



Countries: CANADA, UNITED STATES, MEXICO
Availability: ISIS, Bus ISIS, FleetISIS, IsSIR
Major System: EXHAUST
Current Language: English
Other Languages: NONE
Viewed: 1215

Document ID: IK0700100
Revision: 4
Created: 8/7/2017
Last Modified: 11/14/2017
Author: Jon Pierce

[Less Info](#)
[Hide Details](#)

Coding Information

Copy Link	Copy Relative Link	Bookmark	Add to Favorites	Print	Provide Feedback	Helpful	Not Helpful
		View My Bookmarks				14	1

Title: Maxx7 2010 DPF Cracking

Applies To: ESN below 5340000 or if the current calibration is one of the following PRS29XR5, PRS19XR5, PRS29XP5, PRS19XP5, PRS29XH5, PRS29XRA, PRS19XRA.

CHANGE LOG

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

11/14/2017 - additional correction to matrix in the 4X4 section
 11/4/2017 - corrected parts matrix
 08/28/2017 - corrected ESN range
 08/07/2017 - Initial Article Release

DESCRIPTION

This document will guide the user through identifying and replacing a cracked DPF with an updated DOC and preDOC combination.

SYMPTOM(s)

Black smoke on snap acceleration tests, check engine light on, low power and unable to complete a proper regen.

Diagnostic Trouble Code(s) & Dashboard Indicator Light(s):

DTC/Light	Description
SPN 3251 FMI 21 FCAP	DPFDP excessivly low
SPN 3936 FMI 0 FCAP	DPF Soot Load – Severe De-rate (regen disabled)
SPN 5319 FMI 31 FCAP	DPF Incomplete Regeneration

Customer Observations or Concerns:

Check engine light on, black smoke under acceleration. Customer may also experience poor engine performance.

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Tool Number	Comments
Electronic Service Tool	J-45067	Ensure your EZ tech has the latest updates available.

SERVICE PARTS INFORMATION

NOTE:

To determine the proper parts needed for this repair you will need to refer to the parts catalog and obtain the production turbo downpipe part number and production DPF/DOC assembly number. Once that information is obtained refer to the matrix linked below for the new turbo down pipe and doc part number.

NOTE:

There may be a long lead time for some of these DOC and downpipe assemblies. Do not down the truck while waiting for new parts for an extended period of time. If the unit needs to be put back in service install original parts to get the unit back online. Then schedule the unit back in for installation of the new parts.

NOTE:

A service calibration is required for this repair to be completed. A tech service case file must be created to get the engine updates added to the engine you are working on.

[Parts Matrix](#)

Additional parts you may need:

Quantities not given as these parts are on an as needed basis.

Part Number	Description	Location Used
3844630C1	Clamp, Exhaust pipe 3.5" V-Band	Turbo down pipe
2593986C1	Gasket, flange offset 3 hole	back of DPF
2593998C1	Gasket, Flange 3 bolt	Front of DPF
2604079C1	M10 X 50 X 1.5 6H Bolt	Mounting Hardware
2593991C1	Nut, Flange hexagon M10 X 1.5	Mounting Hardware

DIAGNOSTIC STEP(s)

WARNING! To prevent property damage, personal injury, and / or death, park vehicle on a hard, flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in either direction.

WARNING! To prevent property damage, personal injury, and / or death, if the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over.

WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent property damage, personal injury, and / or death, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

WARNING! To prevent property damage, personal injury, and / or death, remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last.

Step	Action	Decision
1	DIAGNOSTIC: Perform snap acceleration test: Black smoke present durring test?	Yes. Goto Step 2
		No. End diagnostics for this symptom

Step	Action	Decision
2	DIAGNOSTIC: Perform Preliminary Vehicle Operational Checkout Procedure Diagnostic Manual	1. Concern found: Repair any defects found durring operational check.
		2. No Concern found: Goto next step.

--	--	--

Step	Action	Decision
3	DIAGNOSTIC: Perform Base Engine Analysis Module per diagnostic manual. Diagnostic Manual	1.If defects are found durring testing, repair these defects first.
		2. Verify no other defects found.
		3. Proceed to R/R procedure.

REPAIR STEP(s)

Always refer to the service portal for complete assembly and removal processes.

REMOVAL PROCEDURE:

1. Install wheel chocks and disconnect and isolate the negative battery cable
2. Remove the DPF and DOC assemblies [Component Manual](#)
3. Remove the turbo downpipe.
4. With the exhaust system removed inspect the hangers and isolatoers, replace as needed.

INSTALLATION PROCEDURE:

NOTE:

Install components loosely to ensure proper fittment. Than torque to specification.

1. Install turbo down pipe and v-clamp.
2. Install DOC and DPF assembly.
3. Torque all components to specification.
4. Reconnect batteries.
5. Install ECM strategy after tech services says it's ready.

NOTE:

This service calibration does not work well with NavKal. Using NETS is the best option to ensure a proper software install.

6. Always choose the change parameters option when receiving the file. [Nets Programming and Troubleshooting Guide](#) .

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](#)

Hide Details	Feedback Information
	Viewed: 1214
	Helpful: 14
	Not Helpful: 1
No Feedback Found	

Copyright © 2017 Navistar, Inc.