SB-10055215-6543

CATERPILLAR*

Service Information System

Shutdown SIS

Previous Screen

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Model: NO EQUIPMENT SELECTED
Configuration: NO EQUIPMENT SELECTED

Technical Information Bulletin

CT660 Engine Injector Doser Nozzle Plugging {7000}

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Caterpillar: Confidential Yellow

i05591750

CT660 Engine Injector Doser Nozzle Plugging {7000}

SMCS - 7000

On Highway Truck:

CT660 (S/N: TGA1-UP; TGD1-UP; TRK1-UP; TKL1-UP; TGS1-UP; TJS1-UP; TGT1-UP; TSW1-UP; TSY1-UP; TGZ1-UP)

Introduction

The problem that is identified below Use the solution that is in this article to resolve the problem that is identified below.

Problem

Doser nozzle plugging due to carbon bridging over the nozzle.

Table 1

I6 Diagnostic Codes				
SPN	FMI	Module	Description	
3556	0	ECM	AFT Fuel Pressure 2 excessively high (Restricted injection)	
3556	1	ECM	AFT Fuel Pressure 2 below desired (Possible system leak)	
3471	1	ECM	Fuel Pressure 1 below desired (Low system pressure)	

3471	7	ECM	AFT Fuel Doser Valve not responding as expected	
3471	10	ECM	AFT Fuel Doser Valve abnormal rate of change	

Table 2 _____

BB Diagnostic Codes				
SPN	FMI	Module	Description	
3556	0	ECM	AFT Fuel Pressure 2 excessively high (Restricted injection)	
3556	1	ECM	AFT Fuel Pressure 2 below desired (Possible system leak)	
3556	7	ECM	AFT Fuel Injector not responding as expected	
3480	0	ECM	AFTFP1 too high while dosing	
3480	1	ECM	AFTFP1 too low while dosing	
3471	7	ECM	Incorrect dosing pressure, multiple events	
3481	7	ECM	AFT Fuel Injector not responding as expected	

Solution

New style **452-8519** Gasket (1) replaces **376-2628** Gasket (2). The new style has a raised center portion of the gasket removed (refer to Illustration 1. This design reduces carbon bridging. The old style gasket can be modified if the new style gasket is not available.

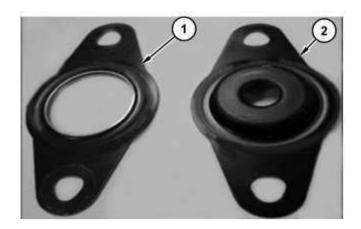


Illustration 1 g03554398

- (1) New style 452-8519 Gasket
- (2) Old style 376-2628 Gasket

Table 3

Qty Part Number		Description					
1	452-8519	Gasket					
1	376-2720	Bolt, Hex Flange					

Replacement Procedure

A plugged HC injector port will result in improper or frequent after-treatment regenerations (regens). If the AFI port is plugged use this procedure and the CT11 and CT13 Engine Diagnostic Manual, UENR1846, for additional reference.

Remove the HC Injector per the procedure in the CT11 and CT13 Engines Service Manual, UENR1845.

- 1. Remove fuel and coolant lines to the HC Injector.
- 2. Remove the HC Injector from the exhaust brake housing (for I6: CT11 & CT13 exhaust back pressure assembly: CT15- turbocharger exhaust duct).

Note: The HC Injector needle at the tip of the valve is **extremely** sensitive to damage, set the component aside in a safe location. **IT WILL NOT BE CLEANED OR SERVICED**

- 3. Discard the gasket and two M8 x 45 bolts.
- 4. Disconnect and remove clamp from the exhaust system from the exhaust brake housing assembly.

Note: Take measures to have sufficient space between the housing and exhaust system so debris can be removed.

- 5. Remove the carbon plugging with a chisel or other appropriate tool.
- 6. Remove the carbon debris from the exhaust brake housing (A shop vac can be used).

Note: Any remaining chunks of carbon debris may damage the after treatment system or cause plugging of the PDOC / DOC / DPF.

- 7. Install the original HC Injector with new gasket and new bolts per the Engine Service Manual.
- 8. Re-Install the rest of the exhaust system.

- 9. Use "Engine Diagnostics" to perform "On Board Filter Cleanliness Test "(OBFCT).
 - a. If test is successful/complete and original complaint is resolved, release the unit into service.
 - b. CT11, CT13 or CT15: If test is unsuccessful/incomplete or original complaint is not resolved, refer to Operation and Maintenance Manual.

Below are photos of a partially plugged port Illustration 2, a completely plugged doser Illustration 3 and a clear port Illustration 4.



Illustration 2 g03554458

Partially plugged AFI port



Illustration 3

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Fully plugged AFI port

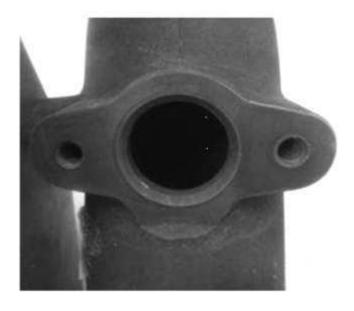


Illustration 4

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Clear AFI port

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