

ASTM D-7038 (L-33-1) MOISTURE CORROSION TEST
SURVEILLANCE PANEL MEETING

For LRI #166
August 8, 2012
PRI Headquarters
Warrendale, PA

AGENDA

- I. Call to Order
- II. Approval of minutes
- III. Business
 - a. Presentation on Next Generation Hardware
 - b. Membership Review
- IV. New Business?
- V. Summary of Action Items
- VI. Summary of Motions and Votes
- VII. Adjourn Motion

ASTM D-7038 (L-33-1) MOISTURE CORROSION TEST
SURVEILANCE PANEL MEETING

For LRI #166
August 8, 2012
PRI Headquarters
Warrendale, PA

Minutes

- I. Call to Order
- II. Approval of minutes

2/2/2012 Approved
5/9/2012 Approved
Motion: Brian Koehler
2nd: Larry Hamilton
Vote: Unanimous

- III. Business

- a. Presentation on Next Generation Hardware
Chair offers a presentation of the AAM K2xx 8.6" axle for use as the next hardware for the L-33 test. Presentation attached: Three questions were presented to the committee for moving forward with this axle.
 1. Can we use the existing vent on the axle? All agree to try!
 2. Can we use the existing axle cover gasket as it is reusable and covered with a sealing material expected to be inert to the test.
 - a. Questions on variability in construction and tolerances were immediately questioned so the chair agreed to get more information from AAM before any final decisions to use this can be made.
 3. This axle uses crush collar for pinion preload. Can shims be used to set the lower torques required for the test preloads so crush is not required for every test.

Finally the committee agrees that this axle is a possible replacement to the existing part and the labs performing the installation and fact finding experiment can continue to the next step running the axles for severity checks.

ASTM D-7038 (L-33-1) MOISTURE CORROSION TEST
SURVEILLANCE PANEL MEETING

For LRI #166
August 8, 2012
PRI Headquarters
Warrendale, PA

b. Membership Review

Allison Athey requests change to voting member and Tom Bryson to nonvoting member for Mack Volvo.

Percy Kanga requests Rob Banas be made a accepted as committee member and be replace him as voting member for Exxonmobil.

Galen Green requests being made member for BASF.

John Dharte American Axle requests becoming voting member.

The committee agreed to all requests by unanimous vote

Motion: Galen Greene

2nd: Larry Hamilton

IV. New Business?

V. Summary of Action Items

Chair to review specs for use of existing AAM gasket and get pricing from current Teflon gasket supplier to supply

VI. Summary of Motions and Votes

Minutes approved

New members accepted

Voting status changes accepted

VII. Adjourn Motion

Motion: Thomas Gottwald

2nd: Larry Hamilton

Vote: Unanimous

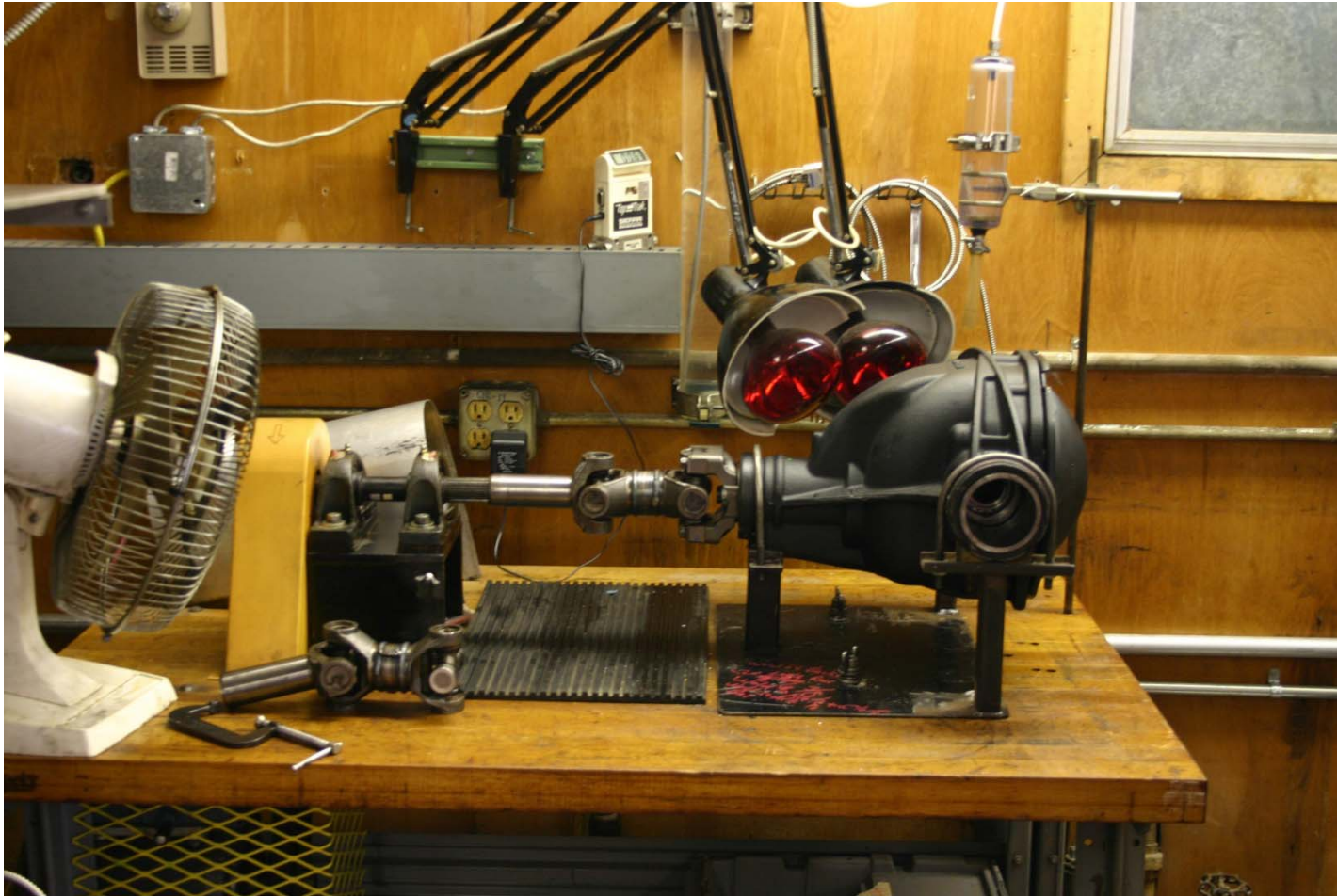
ASTM D7038 L-33-1

New Hardware

American Axle K2XX can be used in
the current stands and ovens.

Intertek

Motoring stand mounted



Mounting

- Findings - Possibly new stands, or major mod.
- Rear Stands - New to adjust height and tube diameter.
- Front Mount – Axle housing bottom wider needs stops set apart to achieve pinion height for motoring stand.
- Stand base – Too short with the larger axle assembly could fall backwards.

Drive connection

- Findings
- Pinion – height the same
- Same shaft can be used
- Installed Spicer U-joint to 5-460X

Oven Installed

- 1 inch clearance on both sides
- Axle sits rear of old location needs to move forward 1 to 2 inches for clearance

Intertek

Side view in oven.



Intertek

Vent possible pressure control.



Issues / Decisions

- Vent – Fabricate pipes for cover or use vent?
- Cover Gasket – Factory steel frame / silicone seal reusable or make new Teflon version and new Templates?
- Pinion Preload – Controlled by a crush collar. Not easily adjusted. Suggest adding shims to existing collar during assembly and reducing pinion nut torque so new collars need not be crushed each time?
- Temporary axle tube plugs can be drain test plugs until axles purchased without tubes.

Similar Gasket



Thank You

- Dale B. Smith
- Sr. Engineering Technologist
- Intertek Automotive Research
- PH: 412-855-6854
- Fax: 210-684-6074
- www.intertek.com
- www.ar.intertek-cb.com
- 8 August, 2012

ASTM D 7038 L-33-1 SURVEILLANCE PANEL PARTICIPANTS LIST

August 8, 2012

Initials	Name	Voting V/NV	Company Name Company Address	Phone / Fax / E-Mail
Attending	Athey, Allison	V	Mack Volvo 13302 Pennsylvania Ave. Hagerstown, MD 21740	Phone: 301-573-5684 Fax: E-mail:allison.athey@volvo.com
Attending	Banas, Rob	V	Exxonmobil Fuels, Lubricants & Spe 114 Arcadia Park Drive Canton, GA 30114	Phone: 678-493-3930 Fax: E-mail: rob.a.banas@exxonmobil.com
Attending	Bell, Don	NV	Afton Chemical Corp 500 Spring Street Richmond, Virginia 23219	Phone: 804-788-6332 Fax: 804-788-6243 E-mail:don.bell@aftonchemical.com
	Bryson, Tom	NV	Mack Trucks 13302 Pennsylvania Avenue Hagerstown, Maryland 21740	Phone: 301-790-5454 Fax: 301-790-6744 E-mail: tomas.bryson@volvo.com
Attending	Boschert, Tom	NV	Afton Chemical Corp 500 Spring Street Richmond, Virginia 23219	Phone: 804-788-5202 Fax: E-mail:ton.boshert@aftonchemical.com
Attending	Clark, Jeff	NV	TMC 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1032 Fax: E-mail: jac@astmtmc.cmu.edu
	Comfort, Allen	V	US Army TACOM Mail Stop 110 6501 E. 11 Mile Road Warren, MI 48397-5000	Phone: 586-282-4225 Fax: 586-282-4244 E-mail: allen.s.comfort@us.army.mil

ASTM D 7038 L-33-1 SURVEILLANCE PANEL PARTICIPANTS LIST

August 8, 2012

AMSTA-TR-D / 210				
Initials	Name	Voting V/NV	Company Name Company Address	Phone / Fax / E-Mail
	Dwornick, Bridget (Brosnan)	NV	US Army TACOM Mail Stop 110 6501 E. 11 Mile Road Warren, MI 48397-5000 RDTA-DP/210	Phone: 586-282-4221 Fax: 586-574-4224 E-mail:bridget.dwornick@us.army.mil
Attending	Dharte, John	V	AAM 2965 Technology Drive Rochester Hill, Michigan 48309	Phone: 313-758-4687 Fax: 313-758-4237 E-mail: Dhartej@aam.com
Attending	Gottwald, Thomas	V	Afton Chemical Corp 500 Spring Street Richmond, Virginia 23219	Phone: 804-788-5230 Fax: E-mail:thomas.gottwald@aftonchemical.com
Attending	Greene, Galen	V	BASF	Phone: 973-245-5509 Fax: E-mail: galen.greene@BASF.com
Attending	Gropp, Jerry	NV	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, Ohio 44092	Phone: 440-347-1223 Fax: 440-347-1555 E-mail:jerrold.gropp@lubrizol.com
Attending	Hamilton, Larry	V	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, Ohio 44092	Phone: 440-347-2326 Fax: E-mail: larry.hanilton@lubrizol.com
	Higuchi, Sam	NV	Afton Chemical Corp 500 Spring Street	Phone: 804-788-5375 Fax: 804-788-

ASTM D 7038 L-33-1 SURVEILLANCE PANEL PARTICIPANTS LIST

August 8, 2012

Initials	Name	Voting V/NV	Company Name Company Address	Phone / Fax / E-Mail
			Richmond, Virginia 23218	E-mail:samuel.higuchi@aftonchemical.com
Attending	Hobson, Kevin	NV	Afton Chemical Corp 500 Spring Street Richmond, Virginia 23218	Phone: 804-788- Fax: 804-788- E-mail:kevin.hobson@aftonchemical.com
Attending	Kanga, Percy	NV	ExxonMobil Research Engineering Co. 600 Billingsport Road Paulsboro, NJ 08066	Phone: 856-224-2094 Fax: 856-224-3613 E-mail: percy.r.kanga@exxonmobil.com
	Kearney, Bill	NV	Afton Chemical Corp	Phone:248-302-8531 Fax: E-mail:
Attending	Koehler, Brian	V	Southwest Research Institute P.O. Drawer 28510 San Antonio, Texas 78228	Phone: 210-522-3588 Fax: 210-684-7523 E-mail: bkoehler@swri.edu
	Marougy, Thelma	V	Eaton Corporation 26201 Northwestern Highway Southfield, MI 48037	Phone: 248-354-6985 Fax: 248-354-2739 E-mail: Thelmaemarougy@eaton.com
	McGlone, Bruce	V	Arvin Meritor 2135 West Maple Troy, Michigan 48084	Phone: 248-435-9929 Fax: 248-435-1411 E-mail: Bruce.Mcglone@Meritor.com
			Arvin Meritor	Phone:

ASTM D 7038 L-33-1 SURVEILLANCE PANEL PARTICIPANTS LIST

August 8, 2012

Initials	Name	Voting V/NV	Company Name Company Address	Phone / Fax / E-Mail
	Muransky, Troy	NV	2135 West Maple Troy, Michigan 48084	Fax: E-mail: troy.muransky@meritor.com
	O'brian, Cheryl	NV	General Motors	Phone: Fax: E-mail: cheryl.obrian@gm.com
Attending	Parke, Scott	V	TMC 6555 Penn Avenue Pittsburgh, PA 15206	Phone: 412-365-1036 Fax: E-mail: sdp@astmtmc.cmu.edu
	Recinos, William	NV	Afton Chemical Corp 500 Spring Street Richmond, Virginia 23218	Phone: 804-788- Fax: 804-788- E-mail: william.recinos@aftonchemical.com
Attending	Smith, Dale (Chairman)	V	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238	Mobil: 412-855-6854 Phone: 210-706-1570 Fax: 210-684-6074 E-mail: dale.smith@intertek.com
Attending	Thorpe, Ryan	NV	Southwest Research Institute P.O. Drawer 28510 San Antonio, Texas 78228	Phone: 210-522-6409 Fax: E-mail: ryan.thorpe@swri.edu
Attending	Trader, Angela	NV	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238	Phone: Fax: 210-684-6074 E-mail: angela.trader@intertek.com

ASTM D 7038 L-33-1 SURVEILLANCE PANEL PARTICIPANTS LIST

August 8, 2012

Attending	Umerley, Matt	NV	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, Ohio 44092	Phone: 440-347-4589 Fax: E-mail: Mathew.Umerley@lubrizol.com
Initials	Name	Voting V/NV	Company Name Company Address	Phone / Fax / E-Mail
	Ved, Chintan	V	Ford Transmission and Driveline 35500 Plymouth Rd L , MI, 48150	Phone: 313-805-9495 Fax: 734-523-3960 E-mail: cved@ford.com
Attending	Venhoff, Wes	NV	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, Ohio 44092	Phone: 440-347-4879 Fax: E-mail: wve@lubrizol.com
	Zakarian, Jack	V	Chevron	Phone: Fax: E-mail: jaza@chevron.com
	Zreik, Khaled	V	General Motors	Phone: 248-977-9214 Fax: E-mail: khaled.zreik@gm.com
				Phone: Fax: E-mail:
				Phone: Fax: E-mail:

ASTM D 7038 L-33-1 SURVEILLANCE PANEL PARTICIPANTS LIST
August 8, 2012

				E-mail:
				Phone: Fax: E-mail: