



Technical Service Bulletin

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Stumble and Misfire Incidents Caused by Condensation Ingestion from Charge Air Cooler: Fault Code 5914 and 6413

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Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

- ISX12N CM2380 X120B
- X15N CM2380 X150B

Issue Summary

Symptom:

- Fault Code 5914
- Fault Code 6413
- Runs Rough or Misfires
- Coolant in the Lubricating Oil
- Lubricating Oil Level High

Root Cause:

- Condensation forming in the charge air cooler.
- Certain operating conditions can increase the chance of condensation forming in the charge air cooler. The charge air cooler can act as a collection device or sump for condensation.
- When airflow increases with a high torque demand, such as with a full throttle acceleration maneuver, condensation can be pulled into the charge airflow causing misfire that can be felt as a stumble or even log a misfire fault code.
- Complaints can be more frequent when humid ambient conditions are present and on units that idle for extended periods of time.

Verification

- Verify fan clutch is fully disengaging when fan is commanded off.
- Stumble or instability when operator requests high torque.
- Intermittent misfire fault codes when operator requests high torque.
- Misfire faults that occur continuously are unlikely to be caused by condensation.
- If lubricating oil level is high, verify there is **not** any coolant in the lubricating oil. See corresponding Fault Code Troubleshooting Manual. Reference Procedure 1232-t07-1018 in Section TS.

Resolution

- Verify that no inputs are causing excessive fan operation.
- Recommend changing duty cycle to reduce extended engine idle operation. Avoid high torque demands during initial operation after long idle or shutdown.
- If condensation conditions are encountered, run engine at high idle for 10 minutes to purge collected water before normal operation.

Document History

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