

From:

Subject:

RMEP Campaign Request - Tulsa

Date:

Tuesday, February 09, 2021 3:55:27 PM

Attachments:

[Mismachined Blocks One Pager rev2 Nav .pptx](#)

[REDACTED]

As we discussed on the phone Cummins is initiating a campaign of 7 engines total (2 shipped to IC Bus) due to a cylinder block thin wall condition. We will work with Levi and Dale to arrange the trucks (chassis numbers 326667 and 114454) to be delivered to the distribution center for the engine replacements. Kim is working on the replacement engines and will provide status updates.

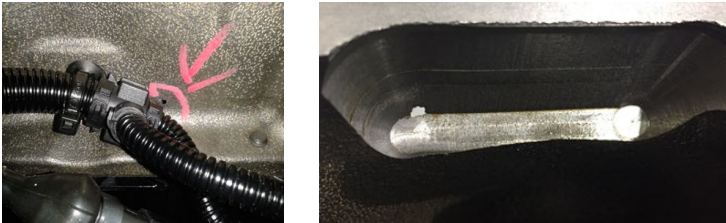
Thanks,

[REDACTED]
Customer Quality Assurance Manager
Cummins Inc.
Rocky Mount Engine Plant
9377 N US Highway 301
[REDACTED]

Thin Wall Condition- Potential Leak Path on Side Wall of B Block

FAIL MODE & TIMELINE

Thin Wall Condition- Potential Leak Path on Side Wall of B Block
Void found during Leak Test at sister plant drove issue investigation



CURRENT STATE

- Root Cause Understood: Tooling came out of spindle due to inadequate tool set up.
- Containment activity at time of tooling failure was inadequate.
- Suspect Population Identified
 - Total 7 shipped engines
 - 1 x SAP
 - 2 x IC Bus
 - 4 x EAP
- All remaining inventory contained at RMEP and DEP.
- Quality Alert instigated
- Modified tooling to prevent failure

NEXT STEPS

Failure / Root Cause	Action Items to Resolve	Responsible	Completion
Customer Impact	Contact customers with engines in suspect population.	Quality- [redacted]	2/9/2021
	Arrange for replacement engines to swap out suspect engines	Quality- [redacted]	2/9/2021
	Inventory Screened and Contained at Cummins Sites	Quality- [redacted]	2/5/2021
Tool Fell Out of Spindle	Tool Set screw process improved	Engineering- [redacted]	2/5/2021
	Add lock washers to tool when bolted to spindle	Engineering- [redacted]	2/5/2021
	Tightened Bearing Pack and spindle in machine	Maintenance- [redacted]	2/5/2021
Operator did not Contain	Quality Alert to impacted stations	Quality- [redacted]	1/27/2021
	Quality Stand Down for all Teams	Operations- [redacted]	2/12/2021
	Operator Accountability	Operations- [redacted]	2/26/2021