

From: Hillman, Daniel (NHTSA) [REDACTED]
Sent: Tuesday, June 14, 2011 12:40 PM
To: Butterfield, Jessica (NHTSA) [REDACTED]
Subject: FW: Airbag VOQs
:
Attach: Jun 2010 Forward VOQDataDrilldown.xlsx; Jun 2010 Forward
VOQDataTablesStaticData.xlsx

From: Magno, Gregory (NHTSA)
Sent: Tuesday, June 07, 2011 12:40 PM
To: Morgan, Tina (NHTSA)
Cc: Hillman, Daniel (NHTSA); Butterfield, Jessica (NHTSA); Freeman, David V. (NHTSA); Hardgrave, Bernard (NHTSA)
Subject: Airbag VOQs

Good afternoon,

This follows up our meeting of 2-Jun-2011 concerning the prioritization of Airbag screening activities.

It was agreed during the meeting that a comparison of top offenders in the VOQ data and EWR would be cross-linked and then receive further review in an effort to discern targets for further attention.

Please find attached VOQ data from the last 365 days. Initial parameters were that the VOQ had to have been added to ARTEMIS between 1-Jun-2010 & 1-Jun-2011 and had to have been filed against any airbag component code. 2,271 records were returned. Further work was conducted to mark each record according to keyword searches intended to identify airbag warning lights and nondeployment concerns.

Two spreadsheets are attached:

The first one is subdivided into four summary sheets:

1. Total traffic ranked by M-MY & VOQ severity type
2. Airbag Light Traffic ranked by M-MY & VOQ severity type
3. Non-Airbag Light Traffic ranked by M-MY & VOQ severity type
4. Non-Airbag Light Plus non deployment Traffic ranked by M-MY & VOQ severity type

The second one contains a pivot table and the filters needed to drill down on the records behind any particular model-MY- condition combination. A sample list of records is included. The actual drilldown is accomplished by first selecting the appropriate filters and then double-clicking on the Grand Total figure.

The four technical staff this is addressed to should review the material, convene to discuss, and then return to Tina and me to share your observations and target list.

Thanks

Greg

Gregory E. Magno

Chief, Defects Assessment Division

Office of Defects Investigation

US DOT / NHTSA

[REDACTED]

[REDACTED]

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Airbag Screening Issues Review



David V. Freeman, Safety Defects Engineer
Office of Defects Investigation
Early Warning Division

Agenda

- Objective
- Problem Statement
- Background Information
- Airbag Issues For Review
- Summary
- Questions/Concerns/Comments



Objective

- Present results from airbag screening sweep to VID

List air bag issues identified

- Discuss screening priorities



Problem Statement

- EWD and DAD uncertain as to how to conduct current/future screening
- Backlog of other side-airbag and OCS-related customer concerns
- Two (2) airbag investigations with precedent implications:
 - EA09-005
 - Side torso air bag non-deployment
 - 2003-2005 Infiniti Q45 and 2003-2004 Infiniti M45
 - EA09-017
 - Occupant Classification System (OCS) failure
 - Passenger front air bag non-deployment for adult passenger
 - 2007 - 2008 Kia Sorento

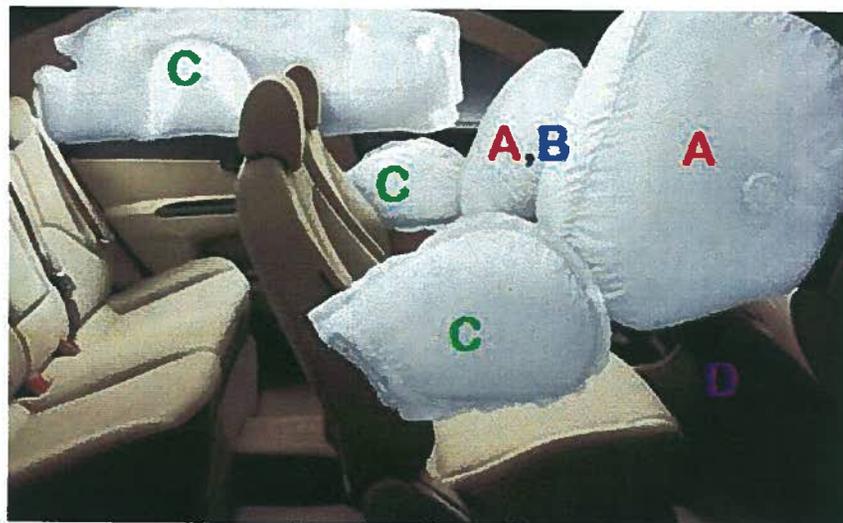


Background Information

- DAD and EWD identified many potential safety-related issues related to air bags
- DAD and EWD Chiefs decide to approach VID for guidance
- DAD and EWD Chiefs decide air bag screening sweep needed so all potential airbag issues can be discuss with VID
- Screening sweep focus on injuries related to air bag issues
 - VOQs with injuries
 - EWR death and injury claims

"Airbags" Identified in ARTEMIS

COMPNO	CMPT_NAME	VOQs		Key
140000	AIR BAGS	1,331	59%	
141000	AIR BAGS:FRONTAL	677	30%	A
141100	AIR BAGS:FRONTAL:SENSOR/CONTROL MODULE	65	3%	
141200	AIR BAGS:FRONTAL:DRIVER SIDE INFLATOR MODULE	2	0%	B
142000	AIR BAGS:SIDE/WINDOW	196	9%	C
145000	AIR BAGS:ON-OFF SWITCH ASSEMBLY	0	0%	
146000	AIR BAGS:KNEE BOLSTER	0	0%	D
Total		2,271	100%	



Airbag Taxonomy (Experimental)

	Region →	Frontal			Knee	Side	
	Airbag →	Driver	Passenger	OCS		Thorax	Curtain
Condition	Non-Deployment	Component fault; wiring fault; must assess crash severity		?	Not seen	Legal issues; otherwise similar to Frontal	Not seen
	Split Deployment	No longer seen		N/A	N/A	N/A	N/A
	Premature Deployment	ID'd in one model		N/A	Not seen	Not seen	Not seen
	Inadvertent Deployment	If while moving, must rule out impact; Injury & distraction potential make this actionable		N/A	Not seen	Minimal hazard ID'd	Same as for frontal
	Incomplete Deployment	Not seen	Not seen	N/A	Not seen	Potential IE	ID'd in one model, closed investigation
	Fragmentation on Deployment	Propellant defect; Prima Facie Defect		N/A	Not seen	Not seen	Not seen
	Deployment in Crash Causes Injuries	Subjective; must assess crash severity vs injuries suffered		N/A	Subjective; must assess crash severity vs injuries suffered	Not seen	Not seen
	Warning Light	Component fault; wiring fault		Algorithm; component fault; wiring fault	Not seen	Component fault; wiring fault	Component fault; wiring fault

Airbag Screening Sweep

VehMod	Min MY	Max MY	VOQ Inj	EWR Death Incidents	EWR Injury Incidents
[REDACTED]					
COBALT	2005	2010	12		
[REDACTED]					
EWR data - Any component of Airbag and Data received as of May 27, 2011					

Potential Issues Identified

- Frontal driver-side air bag non-deployment
- Frontal passenger-side air bag non-deployment
 - OCS issues
- Side air bag non-deployment
- Side air bag inadvertent deployment

Frontal Driver-Side AB - VID

- Vehicle of Interest

- [REDACTED] [REDACTED] [REDACTED] [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- Status

- VID referral

Frontal Pass-Side AB Non-Deployment - EWR

Vehicle of Interest

[REDACTED] = [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED] = [REDACTED]

[REDACTED]

Status

EWD referral, pending review with DAD and VID

Frontal Pass-Side AB Non-Deployment – EWR

Vehicles of Interest

[REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Status

- EWD referral submitted to DAD 06/2009
- Currently on hold pending outcome of EA09-017

Frontal Pass-Side AB Non-Deployment – DAD

Vehicle of Interest

[REDACTED] = [REDACTED] [REDACTED] [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Status

- IE09-064; generated 07/2009
- Currently on hold pending outcome of EA09-017

Frontal Pass-Side AB Non-Deployment – EWR

Vehicle of Interest

[REDACTED] = [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Status

EWD referral, pending review with DAD and VID

Frontal Pass-Side AB Non-Deployment - EWR

• Vehicle of Interest

2006 - 09 Chevrolet Cobalt

Population: 764, 280

• Customer Concern

Occupant Classification Safety (OCS) system malfunction

Airbag on/off light illumination suggests front-passenger airbag is deactivated when an adult is present (DTC B0081)

Potential non-deployment of front-passenger airbag under this scenario

• Screening Results (numbers as of July 2011)

45 total field reports

3 known VOQs

1 TSB: 10025669 (2006 - 08MY)

No recalls or pursuits were active for this customer concern

• Potential precedence set with NHTSA campaigns 08V161 and 07V062

Status

• EWD referral, pending review with DAD and VID

Frontal Pass-Side AB Non-Deployment - EWR

Vehicle of Interest

[REDACTED] = [REDACTED] [REDACTED]

- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED] [REDACTED]

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[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

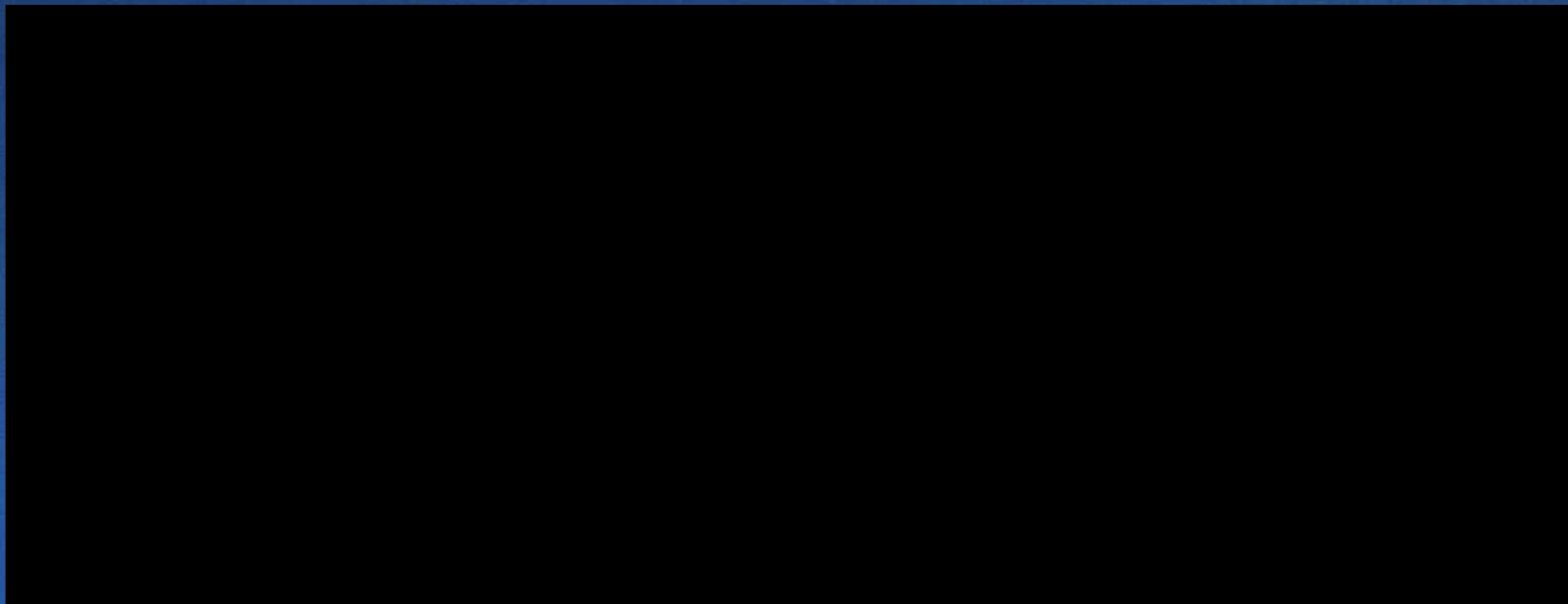
[REDACTED]

Status

- EWD referral, pending review with DAD and VID

Frontal Pass-Side AB Non-Deployment - OVSC

- Vehicle of Interest



Status

- OVSC referral prompted by informant, pending review with DAD and VID

Side AB Non-Deployment - EWR

Vehicles of Interest

[REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED]
1 [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]

Status

- EWD referral submitted to DAD 06/2009
- IE10-023 recommends a PE; VID reluctant to open due to Infinity investigation

Side AB Inadvertent - EWR

Vehicle of Interest

[REDACTED] = [REDACTED] [REDACTED]

- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- [REDACTED] [REDACTED]
[REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]

Status

- EWD referral, pending review with DAD and VID

Side AB Inadvertent - EWR

Vehicle of Interest

[REDACTED] = [REDACTED] [REDACTED] [REDACTED]

- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

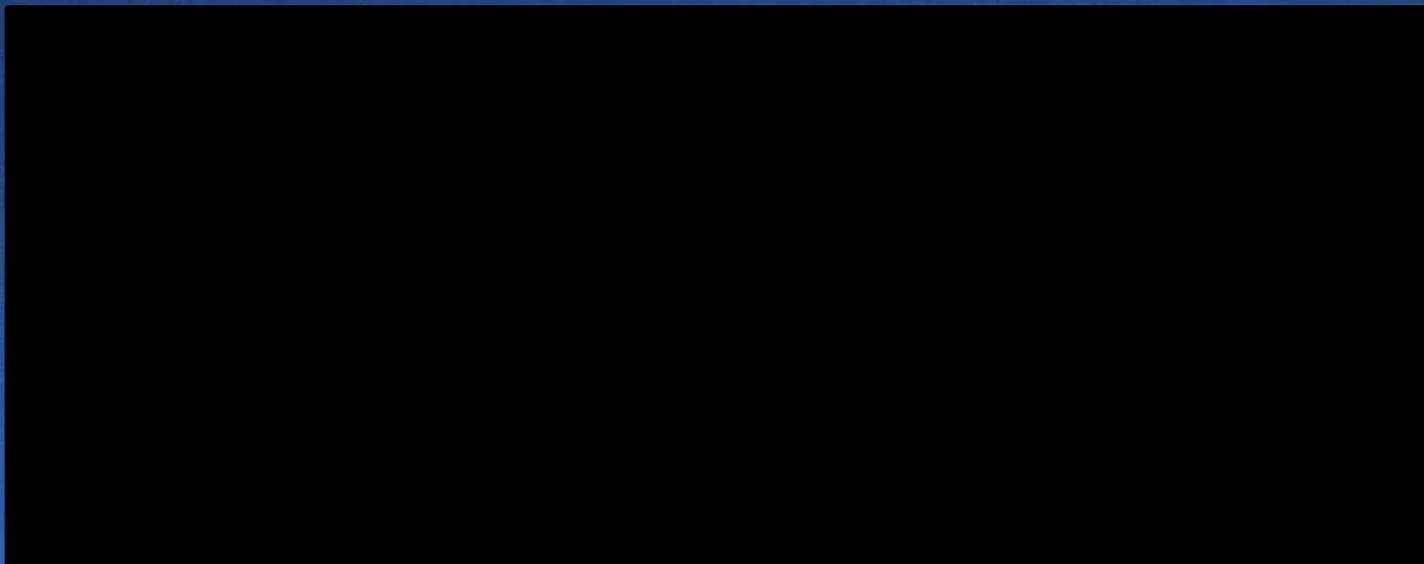
Status

- EWD referral, pending review with DAD and VID

Side Thorax AB

Incomplete Deployment - DAD

- Vehicle of Interest



- Status

- IE in process

Summary

- EWD and DAD need guidance/direction as it pertains current/future airbag screening efforts.
- There is two (2) frontal driver-side air bag issues.
- There is one (1) frontal passenger-side air bag issue.
- There are five (5) frontal passenger-side air bag issues related to OCS.
- There are three (3) side air bag non-deployment issues.
- There are two (2) side air bag inadvertent deployments.
- There is one (1) side thorax air bag incomplete deployment.

Questions/Concerns/Comments

