



Countries: CANADA, UNITED STATES **Document ID:** IK1201117
Availability: ISIS, Bus ISIS **Revision:** 8
Major System: ENGINES **Created:** 4/18/2014
Current Language: English **Last Modified:** 6/2/2015
Other Languages: NONE **Author:** Ryan Hendrickson
Viewed: 12354

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Coding Information

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Title: Open Crankcase Breather

Applies To: 2010 + MaxxForce DT, 9 & 10 Engines

CHANGE LOG

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

02/18/2015 - Added Australia, New Zealand, and Puerto Rico to country coding.
 3/16/2015 - Changed SRT description, moved Install note above step 4 into step 4.
 05/14/2015 - Author updated for feedback purposes; PDF updated for the 2013 HD-OBD DT, 9 or 10 Engine; added content related to vehicle excluded from Open Breather Kit.
 06/02/2015 - Fixed link to IK1201175 and link to the 2013 HD-OBD DT, 9 or 10 Engine

DESCRIPTION

Title: Open Crankcase Breather

Purpose: Open breather application guidelines.

Applies To: 2010 I-6 MaxxForce DT, 9 & 10 Engines

NOTE:

I367 ST (215 and 230 HP) engines produced in year 2013 (ESN 3500000 to 3520751) are excluded from the open breather kit offering. (They are not compliant with the open breather.)

This article provides guidelines as to when installation of an open breather system is applicable.

Action	Decision
Complaint	A: Low Power: Proceed to section 1
	B: Oil leak at CAC pipes: Proceed to section 2
	C: Shutdown at or below 20°F: Proceed to section 3

Section/Step	Action	Decision
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1/1	Is boost >10PSI below Specification?	Yes: Proceed to Section 1 Step 2
		No: Complete Engine Run / Start Symptoms , open breather kit is not required

Section/Step	Action	Decision
1/2	Remove <u>only</u> the air inlet duct from the low pressure turbocharger. Visually inspect for severe turbo coking, is coking present?	Yes: Clean turbo coking per IK1200656 then proceed to Section 4
		No: Complete Engine Run / Start Symptoms

Section/Step	Action	Decision
2/1	Is there impeller contact with the HP turbo housing?	Yes: Proceed to Section 2 Step 2
		No: Proceed to Section 2 Step 3

Section/Step	Action	Decision
2/2	Is the contact with the intake or exhaust housing? Note: the turbocharger oil feed line is not reusable if removed it must be replaced	Exhaust housing: Replace HP turbo assembly. Clean system of oil contamination per Section 2 Step 3 . Once completed proceed to Section 4
		Intake housing: Replace turbo center section per IK1200938 . Clean system of oil contamination per Section 2 Step 3

Section/Step	Action	Decision
2/3	Clean system of oil contamination from CAC per IK1201175	Once completed proceed to Section 4

Section/Step	Action	Decision
3/1	Has CAC or ETV icing been found?	Yes: Proceed to Section 4
		No: Complete Engine Run / Start Symptoms

Section	Action	Decision
4	Install open breather kit using the ESN range guide below. Identify engine emissions year using Service Maxx as shown in Figure 1	2010 Emissions DT, 9 or 10 Engine
		2013 HD-OBDDT, 9 or 10 Engine



ServiceMaxx

File View Sessions Tests Procedures Tools Help

Vehicle Information

Engine Type: MaxxForce DT/9/10 (2010 - 2012)

Software Identification: 466HM2U8

ACM Software Identification: ...

Engine Family Rating Code: E40F

Vehicle Identification Number: 1S1MENGENVINI6ENG

Engine Serial Number: 466HM2U3000000

Transmission Type:

Rated Power: 8,787 hp

Total Miles: 45,728,643.1 miles

Total Fuel Used: 450,969,470 gal

Total Engine Hours: 41,469,848.1 hr

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Figure #1: Service Maxx Engine ID

Item 1: 2010 Emissions DT, 9 or 10 Engine

Item 2: 2013 HD-OBD DT, 9 or 10 Engine

Possible Part Numbers Needed

Part Number	Part Description	Quantity
2512354C91	HP Turbocharger Center Cartridge	1
1881990C1	Pipe Seal/ Crossover Tube Seal (inter-stage cooler not equipped, If needed)	1
1858048C2	Inter-stage Cooler Outlet O-Ring (ISC equipped, If needed)	1
7091592C91	KIT, Turbocharger Compressor Cleaning	1
2512460C1	Fluid, EGR Cleaning	1

1885590C92	TUBE ASSY TURBO OIL SUPPLY	1
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Standard Repair Times (SRT)

Description	Model	SRT Link
12 - VALVE COVER(S) AND/OR GASKET (I-6 ENGINES), R & R AND/OR REPLACE	4300 4400	[KL12-1564T-20]
	7300, 7400, 7500	[M12-1564T-20]
12 - CRANKCASE BREATHER (ENGINE MOUNTED), REPLACE	4300 4400	[K12-9215T]
	7300, 7400, 7500	[M12-9215T]
12 - Air Cleaner AIR INLET HOSE/Piping, Replace	All Models	[A15-180]
12 - TURBOCHARGER H.P CENTER SECTION, REPLACE (Note the turbo oil supply line must be replaced)	4300 4400	[KL12-6135T-24]
	7300, 7400, 7500	[M12-6135T-24]
12 - CAC Cleaning, Perform	4300 4400	[A09-3925A]
	7300, 7400, 7500	[A09-3925A]
12 - Charge Air Cooler, Replace	4300 4400	[KL09-3925T]
	7300, 7400, 7500	[A09-3320]

Warranty Coding

Group	Noun	Noun Description
12000	215	Filter, Oil Separator, Crankcase Vent

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Feedback Information

Viewed: 12353

Helpful: 83

Not Helpful: 4

Staff ID	Client ID	Comments	Created Date
	DY46884	You received the following feedback From: dy46884 - Brian Thornton Email Address: hiter@RUSHENTERPRISES.COM Job Classification: SE008, Service Technician Dealer: RUSH TRK CTR OF VA Feedback: Step 2 valve cover identification: pictures of the actual baffel are poor, should also include pictures of valve covers removed so you know what you are actually looking for inside that hole. Figure 2 looks like an open hole does not look like baffel is installed. I have had multiple technicians order the incorrect parts as a result of this.	6/24/2015 1:55:12 PM