Name of Committee: Human Accommodations and Design Devices (HADD)

Date: 6/15/2012

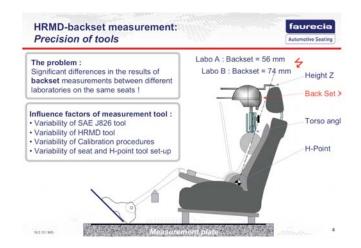
To: Bernie Frost Principal Engineer, Crash Injury Mitigation Team
Zone 1/34 Great Minster House
33 Horseferry Road
London
SW1P 4DR

SUBJECT: Head Restraints: GTR7 ph2, Static Backset Measurement proposal by OICA

<u>Purpose:</u> The HADD committee appreciates the opportunity to review and comment on GTR-7 activities related to the HRMD. I met informally on 5/11/2012 with members of the VDA while attending the May ISO meetings in Berlin Germany. We discussed collaboration to create and propose an alternative to the current manikin method of measuring head restraint backset. It was agreed that collaboration between SAE, VDA and GTR7 would be mutually beneficial because of the common interest to improve head restraint backset measurement methods.

<u>Discussion:</u> Static Backset Measurement proposal by OICA for the 6/18/2012 GTR7 meeting.

The SAE HADD committees, VDA, GTR7, OICA and other groups have investigated improving the static head restraint measurement methods now employed to measure backset. A measurement solution employing the use of coordinate measuring machines (ex. Faro Arm) in combination with the SAE J826 H-point machine has been recognized as a possible technique to replace the use of the ICBC HRMD. The reason for pursuing new measurement methods has been documented by many groups, but more recently by Faurecia. Their backset measurement report is contained within the letter sent to me by the VDA and it is attached to this email, but briefly stated, their results are as shown in the following screen capture.



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Suffice it to say that backset measurement variation occurs from several sources when the ICBC fixture is coupled with the J826 manikin, primarily because the SAE J826 was never designed to be used with the ICBC HRMD. Further, J826 is an H-pt location device such that adding anything on to the J826 influences the validity of the resultant H-pt. In this regard, SAE HADD committee welcomes and supports proposals such as that received from OICA on 6/15/2012, but since we received this proposal after our 6/14/2012 meeting the entire membership has not had the opportunity to review and comment.

The OICA backset measurement method proposal will be distributed to the SAE HADD committee after the 6/18/2012 GTR7 meeting so a complete information package may be reviewed. I will also ask HADD to review these materials comment before 7/15/2012 so we can provide GTR7 with timely and actionable information.

<u>Summary</u>: The HADD committee appreciates the opportunity to review and comment on GTR-7 activities related to use of the J826 H-pt manikin and its use in proposed head restraint backset measurement methods. To this end the HADD committee fully supports going away from using the ICBC HRMD as a measurement method and welcomes the cooperative atmosphere conveyed by the VDA, GTR7, OICA and other members of the international community involved in this activity.

Regards,

SAE HADD Committee

Chair: Dr. Lawrence Smythe

Lawrence Smythe EdD Principal Engineer, Human Engineering Nissan Technical Center, NA 39001 Sunrise Drive Farmington Hills, MI 48331-3487 248-488-8591 Office 248-488-3905 FAX smythel@ntcna.nissan-usa.com