



Technical Service Bulletin

Technical Service Bulletin: TSB180047	Released Date: 17-Jul-2019
Aftertreatment Diesel Exhaust Fluid Dosing Unit Heating Element Discoloration	

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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
- X12 CM2350 X119B
- X15 CM2350 X114B
- X15 CM2350 X116B
- QSK19 CM2350 K105
- QSK50 CM2350 K108
- QSK60 CM2350 K116
- QSK60 CM2350 K117
- QSK60 CM2350 K121
- QSK78 CM2350 K126
- QSK95 CM2350 K113

Issue

Symptom:

- Diesel exhaust fluid (DEF) dosing unit heater elements can be discolored caused by chemical reactions between aluminum housing and DEF.

- DEF dosing valve inlet screen can become plugged with debris when corrosion on the DEF dosing unit heating element flakes off.
- A plugged DEF dosing valve inlet screen will typically lead to FC1682, FC3574, and/or FC3596.

Note : Additional DEF system related fault codes can be present.

Verification/Confirmation

Verify symptoms and/or listed Fault Codes are present.

Resolution

If DEF dosing valve inlet screen is found to be plugged with debris, and corrosion on DEF dosing unit heating element is flaking off:

- DEF dosing unit and DEF dosing valve inlet screen must be replaced. DEF pressure line, between DEF dosing unit and DEF dosing valve must be flushed with distilled water to remove any residual debris.
- See Figure 1 for an example of a plugged DEF dosing valve inlet screen.
- See Figure 2 for an example of a DEF dosing unit heating element with corrosion that is flaking off.

If DEF dosing valve inlet screen is **not** plugged with debris and there is corrosion on DEF dosing unit heating element, but is **not** flaking off:

- Do **not** replace DEF dosing unit (for this condition). All DEF dosing units will have some level of discoloration/corrosion internally.
- See Figure 3 for an example of a clean DEF dosing valve inlet screen.
- See Figures 4, 5, and 6 for examples of DEF dosing units with acceptable levels of discoloration/corrosion.

Note : If DEF dosing valve inlet screen was removed from DEF dosing valve during inspection, DEF dosing valve inlet screen, Part Number 5372671, **must** be replaced.

Part Identification

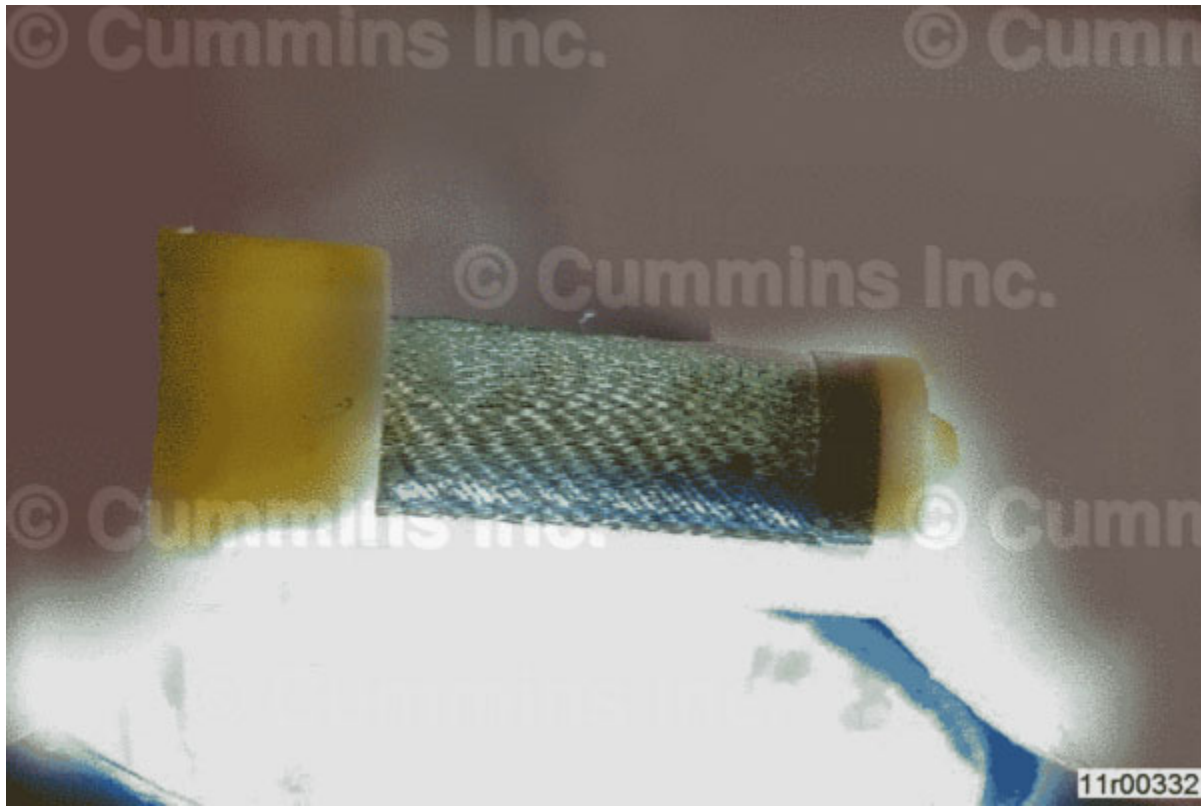


Figure 1, Plugged DEF Dosing Valve Inlet Screen.



Figure 2, Corroded DEF Dosing Unit Heating Element



Figure 3, Normal DEF Dosing Valve Inlet Screen.



Figure 4, Normal DEF Dosing Unit Heating Element Discoloration.



Figure 5, Normal DEF Dosing Unit Heating Element Discoloration.



Figure 6, Normal DEF Dosing Unit Heating Element Discoloration.

Affected UL2 DEF dosing unit parts numbers can be seen in Table 1:

Table 1: Affected DEF dosing unit part numbers	
CES Part Number	EBU Part Number
A052Y605	4388105
A051F964	4377994
A047H782	4353810
A050G798	4377364
A055B124	5373865
A055B125	5373866
A057Y382	5375478
A057Y387	5375479
A057Y445	5375480
A057Y212	5375481
A057Y215	5375482

Document History

Date	Details
2018-4-13	Module Created
2018-6-1	Non-Product Problem Solving (PPS)
2019-6-5	added Part Number 5372671 reference
2019-7-17	Added engines to product affected section

Last Modified: 17-Jul-2019
