



Countries: BAHAMAS, BOLIVIA, BELIZE, CANADA, CHILE, TAIWAN, COLOMBIA, COSTA RICA, DOMINICAN REPUBLIC, ECUADOR, EL SALVADOR, TRINIDAD AND TOBAGO, UNITED STATES, URUGUAY, VENEZUELA, ARUBA, NICARAGUA, PERU, Curaçao, GUAM, GUATEMALA, GUYANA, HAITI, HONDURAS, JAMAICA, KOREA, SOUTH KOREA, PANAMA

Document ID: IK1201080

Revision: 5

Created: 2/26/2014

Last Modified: 8/27/2015

Author: Ron Lezotte

Availability: ISIS

Major System: ENGINES

Current Language: English

Other Languages: NONE

Viewed: 3186

[Less Info](#)

Hide Details

Coding Information

Copy Link 	Copy Relative Link 	Bookmark View My Bookmarks	Add to Favorites 	Print 	Provide Feedback 	Helpful 11	Not Helpful 6
----------------------	-------------------------------	--	-----------------------------	------------------	-----------------------------	--------------------------	-----------------------------

Title: Intake Air Heater Test, DTC 626-11 and 626-18

Applies To: N13 SCR (2013-2014)

CHANGE LOG

- 2015/08/27 - Removed 2010-2013 MaxxForce 11/13. Refer to updated manual 1741.
- 2015/07/13 - Added words to key words for iKNOW Search.
- 2014/03/26: Added SRT T-times.

DESCRIPTION

The Intake Air Heater Igniter current draw specification has changed with new calibrations.

NOTE: The Intake Air Heater System DOES NOT help start a cold engine. This system is used to help eliminate white smoke after starting a cold engine. (Below 50 degrees F)

SYMPTOMS

Malfunction Indicator Lamp (MIL) comes on after cold engine start up. Ambient Air Temperature, below 50 degree F.

SPN	FMI	Description
626	11	Inlet Air Heater fault: Lack of Heat in the Intake Manifold
626	18	Inlet Air Heater fault: Lack of Heat in the Intake Manifold

SPECIAL TOOLS or SOFTWARE

Tool Description	Tool Number	Comments
ServiceMaxx software		Inlet Air Heater Test
Digital Multimeter (DMM)	ZTSE4357	Measure voltage to the Injector
EXP-1000 HD by Midtronics	EXP-1000	Measure current to Igniter
Fuel Pressure Gauge	ZTSE4681	Measure fuel to the Igniter
Inlet Air Heater Solenoid Test Adapter kit	ZTSE6059	Measure fuel to the Igniter

INSPECTION STEPS

Inspect the engine block for coolant heater. A coolant heater could falsely set a 626-11, 626-18 or 3061-31

DIAGNOSTIC STEPS

Step 1: Check for other DTCs	
<p>Check for any of the following fault codes:</p> <ul style="list-style-type: none"> • FDP: SPN 94 FMI 0, 3, 4 • IMT: SPN 105 FMI 2, 3, 4, 18 • AAT: SPN 171 FMI 2, 3, 4 • IAHFS: SPN 626 FMI 3, 4, 5 • IAHFI: SPN 5548 FMI 3, 4, 5, 7 <p>Are any of the listed DTCs present?</p>	<p>Yes: Repair any listed faults before diagnosing 626-11, 626-18, or 3061-31.</p> <p>No: Continue to Step 2.</p>
Step 2: Check Calibration	
<p>Check 6th digit of ECM Calibration ID.</p> <p><i>Example: 2013 + SCR Engine, Should be OKFADD<u>D</u>AD or later.</i></p> <p>Is Calibration up-to-date?</p>	<p>Yes: Continue to Step 3.</p> <p>No: Update the Calibration, then Continue to Step 3</p>
Step 3: Intake Air Heater Test (Figure 1 and 2)	
<p>Pre-Setup:</p> <ul style="list-style-type: none"> - Engine Temperature below 100 degrees F - Connect Current Clamp to Intake Air Heater Fuel Igniter. <p>Using ServiceMaxx, Run Intake Air Heater Test.</p> <p>Is or does IAHFI current drop below 15 amps during the test?</p>	<p>Yes: Replace IAH Fuel Igniter</p> <p>No: Continue to Step 4.</p>
Step 4: Check Fuel Delivery to IAH Fuel Solenoid (Figure 3)	
<p>Pre-Setup:</p> <ul style="list-style-type: none"> - Assemble Fuel Pressure Gauge to Intake Air Heater Fuel Solenoid Test Adapter Kit. - Connect tool setup between IAH Fuel Solenoid fuel supply and IAH fuel Solenoid. <p>Start engine and monitor fuel pressure.</p> <p>Is fuel pressure above 8 psi?</p>	<p>Yes: Continue to Step 5</p> <p>No: Replace damaged, leaking or restricted fuel line to IAH Fuel Solenoid.</p>
Step 5: Check Fuel Delivery to IAH Fuel Igniter (Figure 4)	
<p>Pre-Setup:</p>	

- Restore fuel line connection to IAH Fuel Solenoid.
- Connect the Fuel Gauge with IAH Fuel Solenoid test kit to the Igniter fuel supply line.
- Leave line disconnected from Igniter and routed to fuel drain container.

Yes: Replace IAH Fuel Igniter

No: Continue to Step 6

Using ServiceMaxx, Run Intake Air Heater Test.

Does fuel flow through line after the engine has started and solenoid is commanded on?

Step 6: Check Fuel Line Restriction

Check fuel lines and connections going to IAHF1 for damage, leaks or restrictions.

Yes: Replace IAH Fuel Solenoid

Shop air can be used to check for restricted fuel lines.

No: Replace damage, leaking or restricted line or connections.

Are fuel lines and connections in good condition and not damaged, leaking or restricted?



Figure 1: Measure Current to IAH Igniter

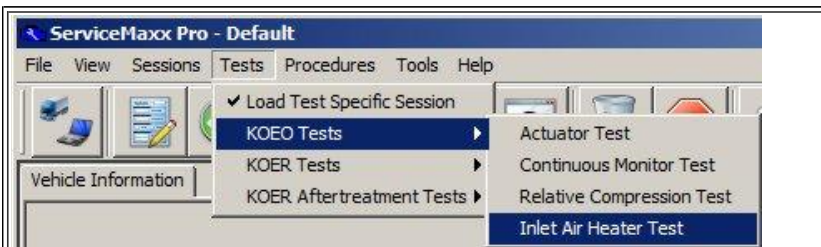


Figure 2: ServiceMaxx Intake Air Heater Test

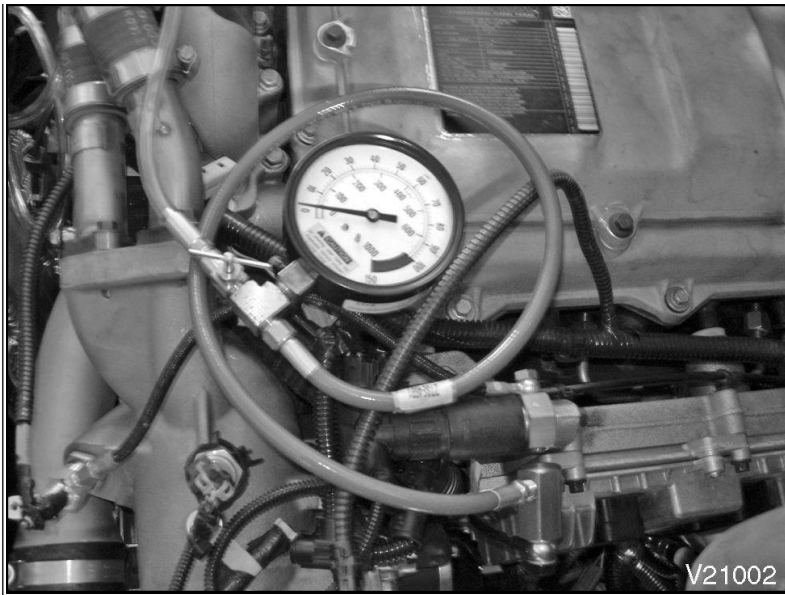


Figure 3: Measure Pressure to IAH Fuel Solenoid

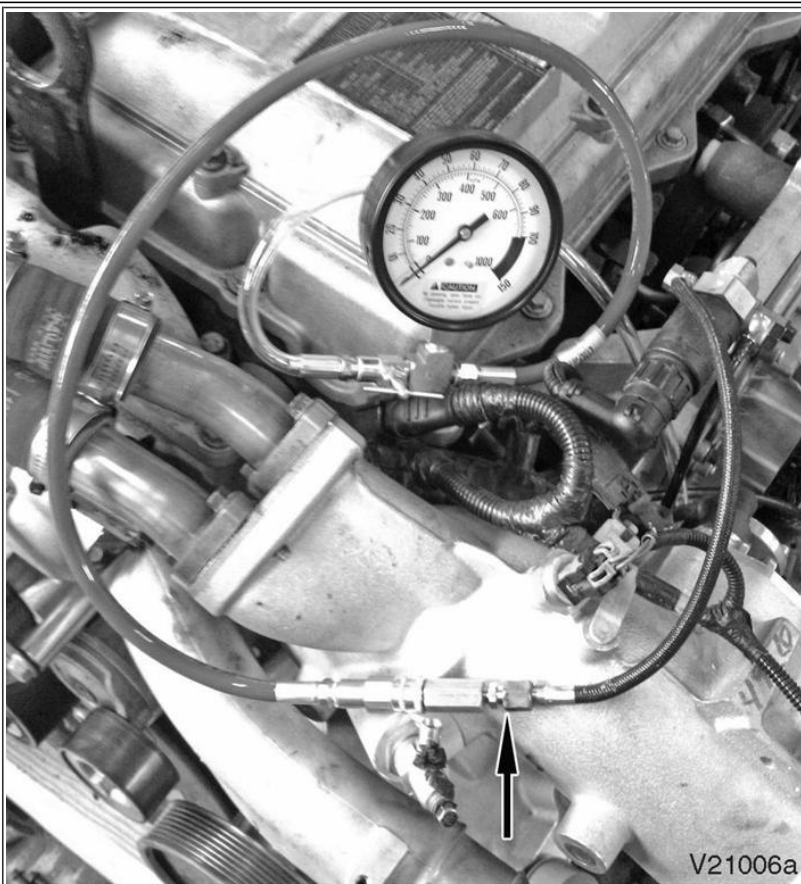


Figure 4: Check Fuel supply to Igniter

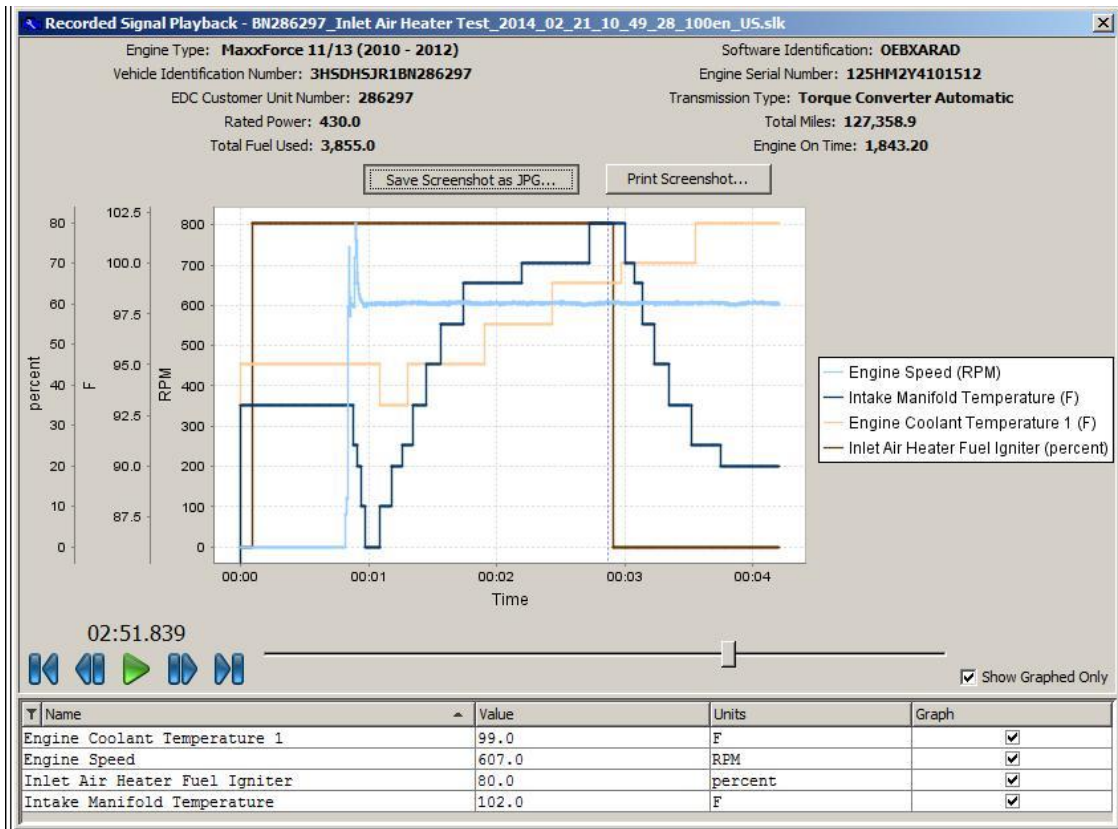


Figure 5: Intake Air Heater Test - Intake Manifold Temperature should raise at least 5 degrees

Standard Repair Time(s):

Step	Description	Hours
Steps 1-3	T-Time	0.2 hr
Steps 1-4	T-Time	0.3 hr
Steps 1-5	T-Time	0.4 hr
Steps 1-6	T-Time	0.4 hr

Hide Details

Feedback Information

Viewed: 3185
 Helpful: 11
 Not Helpful: 6

No Feedback Found