

Cummins Surveillance Panel
ISB (ASTM D7484)
ISM (ASTM D7468)
09/25/2025

Prepared By: Joshua Ward, S.P. Chairman



Agenda

- ISB Camshaft Inventory, Rejection Criteria, and Planning
- ISM Hardware Status
- ISBV Procedure for Oxidation Measurement
- ISBV LTMS Critical vs. Non Critical Parameters for Level 3 Ei Alarms
- AOB

ISB Camshaft Rejection Criteria

- Camshaft Issues
 - 70 to 90% rejection rate



ISB Camshafts

- Estimated 7 remaining cams with no pits
- Estimated 75 cams with only 1 pit
- Estimated 300 cams with 1 pit on intake and 1 pit on exhaust lobe
- Outlier screening of cam and tappet wear
- Other Options

ISM Hardware Status

- TEI received x7 kits worth of ISM rockers
- Only x2 kits worth of shaft supports (P# 3064582) in stock
 - Currently trying to source more
- Parts in short supply
 - Rockers
 - Pushrods
 - Oil Coolers
- ISM blocks in short supply with new blocks coming in slowly

ISBV Oxidation Method

- Procedure and report have different wording for what oxidation method to report

sequence	form_number	testtype	field_name	field_length	decimal_size	data_type	unit_of_measure	description
1381	6	ISBV108	IRINHxxx	7	1	N		INTEGRATED IR OXIDATION

11.1.3 Every 24 h, starting with the 12 h oil sample and including new and EOT samples, determine base number in accordance with Test Method **D4739**; determine acid number in accordance with Test Method **D664**; determine oxidation using peak IR method found on the TMC² website.

11.1.4 Every 24 h, starting with the 24 h oil sample and including new, 108 h, and EOT samples, determine iron, lead, copper, chromium, aluminum, silicon, tin, and sodium levels in accordance with Test Method **D5185**.

ISBV Level 3 Ei Alarm Critical vs. Non-Critical

- LTMS states that an Ei Level 3 alarm only requires another reference test for critical parameters
- TMC system is currently set up that Ei alarms require a follow on test before severity adjustments can be calculated
- Options
 - Change the system to calculate severity adjustments for parameters that have an Ei level 3 alarm without running the follow up test for undue influence evaluation?
 - Which parameters should require an additional calibration test to be ran?

Concluding Remarks

