KENWORTH
A PACCAR COMPANY

Technical Information Bulletin

E222

Section

Inlet/Exhaust/Aftertreatment

Subject

MY2017 and MY2018 Chassis with PACCAR MX-11/MX-13 engines with DTC P3912, P3857, and/or P3926

Release Date

8/14/2018

Condition

DTC P3912, P3857, and/or P3926 may be caused by a plugged DEF dosing valve inlet screen. DEF dosing valve inlet screen may be plugged with debris when corrosion on the DEF dosing unit heating element flakes off.

Chassis Affected

All MY2017 and MY2018 chassis with PACCAR MX-11/MX-13 engines and DEF pump module part number 2115624PE and Doser part number 2115633PE.

Action

Fix-As-Fail

If a customer comes into your shop and demonstrates the condition above, then verify the symptoms and/or listed Fault Codes are present. Use the procedure below to make appropriate repairs.

For Cummins powered chassis, refer to Cummins TSB180047.

Warranty

Through Standard Warranty (includes Extended Warranty) Kenworth will pay for parts at dealer net plus applicable mark-up and labor:

- 1.0 hour labor **if the inlet screen is plugged and the corrosion on the heater is flaking off** to remove the DEF Pump, flush the lines, and replace the filters. Use Quick Claim code E222.
- If the inlet screen is not plugged and corrosion on the heater is not flaking off, continue with your diagnosis and file a standard claim.
- File an additional claim for extraordinary circumstances. A quick claim for standard labor must be filed first.

Kenworth dealers may perform E222 repairs on Peterbilt chassis, but Quick Claims do not apply. For Peterbilt chassis repairs, use the long claim input form in DWWC selecting "Draft/Offline Claims", the "General" tab, and in the "Type of Claim" drop down box, select "PACCAR Engine Claim", then manually enter claim codes (Campaign #, Failure type, and SRT).

CLAIM CODING			
Failure Location:	043-007-016	Work Accomplished:	35
Failure Type:	145	Responsibility Code:	05
SRT Code:	**043-081** DEF doser module filter R&R 0.3 hrs. (Does not include fairing or step R&R for access) **100-521** DEF Pump Module Prime Test 0.3 hrs. **100-524** Airless DEF flush - MX engine 0.3 hrs. **043-825** SCR doser Injector - R&R 0.10 hrs. (does not include fairing removal)	Claim Type:	F
Vendor Code	**86837**		

Parts

Parts are available from PACCAR Parts.

Quantity	Part Number	Description
1	2115624PE	UL2 pump/EAS pump module
1	2115633PE	UL2 doser/DEF dosing valve
1	2122909PE	FILTER KIT-DEF PUMP, EPA17

1	2028048PE	GASKET, DEF DOSER
1	2127614PE	DPF Pump inlet screen/AdBlue pre-filter -- AFTERTREATMENT INJECTOR KIT
1 gal	Distilled water	Source Locally

Procedure

Make sure the heating element is free of DEF crystals. Remove DEF crystals by washing with distilled water.

If DEF dosing valve inlet screen is plugged with debris, and corrosion on DEF Pump Module heating element is flaking off.

- DEF Pump Module 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 DEF Pump Module heating element location.
- See Figure 2 for an example of a plugged DEF dosing valve inlet screen.
- See Figure 3 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 corrosion on DEF Pump Module unit heating element is not flaking off.

- Do not replace DEF dosing unit for this condition. All DEF Pump Modules will have some level of discoloration/corrosion internally.
- See Figure 4 for an example of a clean DEF dosing valve inlet screen.
- See Figures 5, 6, and 7 for examples of DEF dosing units with acceptable levels of discoloration/corrosion.
- Continue with troubleshooting to find the root cause of the issue. File a long form claim.

Figure 1 DEF Pump Module Heating Element Location

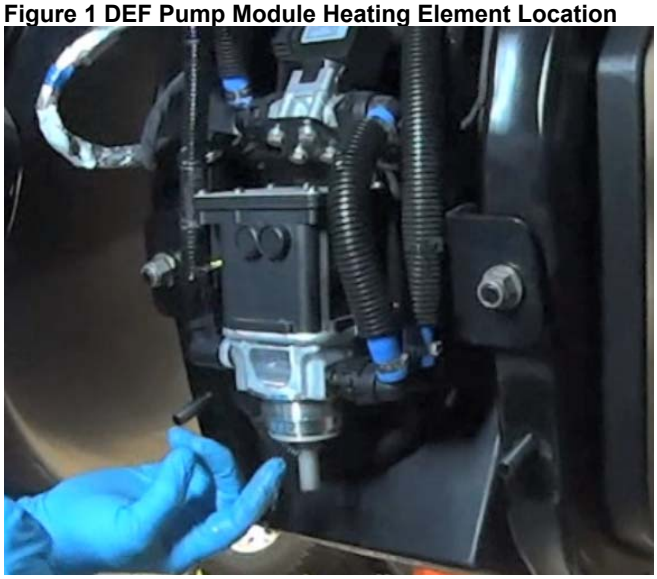

Figure 2 Plugged DEF Dosing Valve Inlet Screen Examples

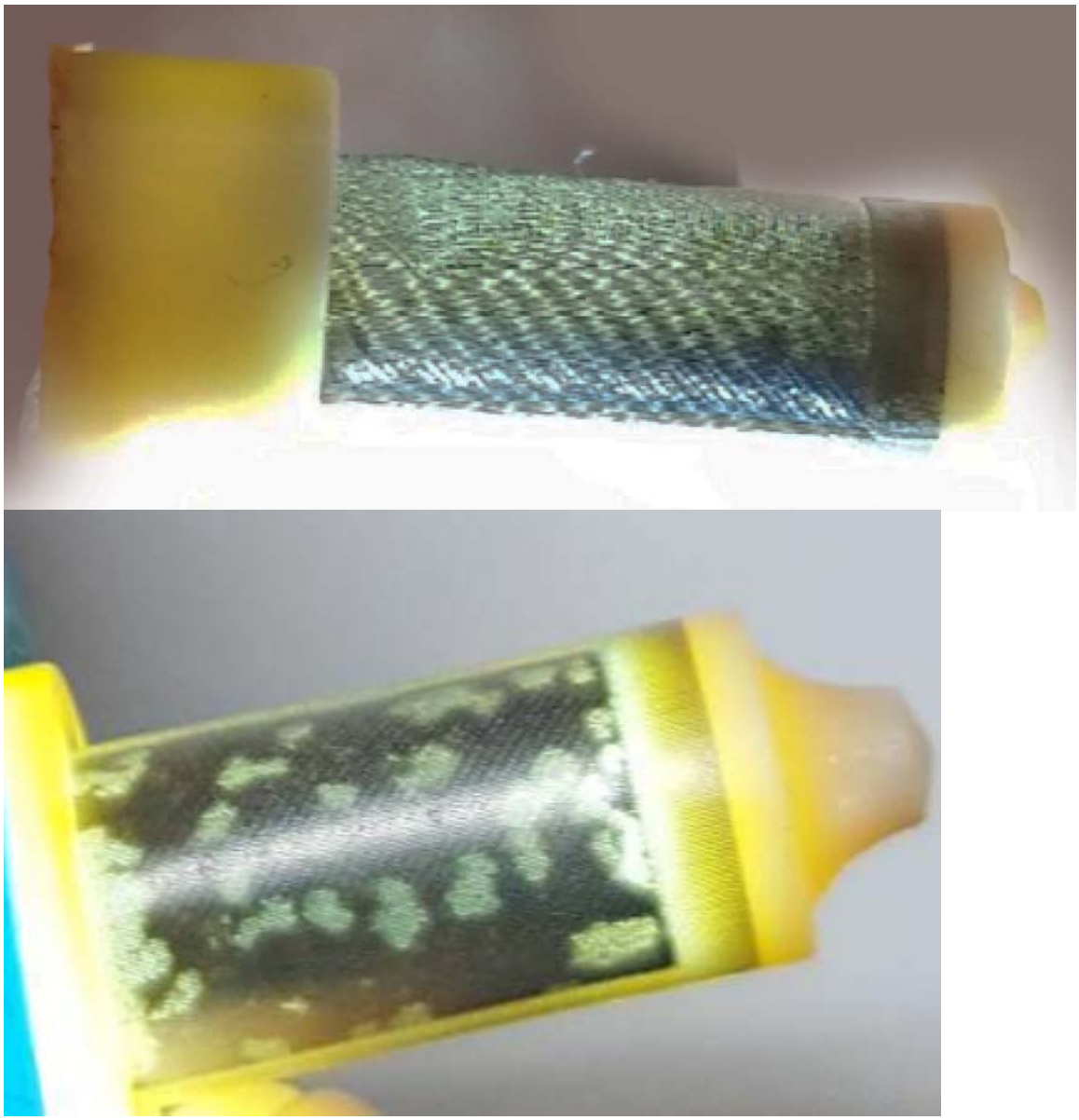

Figure 3 Corroded DEF Pump Module Heating Element

Figure 4 Normal DEF Dosing Valve Inlet Screen

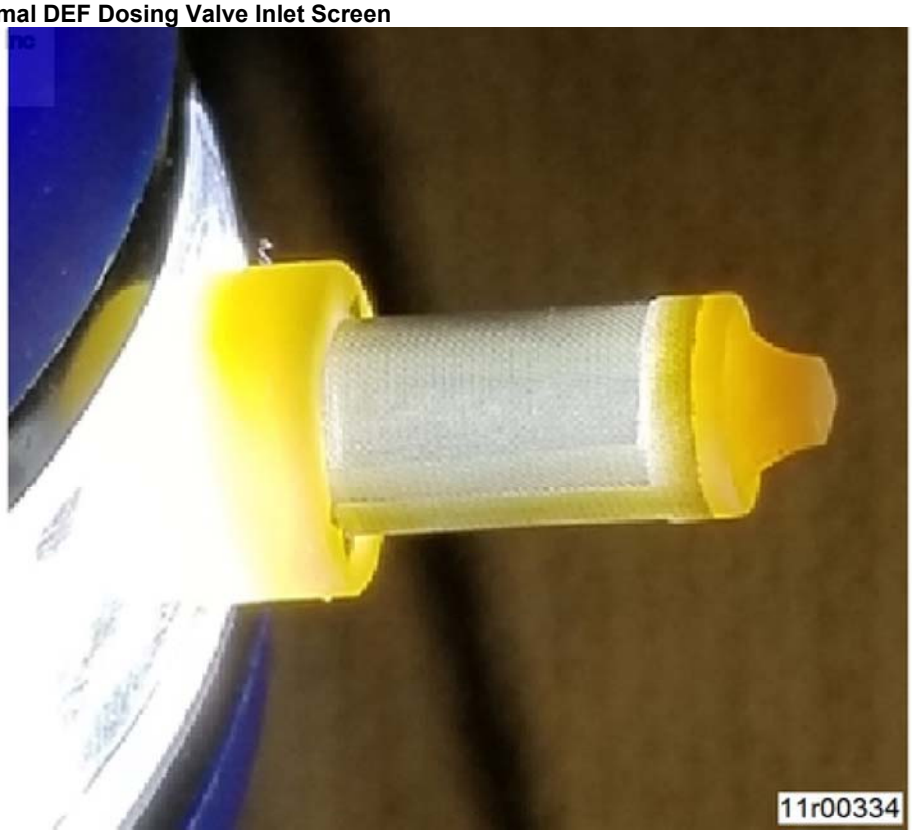

Figure 5 Normal DEF Pump Module Heating Element Discoloration

Figure 6 Normal DEF Pump Module Heating Element Discoloration

Figure 7 Normal DEF Pump Module Heating Element Discoloration

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