



**mga research corporation**

**SCC NORTHWEST MANUFACTURING LTD.  
2008 CHRYSLER SEBRING SEATS WITH SCC NORTHWEST LTD  
SEAT COVERS  
STATIC AIRBAG DEPLOYMENT TEST SERIES**

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## mga research corporation

### TEST REPORT

**MGA REPORT NO.:** C13I7-030.1  
**TEST(S) PERFORMED ON:** December 7, 2012  
**TEST DESCRIPTION:** Static Airbag Deployment  
**ITEM DESCRIPTION:** 2008 Chrysler Sebring with SCC Northwest Mfg. LTD. Seat Covers  
**PROCEDURE NUMBER:** MGATP\_SAD  
09/18/12  
**TEST REFERENCE  
NUMBER(S):** P21497-P21499  
**TEST LABORATORY:** MGA Research Corporation  
446 Executive Drive  
Troy, Michigan 48083  
**SUBMITTED TO:** Steven Koyama  
SCC Northwest Manufacturing LTD.  
1330 William Street  
Vancouver, BC V5L 2P5  
**REPORT DATE:** December 10, 2012  
**MGA PERSONNEL:**

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William Mangum  
Project Leader

Test Personnel:  
Shanon Brintley  
Justin Lewis

\* 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 SCC Northwest Manufacturing LTD (SCC Northwest). The items tested were 2008 Chrysler Sebring Seats with SCC Northwest Manufacturing LTD Seat Covers. The testing was conducted on December 7, 2012 at MGA in Troy, Michigan.

**Customer-Specified Requirements**

Three (3) airbag was tested following the specifications provided by the customer.

- Three (3) at ambient (+23°C) temperature

**Test Procedure**

- The seats and covers were supplied by SCC Northwest Mfg. LTD.
- The seats were adjusted to mid track, full down and a 4.5° back angle measured from head restraint position. A lexan shield was secured 50mm from the outboard side of the seat to simulate the door and b-pillar.
- The airbag was deployed at time zero t (0) =10 msec.
- MGA's high-speed video cameras were used to capture the airbag deployment event at 2,000 fps.
- Pre and post-test photographs were taken and all fragmentation was collected and weighed.

**Equipment**

MGA's Kayser Threde airbag deployment system was used for this testing.

| Equipment          | Serial # | Manufacturer | Calibration Date | Calibration Due Date |
|--------------------|----------|--------------|------------------|----------------------|
| Tape Measure       | TPM200   | Stanley      | 02/07/2012       | 02/07/2013           |
| Digital Protractor | MGA00518 | Mitutoyo     | 12/04/2012       | 12/04/2013           |

**Test Results**

Pre and post-test photographs for this testing can be found in Appendix A. All data is traceable to the National Institute of Standards and Technology (NIST).

**SCC Northwest Mfg Ltd**  
**2008 Chrysler Sebring Seats With SCC Northwest Mfg Ltd. Seat Covers**  
**SIAB Deployment**  
**MGA Job No. C13I7-030.1**

**Summary**

| MGA Test No. | Date      | Sample               | Temperature (°C) | Breakout Time (ms) | Full Inflation Time (ms) | Post-Test Comments  |
|--------------|-----------|----------------------|------------------|--------------------|--------------------------|---|
| P21497       | 12/7/2012 | OEM Seat (Baseline)  | 22.1             | 2.50               | 7.50                     | •Airbag deployed<br>•No visible damage                        |
| P21498       | 12/7/2012 | OE Grey Cover        | 22.3             | 3.50               | 7.50                     | •Airbag deployed<br>•Airbag labels came off during deployment |
| P21499       | 12/7/2012 | Ballistic Grey Cover | 22.2             | 3.00               | 7.00                     | •Airbag deployed<br>•Airbag labels came off during deployment |

**Additional test documentation can be found in the following appendices.**

Appendix A Test Data and Photographs

**Appendix A**  
**Test Data and Photographs**

MGA Test #: P21497

Test Date: 12/07/2012



Pre-Test Photo #1 of Test #P21497



Pre-Test Photo #2 of Test #P21497



Post-Test Photo #1 of Test #P21497



Post-Test Photo #2 of Test #P21497



Post-Test Photo #3 of Test #P21497



Post-Test Photo #4 of Test #P21497



Post-Test Photo #5 of Test #P21497



Post-Test Photo #6 of Test #P21497





Post-Test Photo #7 of Test #P21497



Post-Test Photo #8 of Test #P21497



Post-Test Photo #9 of Test #P21497

MGA Test #: P21498

Test Date: 12/07/2012



Pre-Test Photo #1 of Test #P21498



Pre-Test Photo #2 of Test #P21498



Post-Test Photo #1 of Test #P21498



Post-Test Photo #2 of Test #P21498



Post-Test Photo #3 of Test #P21498



Post-Test Photo #4 of Test #P21498



Post-Test Photo #5 of Test #P21498



Post-Test Photo #6 of Test #P21498



Post-Test Photo #7 of Test #P21498



Post-Test Photo #8 of Test #P21498

MGA Test #: P21499

Test Date: 12/07/2012



Pre-Test Photo #1 of Test #P21499



Pre-Test Photo #2 of Test #P21499





Post-Test Photo #1 of Test #P21499



Post-Test Photo #2 of Test #P21499



Post-Test Photo #3 of Test #P21499



Post-Test Photo #4 of Test #P21499



Post-Test Photo #5 of Test #P21499



Post-Test Photo #6 of Test #P21499



Post-Test Photo #7 of Test #P21499



Post-Test Photo #8 of Test #P21499