



Countries: CANADA, UNITED STATES, MEXICO
Availability: ISIS, Bus ISIS, FleetISIS
Major System: ENGINES
Current Language: English
Other Languages: NONE
Viewed: 905

Document ID: IK1201174
Revision: 1
Created: 8/1/2014
Last Modified: 10/21/2014
Author: Mark Ehlers

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

Coding Information

Copy Link 	Copy Relative Link 	Bookmark View My Bookmarks	Add to Favorites 	Print 	Provide Feedback 	Helpful 22	Not Helpful 0
----------------------	-------------------------------	--	-----------------------------	------------------	-----------------------------	--------------------------	-----------------------------

Title: Step-based diagnostics for SPN 164 FMI 0 and ICP sensor diagnostics

Applies To: EPA 2010 MaxxForce DT, 9, 10, OBD, N9, N10

CHANGE LOG

2014/08/11 - Initial Article Release
 2014/10/16 - Added N9 & N10 engines

DESCRIPTION

Navistar has recently released engine calibrations that improve the accuracy of this ICP (injection control pressure) fault. It is important to update the engine calibration **before condemning an ICP sensor** because of this fault.

ICP sensors **should NOT be replaced** unless they are determined faulty by the ECM, CPA Tool, or other approved method.

NOTE: ICP sensors are often unnecessarily replaced as part of other under the valve cover repairs such as injectors and pucks (oil inlet adaptors). The ICP sensor that ends in C93 is very robust and many ICP sensors that are returned to Navistar are found to be free of defects.



SYMPTOMS

DTC/Light	Description
164-0	ICP above KOEO spec

SPECIAL TOOLS or SOFTWARE

Tool Description	Tool Number	Comments
ServiceMaxx (installed on EZ-Tech) or PocketMaxx		
RP1210 communication device		

DIAGNOSTIC STEPS

Step	Action	Decision
1	Is SPN 164 FMI 0 active or inactive or pending?	Yes: go to step 2
		No: STOP. Since this fault is not present do not replace ICP sensor.

Step	Action	Decision
2	Is engine calibration P____XUR1 or P____XURB (EPA 2010) or later installed? Note: Use Service Portal's Calibration Scorecard or ServiceMaxx to determine this	Yes: Run Health Report and replace ICP sensor (Health Report required for warranty claim)
		No: Go to step 3

Step	Action	Decision
3	• Run Health Report • Update engine calibration • Clear faults • Idle engine 5 minutes • Key off or 3 minutes • Idle engine 5 minutes • Key off for 3 minutes • Key on & check for faults Does fault FMI 164 SPN 0 reset? (Use ServiceMaxx and check for "Pending")	Yes: Replace ICP sensor (Health Report required for warranty claim)
		No: End

SERVICE PARTS

Kit Description	Part Number	Quantity	Ordering Instructions
ICP sensor	1875784C93	1	Parts Catalog

WARRANTY INFORMATION

Warranty Claim Coding:

Group:	12000
---------------	-------

Noun:	716 (ECM recalibration)
--------------	-------------------------

Group:	12000
Noun:	168 (Sender, ICP / FRP)

Standard Repair Time:

Step	Description	SRT Link	Hours
KL12-8168T (4400)	ICP sensor replace		.3 hrs.
KL12-1564T (4400)	Valve cover replace		2 hrs.
A12-3510T	Electronic control module- program		.4 hrs.

Special Requirements:

Warranty claims for defective ICP sensors must be supported by a Health Report that cites 164-0 and the calibrations cited in this article (or newer). The CPA Tool with version 5 software (November 2014 release) will also provide a WAC for a defective ICP sensor.

OTHER RESOURCES

Engine Diagnostic Manual: [DTC 164-0](#)

 Hide Details

Feedback Information

Viewed: 904

Helpful: 22

Not Helpful: 0

Staff ID	Client ID	Comments	Created Date
	DYYRFMG	You received the following feedback From: dyyrfmg - Rich Michels Email Address: richm@bendbroadband.com Job Classification: SE008, Service Technician Dealer: BRATTAIN INT'L. TRUCKS I Feedback: In step 3, the idle 5 minutes key off 2 minutes procedure, is this the way to get the OBD monitors to run? I'm working on a DT OBD, that came in with a CEL on, it had a ACF for updating the fuel module heater. Another tech did the fuel heater, than I did the CEL. It had codes for cylinder miss, low boost (both pending) and All injectors low flow (healing). I knew these where not right, from previous health reports and the freeze frame had allot of negative data readings. I ended up running the engine twice till finally the two pending codes cleared themselves and the low flow code stayed at healing. I believe it would be very helpful to know how to run the OBD HD monitors, in order to get a current correct code. A possible Iknow article? Thank you,, Rich Michels	10/22/2014 10:38:04 AM