

From: [Babcock, Robert](#)
To: [RMD.ODL \(NHTSA\)](#)
Cc: [Timian, Jennifer \(NHTSA\)](#)
Subject: Hyundai-Kia Response to EQ12-002
Date: Wednesday, April 04, 2012 3:39:09 PM
Attachments: [XM CAB \[Tab 2 Original\].pdf](#)
[XMA Letter - ACH2 1B Feb 2012 \[Tab 3\].pdf](#)
[EQ12-002 Final Response Letter to NHTSA - Signed.pdf](#)
[ACH inflator Testing overview 2-9-12 373mm \[Tab1\].pptx](#)
[KMA XM Airbag Quality Letter Translation \[Tab 2 Translation\].docx](#)

Please find attached the documents of submission for EQ12-002. This document has also been sent via Federal Express to Ms. Jennifer Timian in hard-copy.

Best regards,
Bob



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6800 Geddes Rd.
Superior Township, MI 48198
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HATCI is an authorized representative of both Hyundai Motor Company and Kia Motors Corporation; which are separate and distinct automotive manufacturers.

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April 4, 2012

VIA FEDERAL EXPRESS

Jennifer T. Timian, Chief
Recall Management Division
Office of Defects Investigation
U.S. Department of Transportation
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
Washington D.C. 20590

Re: **Equipment Query (EQ12-002)**
Autoliv Air Bag Modules

Dear Ms. Timian:

This letter is submitted in response to your letter dated February 23, 2012 sent to Hyundai-Kia America Technical Center, Inc. ("HATCI") (Reference NVS-215aa/EQ12-002). That letter requested information concerning certain side curtain airbag inflators that were manufactured by Autoliv with an incorrect initiator propellant formulation. A number of these inflators were supplied to Kia Motors Manufacturing Georgia, Inc ("KMMG") and installed in certain 2012 Kia Sorento vehicles. Although HATCI is an organization independent of both Kia Motors Corporation ("KMC") and Kia Motors America, Inc. ("KMA"), it has been designated by those organizations to act as their communication liaison with the National Highway Traffic Safety Administration ("NHTSA"). This response is submitted to NHTSA by HATCI in that limited role.

HATCI also notes that NHTSA's inquiry was submitted directly to HATCI personnel for response. It appears that this occurred because the February 17, 2012 submission by Autoliv noted in your inquiry indicated that 693 components were sold to HATCI for assembly into new motor vehicles. The report from Autoliv was incorrect. HATCI does not assemble vehicles and did not purchase components reported on. However, in its role as a communications liaison for Kia with NHTSA, HATCI has passed on your letter to Kia to obtain the information contained in this response.

No Autoliv components of the type that are a subject of your February 23, 2012 letter were sold, offered for sale, delivered, or imported in the United States for Hyundai Motor Company.

In addition, thank you for granting Kia an extension in which to provide its response as it was unaware that such an inquiry was pending. According to HATCI's records, the letter was received by HATCI's mail room on February 29, 2012. However, for reasons unknown, the letter appears to have been misrouted and/or lost. As a result, your inquiry was not forwarded to Kia, who was also unaware that

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Hyundai-Kia America Technical Center, Inc

Jennifer T. Timian, Chief
Recall Management Division
April 4, 2012
Page 2 of 2

such an inquiry was pending. HATCI has addressed this issue internally so that it does not happen again.

REQUEST NO. 1: State whether your company has made, or intends to make, a decision that vehicles it manufactured with these modules contain a safety defect, and will notify its purchasers by conducting a safety recall.

RESPONSE TO REQUEST NO. 1:

On February 1, 2012, Autoliv notified Kia Motors Manufacturing Georgia, Inc. (“KMMG”) of the potential issue with the initiator propellant mixture contained in the ACH-2.1B inflators in the side curtain air bags supplied to KMMG for the 2012 Kia Sorento vehicles. KMC began to investigate the effect of this issue and whether a recall would be necessary. On February 9, 2012, Autoliv informed Kia that it had tested 100 ACH-2.1B inflators at -40°C and that all inflators deployed. **See Tab 1.** On February 13, 2012, Autoliv further confirmed via letter, that its testing showed that the inflators from the affected lots still met the required specifications for deployment and assured that the affected lots of inflators would deploy normally. **See Tabs 2 and 3.** As a result, on February 13, 2012, KMC determined there was no safety related defect in the 2012 Kia Sorento vehicles that result from the condition described by Autoliv and that a recall was unnecessary.

REQUEST NO. 2:

If your company does not believe that vehicles it manufactured with these modules contain a safety defect, provide all information, such as supporting documents, analysis and/or test results, that support this opinion.

RESPONSE TO REQUEST NO. 2:

See Response to Request No. 1.

If you have any questions, please do not hesitate to contact me.

Sincerely,



Robert Babcock
Senior Manager,
Regulation and Certification Department

Autoliv Corp.

우 445-810/경기도 화성시 동탄면 송리 436-1/Tel (031)379-65** /Fax (031) 379-6698~9/담당 ***

문서번호 : AKR 2012 - 0201

발송일자 : 2012.02.13

수신 : 기아자동차 품질본부, 구매본부

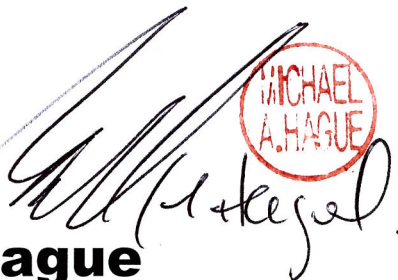
참조 : 품질전략팀, 품질보증 2 팀, 글로벌부품품질개선팀,

제목 : XM 커튼 에어백 전개 성능 품질 보증 통보

1. 귀사의 일익 번창하심을 기원하오며, 평소 업무 협조에 감사를 드립니다.
2. 표제의 건, 먼저 폐사에서 납품하는 XM 커튼에어백 인플레이터 기폭장치인 이니시에이터의 이종 재질을 사용하게된 문제점에 대하여 귀사에 통보드리게 된 점에 대하여 사죄의 말씀을 드리며 아울러 귀사의 든든한 파트너가 될 것을 약속드립니다.
3. 폐사에서는 상기 문제 건에 대해 원인 파악 및 개선 대책, 재발 방지를 수립하여 귀사에 적용을 완료하였으며, 또한 귀사의 타 차종에 대한 문제 발생 없음을 확인하였습니다.
4. 따라서, 상기 문제 제품에 대한 고객의 안전성을 검토하기 위하여 문제품과 동일 사양의 제품을 제작하여 전개 시험을 실시한 결과 도면 규격(85010-2P500)에 만족한 성능을 확인하였으며, 고객의 안전에 문제 발생이 없음을 확인 할 수 있었습니다.
5. 아울러 오토리브 글로벌에서는 타 OEM 에 공급하는 동일한 인플레이터 모델에 대하여도 기아 자동차에 보고한 내역과 동일하게 통보하였으며, 필드 조치를 취하지 않는 방향으로 진행중임을 말씀드립니다.
6. 이에 폐사에서는 의심 로트의 제품에 대한 전개 성능에 대해 품질 보증을 약속드리며, 향후 동일 로트 제품에 대해 전개 성능에 문제가 발생시 폐사에 책임이 있음을 약속드립니다.-끝-

오토리브 코리아
대표이사

Michael A Hague



Autoliv Corp.

436-1, Song Ri Dongtan-Myun, Hwaseong-Si, Gyeonggi-Do, Korea 445-812
Tel (031) 379-65/ Fax (031) 379-6698-9 / Manager *****

DOC NO: AKR 2012 – 0201

ISSUED DATE: 2012.02.13

RECIPIENTS: Kia Motors Quality Division / Purchasing Division

COPY TO: Quality Strategy Team, Quality Assurance 2 Team, Global Parts Quality Improvement Team

SUBJECT: Letter of Guarantee for the Performance Quality of XM Curtain Airbag Deployment

1. We wish you continued success and prosperity. We thank you for your continued cooperation.
2. With regards to the above subject matter, we apologize for having to notify you of problems relating to the use of different materials in the initiator. The initiator is the device contained in the inflator that triggers the deployment of the XM Curtain Airbag, supplied by Autoliv.
3. Autoliv identified the root cause relating to this issue and as a result, Autoliv has implemented corrective actions and preventative measures. Additionally, we have verified that the problem does not occur in other Kia models.
4. Accordingly, in evaluating consumer safety issues raised by the problematic product mentioned above, Autoliv has been able to confirm, through multiple deployment tests of the same inflator type built to reproduce the identified issue, that the inflators from the affected lots still satisfy Drawing Standard 85010-2P500.
5. Also, Autoliv Global has notified other OEMs to which the same inflator model was being supplied to and would like to inform you that we are currently executing these measures in a direction that does not include field measures.
6. In all, Autoliv promises a guarantee of quality in terms of deployment performance for the products within the suspected lot(s). Autoliv also promises that we will assume responsibility for problems related to deployment performance of products from the same lot(s) if such were to occur in the future. - End -

Autoliv Korea
President
Michael A. Hague

Autoliv Corp.

436-1, Song Ri, Dongtna-Myun, Hwasung-city, Gyeonggi-Do, 445-812, KOREA

DOC. NO : AKR 2012 - 0201

ISSUED DATE : 2012.02.14

RECIPIENTS : KMA / KMMG QUALITY / PURCHASING

COPTY TO :

SUBJECT : Guarantee letter of the normal deployment of XMA Curtain Air bags.

Dear Sirs.

With reference to the above subject matter, we apologize that we have had to notify you of an issue relating to the initiator propellant mix on the XMA curtain airbag. The initiator being the device contained in the inflator that initiates the deployment of the Curtain Airbag.

Investigation and identification of the root cause relating to this issue has been completed and as a result corrective actions and preventive measures have been implemented. Our investigation has clearly identified all affected lots and a "clean point" Identified. As such corrective actions were rapidly applied to the production of initiators and inflators which are shipped to your plant subsequently.

Autoliv has been able to confirm that the inflators from the affected lots do still meet the required specifications for deployment as well as HKMC requirements shown in the drawing (85010 - 2P500). This has been confirmed through multiple deployment tests of the same inflator type built to reproduce the identified issue.

At the same time as notifying your organization of this issue and the corresponding facts, Autoliv has also informed all other OEM's who are similarly affected. We are in similar discussions with these OEM's.

Based on the above, we assure you that affected lots of inflators will deploy normally, and we will take responsibility of deployment problems if any occur.

Please let me know if there is anything else that we can do to support you related to this issue.

Autoliv Korea

President

Michael A Hague





ACH-2.1B Inflator Grade B Testing Summary

Feb. 9, 2012



Content: **INTERNAL**

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ACH-2.1B Grade B Inflator Family Testing Summary

Inflator	Test Temp. ©	Dia. (mm)	Length (mm)		Prototype initiator test results	Production initiator test results
ACH-2.1B	Ambient	35	392		1/38	0/100
		35	385			
		35	332		2/100	0/100
		35	293		0/100	
	-40	35	373			0/100
	-30	35	392			0/100
	-40	35	385			
	-30	35	332			0/100
	-25	35	332			0/100
	-40	35	325			
	-35	35	293		2/100	
	-30	35	293			0/100
	-25	35	293		3/100	0/100
	-40	35	269		6/100	
	-30	35	269			0/100
-25	35	269		5/100	0/100	

ACH-2.0B Grade B Inflator Family Testing Summary

Inflator	Test Temp. ©	Dia. (mm)	Length (mm)		Prototype initiator test results	Production initiator test results
ACH-2.0B	Ambient	30	322		0/100	
		30	243		0/100	
	-40	30	300		2/100	
	-40	30	243		0/100	0/100

ACH-2.4 Grade B Inflator Family Testing Summary

Inflator	Test Temp. ©	Dia. (mm)	Length (mm)		Prototype initiator test results	Production initiator test results
ACH-2.4	Ambient	30	225		0/100	
		30	225			
	-40	30	225		0/100	
	-40	30	225			

ACH-2.1B Inflator Testing

Grade B initiator Production process

Test Summary:

- Configuration: 373mm,
- 100 inflators tank tested at -40C conditioning

Results

All inflators deployed.

Curves are shown against inflator LAT requirements.

All LAT gates met.

