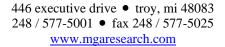


mga research corporation

PECCA LEATHER TOYOTA PASSENGER SEAT SMART FIT DESIGN STATIC AIRBAG DEPLOYMENT (AMBIENT) TEST (PO #323)







mga research corporation

TEST REPORT

MGA REPORT NO.:	C09I7-070.1
TEST(S) PERFORMED ON:	October 23, 2009
TEST DESCRIPTION:	Static Airbag Deployment (Ambient)
ITEM DESCRIPTION:	Toyota Passenger Seat Smart Fit Design (PO #323)
PROCEDURE NUMBER:	MGATPSAD 7/7/2005
TEST REFERENCE NUMBER(S):	DT9020
TEST LABORATORY:	MGA Research Corporation 446 Executive Drive Troy, Michigan 48083
SUBMITTED TO:	Zac Lee Pecca Leather 13426 Rosecrans Avenue Suite D Norwalk, California 90650
REPORT DATE:	October 26, 2009
MGA PERSONNEL:	Pero

Peng Lee

Project Leader

Test Personnel: William Mangum

* The results presented in this report relate only to the specified test items.
** This report shall not be reproduced except in full, without the written approval of the laboratory.



Objective

The purpose of this report is to document the results of a static airbag deployment test series performed by MGA Research Corporation (MGA) for Pecca Leather (Pecca). The item tested was a Toyota front row passenger seat with airbag module. The test was conducted on October 23, 2009 at MGA in Troy, Michigan.

Customer-Specified Requirements

One (1) airbag was tested at ambient temperature condition as listed in the table below. The airbag was deployed at T=10 msec.

<u>Equipment</u>

MGA's airbag deployment system was used for this test. The deployment was captured using two (2) high-speed cameras at a rate of 1000 frames-per-second. All equipment and data has been calibrated by a source traceable to the National Institute of Standards and Technology (NIST). Calibration certificates can be provided upon request.

Chamber ID	Chamber ID Chamber Type	
Chamber 10	Environmental Chamber	Russells
MGA00133	Balance Scale	Ohaus

Test Results

Pre- and post-test photographs can be found in Appendix B.

Test No.	Seat Type	Environmental Condition	Airbag Break Out Time (ms)*	Post-Test Comments
AD9020	Toyota Passenger Front Row	Ambient	3	The airbag deployed successfully.Fragmentation foam = 0.41g

*<u>Notes</u>: Airbag break out time measurement is recorded through subjective video.

Additional test documentation can be found in the following appendices.

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Appendix A Test Data and Photographs......Page 3
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Appendix A Test Data and Photographs Customer: Pecca Program: Toyota

Page

Friday

,23.10.2009

14:56:34

MGA Test #: AD9020

Page (1) of AD9020 on Version: 2.5.0 DT9002.def EVAI MGA #: AD9020 Customer: Pecca Leather 13AIRB010000CU0P / prefiltered Test Number: AD9020 Job #: C09I7-070.1 Sample: Passenger Seat Impact Angle: N/A Program: Toyota Temp: Ambient Impact Vel.: N/A Eng: Date: 10/23/2009 2:51:36 PM SIAB Deployment 5.0 4.5 4.0 3.5 3.0 M 2.5 current [A] 0 1.5 2.0 1 mm 0.1 Λ. 0.5 8 -0.5 .--1:5 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 time [ms]

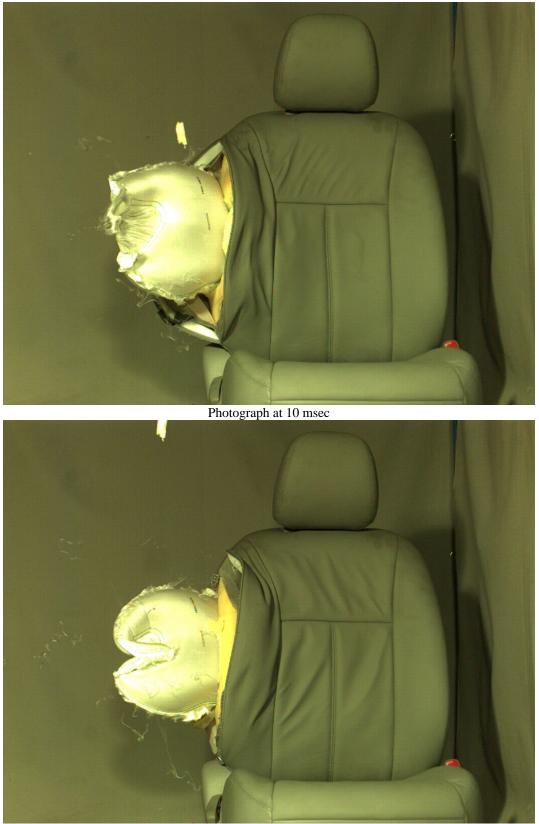
Evaluation Interval: 0 - 250 [ms] before Filter : Max(10.3 ms) = 2.95A; Min(69.85 ms) = -0.01372A Test Date: 10/23/2009





Photograph at 3 msec





Photograph at 20 msec





Photograph at 40 msec



Photograph at 50 msec



Pre-Test Photo #1 of Test #AD9020



Pre-Test Photo #2 of Test #AD9020





Pre-Test Photo #3 of Test #AD9020



Pre-Test Photo #4 of Test #AD9020

Customer: Pecca Program: Toyota



Post-Test Photo #1 of Test #AD9020



Post-Test Photo #2 of Test #AD9020





Post-Test Photo #4 of Test #AD9020



Post-Test Photo #5 of Test #AD9020



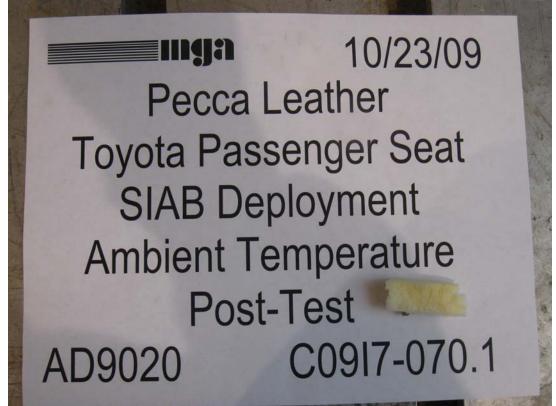
Post-Test Photo #6 of Test #AD9020



Post-Test Photo #8 of Test #AD9020



Post-Test Photo #9 of Test #AD9020



Post-Test Photo #10 of Test #AD9020



Post-Test Photo #11 of Test #AD9020