



Countries: AUSTRALIA, CANADA, UNITED STATES, MEXICO, PUERTO RICO
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Major System: ENGINES
Current Language: English
Other Languages: NONE
Viewed: 189

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Coding Information

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Title: Lambda sensor adaptation- locked ECM DTC 6915 SPN 1119 FMI 21

Applies To: EPA 2007 11 & 13L MaxxForce Engines

CHANGE LOG

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

6/13/14: Created iKNOW article.

DESCRIPTION:

This article provides the procedure to diagnose fault code DTC 6915 SPN 1119 FMI 21- Lambda sensor adaptation- locked ECM.

SYMPTOM(s):

DTC	Description
6915-1119-21	Lambda sensor adaptation- locked ECM

Customer Complaint(s):

- Check Engine lamp or Malfunction Indicator Lamp (MIL) on.

SPECIAL TOOL(s) or SOFTWARE:

Tool Description	Tool Number	Comments
Electronic Service Tool		

OVERVIEW:

- Do not attempt to re-flash all three modules, this will not repair the fault code it will only clear it and may return on a road test.
- During the circuit checks pay close attention to the circuit labeled ELSPCUR from ECM E2 -24 to pin 1 of the lambda sensor connector. This has been the faulty circuit in some cases.
- The fault code sets when a short in the lambda (ELS) wiring circuit occurs. It will not always set a fault code for an open circuit however, it will lock the ECM. Follow the step-based diagnostic procedure below for the fault code.

DIAGNOSTIC STEP(s):

Step	Action	Decision
1	Verify fault code DTC-6915 SPN-1119 FMI-21 is active. • Connect the electronic service tool. • Check for Active fault codes Is the fault code active?	Yes: Go to step 2
		No: Diagnostic complete

Step	Action	Decision
2	Perform visual inspection on the wiring harness from the ECM E2 connector to the Lambda sensor connector. • Inspect for rubbing or chaffing of the wiring harness. Can any visible damage be seen?	Yes: Repair wiring and/or circuits. Then go to step 6.
		No: Go to step 3

Step	Action	Decision
3	Inspect ECM E2 connector, Lambda sensor connector and terminals. • Turn ignition switch OFF. • Disconnect ECM E2 connector to inspect. Is corrosion, pushed back terminals or damage present?	Yes: Repair or replace connector and/or terminals as needed. Then go to step 6.
		No: Go to step 4

Step	Action	Decision
4	Check for a terminal to terminal short in the lambda circuits within the ECM E2 connector. • Ignition switch OFF. • With the ECM E2 connector disconnected use a DVOM to test for a terminal to terminal short between the lambda circuits and all the other terminals in the ECM E2 connector. Is a short circuit present in the ECM E2 connector terminals?	Yes: Repair or replace the terminal(s) as needed. Then go to step 6.
		No: Go to step 5

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Step	Action	Decision
5	With ECM E2 connector and Lambda sensor connector disconnected, load test each of the six Lambda circuits individually with a headlight bulb. Check for the light to flicker or dim when wiggle testing the lambda wiring. Did the headlight flicker or dim on any circuits?	Yes: Repair open or shorted circuit(s). Then go to step 6.
		No: Go to step 6

Step	Action	Decision
6	Replace the Lambda Sensor.	Go to step 7.

Step	Action	Decision
7	Re-flash ECM ONLY as a Blank module.	Go to step 8.

Step	Action	Decision
8	Perform Lambda sensor adaptation reset. See IK1200508 for the procedure. Was the adaptation reset procedure successful?	Yes: Repair complete.
		No: Go to step 1.

SERVICE PART(S) INFORMATION:

- See Parts Catalogue for most recent part number.

Kit Description	Part Number	Quantity Required	Ordering Instructions
Sensor, Exhaust Lambda	3006233C1	1 (If Needed)	Order from Navistar

WARRANTY INFORMATION:

Warranty Claim Coding:

Group:	1200 - Engines
Noun:	768 - Sensor, Exhaust Lambda (Pre 2010 Emissions)

Standard Repair Time(s):

12 - ELECTRONIC ENGINE CONTROL SENSORS/VALVES (MAXXFORCE 11/13), REPLACE						
Hours	Code	Model	Engine	Qualifier 1	Qualifier 2	
1.1	A12-5040	Models, ALL		MaxxForce 11/13	Exhaust Lambda Sensor (ELS)	

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Feedback Information

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