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November 24th, 2014

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ASTM D02.B0.03 L-37-1 Next Generation Hardware Task Force Members and Guests:

Attached for your review and comment are the unconfirmed minutes of the:

November 12th, 2013 Next Generation Hardware Task Force Meeting; Automation Alley, Troy MI

Please direct any corrections or comments to my attention.

Sincerely,

Chris Prengaman, Chairman L-37-1 Hardware Taskforce Chairman

Report of Meeting

L-37-1 Next Generation Hardware Task Force Meeting Surveillance Panel Meeting, Automation Alley, Troy, MI

November 12th, 2014 Meeting

Attendees:

Voting Members in **BOLD**

Keisler, Marc - Afton Chemical

Chalkley, Jay – Afton Chemical

Bell, Don – Afton Chemical

Dharte, John - American Axle Manufacturing

Parke, Scott - ASTM TMC

Dykhne, Olga - BASF

Koehler, Mike - Custom Coating

Guzikowski, Joe – Dana

Banas, Rob – ExxonMobil

Kanga, Percy - ExxonMobil

Heim, Scott - The Gleason Works

Dennis, Mike – The Gleason Works

Trader, Angela – Intertek Automotive Research

Smith, Dale - Intertek Automotive Research

Prengaman, Chris - Lubrizol

Gropp, Jerry – Lubrizol

Umerley, Matt – Lubrizol

McGlone, Bruce - Meritor

Muransky, Troy - Meritor

Warden, Rebecca – Southwest Research Institute

The meeting was called to order at 1430 EST.

1.0 Agenda Review

The agenda was reviewed

2.0 Hardware order Update

Labs have received the first set of parts (25 per lab). The shipment schedule was reviewed. Part of the first set of Lubrited parts have been lubrited at Custom Coating and will be sent back to Gleason soon.

S. Hiem shared an update of the process – the shot peen issue has been resolved now that Gleason has received shot peen that is in spec. Gleason will evaluate the lubrited parts using their equipment to see if there are any detectable difference between the lubrited and non-lubrited gearsets.

3.0 Test Matrix Discussion

The group discussed the approval test matrix for qualifying this hardware batch. The group verbally agreed to focus on the non-lubrited parts first, with the goal to qualify those parts, before qualifying the lubrited parts.

An approval matrix was agreed upon as follows:

Non-Lubrited (to be split evenly across 4 test labs)

Standard Conditions

TMC 155-1 x 8

TMC 152-2 x 8

TMC 117 x 8

TMC 134 x 4

Canadian Conditions

TMC 152-2 x 8

4.0 Test Procedure Discussion

One major item remained to be ironed out for the test procedure – as relating to the spray valve used for axle cooling. The group agreed to remove the specific valve specified, and in its place, the spray nozzles, line size and water pressure range (low and high) will be specified.

5.0 Lab Audits

Lab audits are scheduled for the following:

Texas labs – week of December 8th. The mornings of Tuesday December 9th & Wednesday December 10th.

Lubrizol – week of January 26th

Afton – Week of February 2nd.

C. Prengaman will share what paperwork will be requested to review prior to the audits to allow for a quicker audit.

6.0 Build Workshop

C. Prengaman shared the draft plan for the workshop is:

Group build – to identify differences, and agree on process / best practice.

Split into groups / stations to build 8 axles to use in the approval matrix.

The duration of the workshop is expected to fill 2 days – and allow for overflow into the 3rd day – (travel day).

2.0 Adjournment

Motion to adjourn. Respectfully Submitted Chris Prengaman





L-37-1

Hardware Taskforce 11/12/14 2:30 PM Automation Alley, Troy, MI



Agenda

- Hardware Update
- Gleason Visit Review
- Test Matrix
- Test Procedure
- December Lab Audits
- Build Workshop Discussion Planning Teleconference in late Nov
- Build Discussion
- Meeting Minutes Will be posted and reviewed next meeting
 - 6/25, 7/25, 8/13, 9/29, 10/16





Hardware Update

Labs have received 1st set of parts.

	At	fton	Inte	rtek	Lub	rizol	South	nwest			
									Non-		Total
	Non-		Non-		Non-		Non-		Lubrited	Lubrited	Shipmen
Sets	Lubrited	Total	Total	t							
Ordered	125	100	90	60	250	150	125	75	590	385	975
200	25	25	25	25	25	25	25	25	100	100	200
200	50		50		50		50		200	0	200
200	20	20	15	20	60	25	20	20	115	85	200
200		55		15		100		30	0	200	200
150	30				115		30		175	0	175
Actual	125	100	90	60	250	150	125	75	590	385	975





Gleason Visit Review

- 10/19
- Parts are being processed in nearly all steps machines are running whenever they are available.
- S. Hiem shared they look like they will hit or stay ahead of delivery plan.
- Parts are moved around in quantities that appear to correlate to size of heat treat batch.
- Pattern Photo Build Sheet will be provided.





Test Matrix

- Focus on Non-Lubrited first & get approved then move to lubrited
- Last Approval:
 - Standard
 - 155 x 8 (use 155-1)
 - 152-1 x 6
 - <u>152-2 x 2</u>
 - 134 x 4
 - Canadian
 - 152-1 x 6
 - <u>152-2 x 2</u>
 - 7 tests per lab
- Do we add in TMC 117?





Test Procedure

- Spray Water Control do we require a specific valve or just specify line size & pressure and let labs use whatever valve/control system they would like?
- Final Draft will be sent to working group to allow auditing of lab to final draft version.





December Lab Audits

- Week of December 8th
- Morning Audits





Build Workshop Discussion

- General Agenda
 - Group Build evaluation & comparison of methods, evaluation of patterns 1 day
 - Split into Groups/stations & Build 8 axles 1.5 days
 - Workshop axles will be shipped 2 per lab and used in approval matrix. 1 pass / 1 fail?
- Lubrizol Audit





Build Discussion

• What are the labs current plans?



ASTM L-37-1 Hardware Taskforce Membership / Sign In List Meeting Date: May 7th, 2014

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ASTM L-37-1 Hardware Taskforce Membership / Sign In List Meeting Date: May 7th, 2014

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ASTM L-37-1 Hardware Taskforce Membership / Sign In List Meeting Date: May 7th, 2014

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ASTM L-37-1 Hardware Taskforce Membership / Sign In List Meeting Date: May 7th, 2014

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