



SURFACE VEHICLE RECOMMENDED PRACTICE

J2878™

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Superseding J2878 JUN2016

Low Speed Thorax Impact Test Procedure for the HIII5F Dummy

RATIONALE

Section 2.1.1 SAE EA-25 was replaced by SAE J2862.

Section 2.2.1 Company name and link replaced with text indicating working link where documents can be obtained.

Section 3.3 Change upper limit of hysteresis corridor from 72 to 79.

SAE J2878 has been reaffirmed to comply with the SAE Five-Year Review policy.

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Documents

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1. SCOPE AND PURPOSE

This procedure establishes a recommended practice for performing a Low Speed Thorax Impact Test to the Hybrid III Small Female Anthropomorphic Test Device (ATD or crash dummy). This test was created to satisfy the demand by the industry to have a certification test which results in peak chest deflection similar to current full vehicle, frontal impact tests. An inherent problem exists with the current certification procedure because the normal (6.7 m/s) thorax impact test has test results for peak chest deflection that are greater than those currently seen in full vehicle, frontal tests.

The intent of this document is to develop a low speed thorax certification procedure for the H-III5F dummy with a 3.0 m/s impact similar to the SAE J2779 procedure for the H-III50M dummy.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

SAE J211/1 Instrumentation for Impact Test - Part 1 - Electronic Instrumentation

SAE J2517 Hybrid III Family Chest Potentiometer Calibration Procedure

SAE J2779 Low Speed Thorax Impact Test Procedure for the HIII 50th Male Dummy

SAE J2862 User's Manual for the Small Adult Female Hybrid III Test Dummy

2.2 Related Publication

The following publications are provided for information purposes only and are not a required part of this SAE Technical Report.

2.2.1 Federal Publication

Copies of these documents are available online at <http://www.ecfr.gov>.

Motor Vehicle Regulation No. 572 Test Dummies Specifications - Anthropomorphic Test Dummy for Applicable Test Procedures