

SB-10055178-6902

CATERPILLAR

Service Information System

Shutdown SIS

Previous Screen

Welcome: chrismk2

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Model: NO EQUIPMENT SELECTED
Configuration: NO EQUIPMENT SELECTED

Technical Information Bulletin

Aftertreatment Injector Is Plugging on Certain CT660 Vocational Trucks{7000}

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Aftertreatment Injector Is Plugging on Certain CT660 Vocational Trucks{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

A plugged hydrocarbon injector port will result in improper or frequent aftertreatment regenerations.

Problem

Aftertreatment fuel injector is becoming covered in soot and plugging prematurely.

Solution

Proper cleaning procedure of exhaust brake housing for proper Hydrocarbon (HC) Injector operation.

Symptoms

- Frequent regens
- Inability to regen

- Plugged aftertreatment fuel injector port
- White smoke

Possible Diagnostic Trouble Codes

Table 1

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

Parts Information

Replace the below gasket and bolts when servicing the HC Injector [aftertreatment fuel injector (AFI) and doser injector].

Table 2

Part Number	Description
452-8519	Gasket Injector
376-2720	Bolt- Hex Flange



Illustration 1

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The old gasket 376-2628 has been reworked and replaced with 452-8519. The new style gasket will have the raised center portion of the gasket removed (Figure 1).

Repair Procedure

Background

A plugged HC injector port will result in improper or frequent aftertreatment regenerations (regens). If the AFI port is plugged use this procedure and the C11 and C13 Engine Service Manual or the C15 Engine Service Manual for additional reference.

Procedure

1. Remove fuel and coolant lines to the HC Injector.
2. Remove the HC Injector from the exhaust brake housing (CT 11 & 13 - exhaust back pressure assembly; CT 15 - turbocharger exhaust duct).

Note: The HC Injector needle at the tip of the valve is sensitive to damage, set it 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 vacume can be used).

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

7. Install the original HC Injector with new gasket and new bolts per the C11 and C13 Service Manual or C15 Engine Service Manual.
8. Re-install the rest of the exhaust system.
9. Use Engine Diagnostics to perform On Board Filter Cleanliness Test (OBFCT).

Note: If the test is successful/complete and original complaint is resolved, release the unit into service.

Below are photos of a partially plugged port (fig 2), a completely plugged doser (fig 3) and a clear port (fig 4)



Illustration 2

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Illustration 3

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Illustration 4

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