



909 Electric Ave., Suite 206
Seal Beach, CA 90740 USA
Phone: +1 562 493 0158
Fax: +1 562 493 3158
www.dtsweb.com

Grounding and ESD Recommended Practices – August 2006

ISO/TR 14933 Technical Report

Road vehicles — Test procedures for evaluating occupant interactions with deploying side impact airbags

First Edition 2001-10-15

4.3 Electrical grounding

The test dummy, vehicle and all related instrumentation shall be grounded. The test dummy shall be grounded with cables attached to the dummy's head, thorax and pelvis, which shall be connected to earth ground during all testing. Between tests, spray the dummy with an anti-static spray. Both grounding and spraying are very important due to the high likelihood for electrostatic discharges resulting from the inflation of the air bag.

The Side Airbag Out-of-Position Injury Technical Working Group (A joint project of Alliance, AIAM, AORC, and IIHS)

RECOMMENDED PROCEDURES FOR EVALUATING OCCUPANT INJURY RISK FROM DEPLOYING SIDE AIRBAGS

(First Revision – July 2003)

3.1.6.3.2 Electrical Grounding

The test dummy, vehicle, and all related instrumentation must be grounded. The test dummy shall be grounded with cables attached to the dummy's head, thorax, abdomen, and pelvis, which shall be connected to earth ground during all testing. Between tests, the dummy may be sprayed with an anti-static spray. These are both very important due to the high likelihood for electrostatic discharges as a result of the inflating airbag.



909 Electric Ave., Suite 206
Seal Beach, CA 90740 USA
Phone: +1 562 493 0158
Fax: +1 562 493 3158
www.dtsweb.com

NHSTA 208 Test Procedure

TP-208S-01

January 15, 1998

11.6 ELECTROMAGNETIC INTERFERENCE

The laboratory shall take all necessary precautions to assure electromagnetic interference with the test data does not occur. The following procedures shall be included in those adopted by the laboratory:

- A. Ground the head, thorax, and both femurs of the anthropomorphic test devices. This is accomplished by connecting the four components with a wire. A single wire then exits the dummy and is attached to a grounding block on the vehicle. Connect the grounding block to earth ground. The actual wire size and connections are left to the laboratory based on the system it uses.
 - B. Use a static electricity elimination spray on the dummies and the interior of the vehicle.
 - C. Disconnect and remove the vehicle battery.
-



909 Electric Ave., Suite 206
Seal Beach, CA 90740 USA
Phone: +1 562 493 0158
Fax: +1 562 493 3158
www.dtsweb.com

NHSTA 208 Test Procedure (updated from the 1998 version)

TP208-12

January 14, 2003

11.13 ELECTROMAGNETIC INTERFERENCE AND STATIC CHARGE CONTROL

The laboratory shall take all necessary precautions to avoid electromagnetic and/or static charge interference with the test data. The following procedures shall be included in those adopted by the laboratory:

- A. Ground the head, thorax, and both femurs of the anthropomorphic test devices. This is accomplished by connecting the four components with a wire. A single wire then exits the dummy and is attached to a grounding block on the vehicle. Connect the grounding block to earth ground. The actual wire size and connections are left to the laboratory based on the system it uses.

 - B. Use a static electricity elimination spray on the dummies and the interior of the vehicle.

 - C. Ground and use a static electricity elimination spray on pit covers.
-