Technical Service Bulletin

Technical Service Bulletin: TSB210136	**Released Date**: 25-Jun-2021
Occurrences of Fault Code 1922, 1921, and 2639 with Long Idle or PTO Operation	

Occurrences of Fault Code 1922, 1921, and 2639 with Long Idle or PTO Operation

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

- X15 CM2450 X124B

Issue

High soot load fault codes during PTO or idle operation.

Symptom:

- Unit presents with a high soot load Fault Code 2639, 1921, or 1922.

Root Cause:

- Overestimation of soot load during extended idle or PTO operation.

Verification

Use steps below in sequential order to determine if high soot load fault codes are caused by engine control module (ECM) overestimation of soot rather than real soot load on the system:

- Check if aftertreatment DPF amber lamp is active with any of the following Fault Codes 2639, 1921, or 1922.
- Verify from the fault snapshot (FC 2639, 1921, 1922) that engine was idling or in PTO when the fault was triggered. Fault triggered when engine speed was at or below 1200 rpm
    - Make a note of the percentage of time the unit has been idling and the time in PTO operation.

Resolution

In Shop Recommendation:

- Follow the published troubleshooting for the high soot load fault codes (2639, 1921 and 1922) present in the unit until the step before DPF replacement, if published troubleshooting has **not** been followed already.
- Connect to the unit and open INSITE™ electronic service tool.
- Run a stationary regeneration. If FC1922 is present a regeneration will **not** be able to be performed.
    - If fault code becomes inactive during this procedure, DPF replacement is **not** necessary and no further action is required
    - If fault codes persist after attempting a regeneration, continue to the next step.
- Raise engine speed to 1800 rpm for at least 10 minutes. Verify the unit is stationary and **not** on a dynamometer.
    - If fault code becomes inactive during this procedure, DPF replacement is **not** necessary and no further action is required.
    - If fault codes persist afterwards, follow any missing steps in trouble shooting tree related to the observed fault code or follow the technical escalation process
- Verify that fault code(s) and derate(s) are cleared before returning unit to customer.

In Field Recommendation:

- Communicate to the customer that keeping the vehicle in extended periods of idle or PTO operation may create some overestimation of soot load in the DPF by the ECM.
- Technician should instruct the driver to follow these recommended steps to reduce downtime:
    - If a DPF lamp becomes active during or right after an extended period of idle or PTO operation.
    - A driver should allow the unit to go through a regen. A regen may be initiated by a driver by engaging the regen switch on their dashboard.
    - If a regen switch is **not** available or the DPF lamp remains on, a driver can also raise their engine speed to at least 1800 rpm for at least 10 minutes.
        - If the DPF lamp remains on, unit will require service from a technician.

- The in-field troubleshooting described above can be done periodically for units that remain in extended periods of idle or PTO operation to avoid unnecessary downtime.

Document History

Date	Details
2021-6-22	Module Created

Last Modified: 25-Jun-2021