



APV Engineering & Testing Services  
1521 Hume Highway  
Campbellfield, Victoria, 3061  
A.B.N. 26 148 189 468

Telephone: 613 9355 5533  
Facsimile: 613 9357 4362

DoTRS TFI#: 2741

## TEST REPORT

**Test Facility:** Component Laboratory

**Test Title / Description:** Static Seat Side Airbag Deployments of Seats Fitted with Seat Covers

**Test Report:** 1046

**Test Date:** 27/02/2019

**Customer:** OTOM Car Seat Covers

Orta Mah. Adnan Menderes Cad. No:201/A 54130  
Serdivan,Sakarya/Turkey  
+90 264 281 9901

**Submitted by:**

 4/03/2019

Alexander Soliman  
Graduate Test Engineer  
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**Authorised by:**

 4/03/2019

José de Freitas  
APV-T Authorised Signatory  
e-mail: jose.defreitas@apvcorporation.com

### Amendment Records

Issue No.	Date	Issue Details
1	27/02/2019	Original Issue

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TL-QMS-FOR-5.10.2 Tech Approved By: TS Qual Approved By: SC

04/02/2016 Issue 4



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Test Centre Work Order No: 02155

Report/Test No: 1046

Sample Part No: Various

Number of Samples: 3

Type of Test: Static Airbag Deployments tested to TSF6767G

### 1.0 Aim:

To evaluate the static deployment characteristics of side airbags when fitted with OTOM Concept Seat Covers.

### 2.0 Samples:

- 3 x OTOM Car Seat Covers made for Suzuki Alto Seat

### 3.0 Test Method:

- Airbag deployment conducted in three different environmental conditions. The first deployment was conducted in an ambient environment (23°C). The second deployment conducted in cold (-30°C) and the last deployment conducted in hot (80°C)
- Deployments conducted on Suzuki Alto Seats

### 4.0 Test Equipment:

- Deployment Room: Drop Rig Room
- Conditioning Chambers: Votsch Freezer/Oven (S/N: VCS 7150-5 & VC 7150)
- Eurosid 1 Crash Test Dummy
- Perspex barrier set 80mm from side face of seat, aligned to middle rib of Eurosid 1

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### 5.0 Test Results:

TEST	CODE	TEMP	INFLATION TIMES		OBSERVATION
1	02155 01 AMB	AMB 23°C	Opening	4.433 ms	Airbag fully deployed through the intended seat cover seam. There were no visible signs of separation or fragmentation. There were no visible signs of holes or tears in the airbag cushion.
			Partial	7.433 ms	
			Full	13.433 ms	
2	02155 02 COLD	COLD -35°C	Opening	5.207 ms	Airbag fully deployed through the intended seat cover seam. There were no visible signs of separation or fragmentation. There were no visible signs of holes or tears in the airbag cushion.
			Partial	8.707 ms	
			Full	14.207 ms	
3	02155 03 HOT	HOT 80°C	Opening	4.383 ms	Airbag fully deployed through the intended seat cover seam. There were no visible signs of separation or fragmentation. There were no visible signs of holes or tears in the airbag cushion.
			Partial	6.883 ms	
			Full	11.883 ms	

Refer to Appendix A for Test Photos

The test results detailed in this test report apply to the test samples identified. The performance of similar products is not implied.

### 5.0 Sample Disposal:

Samples returned to originator for further evaluation as requested by the customer

### 6.0 Data Supplied To The Customer:

- One soft copy of the test report

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**Tested By:** José de Freitas  
 Alex Soliman

**Title:** Test Engineer  
 Graduate Test Engineer

**Date Tested:** 27/02/2019

**Reported By:** Alex Soliman

**Title:** Graduate Test Engineer **Report Date:** 27/02/2019

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**Appendix A**  
**Test Photos**

<i>Amendment Records</i>		
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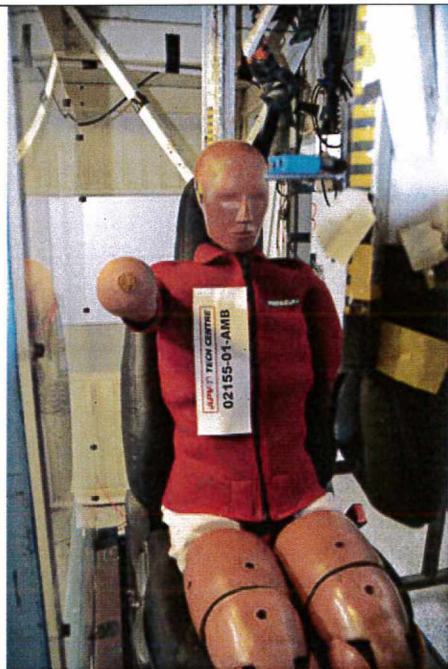
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Telephone: 613 9355 5533  
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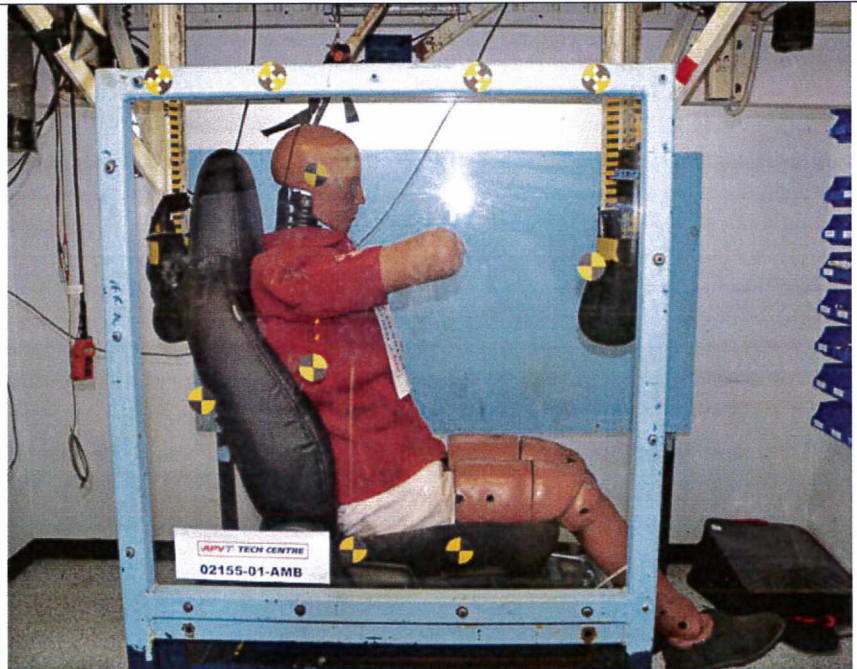
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**Sample 1 (02155-01-AMB)**

**Pre-test Front**



**Pre-Test Side**



**Open – t = 4.443 ms**



**Partial – t = 7.433 ms**



**Full – t = 13.433 ms**



**Amendment Records**

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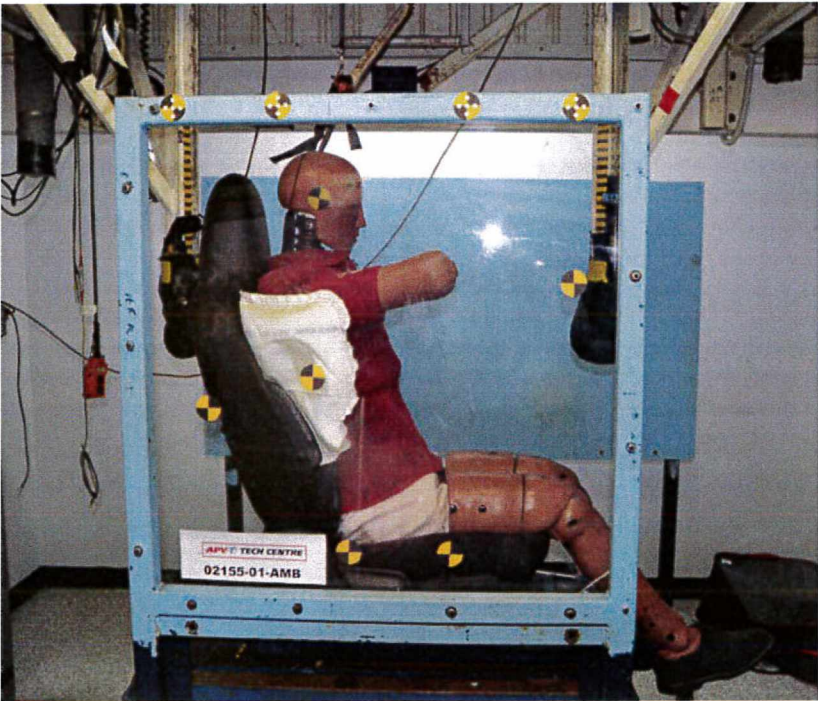
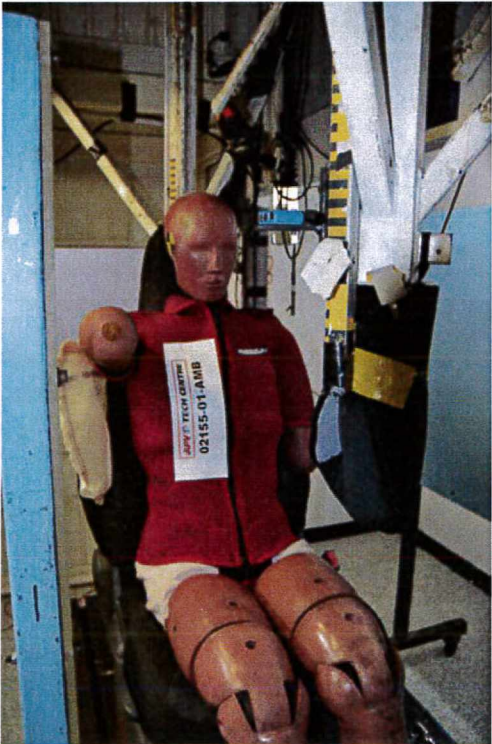
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**Post-Test Sample 1 (02155-01-AMB)**



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**Sample 2 (02155-02-COLD)**

**Pre-Test Front**



**Pre-Test Side**



**Open – t = 5.207 ms**



**Partial – t = 8.707 ms**



**Full – t = 14.207 ms**



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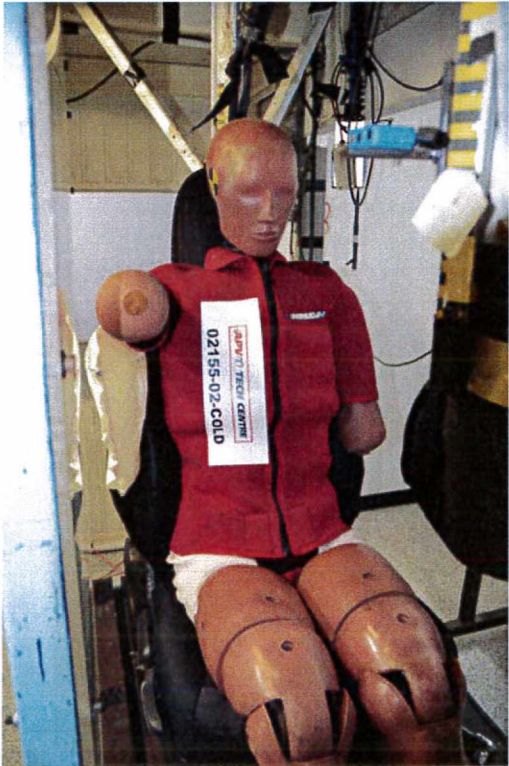
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### Post – Test Sample 2 (02155-02-COLD)



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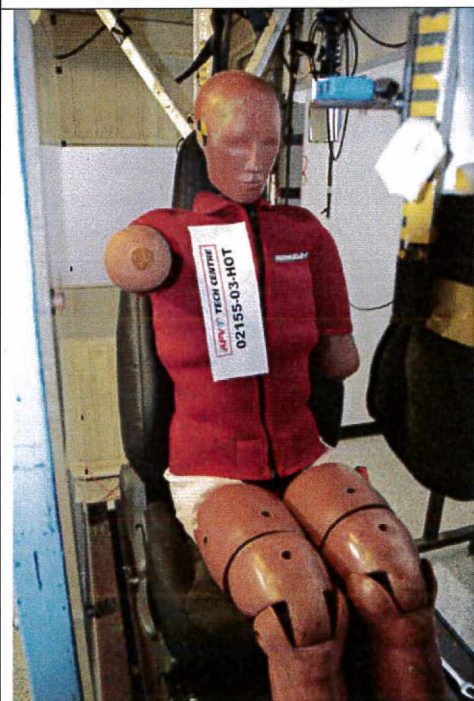
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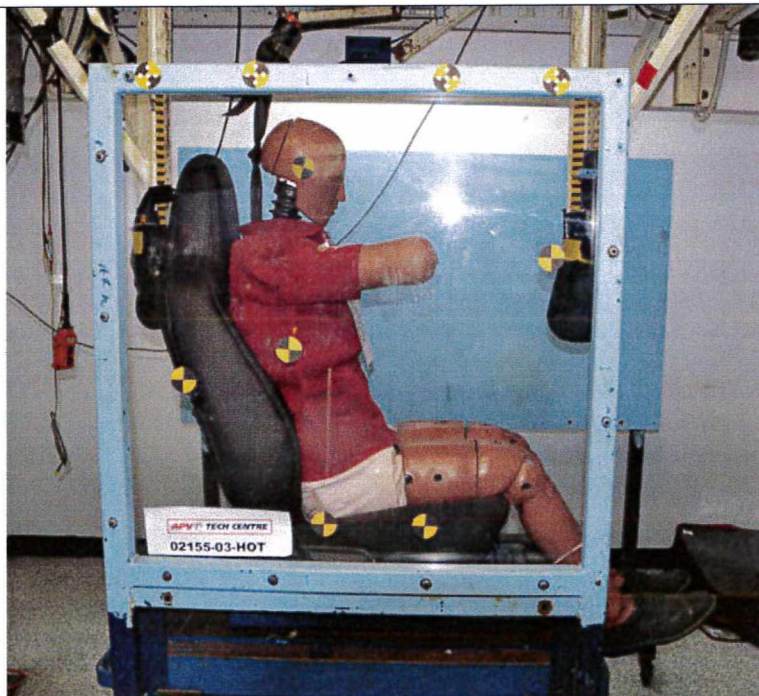
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**Sample 3 (02155-03-HOT)**

**Pre-Test Front**



**Pre-Test side**



**Open – t = 4.383 ms**



**Partial – t = 6.883 ms**



**Close – t = 11.883 ms**



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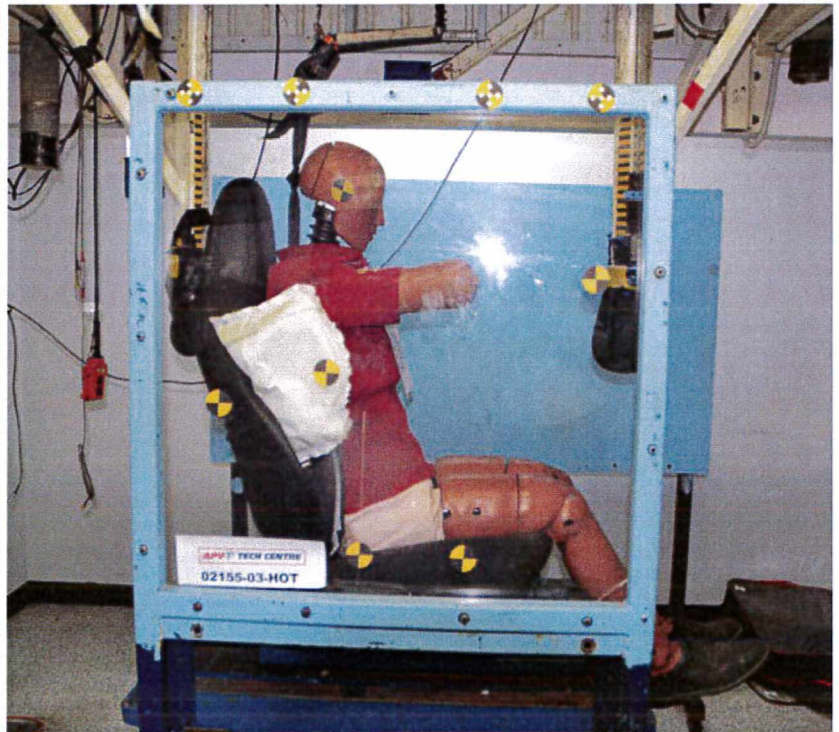
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### Post – Test Sample 3 (02155-03-HOT)



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