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**Document ID:** IK1200969

**Availability:** ISIS, FleetSIS

**Revision:** 2

**Major System:** ENGINES

**Created:** 10/4/2013

**Current Language:** English

**Last Modified:** 9/1/2015

**Other Languages:** NONE

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**Viewed:** 5363

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Coding Information

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**Title:** 2010+ IBB ETV (Engine Throttle Valve) - Diagnostics

**Applies To:** 2010 - Current Maxxforce 11/13 & N13 Engines

## CHANGE LOG

2015/09/01 - Updated related fault codes, service parts information and SRTs  
 2014/08/25 - Revised document to latest Fault Code Action Plan formatting. Prodecures unchanged. Added warranty information, symptoms, etc.  
 2013/10/18 - Launch to field.

## DESCRIPTION

This document will guide the user through the proper repair of the ETV (Engine Throttle Valve) leak at the cylinder head mounting location. Leaks have been noted with causing aftertreatment soot loading. This article should be followed anytime the ETV is replaced.

## SYMPTOMS

**Diagnostic Trouble Codes & Dashboard Indicator Lights:**

DTC/Light	Description
SPN 51 FMI 7	ETP Does not agree with commanded position
SPN 51 FMI 3	ETP Signal Out of Range HIGH
SPN 51 FMI 4	ETP Signal Out of Range LOW

**Customer Observations or Concerns:**

MIL  
 Performance concerns  
 Engine Noise

## SPECIAL TOOLS

No special tools are necessary for repair

## **SERVICE PARTS INFORMATION**

<b>Kit Description</b>	<b>Part Number</b>	<b>Quantity Required</b>	<b>Notes</b>
Kit, Air Intake Throttle Duct ( <b>Vertical</b> )	3007676C91	1	2010 Maxxforce
Duct, Air Intake Throttle ( <b>Horizontal</b> )	3005375C1	1	2010 Maxxforce
Duct, Air Intake Throttle ( <b>Vertical</b> )	7097288C1	1	N13 Before 6/30/2014
Duct, Air Intake Throttle ( <b>Horizontal</b> )	7095811C1	1	N13 6/30/2014 and later
Gasket, Intake Throttle	3013488C1	1	

## **DIAGNOSTIC STEPS**

Follow Fault Code Action Plans (FCAPs) for associated fault codes.

### **NOTE:**

There are no diagnostics steps necessary for a DTC 51-7, when it is the only ETV fault present. In this case, simply replace the ITV, clear the code, and send the truck on it's way.

If there is another ETV fault present (51-3, 51-4 etc), diagnose the other faults first before going after the 51-7 fault code.

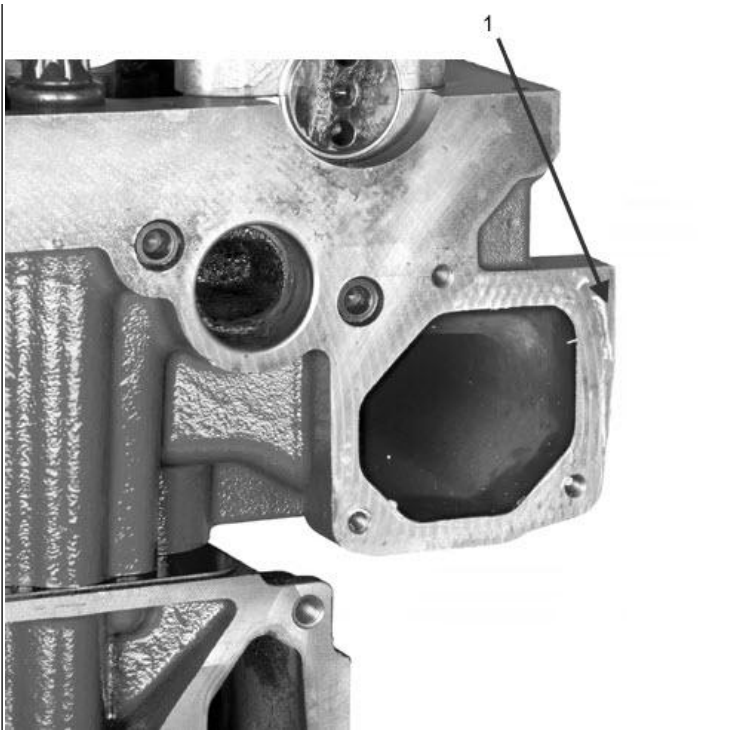
## **REPAIR STEPS**

Please reference the [Service Manual](#) for ETV removal/installation instructions.

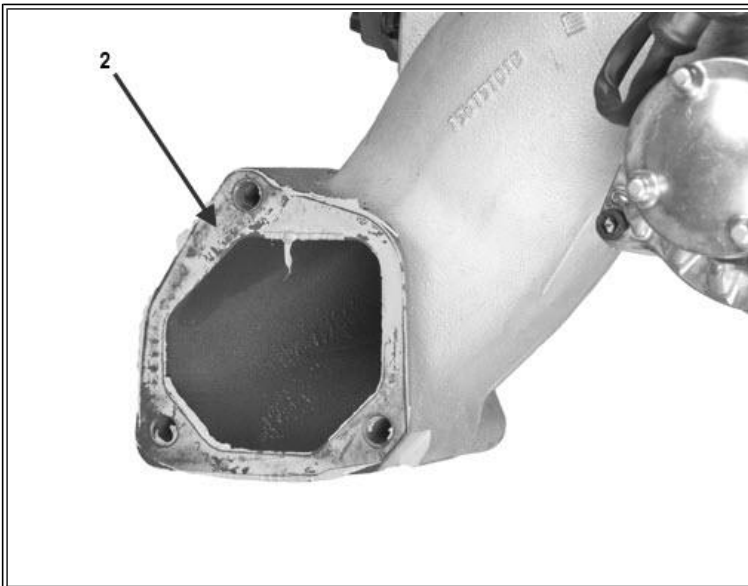
The "old" seal between the Engine throttle duct and cylinder head is RTV; that is, Wacker 442, Loctite® 5900 Sealant, or equivalent. This should no longer be used, and the Intake Throttle Gasket noted above, should be used instead.

Use a scraper to remove the RTV application on the cylinder head and engine throttle valve (if not done already), and install the engine throttle valve gasket with the air intake throttle duct.





**Figure 1: Cylinder Head Intake Manifold**



**Figure 2: Engine Throttle Valve to Head Mating Surface**

## **WARRANTY INFORMATION**

**Warranty Claim Coding:**

<b>Group:</b>	12000 - Engine
<b>Noun:</b>	714 - Intake Throttle Module

**Standard Repair Times:**

Description	Chassis	Engine	SRT	Hours
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ITV Diagnostics	7600/7700	MaxxFace 11/13L	<a href="#">N12-2107L</a>	0.7
ITV Diagnostics	8600	MaxxFace 11/13L	<a href="#">Q12-2107L</a>	0.7
ITV Diagnostics	Prostar	MaxxFace 11/13L	<a href="#">R12-2107L</a>	0.7
Engine Throttle Valve (ETV), Replace	CT610	MaxxFace 11/13L	<a href="#">AR12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	7600/7700	MaxxFace 11/13L	<a href="#">N12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	8600	MaxxFace 11/13L	<a href="#">Q12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	Prostar	MaxxFace 11/13L	<a href="#">R12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	Lonestar	MaxxFace 11/13L	<a href="#">S12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	5000	MaxxFace 11/13L	<a href="#">TC12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	Cat CT660	MaxxFace 11/13L	<a href="#">TC12-8714U</a>	1.5
Engine Throttle Valve (ETV), Replace	All Models	N13	<a href="#">A12-8714US</a>	1.5
Engine Throttle Valve (ETV), Replace	All Models	N13 update (ESN Prefix 124 or 127)	<a href="#">A12-8714UT</a>	1.5

## OTHER RESOURCES

### [Master Service Information](#)

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U024713		You received the following feedback From: u024713 - Dominic Venice Email Address: SMTP:{dominic.venice@navistar.com} dominic.venice@navistar.com Feedback: Should really think about changing the title of this article. It is not diagnostics for the ETV. Its a "Hey, this is something cool to repair a known boost leak" kinda article. Also, remove the DTC table too.	9/2/2015 9:44:22 AM