAE J1733 Information Report, titled “Sign Convention for Vehicle Crash Testing”, dated December 1994.

(b) The Director of the Federal Register approved those materials incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of the materials may be inspected at NHTSA’s Technical Reference Library, 400 Seventh Street, SW., room 5109, Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.

(c) The incorporated materials are available as follows:

(1) The Drawings and Specifications for the Hybrid III Six-Year-Old Weighted Child Test Dummy referred to in paragraph (a)(1) of this section are available in electronic format through the NHTSA docket center and in paper format from Leet-Melbrook, Division of New RT, 18810 Woodfield Road, Gaithersburg, MD 20879, (301) 670–0090.

(2) The SAE materials referred to in paragraphs (a)(3) and (a)(4) of this section are available from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.

§ 572.161 General description.

(a) The Hybrid III Six-Year-Old Weighted Child Test Dummy is defined by drawings and specifications containing the following materials:

(1) Technical drawings and specifications package (drawing 167–0000), the titles of which are listed in Table A;

(2) Procedures for Assembly, Disassembly, and Inspection (PADI) of the Hybrid III Six-Year-Old Weighted Child Test Dummy [a date will be inserted in the final rule].

TABLE A

Component assembly	Drawing No.
Head assembly	127–1000
Neck assembly	127–1015
Upper torso assembly	167–2000
Lower torso assembly	167–3000
Leg assembly	127–4000
Arm assembly	127–5000

(b) Adjacent segments are joined in a manner such that except for contacts existing under static conditions, there is no contact between metallic elements throughout the range of motion or under simulated crash impact conditions.

(c) The structural properties of the dummy are such that the dummy must

conform to this subpart in every respect before use in any test similar to those specified in Standard 208, “Occupant Crash Protection” (49 CFR 571.208), and Standard 213, “Child Restraint Systems” (49 CFR 571.213).

§ 572.162 Head assembly and test procedure.

The head assembly is assembled and tested as specified in 49 CFR 572.122.

§ 572.163 Neck assembly and test procedure.

The neck assembly is assembled and tested as specified in 49 CFR 572.123.

§ 572.164 Thorax assembly and test procedure.

(a) *Thorax (upper torso) assembly.* The thorax consists of the part of the torso assembly shown in drawing 167–2000.

(b) When the anterior surface of the thorax of a completely assembled dummy (drawing 167–2000) that is seated as shown in Figure S1 is impacted by a test probe conforming to 49 CFR 572.127(a) at 6.71 ± 0.12 m/s (22.0 ± 0.4 ft/s) according to the test procedure specified in 49 CFR 572.124(c):

(1) The maximum sternum displacement relative to the spine, measured with chest deflection transducer (drawing 127–8050), must be not less than 38.0 mm (1.50 in) and not more than 46.0 mm (1.80 in). Within this specified compression corridor, the peak force, measured by the probe in accordance with 49 CFR 572.127, must be not less than 1225 N (275 lbf) and not more than 1455 N (327 lbf). The peak force after 12.5 mm (0.5 in) of sternum displacement, but before reaching the minimum required 38.0 mm (1.46 in) sternum displacement limit, must not exceed by more than 10 percent the value of the peak force measured within the required displacement limit.

(2) The internal hysteresis of the ribcage in each impact as determined by the plot of force vs. deflection in paragraph (b)(1) of this section must be not less than 65 percent but not more than 85 percent.

(c) *Test procedure.* The thorax assembly is tested as specified in 49 CFR 572.124(c).

§ 572.165 Upper and lower torso assemblies and torso flexion test procedure.

(a) *Upper/lower torso assembly.* The test objective is to determine the stiffness effects of the lumbar spine (drawing 127–3002), including cable (drawing 127–8095), mounting plate insert (drawing 127–910420–048), nylon shoulder busing (drawing 9001373), nut