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Coding Information

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Title: A26 SPN: 4364 FMI: 18 Supplemental Diagnostics

Applies To: All A26 engines

CHANGE LOG

Please refer to the change log text box below for recent changes to this article:

02/17/2020 - Calibration released to NavKal - Updated step 1 to reflect this change 02/03/2020 - Updated diag steps with calibration release info 01/21/2020 - Initial Article Release
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DESCRIPTION

This document will guide the user through supplemental diagnostics for SPN: 4364 FMI: 18 on A26 engines

This document replaces and supplements the current FCAP and diagnostic manual.

In some operating conditions a buildup of DEF can occur in the mixing housing and SCR system, this build up can result in a phenomenon known as ammonia slip. This occurs when the ammonia in the DEF does not react in the SCR system and pass through the system. Once past the SCR the ammonia is picked up by the outlet NOx sensor as NOx, resulting in a bias reading.

SYMPTOM(s)

Engine warning light will be on. There will be no drivability issues, derates or resulting damage to any aftertreatment devices as a result of operation of the engine with SPN: 4364 FMI:18 active.

Diagnostic Trouble Codes & Dashboard Indicator Lights:

DTC/Light	Description
SPN 4364 FMI 18	Aftertreatment SCR Conversion Efficiency low

Customer Observations or Concerns:

Engine warning light on.

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Tool Number	Comments	Instructions
Navistar Engine Diagnostic Software		Release: v6.5.16	

SERVICE PARTS INFORMATION

Kit Description	Part Number	Quantity Required	Notes
DEF Doser Gasket	4387978 (Cummins PN)	1	

DIAGNOSTIC STEP(S)

Step	Action	Decision
1	<p>DIAGNOSTIC: ECM Calibration</p> <p>Is the ECM calibration at xxxxSMxC or higher?</p>	<p>Yes. Proceed to step 2.</p> <hr/> <p>No. Update the ECM through NavKal.</p> <p>Once the ECM is up to date; ensure a regen is performed prior to releasing the unit.</p>

Step	Action	Decision
2	<p>DIAGNOSTIC:</p> <p>Are there any other active or pending fault codes?</p>	<p>Yes. Diagnose and repair any active faults first.</p> <hr/> <p>No. Proceed to Step 3.</p>

Step	Action	Decision
3	<p>DIAGNOSTIC:</p> <p>Pull and save a parameter file and the freeze frame data for this fault prior to performing any diagnostics.</p>	<p>Yes. Proceed to step 4.</p> <hr/> <p>No. Repeat step 3.</p>

	<p>Was the parameter and freeze frame data saved?</p>	
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Step	Action	Decision
4	<p>DIAGNOSTIC: Check for air flow leaks and restrictions.</p> <p>Check air filter restriction gauge. Then smoke test the intake, exhaust and aftertreatment system.</p> <p>Were any restrictions or leaks found?</p>	<p>Yes. Repair as needed. Proceed to step 5.</p> <hr/> <p>No. Proceed to step 5.</p>

Step	Action	Decision
5	<p>DIAGNOSTIC:</p> <p>Perform the DEF System Leak Test and visually inspect the DEF system for leaks or damage to any DEF lines or fittings.</p> <p>Were any leaks found?</p>	<p>Yes. Repair as needed. Proceed to step 6.</p> <hr/> <p>No. Proceed to step 6.</p>

Step	Action	Decision
6	DIAGNOSTIC: Remove the DEF Doser and inspect the mounting surface for corrosion or clogging of the injections port. Was any corrosion or clogging found?	Yes. Repair as needed. Proceed to step 7.
		No. Proceed to step 7.

Step	Action	Decision
7	DIAGNOSTIC: Perform the DEF Dosing System Test , collect and measure the DEF output and note the spray pattern in conical shaped and a fine mist. Does the Doser produce the correct spray pattern and the collected amount in spec?	Yes. Proceed to step 8.
		No. Replace the DEF Doser and repeat step 7. Once passing proceed to step 8.

Step	Action	Decision
8	DIAGNOSTIC: Regen + 20 mins of idle Run and record a regen, allowing the engine to idle for at least 20mins post regen. Note: The idle shut down timer may need to be changed to complete this test. Was a regen with 20 mins of idle time successfully recorded?	Yes. Open a tech service case file and attach the regen, parameter file and freeze frame data to the case for additional assistance.

REPAIR STEP(s)

Note: Any repairs for this fault should include a regen to ensure any buildup of DEF in the mixer or SCR is burned off prior to releasing the unit.

WARRANTY INFORMATION

Warranty Claim Coding:


Refer to the [Warranty Coding Manual](#) for Group and Noun Codes.

Standard Repair Time(s):

Refer to the [SRT Manual](#) for Repair Times

OTHER RESOURCES

[Master Service Information Site](#)

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