

Fault Codes Caused by Insulation Buildup on the Aftertreatment Diesel Particulate Filter (DPF) Inlet Face.

Issue

This document describes a condition where insulation buildup on the aftertreatment diesel particulate filter (DPF) inlet face can lead to active fault code(s):

• For ISX15 and ISX12 engines, Fault Code(s) 1921, 1922, 1981, 2754, 3322, 3375, 3376, 5383 can become active.

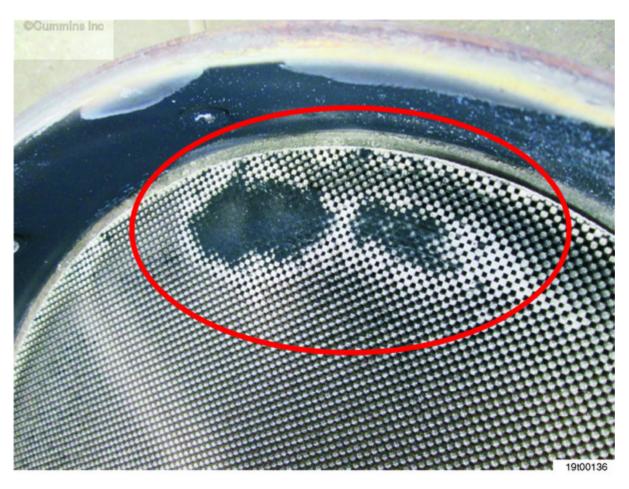
Customers may experience the following symptoms:

- Check engine lamp
- Malfunction indicator lamp (MIL)
- Engine torque derate

The insulation collects near the aftertreatment DPF intake temperature sensor port, plugging the aftertreatment DPF inlet face. See Figures 1 and 2 below.









Verification

Product Affected:

- ISX12 CM2350 X102
- ISX15 CM2350 X101

Perform the Following:

- Remove aftertreatment DPF and inspect inlet face of aftertreatment DPF for insulation buildup.
- Use the following procedure in the ISX12 CM2350 X102 Service Manual, Bulletin 4310646. Refer to Procedure 011-041 in Section 11.
- Use the following procedure in the ISX15 CM2350 X101 Service Manual, Bulletin 4310641. Refer to Procedure 011-041 in Section 11.
- If insulation buildup is present on aftertreatment DPF inlet face, verify which aftertreatment diesel oxidation catalyst (DOC) part number is installed.
- To locate aftertreatment part number on the DOC, use the following procedure in the ISL9 CM2350 L101 Service Manual, Bulletin 4310787. Refer to Procedure 100-001 in section E.

• Verify if aftertreatment DOC part number installed is found in Table 1 below.

Table 1, Aftertreatme	nt DOC Part Numbers	Affected ¹	
4328732	5298340	5301797	5311786
4328814	5298344	5302732	5311787
4328825	5298349	5302735	5312109
4329123	5298495	5304057	5312110
4329193	5300526	5306782	5313200
4329542	5300779	5309560	5313202
4329543	5300783	5310371	5313412
4352888	5301016	5310490	5313600
4353193	5301135	5310783	5313770
4353195	5301157	5311625	
¹ All Recon Equivalent	RX and NX Part Numbe	rs Included for Parts Lis	ted Above

Resolution

1. If insulation buildup is present on the aftertreatment DPF inlet face and the aftertreatment system is equipped with one of the aftertreatment DOC part numbers listed in Table 1, perform the following:

- Clean the aftertreatment DPF.
- Use the following procedure in the ISX12 CM2350 X102 Service Manual, Bulletin 4310646. Refer to Procedure 011-041 in Section 11
- Use the following procedure in the ISX15 CM2350 X101 Service Manual, Bulletin 4310641. Refer to Procedure 011-041 in Section 11.
- Remove and replace the aftertreatment DOC.
- Use the following procedure in the ISX12 CM2350 X102 Service Manual, Bulletin 4310646. Refer to Procedure 011-049 in Section 11.
- Use the following procedure in the ISX15 CM2350 X101 Service Manual, Bulletin 4310641. Refer to Procedure 011-049 in Section 11.
- Clean the aftertreatment DPF intake temperature sensor probe.

2. If insulation buildup is present on the aftertreatment DPF inlet face and the aftertreatment system is **not** equipped with one of the aftertreatment DOC part numbers listed in Table 1, perform the following:

• Inspect the exhaust piping from the turbocharger outlet to the aftertreatment DOC inlet for possible sources of foreign material that caused the buildup or plugging.

Refer to Service Bulletin Aftertreatment Diesel Oxidation Catalyst and Aftertreatment Diesel Particulate Filter Reuse Guidelines, Bulletin 4021600, for reuse guidelines.

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.

Document History

Date	Details	
2014-9-8	Module Created	
2015-3-20	Added additional fault codes, ISX12 CM2350 X102 as additional product affected, DOC part numbers affected table, and more detailed instruction.	
2015-5-13	Added fault code 3322.	
2015-6-4	QSOL Work Order 73262	

Last Modified: 04-Jun-2015

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