

Technical Service Bulletin

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UL2 DEF Dosing Unit External DEF Leaks

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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

- B6.7 CM2350 B121B
- L9 CM2350 L116B
- QSG12 CM2350 G110
- QSK19 CM2350 K105
- QSK50 CM2350 K108
- QSK60 CM2350 K116
- QSK60 CM2350 K117
- QSK60 CM2350 K121
- QSK95 CM2350 K113
- X12 CM2350 X119B
- X15 CM2350 X114B
- X15 CM2350 X116B

Issue

External aftertreatment diesel exhaust fluid leaks at aftertreatment diesel exhaust fluid pump filter housing.

Symptom:

- External aftertreatment diesel exhaust fluid leak is present at aftertreatment diesel exhaust fluid dosing unit filter housing vent.
- External aftertreatment diesel exhaust fluid leak is present between the aluminum dosing unit housing and diesel exhaust fluid dosing unit filter housing.

Root Cause:

• A hard interference between the diesel exhaust fluid dosing unit filter, freeze membrane, and filter housing can cause the freeze membrane to tear and allow aftertreatment diesel exhaust

fluid to leak into the filter housing and leak out the filter housing vent.

• Some diesel exhaust fluid dosing unit filter housings have been observed to swell over time and lose clamping force required to seal DEF between the dosing unit housing and the freeze membrane.

Verification

Perform diesel exhaust fluid leak test. Refer to Procedure 011-080 (/qs3/pubsys2/xml/en/procedures/493/493-011-080.html) in Section 11. Observe for leakage between the plastic filter cap and aluminum dosing unit housing. See Figures 1 and 2 below.

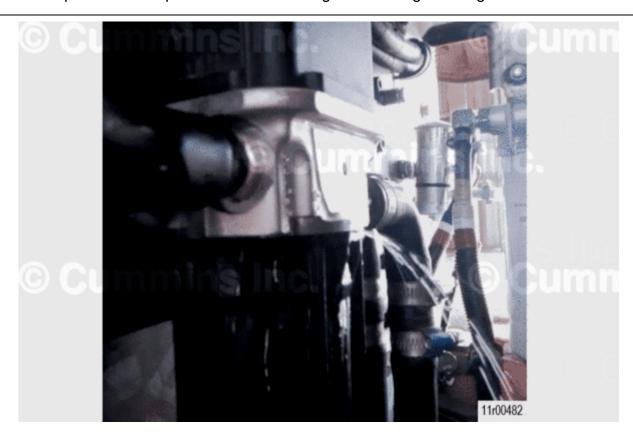


Figure 1, Leak between Aftertreatment Diesel Exhaust Fluid Dosing Unit and Filter Housing.



Figure 2, Signs of External DEF Leak Present on Aftertreatment Diesel Exhaust Fluid Dosing Unit.

Visually inspect diesel exhaust fluid dosing unit filter housing for signs of leakage from filter housing vent. See Figures 3 and 4 below.



Figure 3, Aftertreatment Diesel Exhaust Fluid Dosing Unit with External Leak



Figure 4, Damaged Aftertreatment Diesel Exhaust Fluid Dosing Unit Freeze Membrane

Resolution

A new aftertreatment diesel exhaust fluid dosing unit filter design has been released to prevent interference between aftertreatment diesel exhaust fluid dosing unit filter, freeze membrane, and filter housing. This improvement is a running change and no new part number will be released.

Service Instructions

- If leakage is present, remove aftertreatment diesel exhaust fluid dosing unit filter housing and freeze membrane and inspect for damage.
- If an external leak is present at aftertreatment diesel exhaust fluid dosing unit filter housing, replace the diesel exhaust fluid dosing unit filter, freeze membrane, and filter housing. See corresponding service manual. Refer to Procedure 011-060 (/qs3/pubsys2/xml/en/procedures/493/493-011-060.html) in Section 11.
- All required parts are contained in diesel exhaust fluid dosing unit filter kit, Part Number 4388378.

Production Status

Implemented for production. See Table 1.

| Table 1, Production Information | | | |
|---|------------------------------|---------------------------|------------|
| Diesel Exhaust Fluid Dosing Unit Serial Number First ¹ | Build Date | Production Line Number | Plant |
| RF202423_5 | June 20 th , 2018 | Line 2 | CES Juarez |
| RF203686_6 | June 20 th , 2018 | Line 3 | CES Juarez |
| ¹ DEF dosing unit serial number can be found on diesel exhaust fluid pump. | | | |

Document History

| Date | Details |
|------------|-----------------------------------|
| 2018-10-15 | Module Created |
| 2019-11-7 | Non-Product Problem Solving (PPS) |

Last Modified: 11-Nov-2019