PE13-018 FORD 8-23-2013 APPENDIX G **Engineering Review** 1 AND 2 PAGE 166

PE13-018 FORD 8-23-2013 APPENDIX G Engineering Review 1

From: Sent:	Ronzi, Bill (W.C.) Monday, June 17, 2013 2:33 PM
То:	Andersen, Erik (E.); Kramer, Michael (M.T.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Russo, Scott (S.)
Subject:	13/14MY Direction RE: 2013 CAC Misfire Meeting

I suspect that the 13/14MY QSF will be opening very soon so I was going to schedule a short meeting to discuss.

Rather than a separate meeting, can we use the first 15 minutes of your Tuesday 2pm meeting to focus on 13/14MY potential solutions? In order to fully address customer drivability concerns, the avoidance of FMEM may need to be goal vs only misfire count reductions.

PS – Would be helpful to have the existing results summarized (could show data for both cells). Can we review that summary on Tuesday? Something like this:

	Misfire	FMEM	# Cylinders	TASE	Towing	Тор
Hardware Configuration	Counts	(Y/N)	FMEM	IAT	Derate?	Water T
11/12MY (no blocker)						
11/12MY (top blocker)						
13MY PCA CAC						
13MY PCA CAC (bottom blocker)						
Note: Due to test/test & vehicle/vehicle varia	ability, misfi	re counts acc	urate to +/- TBL).		

Thanks,

Bill

-----Original Appointment-----From: Andersen, Erik (E.) Sent: Friday, February 08, 2013 2:14 PM To: Andersen, Erik (E.); Ronzi, Bill (W.C.); Giunta, Michael (M.J.); Huang, Larry (L,.); Allan, Valerie (V.J.); Madej, Jeanette (J.); Raver, Jon (J.A.); Ladd, John (J.R.); Dumler, Jeff (J.D.); Rollins, Scott (S.); Rollinger, John (J.E.); Devries, Jason (J.E.); Yamada, Shuya Shark (S.Y.); Norman, Kristofor (K.R.); Styles, Daniel (D.J.); Shaikh, F Zafar (.); Abarham, Mehdi (M.); Glugla, Chris (C.P.); Usman, Mohammad (M.); Shaw, Nathanael (N.); Wade, Robert (R.A.); Baldwin, Damien (D.K.); Bishop, Chris (C.B.); Garrett, David (D.P.); Rackmil, Chuck (C.I.); Hall, Brent (A.); Sowards, John (J.); Toutanji, Mohamad (M.); Wenzel, Todd (T.L.); Widmann, Carl (C.A.); Sparks, Douglas (D.S.); Gardner, Greg (G.D.); Gallo, Joseph (J.J.); Robbins, John (J.R.); Keough, Shane (S.T.); Michela, Mike (M.); Schoeneman, Christian (C.B.); Zhang, Yi (Y.); Dame, Andrew (A.C.); Perini, Rob (R.M.); Stewart, LaMar (M.L.); Zhao, Yonglu (Y.); Vostal, Pat (P.T.); Valluri, Siddharth (S.); Beck, Jim (J.G.); Smith, Craig (C.A.) Cc: Russo, Scott (S.); Cragel, Daniel (D.M.) Subject: FW: 2013 CAC Misfire Meeting When: Tuesday, June 18, 2013 2:00 PM-3:00 PM (UTC-05:00) Eastern Time (US & Canada). Where: 23G26

-----Original Appointment----- **From:** Andersen, Erik (E.) **Sent:** Thursday, December 13, 2012 11:14 AM To: Andersen, Erik (E.); Giunta, Michael (M.J.); Huang, Larry (L..); Allan, Valerie (V.J.); Madej, Jeanette (J.); Raver, Jon (J.A.); Ladd, John (J.R.); Dumler, Jeff (J.D.); Rollins, Scott (S.); Rollinger, John (J.E.); Devries, Jason (J.E.); Yamada, Shuya Shark (S.Y.); Norman, Kristofor (K.R.); Styles, Daniel (D.J.); Shaikh, F Zafar (.); Abarham, Mehdi (M.); Glugla, Chris (C.P.); Usman, Mohammad (M.); Shaw, Nathanael (N.); Wade, Robert (R.A.); Baldwin, Damien (D.K.); Bishop, Chris (C.B.); Garrett, David (D.P.); Rackmil, Chuck (C.I.); Hall, Brent (A.); Sowards, John (J.); Toutanji, Mohamad (M.);
Wenzel, Todd (T.L.); Widmann, Carl (C.A.); Sparks, Douglas (D.S.); Gardner, Greg (G.D.); Gallo, Joseph (J.J.); Robbins, John (J.R.); Keough, Shane (S.T.); Michela, Mike (M.); Schoeneman, Christian (C.B.); Zhang, Yi (Y.); Dame, Andrew (A.C.); Perini, Rob (R.M.); Stewart, LaMar (M.L.); Zhao, Yonglu (Y.); Vostal, Pat (P.T.); Valluri, Siddharth (S.); Beck, Jim (J.G.); Smith, Craig (C.A.)
Cc: Russo, Scott (S.); Cragel, Daniel (D.M.)
Subject: 2013 CAC Misfire Meeting
When: Occurs every Tuesday effective 1/8/2013 until 2/25/2014 from 2:00 PM to 3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: 23G26

2013 CAC Misfire Meeting Placeholder

[Do not add or change anything below this line. The information in this section may be replaced with your meeting details after you click Send.]

WebEx Meeting Information

Meeting Number: 715 630 409 Meeting Password: This meeting does not require a password. Meeting Link: https://ford.webex.com/ford/j.php?J=715630409

Audio conference information

To receive a call back, provide your phone number when you join the meeting, or call the number below and enter the access code. US Toll Free Number: +1-888-628-3668 FordNet 248-3668 / Toll: +1-313-248-3668 Global call-in numbers: <u>https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=189580907&tollFree=1</u> Toll-free dialing restrictions: <u>http://www.webex.com/pdf/tollfree_restrictions.pdf</u>

Access code:715 630 409

MC12

http://www.webex.com

From: Sent: To: Cc: Subject: Ronzi, Bill (W.C.) Tuesday, March 12, 2013 6:30 PM Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.) Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Andersen, Erik (E.) 13MY CAC Replacement

Rick/Dan,

We need the SSM out... Good example below.

Can you call the dealer on this one to discuss the repair? It appears the vehicle had a P0430 catalyst code but instead of replacing the LH catalyst they replaced the CAC, per the TSB, even though it was built outside the TSB dates (already had new CAC). That means the customer will likely be back very soon with another P0430 and got \$300 worth of new CAC parts that won't help.



Bill William C. Ronzi PTI Quality Supervisor (313) 805-6140 cell & pgr

From:	Osepchook, William (W.R.)
Sent:	Wednesday, January 04, 2012 9:04 AM
To:	Stawiecki, Bob (R.)
Cc:	Cockerill, Al (C.A.); Donahue, Francis (Fran.); Bonell, Paul (P.S.); Mazuchowski, James (J.A.); Harmon, Derek (D.M.); Graham, David (D.L.)
Subject:	2011 F-150 EcoBoost 1FTFX1ET5B Misfire

Hi Bob,

I will be shipping six spark plugs and a 7T4Z-19A095-A ground strap.

Reference GCQIS report BF3GB001

Per conversation; below are the instructions for recommended repairs on this vehicle:

1. Scan for DTC's and list current drivability issues.

2. Check G105 Ground (Rear of driver side cylinder head) torque per attached instructions. (M-time)

A) Can you loosen G105 bolt using only finger pressure?B) Attempt to torque bolt to 10 Nm (7lb/ft). Was the torque set correctly?

- 3. Install spark plugs. Set gap to 0.8mm +/- 0.05mm (Labor Op 12405AT)
- 4. Install ground strap per attached instructions. (M-time)



Thanks for the help. Let me know if there are any questions.



LGDEE Large Gas & Diesel Engine Engineering V-Engine Service Engineer 313-805-9191 wosepcho@ford.com

F-150 Service Ground Strap Instructions (Left/Driver side Rear of Engine)

Attach 7T4Z-19A095-A wire to G105 ground and crank position sensor heat shield lower bolt. Use a tie strap to secure wire to transmission shift cable.

(Keep existing G105 ground eyelet in same position)



1. G105 Ground

Install eyelet behind the stud. Torque to 10Nm (7 lb/ft) then rotate an additional 45 degrees

2. Crank position

<u>sensor heat shield</u> <u>lower bolt</u> Torque to 11Nm (8 lb/ft)

3. Attach tie strap

Secure wire to transmission shift cable (Cable not shown)

From:	Oyafuso, Kevin (K.G.)
Sent:	Monday, August 15, 2011 5:46 PM
To:	Sims, Ivan (I.D.); McCoy, Jim (D.); Rutkowski, Brian (B.); Dusa, Daniel (D.V.); Donahue,
	Francis (Fran.); Morrow, Bill (N.W.); Baskins, Robert (R.S.); Whitehead, Joseph (J.P.);
	Smith, Craig (C.A.); Wagers, Sue (S.K.); Fischer, Troy (T.A.)
Cc:	Dixon, Mark (M.R.); Avery, Kevin (K.); Hamilton, Steven (S.C.); Nowaczyk, Rick (R.J.);
	Reno, George (G.L.); Elkins, Donly (D.); Cockerill, Al (C.A.)
Subject:	2011 P415 GTDI P0306 at York Ford, Maine (Houlton); 1FTFX1ET1BF
Attachments:	2011 P415 gtdi misfire York Ford.zip

here is the data from the P415 GTDI in Maine - Customer was able to repeat misfire condition with the ADR2 installed.

Regards, Kevin Oyafuso Ford Motor Company PD / Powertrain Integration Management - C&C Quality Vehicle Operations General Office (VOGO) 17000 Oakwood Blvd, Allen Park, MI 48101 6-Sigma Garage, Office 4B (313) 805-4908 (koyafuso@ford.com)

From: Avery, Kevin (K.) Sent: Thursday, July 28, 2011 12:29 PM To: Oyafuso, Kevin (K.G.) Subject: 2011 F-150 Ecoboost misfire

Kevin,

Heads up that the coils and plugs have not repaired this vehicle. Ritchie did say that he sent the parts back last week as requested. Did you have further insight beyond the secondary ignition?

Kevin Avery

Field Service Engineer, Boston Region (774) 285-9143 Fax: 866-736-6011

Rotunda: Your Single Source for Service Department & Equipment Needs

Just because you don't see it in the Rotunda catalog doesn't mean we don't sell it!

This e-mail and any attachments is intended only for the use of the person or persons addressed hereto and may contain legally privileged and/or confidential information. If you are not the intended recipient of this e-mail, you are hereby notified that any dissemination, distribution or copying of this e-mail, and any attachments, is strictly prohibited. If you have received this e-mail in error, please notify me via return e-mail and permanently delete the original and any copy of any e-mail and any printout.

From: KAVERY3@ford.com [mailto:KAVERY3@ford.com] Sent: Thursday, July 28, 2011 12:22 PM To: Avery, Kevin (K.) Subject: Report Summary for the CQIS Report#BCWAN004

Attachments: 0 **BCWAN004 NHL Received: Report#:** 03/23/2011 **CCRG/EPRC: Reviewed Status:** Date: 2011,F150 4X4,SUP CAB,STYSD Vehicle: **Build Date:** 02/15/2011 ,1FTFX1ET1BF 3.5L-GTDI Calibration: **Odometer :** 1,847 M **Engine:** 3800F3.31C A/C: **Transmission:** 6R80E Axle: YES (207) 532-**Dealer:** USA 08849 York Ford Sales **Phone#:** 2928 USA City: Maine **Country :** Houlton State: **Originator: RITCHIE LYNDS** 5 51 9 02 DRV PERF, IDLE QUALITY, ROUGH, ALWAYS Symptom: Status: VFG: V40 GOOD IDLE QUALITY Additional PREMATURE CATALYST FAILURE Symptom: Fix: **Causal Component : Condition Code:** Hotliner: ABOUGHAN **Phone:** 000 317-6308 Regn Cd: N2 Boston **Phone: TAR:** 0-30 **Engineering: Dir Contact:** RITCHIE LYNDS **Phone:** 207 532-2928 Title Cde: T **DTCs:** KOEO: KOEC:P0430 KOER: **Comments** REPAIR 03/23/2011 08:03AM ALEX BOUGHAN MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: OWNWER SAYS MISSES AT TIMES, LACK OF POWER DIAGNOSTICS: ROAD TESTED AND CHECKED FOR CODES PARTS REPLACED:: NONE TECH QUESTION: NO CODES NOTHING IN MODE 6 A KNOWNS ON THESE FOR LACK OF POWER PLEASE LIST ANY PERTINENT PID DATA PLEASE LIST ANY VEHICLE MODIFICATIONS, OR TYPE NONE. NONE RECOMM 03/23/2011 08:03AM ALEX BOUGHAN MSS - FCSD - TECH SVC HOTLINE RITCHIE, BASED ON THE INFORMATION PROVIDED, THE CUSTOMER STATES THAT Α MISFIRE AND LACK OF POWER IS PRESENT, THE CONCERN CAN NOT BE DUPLICATED AT THE DEALER LEVEL. GATHER MORE DETAILED INFORMATION

FROM

THE CUSTOMER. DUPLICATE CONCERN AND PROCEED WITH NORMAL DIAGNOSTICS AS

NECESSARY. REFER TO SECTION 3 OF THE PC/ED FOR A LIST OF POSSIBLE CAUSES BY SYMPTOM. REFER TO SECTION 6 OF THE PC/ED FOR A LIST OF PIDS TO MONITOR BY SYMPTOM. DOCUMENT ANY AFTERMARKET COMPONENT OR ANY

DAMAGE ON THE VEHICLE. FOR AN INTERMITTENT MISS/LACK OF POWER CONCERN,

THERE ARE NO COMMON CONCERNS IN THE HOTLINE DATA BASE TO INFORM YOU

OF. PLEASE CONTACT THE HOTLINE BY PHONE, USING THE CONTACT ID IN RED AT THE TOP OF THE PAGE, IF FURTHER TECHNICAL ASSISTANCE IS NEEDED ON THIS CONCERN.

REPAIR 03/23/2011 08:47AM LAWRENCE NEWSOM MSS - FCSD - TECH SVC HOTLINE CUSTOMER HAS ALSO COMPLAINED OF POOR FUEL ECONOMY. UABLE TO VERIFY THE

CUSTOMERS COMPLAINTS. EEC PASSES, MODE 6 DATA SHOWS NO MISFIRE COUNTS

PRESENT. PERFORMED A IDS FUEL ECONOMY TEST WHICH SHOWS USAGE WAS IN SPEC.

RECOMM03/23/2011 08:47AM LAWRENCE NEWSOM MSS - FCSD - TECH SVC HOTLINERITCHIE, ADVISE TO CONTINUE TO ATTEMPT TO DUPLICATE THE CONCERN.ATTEMPT TO OBTAIN MORE INFORMATION FROM THE CUSTOMER ON WHEN THECONCERN OCCURS COLD OR HOT ENGINE OPERATION, AT IDLE OR UNDERHEAVY

ACCELERATION. INSTALL A VDR TO ATTEMPT TO GET A POSSIBLE RECORDING OF

THE ALLEGED CONCERN.

ADD-ON 04/01/2011 11:59AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE

THE DEALER WAS CONTACTED TO DISCUSS THIS VEHICLES CONCERN (SPOKE WITH

CARLENE). HOWEVER, THE TECHNICIAN WAS UNAVAILABLE AND WILL NOT RETURN

UNTIL MONDAY (4/4/11)

ADD-ON 04/01/2011 01:41PM ALEX BOUGHAN MSS - FCSD - TECH SVC HOTLINE

PLEASE HAVE THE TECH MONITOR THE SHORT TERM FUEL TRIMS, LONG TERM FUEL

TRIMS, BARO, FRP (ACTUAL AND DESIRED) AND OBTAIN FUEL SAMPLE FOR VISUAL INSPECTION.

AUDIT 07/02/2011 11:05AM SYMPTOM 6 14 5 93 CHANGED TO 5 54 2 02 BY CS012093

REPAIR 07/12/2011 03:32PM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE

WEB FORM DATA - CONCERN: SES LIGHT MISSING, DIAGNOSTICS: ROAD TESTED PIN POINT, PARTS REPLACED:: NONE TECH QUESTION: KNOWNS

RECOMM 07/12/2011 03:32PM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE

RITCHIE, THE P0430 INDICATES THAT CATALYST FAILURE HAS OCCURRED. THIS CONCERN OF PREMATURE CATALYST FAILURE IS CURRENTLY UNDER ENGINEERING

INVESTIGATION. BEFORE CLEARING ANY CODES OR DATA, PLEASE USE IDS TO VIEW MODE 6 DATA AND CLICK ON THE BLUE LINED BUTTON IN THE UPPER RIGHT

HAND CORNER OF THE SCREEN. PLEASE THEN CLICK ON "LOG DATA." THIS WILL STORE MODE 6 DATA TO THE VEHICLE SESSION. PLEASE THEN HOLD THE VEHICLE

SESSION AND THEN OPEN THE PREVIOUS SESSIONS SCREEN. HIGHLIGHT THE VEHICLE SESSION FOR THIS VEHICLE AND CLICK ON THE BUTTON WITH THE PICTURE OF THREE COMPUTERS AT THE RIGHT OF THE SCREEN. AS LONG AS YOU HAVE A GOOD INTERNET CONNECTION, THIS WILL SEND THE VEHICLE INTO THE HOTLINE FOR ENGINEERING REVIEW. PLEASE THEN PROCEED WITH REPLACEMENT OF THE AFFECTED CATALYST, RESET KAM, AND RETEST THE VEHICLE.

- AUDIT 07/12/2011 03:32PM CASEY WAGONER MSS FCSD TECH SVC HOTLINE SYMPTOM 5, 54, 2, 02 CHANGED TO 5, 51, 9, 02 BY CWAGONE1
- **REPAIR** 07/12/2011 04:04PM TONY ROMANO MSS FCSD TECH SVC HOTLINE RITCHIE CALLED TO ADVISE HE HAS FOUND THE NUMBER 6 PLUG'S CENTER ELECTRODE HAS BROKEN AND IT IS SLIDING DOWN TO COVER THE CENTER ELECTRODE.

RECOMM 07/12/2011 04:04PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE THANKED RITCHIE FOR THE UPDATE AND ADVISED HIM TO RETEST FOR ANY CONCERNS AFTER THE CATALYST IS REPLACED. ESCALATION TO AN FSE CONTACT MAY OR MAY NOT BE NEEDED.

REPAIR07/13/2011 02:05PM JACK STRAMER MSS - FCSD - TECH SVC HOTLINE
RITCHIE STATES THAT THE PLUG AND BANK 2 CATALYST WERE REPLACED AND
VEHICLE SEEMED TO RUN GOOD. VEHICLE WAS RELEASED TO CUSTOMER AND
CUSTOMER CALLED DEALER BACK STATING THE MIL CAME BACK ON AND THE
TRUCK

IS MISSING AGAIN. TRUCK IS NOT AT THE DEALER AT THIS TIME. TECH IS LOOKING FOR ESCALATION OR FSE.

RECOMM07/13/2011 02:05PM JACK STRAMER MSS - FCSD - TECH SVC HOTLINEADVISED RITCHIE TO HAVE CUSTOMER BRING TRUCK TO DEALER. ALSOADVISEDTHAT WE HAVE ESCALATED THIS CONCERN FOR ADDITIONAL REVIEW. AREPRESENTATIVE SHOULD CONTACT YOU BY PHONE OR THROUGH THIS

HOTLINE

ASSISTANCE REQUEST WITHIN ONE (1) BUSINESS DAY WITH ADDITIONAL INFORMATION OR RECOMMENDATIONS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.

- ADD-ON 07/13/2011 02:05PM JACK STRAMER MSS FCSD TECH SVC HOTLINE ESCALATED DUE TO # OF CONTACTS TO HOTLINE FOR CONCERN AND FACT THAT CUSTOMER HAS OPEN CUDL SEEKING BUY-BACK
- REPAIR07/13/2011 03:55PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE
AN OBC HAS BEEN PLACED TO THE DEALER TO DISCUSS THIS CONCERN IN
GREATER DETAIL. RITCHIE (TECHNICIAN) HAS STATED THAT THE VEHICLE
PREVIOUSLY EXHIBITED A MISFIRE CONCERN. UPON ARRIVAL OF THE VEHICLE,
NO MISFIRES WERE PRESENT IN MODE 6 IN ADDITION TO POWER BALANCE. THE
VEHICLE WAS RELEASED AND RETURNED WITH A MISFIRE ON CYLINDER
NUMBER 6

AND A FAULTY SPARK PLUG WAS IDENTIFIED. THE INSULATION ON THE PLUG FAILED THUS DROPPING DOWN AND COVERING THE CENTER ELECTRODE. THE SPARK

PLUG HAS BEEN REPLACED AND THE VEHICLE RAN FAN AT THAT TIME. HOWEVER,

THE VEHICLE RETURNED WITH THE MIL LIGHT (P0430) WAS ON. THE CATALYST HAS BEEN REPLACED AND THE VEHICLE WAS RELEASED AGAIN. THE CUSTOMER CALLED THE DEALER AND HAS STATED THAT THE VEHICLE CONTINUES TO MISFIRE. THE VEHICLE IS CURRENTLY NOT AT THE DEALER. A CUDL CASE IS CURRENTLY OPEN INDICATING A POTENTIAL CASE OF BUY BACK/LEMON LAW.

TAR07/13/2011 03:55PM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINEA TAR HAS BEEN OPENED AT THE REQUEST OF THE HOTLINE DUE TO ADOCUMENTED CUDL CASE. THE CUSTOMER HAS REQUESTED THAT THE VEHICLEBE

BOUGHT BACK. THIS VEHICLE EXHIBITS AN INTERMITTENT MISFIRE CONDITION. THE NUMBER SIX SPARK PLUG HAS BEEN REPLACED DUE TO A FAILED INSULATOR

WHICH HAS DROPPED DOWN THUS COVERING THE ELECTRODE. THE VEHICLE WAS

RELEASED WITH NO DRIVE-ABILITY CONCERNS AND RETURNED WITH DTC P0430. THE CATALYST HAS BEEN REPLACED AND THE CONDITION WAS RE-EVALUATED. THE

TRUCK DID NOT EXHIBIT ANY CONCERNS AND THE VEHICLE WAS RELEASED AGAIN.

HOWEVER, THE CUSTOMER CONTACTED THE DEALER STATING THAT THE MIL IS ON

AND THE TRUCK CONTINUES TO MISFIRE. THE VEHICLE IS CURRENTLY NOT AT THE DEALER. THE TECHNICAL HOTLINE SUSPECTS THIS CONCERN MAY BE A RESULT OF A LOOSE GROUND (G105) OR A FUEL PRESSURE/QUALITY RELATED CONCERN. PLEASE ASSIST THE DEALER WITH DETERMINING ROOT CAUSE OF THIS

CONDITION. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 3 ESTIMATED DAYS OUT

OF SERVICE: 10

RECOMM07/13/2011 03:55PM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE
RITCHIE, WE'VE REFERRED THIS CONCERN TO THE FIELD SERVICE ENGINEER
(FSE) IN YOUR MARKET AREA. THE FSE SHOULD CONTACT YOU OR DEALERSHIP
MANAGEMENT (SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN ONE (1)
BUSINESS DAY. IF THE FSE DOES NOT CONTACT YOU DIRECTLY, PLEASE
CONSULT
WITH DEALERSHIP MANAGEMENT TO DISCUSS FURTHER RECOMMENDATIONS
AND

STEPS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.

- **REPAIR** 07/13/2011 04:27PM RICHARD MAILLOUX MSS FCSD TECH SVC HOTLINE THE TECHNICIAN IS REQUESTING JORDAN FOR ADDITIONAL INFORMATION.
- **RECOMM 07/13/2011 04:27PM RICHARD MAILLOUX MSS FCSD TECH SVC HOTLINE** RITCHIE, A TECHNICAL SERVICE HOTLINE REPRESENTATIVE WILL BE CONTACTING YOU SHORTLY.
- REPAIR07/13/2011 04:37PM JORDAN DODDS MSS FCSD TECH SVC HOTLINEAN OBC HAS BEEN PLACED TO RITCHIE VIA HIS CELL PHONE NUMBERRITCHIE WAS UNAVAILABLE DURING THE TIME OF THE CALL.
- **RECOMM 07/13/2011 04:37PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE** RITCHIE, PLEASE CONTACT THE HOTLINE BY PHONE AT YOUR EARLIEST CONVENIENCE.
- **REPAIR** 07/13/2011 04:53PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE AN OBC HAS BEEN PLACED TO RITCHIE.
- RECOMM 07/13/2011 04:53PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE RITCHIE HAS STATED THAT THE VEHICLE WILL ARRIVE IN THE MORNING AND THE

CONCERN IS WORSE WITH AN INCREASE IN ENGINE TEMPERATURE.

- ADD-ON 07/13/2011 04:53PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE NOTE TO FSE: THE VEHICLE WILL ARRIVE AT THE DEALER IN THE MORNING ON THE DAY OF JULY 14, 2011. ADDITIONALLY, THE TECHNICIAN HAS STATED THAT THE VEHICLES CONCERN IS MORE PROMINENT WITH AN INCREASE IN ENGINE TEMPERATURE.
- ADD-ON 07/14/2011 11:20AM KEVIN AVERY(FSE) MSS FCSD REG BOSTON I SPOKE WITH RICHIE YESTERDAY BEFORE THE TAR WAS FILED AS HE WAS SEEKING ANY INFORMATION I MAY HAVE, I ADVISED THAT IF THE CUSTOMER IS ALLEGING A RECURRANCE OF THE SAME ISSUE TO LOOK AT MODE 6 AGAIN TO CONFIRM IF A MISFIRE WAS DETECTED. I ADVISED POSSIBLE STICKING VALVE CONCERN OR INJECTOR.

ADD-ON 07/18/2011 10:58AM KEVIN OYAFUSO PD - PRODUCT DEVELOPMENT SPOKE WITH RITCHIE, TECHNICIAN, REQUESTED SESSION DATA AND VERIFY G105 IS TIGHT. RITCHIE CALLED BACK AND SAID GROUND WAS TIGHT AND COULD NOT TIGHTEN IT MORE THAN A 1/8 TURN. ENGINE WAS NOT MISFIRING AT THE TIME. CUSTOMER HAD CONCERNS OF ENGINE RUNNING ROUGH SINCE MARCH 23, WITH 1100 MILES, TECH COULD NOT FIND ANY MISFIRES DURING THIS TIME. VEHICLE NOW HAS ABOUT 11000 MILES ON AND CAME IN FOR MIL ON, STILLS SAYS ENGINE RUNS ROUGH - NEED CLARIFICATION IF THIS IS DURING ACCEL TOO , VEHICLE HAS CAMPER ON THE BACK, NOT SURE IF USED WITH TRAILER, GETS WORSE WHEN ITS HOTTER (LONGER HE DRIVES). S UPERCAB 4X4 S

EEMS WORSE WHEN WET, M

ISFIRE TEST - NO CONCERS AT PARK, BRAKE TORQUE, NO MIS DURING POWER B ALANCE M

ODE 6: O2 STORAGE CAPACITY =.36;1, .32;1 RESULTS SHOW CAT MONITOR I S OK NOW(AFTER CAT REPLACMENT) R

S OK NOW (AFTER CAT REFLACMENT)

EL COMP: ALL CYLINDERS AT 0% M

ODE 9: PCM ID INDICATES AT R11= KGCH0C5.H32. REFLASHED LAST THURSDAY (7/14/11). D

ATALOGGER SNAPSHOT RECORDED: M

FF_TRIP=3 M

FF_RPM=628 M

FF_VS=0 M

FFLOAD 16% M

FF_RUN=4:15 M

FF_SOAK=11:00 K

NK_CNTR_CYL=0 K

NK_CNTR=WAS AT 49 BEFORE #6 PLUG SWAP R

EQUESTED RITCHIE TO HOLD ON TO #6 PLUG AND CAT, THEN REPLACE ALL 6 P LUGS AND IGNITION COILS. ENGINEERING WILL REQUEST ALL PARTS BACK V IA HOT PROCESS FOR ANALYSIS. MAKE SURE ALL PLUGS AND COILS ARE L ABELED WITH ORIGINAL CYLINDER NUMBER.

ADD-ON 07/28/2011 11:07AM KEVIN AVERY(FSE) MSS - FCSD - REG - BOSTON RECEIVED VOICE MAIL FROM TECH YESTERDAY, CALLED TECH TODAY AND WAS

TOLD HE WAS AT LUNCH, LEFT MESSAGE FOR TECH TO CALL ME.

ADD-ON 07/28/2011 12:21PM KEVIN AVERY(FSE) MSS - FCSD - REG - BOSTON SPOKE WITH SF RITCHIE WHO STATES HE REPLACED ALL 6 COILS AND PLUGS AND CUSTOMER STATES STILL HAS THE CONCERN, VEHICLE IS NOT AT THE DEALERSHIP CURRENTLY. SF STATES HE SENT THE COILS AND PLUGS BACK LAST

WEEK.

From:	Hepburn, Mitch (M.)
Sent:	Monday, November 07, 2011 9:54 AM
To:	Gernant, Tim (T.R.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Smith, Craig (C.A.);
	Wagers, Sue (S.K.); Sims, Ivan (I.D.); Cockerill, Al (C.A.); De Coste, Bill (W.J.)
Cc:	Graham, Daniel (D.B.); 'Christopher White'
Subject:	3.5 CAL. MISFIRE
the second s	

Here is the lastest over the weekend on the 4- 3.5L mis. Calibration units. CKD00034 is back on drives after getting ABS module replaced In Denver.

Chris White I need paperwork on this sent to me please for the repair with mileage and dealership and all.



Mitch Hepburn Roush Industries Vehicle Coordinator U377-2012 VN127-2012 C346-2012.25 BEV <u>mhepbur1@ford.com</u> Cell - 734-748-5728

t

1

1

OUSI	rsStores	Current Odo	M learns	Base daining	Hiles Schedu ed			Drive Data	
stores Veh	inche IC	Ode	11.000	Remaining On 5 te 1,707	for Site	0454 10/21/11 10/21/11	ou 5 m	Data	
	v - 1	16,930	E 293	8.807	8 000	10/21/11	10,837	Deta IT-TOTIC IT-TE-TE-TE-TE-TE-TE-TE-TE-TE-TE-TE-TE-TE	
VER CK		12,813	139	3,881	8 000 8	10/21/11	3,67	11,2251	
		- Indiana		GART					
_		2	2 a		_	-			
	-		8			-			
10		3 7 7 1					B		
-	_	-		D	the shift o	ata		a successive de	
Center Ve		BOTH I	Riart Odio	End Odo	Shift MI as	With the	_	Wenther	
25 2 C		BOTH BOTH BOTH BOTH	10,630 300 8.67 9.337	11,580 3,380 10,8 9,88	903 2 870 2,170 3 7	_			
1212 G 1252 C 1212 C 1212 C		BOTH	9.357	9,68	37				
22511 C 02511 C 02511 C		All All All All	11,580 3.380 10,8 9.88	11,820 3,622 11,152 10,128	280 261 308 3	-			
0.28 tt C		AM	10,8	11,152	808	_			
23 11 C		PM	11,820	12,008	200	_			
		PM PM PM	11,820 3.622 11,152	12,008 129 11, 76	32	1			
		PM AM AU AU	10,028 12,008 129 11, 75	10,371	286 507 52 3 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2	-			
28 11 C 28 11 C 28 11 C		AM	129	.399 11,690	270				
0 20 11 C		AM		10.76		-			
28 11 C 28 11 C 28 11 C		AM PM PM PM	12,35 300 11,620	12,587 585 11,620	233				_
		PM	11,620	11,620		-	-		
27.11.0		PM AM AM AM	10,71 12,587 585 11,820	11.0 9 12,905 ,88 11,820	338 318 299		_		_
211 C		AM	11,820	11,8285					
0 27 11 C		AM PM PM PM	11,0 9 12,905 .58 11,620	11,382	3 3 233 356		-		
2.38 11 C 2.38 11 C 2.37 11 C 2.38 11 C 2.38 11 C 2.38 11 C		PM	38	5,2 0	356	DE LA JER T	-		
27 11 C		PM	11,820 11,362 15,138 5,2 0 11,820 11,7 7 13,138 5,88	11,382 13,136 5,2 0 11,620 11,620 11,7 7 13,138 5, 85	385	DERVER D		Sector Sector	_
238 11 C 238 11 C 238 11 C 238 11 C		PM AM AM	52.0	13,138	28			WIN TODAY	
28 11 C		AM AM AM PM PM	11,630	12,001	-11 670	DENVER DO	WWW .		
02811 C		PM	13,138	13, 81	323	ALC INCOME	a new		
2.86 1 C 2.86 1 C		PM	5.88 11,620 12,301 5.8.8 11,620 11,620	5,8 8	360	DENVER DA	SAN.		-
0 28 11 12		PM	12,001	1237	256	and the second			
28 11 C		AM	11,620	11,820	100	Unit Coint	.dutrat		
			11,620	11,620 12,3 7 6,01 11,625 11,625 11,625 12,360 6,371 11,625 12,360	-	Artil Bonin Mili Bonin Mili Bonin In L 13GH	i demoir	Set U and the	
30 11 12		AM	11,620 12,3 7 8,01 11,620 72,380	12,360	13 307	HE LIGH	NORMAL THE AL	APLER	
30 11 12		PM	11,620	11,820		NI L LUCH	i denrer	COPULA -	
231-11-0		AM	13, 51	(3,639	228	NIL LICH	DCTIMIN IN A	AP125	
		AM AN AM AM	13, 81 8,371 11,820 12,380	8,505	228 238 -11 620 -12 360				
ante		AM	12,380		-12 360				
31 11 C 31 11 C 31 11 C 31 11 C			13,660 8,505 11,620 12,380	13,995	305 310 -11 620 -12 360	-			
2 31 11 C 2 31 11 C 2 31 11 C 2 31 11 C		PM	11,620		-11 620	-			
		AM AM AM AM	13,005 8,016 11,820 17,380	1,287	202 208 -11 623 -12 360				
Of It C		AV	11,620	6411	-11 820				
101110		PM	1,380	1,96	-12 360	10			
101110		PM	1,387 7,211 11,630	1,96	213	_			
01 11 C			12,300	12,703 11,788 7,717 11,620	-11 620 213 -11 620 3 3 200	-			
02 11 C		AM	7,2	7,212	290	-			
		AM	11,600	11.620	3 5		_		
		****	1, 380 7, 2 11,650 12,753 1,788 7,717 11,855	13,0 8 15,087 8,018 11,838	208 301 219	-	_		
140. 11		PM	11,825	f1,835	219		-		
			13,0 8 15,087 8,018 11,839	13,382 16,275 6,271 12,190 13,738 16,582 8,518	3		-		
日日に		AM	8,018	8,211	193		-		
t CS TE C		AM	53,382	13,735	3.6	1	-		
		FM	13,382 15,278 8,211 12,189 13,738 15,552 8,518	15,582	30	-	-		_
03 11 C		PM	12,180	12,539	390				
0 11 C			15,662	12,639 1,030 15,916 8,716	23	-	_		
0 11 C 0 11 C 0 11 C		All	02,530	8,716	-12 530	-			
10 11 C		AM AM PM PM	0,518 (2,539 1,030 15,518 8,716	1,030			_		
		PM	8,716	8,167	251	-	_		
		PM	1,030 1,030 15,816 8,967	1,3/5	-12 530 3 5		_		_
CD TH C		AM	15,816	1,375 18,102 8,257	280	-	_		
		AM AM PM PV	02,830 1,375 96,932 10,257		-12 539	-			
US H G		PM	96,902	1,725	250	-			-
08 11 C 08 11 C 08 11 C		PM	17,530	9,508	251 -12 530				
05 11 C		PM	1,725 1,725 16,580	15,785	200	_			
			9,508 12,539 15,089 15,089	2,800 2,800	30				-
06 11 C 06 11 C 06 11 C		AM	12,539	15, 16	-12 538 3 6				_
06110		PM	96,8 9	10,000	201				
		PM PM PM	8,000 17,530 15,15 16,250	10,085 12,813 15,760	289 27 3 5		_		
07 11 C		AM	000,00	15/60	-16 500	-			_
0711 C 0711 C 0711 C 0711 C		AM AM AM FM	10,0215 12,013 15,750		-16 030 -10 083 -12 813 -15 760		-		
OF 11 C		AM	15,750		-15 760	-			
		PM	1				_		
0/110		PM PM PM					-		
-		3	10 0		1		-		-

ROUSH

VOCF Drive Comments

ROL	121			VOCF Drive Comme	nts
and the second	Date	Shift	Odomalar	Driver Comment Entry atta	And a second
c	102	BOTH	H1 580	NO ISSUE'S	GIVEN TO ENCINANCE FOR WEEDING RESISTANT
C	102	BOTH	3.360	NO ISSUE'S	SSUE, HARD SH FT CLONK FRST SK WITHOUT THALER.
00	102	BOTH	10.0	NO ISSUE'S	
C	102	MA	9,55	NO ISSUE'S	ATRINE IN MARLES MONDAY AM, LATE, HAS LEK TRALER ON IT.
00	1025	AN	3.622	NO ISSUE'S NO ISSUE'S	INS IN TRACK ON IL
0 0 0 0	1025	AN	11,182	NO ISSUE'S	
G	1025	AM	10,028	NO ISSUE'S	
00	1025	PM PM	12,010	NO ISSUE'S NO ISSUE'S	
000000	1025	FM	11, 78	NO ISSUE'S	
C	1025	PM	50,373	NO ISSUE'S	
00	1028	AM	12,35	NO ISSUE'S NO ISSUE'S	
C	1005	AN	11,620	NO ISSUES	Wil Light In Genner Auto
C	10/26	AM	10,73	NJ ISSUES NJ ISSUES	
C	1026	PM PM PM	12,587	NO ISSUES	the manager and set of the
C	1025	PM	11,620 11,0 P	NO ISUES	Grounded in Denver per Prevent a o
C	10/28	PM	12,905	NO ISSUES	
C	1027	AM	11,620	NG GISUE'S	Grounded in Device per Posentine o
C	10/27	AM	11,322	NO ISSUES	
olo	1027	PM PM	13,138 5,2 0	NO ISSUE'S	MELIGH CODESISEN
C	1027	PM	11,620		DROGROED & DENVER
0 0	1025	AM	\$3,138	AD ISSUES SUESSES	
G	1028	AM	5, 56	NO ISSUE'S	ANDONED & DEVVER
č	1028	AN	12,021	NO ISSUES	And a state of the
C	1028	PM PM	13, 40	NO ISSUES NO ISSUES	
C	1035	PM	11,620		anoundo k denver
C	1028	PU	12,3 7	ND ISSUES NO ISSUES	W WATER WATER
C	10/29	AM	6,01	and the second s	And an
C	1009	AM AN	11,630	NO ISSUES	GROUND BURNNER
C	1029	PN	13, 81	NO ISSUES	
เกษา สดด กลางสดด กลางส	1029	PM	10,01	NO ISSUES	GROUNED NORWER
C	1029	PM PM	123.7	NO ISSUES	and a second
00	10/30	AM	13, 81 8,01	NO ISSUE'S	
C	10/30	AM	11 620		GROUNED H DENVER
C	1000	PM	12 360	STUDIES CH SUBJES SUBJES	
C	1000	PM	6,371	NO ISSUE'S	GROOMET & DENVISE
CC	1000	PM	11 820		URLEGN MINAPLES
00	1001	AM	(3 KBB 6,606	NO ISSUES NO ISSUES	
C	1001	AM	11 8530	NO ISSUE S	GROUNDED IN DERIVER
0	1001	AM PM	12 380	NO ISSUES	MELCH: WNAPLES
C	1001	PN	6,915	NO ISSUES NO ISSUES	SH RALING THE IN THE FOR SH MELES
GC	1001	PM	11 620	NO ISSUES NO ISSUES	
C	TEMP	AM	1 207	NO ISSUES	1
C	11/1	AM	7,211	NO GIÚLES	SINGLINDED DENVER
C	11/1	AM	12 380		GROUNDED DERVER MLLOK V/RAPLES
cic	45/1	PM PM	1,90	NO ISSUE'S	
C	11/1	PM	11 4520		PETETING NEW SPARK PLUGS IN HER TEAM
olo	11/2	PM	1 769	NO ISSUES NO ISSUES	togething and and provide and
G	11/2 11/2	AM	7,717	NO ISSUE'S NO ISSUE'S	RUNN NO IN DERVER BACK ON ROU IL
0	11/2	AN	130 0		NORTH ACTIVATION AND A CHINGS &
CIC	11/2	FM FM	15 087 8,010	NO ISSUETS NO ISSUETS	
C	13/2	PM	11 6359	NO ISSUES	
C	11/2	PU	13 392	NO ISSUES NO ISSUES	
C	11/3	AM	0,211	NO ISSUE'S	
C	15/3	AM	12,089	NO ISSUES NO ISSUES	
C	11/3	PN	15 582	NO ISSUES	
C	11/3	PM PM	0,518	NG ISSUES	DOWN FOR ABS HOOULS PE OR HAUND
C	11/3	PM PM	5 0000	CODES PULLED AND SENT TO TEAM	DOWNFOR ABS HODULE PE OR INALING MERTING OF EC ED
00	+10/ +10/	AM	15 018	NO ISSUES NO ISSUES	
C	110	AM	1 000	NO IROUPS	DOWN FOR ABLINODULE PE IN INAUNO
C	110	PM	15 016	NO ISSUES NO ISSUES NO ISSUES	
C	412 +12	PM PM	8,967	NO ISSUE'S NO ISSUE'S	
C	1.12	PM	1 375 15,102		
00	11/5	AM	15,102 9,257	NO ISSUES	
C	110	AM	1.725	NO ISSUES NO ISSUES	
00	11/5	AM PM	1 725	NO ISSUE'S	
C	11/5	PM PM	9,508	NO BOUES NO ISSUES NO ISSUES	
C	11/5	PM	15 (969	NO ISSUE'S	
C	11/0	AM	1559	NO ISSUES	
C C	156	AM AM	8,800	NO ISSUES	
C	158	AM	15, 15	ND ISSUES NO ISSUES	
C	15/6	PW	10 0801	NO ISSUE'S	
C	11/8	PM	12-015	STERES CH	BACK ON ROLL & PROMARS MODILE
C	15/7	MA	100		
c c	\$307 \$507	AM AM			
C	11/7	AN	-		
olc	11/7	1954	-		
000000000000000000000000000000000000000	15/7	PM PM			
G	157	PM	-		
	-		2		
			8 8		
S			-		
2			3		
10 3	3		0		
			2		

From:Hepburn, Mitch (M.)Sent:Tuesday, November 08, 2011 9:44 AMTo:De Coste, Bill (W.J.); Gernant, Tim (T.R.); Garrett, David (D.P.); Whitehead, Joseph (J.P.);
Smith, Craig (C.A.); Cockerill, AI (C.A.); Wagers, Sue (S.K.); Sims, Ivan (I.D.); Mazuchowski,
James (J.A.)Cc:Tatro, James (J.E.); Graham, Daniel (D.B.)Subject:3.5L calibration

CF was been an a misfire detected late last night file was sent out this morning at 6.00am, here is the lastest from drive yesterday all units ok except common need next steps from team after reading the data please David. Thanks Mitch



Mitch Hepburn Roush Industries Vehicle Coordinator U377-2012 VN127-2012 C346-2012.25 BEV <u>mhepbur1@ford.com</u> Cell - 734-748-5728

0.011						- tr	-		
ROU	Veticie D	Ourment Ode	Winter	FORD 3	SL Cand	Arrivel Date	Arrival	Projected Finish Dom	
VOOT	C C	04e	8,521	On Alm	for Alte	on 5be	on bits	TUND ST.	
DENVER	2002	10.017	187	1,002	10,000	94221 11	6,67	100211	
ANDIZS .	0	10.27	7 210	790	A.000	5962 15	9,507	110211	
			<u> </u>			-			
-					-		-		
	_	1000		CONVERS.	Detre Sil & C	ulli i	-		
NOTION A	No.	501H	Stan Ods 10837	End Ode 11 200	5018 Milles 2870 2,670 2,170 3,7 3,7 200		_	tine Ger	
19212	Color 1	807H 807H 807H	800	2,500	2,670	_		_	
10212	00	AM	8.207 11580 3,380 106	9,63 11 800	3 7	-	_		
1025 11	C C C	22 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 300 5 401	5,603	20.	-			
1925.11	19	AM PM	9.00	10 000	200	-	_		
1025	C La C	Ple	9.05 11.522 5.625 14.152 14.152 15.056 12.056 12.056 12.056 13.571 12.255 14.152 14.152 15.255 14.155 15.255 1	11,76	20 20 20 20 20 20 20 20 20 20 20 20 20 2	-	_		
1926 11	alala a	AU	12 008	12.35	28	-			
102811	olo I	AM AN	11.78	11 800	133	-	_		
100811	00	PM	12.35	12.58.7 52.6	1 33 200 100				
1000811 1000611	cio.	22	11 800 10 75	11 800		-	_		
027	olo 0	AM	7 887 586 11 620 11 620 11 6 3 12 886	2 000	31 31	-			
102715	C C C	AM	11 620	11 820	33	-	_	_	
100711	alai	PM	11 620	13,130	200	DEWER DO	-		
100711	SPIC	PM PM AM	11 382	는 4월 2022년 2018년 1927년 11월 2022년 11월 2022년 11월 2022년 2021년 2021년 11월 2022년 11월 202	32	AT UNCHER DO	Sec. 2	ANT TOP OF	
1002611	sint	AM. AM	11.992 13.739 14.992 14.977 14.977 14.77 15.788 14.77 14.788 14.77 14.788 14.77 14.788 14.777 14.788 14.692	5.00	2 8 -11 60R	DENVER DO	Of the last		
102011	6	AU PU	1577	12 081 15, 81 54 8 11 080 2 3 7 8 071 11 080 11 080 12 380 12 380 12 380 13 085 13 085 14 085 15 085 15 085 15 085	3	_	-		
102611 1025611	200	22.25	5.60	5 6 6 11 800		DENNER DO	AN		
0.28 (029m)	90	PU AM	200	237 801	200 100				
102911	C C C	AN	11 620	11 400	1	n II dover bi N H dover bi	Cartolar Cartolar		
100071	- No	2225	11.600	11 020	+5 367	B (I down B	SHALWING	PL01	
1000111	Cial I	PM	8.01 31.6250	6.371		5 til down ha	bernet .		
1003191		AU	13.45	13 600	228	The Lose I is	COMM IN 1920	P144	
051/11	slok	2222222	11 825		228 2.95 7.44 8025 2.560 5.06 5.10	-	_		
1001/01	Ciol Ciol	PN PN	13 609	13 880	508 510				
1021/11 1021/11	00	RP	11 600	s	-11 105	-			
trugers	als.	22 33	11 800 12 340 13 945 13 945	1 207	41 60 42 30 30 30 30 30 30 30 30 30 30 30 30 30 3	-	_		
11/01/11	CO	AU	11 600		-11 000		_		
51/04/91	100	Page Page	1 287	1 1	211	-			
STRIM1	and a	PM	600 12.560	12700	600 5 3				
11/02/11	200	AN	7.2	2,717	28		_		
11/2011	l un		12.700	120.0	2.5	-	_		
	00	PM PM	7,717	5 015	21 A 22				
11/05/11	C C	PM AM	1508	13.362 15.273	3				
11/20111	00	AM	0.0 0	5.2 12,100	40 560	-			
11/2011	0	22 22 22 22 22 22 28	1, 10 7, 2 11 400 12 200 13 0 4 15 0 7 0,0 5 11 205 15 0 4 15 207 0,0 5 15 0 4 15 207 0,0 5 15 0 4 15 207 0,0 5 15 0 4 15 207 0,0 5 15 0 4 15 0 5 15 0 4 15 0 5 15	1 386 1 786 1 800 1	9 18 19 19 19 19 19 19 19 19 19 19 19 19 19	-			
	2 DO	PM	0,211 12 100	12 03	307		-	_	
110 011	101	AM	13 582 A 592	1 000	22				
110 011	Cic	2223	12 529	1 100	-17 559		-	_	
110.011	20	PM	58.8	3 550 553 5387	281	-			
110 /11	C C	PM PM AM	12 139	1.855	-12 536				
11/05/11 11/05/11	00	AM AM AM	Y2 199 C 159 C 159 A 14 A 14 A 14 C 150 C	16,100 9,257	200 -12 539 -12 539				
11/05/11	dic		1 275		-12.538				
11/05/11 11/05/11 11/05/11	00	PN	91.102	1 725 16 580 9 500	21		_		
11/05/11 11/05/11 11/00/11	លស្រុង២០ខែសុខ ២០១សម្ភា ២៥ខែកំណើរ សាក់សំក្រសា	22 25 25	1 725	15000	21 21 42 58 3				
11/00/11 11/06/11 11/06/11	100	AM	90,500 9,500	15.060 18.5 9 9.600	202	-	-	_	
00	10	AN PR	5000		200 472555 3 8 201 3 20 20 20 20 20 20 20 20 20 20 20 20 20 2	-			
11/06/11 11/06/11	a la	PM	8,600 12,639 16, 15	10,630 10,630 10,081 (2,613) 15,700 37,15 30,350 37,15	30				_
11/00/11 11/00/11 11/00/11	0	22 22 22	15 (5	15700	3 5		-		
1100711 100011 100011 100011	DID.	AM	10.920 10.045 12.015 15.760	10 390		_			
11/027111 11/027111 11/027111	00	200	15740 1715 10310	12.813 16.108 17.81 10.877 3.360 14. 57	34				
1000711 07 (1000711	ola	PM	10.340 2.6.3 140,000	3 360	54 55 55 55 56 55	-	-		
HOWH	101	PN	10,000	14, 37	37, 51			_	
110011	and a	AM	17 80 Déni 086 17	_	-10.817 -10.817 -15.368	-		_	
110011	de la	2 22 28	70.17		10.5				
11/10/71		1	-				-	-	
11/00/11 11/00/11 11/00/11	9	PU	-	1.0					
11/20/01 01/20/01 01/20/01 01/20/01	a a	PM	-			-			
192941 192941 192941	ci ci	PN							

ilije mort			
NDe MO.1	-		a ser a manufa de stando sua de
		NO ESUES	THER WHEN DIS . LINK
1010 MQ 4	1 336	NO ESUES	HE MIN HEN THE CR
634 80 1 638 80 1	1 (1884) 1 (1884)	90 5328%	MERINA DUNK AL AD
8.14 80 1	1 #884 #85	NO DSUES	HALF DE SAN DE DETREM AND A C
8.25 AM 5.26 AM	240	NO BSUES	
0.08		ND RELETS	
0.00 AN 0.00 M	10 Mail	NO RELES	
9.05	2.000	NO BOUES	
0.00 14	1.3	NO RAVES NO RAVES	
81.28 MA 0.28 MA			
0.26 AM	226	NO SAUES	-
0.00 004		NDRSUES	
0.06 AM 0.36 AM	44		a a se heat
028 AM	074	0 8181	
	4 645 603 (46) 1 666	O MUES O SNES	
0.08 M	400		A
0.2% M 81.97 And	1 90	O GALES O DALES	
0.27 Au 0.27 Au 0.27 Au	4.884	O MARIA	the concernance with
0.027 And 0.227 And 0.357 And	4 50 1 4 1 3 1	o miles	
8.17 44	1.1		u 1 1
6.17 M		0 101.8 2	
0.07 M	atat Nel	O BULES	
0.00	8 38		
0.28 Aut 9.28 Aut	2 30 1-00	O MARS	
618 Au	61	0 10.81	
100 Au 100 Au 100 Au	10 10	d teams	
518 W 518 W 518 W 518 W 518 W 518 W 518 W 518 W	5.548	O MILES	*
010 0 010 0 010 0 010 4 010 4 000 4 0000 4 000 4 00000000	1.90	0 84.63	-
100 40	131		
0.04 404	84.4 190 2 MT	OWNER	
130	110		1
0.28 W	24	O MALES	
		OMERS	-
4.29 M	1247	0 8018 8	1
Q ME AN	14	O MALES.	
0.20 Au	324	O MARS	
D M AM D M AM D M M	800 2 340 2 48	O SIGER	
O.M. N	14		
0.26 M	8.27	o minina O minina	U U
036 4	800		4 8 4
0.00 M	2 630	0.89.819	The second second
03 AM	6 806	0 84.83	
0.0 AN	6,21		4 1 4 X
0.5 Am 0.5 W 0.5 W	100	Q 184.81.8	
83 b		O MALES O MALES	NT # T. 118
10 10	120	O BUER	
-	4.287	O MARIA O MARIA O MARIA	
2	4.207 7.3	0 100 2 2	
-	1 100 1 100 1 4 400	- Courter	1 T X
	1-00	0 99.81	
	Tele BR	O MARK O MARK	
	1 100	0.0047	U NUMBER OF LOUTE ET LINE
1 4	4 758	O MARIE	
1 2	1 1700 4 7500 11 1 6 600	0 MAT 0 MAT	
	6.0	0 6671	N 88 1
13	1 204 1 197 1 11	C MUER	
	111	O WILL'S	
	1.00	O MARY	
1 2	6 6276 83 3 80 3 700	o miles o miles	
8 70	43	0 9925	
1 2	2 100	O BRUES O MOLES	
	6 000 89 0 2 000	O SOLES O SOLES	
	37.0	O THER	
3 A	4 (18) 8 8 8 8 7 8 7 158	DOMES U EDAND SEN O 1544	W AW -Y A
1 1 20 1 2 20 1 2 20 2 2 2 2	1 18.8	O SELER O SELER	
* *	4 878		
- 14	4 000	0.0045	
	4 000 6 6 8 8 807	O SALES O SALES O SALES O SALES	
		O MARKED	
		o mints	
		O BARB	
		O MARTS O MARTS O MARTS O MARTS	
1 2	4 738		
	6 5.000 2.000	O MARIE O MARIE	
1 1		O MAR	
1 4	1 10m	o miuta o miuta o miuta	
1 4	e enio	O BULLE	
1 2	6 6435	O BUZS	
	543	0 38.83	
1 1		O SHAR	
1 1	0.000 79.3 5.900	O MARTS O MARTS	11. 1
	1 198	O SHARE	1000 C
	0 1.64	O SHARE O SELETE	
	1 142	o sears o sears o sears	
1 2	19.3	G MURA	
		0.100.005	
	4 1.453 4 5.67 4 8.467 4 8.467	0.60.81	
1 1	8 8452	O MURI O MURI	
8 14			
1 1			
	4	-	
1 1		-	
1 1			
	-		
	-		
	-		
		1	
	-		

From: Sent: To: Cc: Subject: Wodzisz, Ken (K.R.) Tuesday, April 19, 2011 2:30 PM Reddy, Srikanth (S.C.); Smith, Craig (C.A.) Shiposh, Melissa (M.A.); Fodera, Jas (J.J.) 3.5L Cat melt

Sri/Craig,

We got our first 3.5L warranty return (LH cat). The front face of brick shows clear signs of overtemp (spider lines). The vehicle was exhibiting misfire codes.

Do you want to do anything with this cat?

There is not much value in tearing it down on my end.

Ken Wodzisz

BoF and Mustang Exhaust Supervisor Ford Bldg 2 (2-3K02) MD 1232 Ph: (313) 805-3355

From:	Wagner, Glen (G.C.)
Sent:	Friday, January 11, 2013 4:54 PM
То:	Dobbs, Dan (K.D.)
Cc:	Nowaczyk, Rick (R.J.); Oyafuso, Kevin (K.G.)
Subject:	3.5L F150 CAC

How are we handling customers that continue to have CAC condensation miss-fire issue after the vehicle has the latest fixes installed?

Glen Wagner FCSD Commodity Program Manager, Fuel / Exhaust / Air Induction / Cooling / Controls / Calibration / Gas Engine Phone 313 32-26768

From:	Whitehead, Joseph (J.P.)
Sent:	Wednesday, October 12, 2011 8:48 AM
To:	Peters, Robin (R.S.); Mills, Linda (L.S.); Michela, Mike (M.); Sullivan, Todd (T.E.)
Cc:	Smith, Craig (C.A.); Garrett, David (D.P.); Whitehead, Joseph (J.P.)
Subject:	3.5L P415 Emergency Releases

Importance:

All,

New calibrations will be released for 3.5L P415 for misfire detection and mitigation. Service cals will be released for 2011.5 and running change cals for 2012.

Your help is needed to support this effort.

Robin,

1. Could you please add Craig and I to the Cert Review agenda on Oct 19?

High

2. Could you please schedule an emergency release meeting for Thursday Oct 20?

Linda,

Could you please provide two new whitepaper numbers for the following:

1. 2011.5 3.5L P415 R12 Service Fix

2. 2012 3.5L P415 R08 Running Change.

Need these numbers by Friday Oct 14.

Mike,

Could you please supply concern number by Friday to support these releases?

Todd,

1. Could you please release the KGCH2 & KGCP2 prelim strategies by Friday morning Oct 14?

2. Final strategies by Tuesday morning Oct 18?

Thanks,

Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com 313 805-5481

From:	Norman, Kristofor (K.R.)
Sent:	Monday, January 23, 2012 11:38 AM
То:	Norman, Kristofor (K.R.); Gardner, Greg (G.D.); McCoy, Jim (D.); Saad, Thomas (T.J.);
	Nester, Darren (D.); Kramer, Michael (M.T.); Ladd, John (J.R.); Madej, Jeanette (J.); Allan,
	Valerie (V.J.); Baldwin, Damien (D.K.); Emery, Jim (J.M.); Bollman, Wes (W.); Lyon, Peter
	(P.M.); Dumler, Jeff (J.D.); Yamada, Shuya Shark (S.Y.); Sparks, Douglas (D.S.); Fabien, Phil
	(P.A.); Smith, Craig (C.A.); Nault, Ben (B.D.); Pierce, Michael (M.A.); Sims, Ivan (I.D.);
	Morrow, Bill (N.W.); Donahue, Francis (Fran.); Cockerill, Al (C.A.); Fried, Marcus (M.W.);
	Devries, Jason (J.E.); Whitehead, Joseph (J.P.); Krygowski, Richard (R.J.); Cowher, Terry
	(T.); Hargreaves, Gregory (G.J.); Garrett, David (D.P.); Sullivan, Todd (T.E.); Imarisio,
	Valerio (V.); Zott, Brian (B.R.); Mancini, Michael (M.A.); Pawlak, Greg (G.J.); Ahmed,
	Masood (M.); Dixon, Mark (M.R.); Wilson, David (D.G.); Dusa, Daniel (D.V.); Wagers, Sue
	(S.K.); Zimlich, Mary (M.); Mingo, Paul (P.C.); Rollinger, John (J.E.); Huberts, Garlan (G.);
	Baskins, Robert (R.S.); Michela, Mike (M.); Zhou, Jay (J.); Lehto, Scott (S.A.);
	Mazuchowski, James (J.A.); Hammoud, Mazen (M.); Boerger, Jim (J.G.); Merrell, Robert
	(R.J.); Stanley, Daniel (D.J.); Ronzi, Bill (W.C.); Palepu, Padmalaya (P.); Stefanski, John
	(J.C.); Russ, Stephen (S.G.); Glugla, Chris (C.P.); McDonagh, Scot (S.M.); Ricks, Kevin (K.J.);
	Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.); Ducklow, Corey (C.S.); Bailey, Owen (O.R.);
	Mohan, Robert (R.); Yamada, Shuya Shark (S.Y.); Madej, Jeanette (J.); Andersen, Erik (E.);
	Huang, Larry (L,.)
Subject:	1/23 D35 Misfire Meeting 3pm Audio and Webex in meeting notice.

1) Review CAC Benchmark Info - Ladd/Huang/Anderson/Palm

2) Upcoming Testing Plans, PT Dyno and DTF - Glugal/Mandjack/Palm/McCoy

3) Hardware fabrication progress from last meeting - All/below

Regards,

Kristofor Norman Manager, Engine Performance Development **Global Engine Engineering** knorman1@ford.com 313-390-7855

From: Sent:

To:

Norman, Kristofor (K.R.) Thursday, January 19, 2012 1:43 PM

Norman, Kristofor (K.R.); Gardner, Greg (G.D.); McCoy, Jim (D.); Saad, Thomas (T.J.); Nester, Darren (D.); Kramer, Michael (M.T.); Ladd, John (J.R.); Madej, Jeanette (J.); Allan, Valerie (V.J.); Baldwin, Damien (D.K.); Emery, Jim (J.M.); Bollman, Wes (W.); Lyon, Peter (P.M.); Dumler, Jeff (J.D.); Yamada, Shuya Shark (S.Y.); Sparks, Douglas (D.S.); Fabien, Phil (P.A.); Smith, Craig (C.A.); Nault, Ben (B.D.); Pierce, Michael (M.A.); Sims, Ivan (I.D.); Morrow, Bill (N.W.); Donahue, Francis (Fran.); Cockerill, AI (C.A.); Fried, Marcus (M.W.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.); Krygowski, Richard (R.J.); Cowher, Terry (T.); Hargreaves, Gregory (G.J.); Garrett, David (D.P.); Sullivan, Todd (T.E.); Imarisio, Valerio (V.); Zott, Brian (B.R.); Mancini, Michael (M.A.); Pawlak, Greg (G.J.); Ahmed, Masood (M.); Dixon, Mark (M.R.); Wilson, David (D.G.); Dusa, Daniel (D.V.); Wagers, Sue (S.K.); Zimlich, Mary (M.); Mingo, Paul (P.C.); Rollinger, John (J.E.); Huberts, Garlan (G.); Baskins, Robert (R.S.); Michela, Mike (M.); Zhou, Jay (J.); Lehto, Scott (S.A.); Mazuchowski, James (J.A.); Hammoud, Mazen (M.); Boerger, Jim (J.G.); Merrell, Robert (R.J.); Stanley, Daniel (D.J.); Ronzi, Bill (W.C.); Palepu, Padmalaya (P.); Stefanski, John (J.C.); Russ, Stephen (S.G.); Glugla, Chris (C.P.); McDonagh, Scot (S.M.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.); Ducklow, Corey (C.S.); Bailey, Owen (O.R.); Mohan, Robert (R.); Norman, Kristofor (K.R.); Yamada, Shuya Shark (S.Y.)

Subject: 1/19 D35 Misfire Meeting Minutes

Reviewed DTF and PT Dyno Testing - . Confirmed process to make sufficient condensate in conditions of around 30 min. Even worse at higher temps. Separator/reservoir concepts in HP AIS did not prevent misfire. A static test indicated that the CAC can hold 23 oz of water.

PT cooling, Palm, will work to develop a bench test for flow/condensate through the CAC/AIS/Manifold at dyno basement or PFSL.

Concepts to be fabricated for testing:

Manifold Runners in a Box - Cockerill Manifold End Reservoir/Absorber - Cockerill Build a CAC end tank perforated separator/lith part - Cockerill Orient CAC for down flow connection - McCoy desired to run at DTF on Monday Develop an improved HP AIS can separator, better location(s) - Palm Procure from supplier reduced turbulator/louver tubes CAC - Palm Develop an ideal HP AIS trap design - Russ/Norman/Yamada

TIMING is ASAP on all.

Regards,

Kristofor Norman

Manager, Engine Performance Development **Global Engine Engineering** knorman1@ford.com 313-390-7855

From: Sent:

Norman, Kristofor (K.R.) Thursday, January 19, 2012 8:05 AM

Gardner, Greg (G.D.); McCoy, Jim (D.); Saad, Thomas (T.J.); Nester, Darren (D.); Bld-1 13F040 (20); Kramer, Michael (M.T.); Ladd, To: John (J.R.); Madej, Jeanette (J.); Allan, Valerie (V.J.); Baldwin, Damien (D.K.); Emery, Jim (J.M.); Bollman, Wes (W.); Lyon, Peter (P.M.); Dumler, Jeff (J.D.); Yamada, Shuya Shark (S.Y.); Sparks, Douglas (D.S.); Fabien, Phil (P.A.); Smith, Craig (C.A.); Nault, Ben (B.D.); Pierce, Michael (M.A.); Sims, Ivan (I.D.); Morrow, Bill (N.W.); Donahue, Francis (Fran.); Cockerill, Al (C.A.); Fried, Marcus (M.W.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.); Krygowski, Richard (R.J.); Cowher, Terry (T.); Hargreaves, Gregory (G.J.); Garrett, David (D.P.); Sullivan, Todd (T.E.); Imarisio, Valerio (V.); Zott, Brian (B.R.); Mancini, Michael (M.A.); Pawlak, Greg (G.J.); Ahmed, Masood (M.); Dixon, Mark (M.R.); Wilson, David (D.G.); Dusa, Daniel (D.V.); Wagers, Sue (S.K.); Zimlich, Mary (M.); Mingo, Paul (P.C.); Rollinger, John (J.E.); Huberts, Garlan (G.); Baskins, Robert (R.S.); Michela, Mike (M.); Zhou, Jay (J.); Lehto, Scott (S.A.); Mazuchowski, James (J.A.); Hammoud, Mazen (M.); Boerger, Jim (J.G.); Merrell, Robert (R.J.); Stanley, Daniel (D.J.); Ronzi, Bill (W.C.); Palepu, Padmalaya (P.); Stefanski, John (J.C.); Russ, Stephen (S.G.); Glugla, Chris (C.P.); McDonagh, Scot (S.M.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.); Ducklow, Corey (C.S.); Bailey, Owen (O.R.); Mohan, Robert (R.) 1/19 D35 Misfire Meeting Agenda

Subject:

12pm 13F040 Audio and Webex in Mtg Notice

1) Review latest DTF/PT Dyno test results - Glugla/Mandjack

2) Determine next steps for potential fixes, testing required - All PT Cooling, please bring in CAC cutaways/drawings

How to proceed with IP

Regards,

Kristofor Norman Manager, Engine Performance Development **Global Engine Engineering** knorman1@ford.com 313-390-7855

From:	Kramer, Michael (M.T.)
Sent:	Tuesday, May 14, 2013 9:12 AM
То:	Corey SMALL <corey.small@valeo.com> (corey.small@valeo.com); Satish NADELLA; Kramer, Michael (M.T.); ying.tang@valeo.com; Guillermo GUADARRAMA; Blas-Fernando GUTIERREZ; Tyler, Jim (J.S.); Huang, Larry (L); Joseph LUMETTA; Larry ENGEL</corey.small@valeo.com>
Cc:	Alcaraz andrade, Alejandro (M.); Tyler, Jim (J.S.); Kramer, Michael (M.T.)
Subject:	A couple open Valeo items

A) On track for 5/16 or sooner for the following data sheets with original J1 CAC internals (these are the ones that were first run with the wrong CAC internals):

1) Externally block bottom 7 tubes / 8 fins

2) Externally block bottom 4 tubes / 5 fins

3) Externally block bottom 7 tubes / 8 fins 25% of the length across the CAC from the inlet side and the bottom 3 tubes / 4 fins the remainder of the length ("L" laying on its side).

B) Status of P415 CAC corrosion testing with 7 tube / 8 fin lower blocker.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com From: Sent: To: Cc:

Subject:

Oyafuso, Kevin (K.G.) Wednesday, May 16, 2012 12:04 PM McCoy, Jim (D.) Whitehead, Joseph (J.P.); Smith, Craig (C.A.); Devries, Jason (J.E.); Cockerill, AI (C.A.); Yamada, Shuya Shark (S.Y.); Dixon, Mark (M.R.) ADR2 FILES FROM MAINE BUYBACK A82092 WITH MODIFIED CAC AND R12.2 SERVICE FIX

p415 gtdi cac mod r12_2 5_16_2,...

Here are the files from the VOCF drive with the latest service release and modified CAC - driver did comment on misfeeling/surge (he calls it rapid fluttering) with wot and cruise- I didn't see any evidence of misfire (during wot) or cbv cycling (with cruise control)but please look at these files and let me know if you see something unusual. Data is from the Maine buyback with a 5000lb trailer. It was raining this morning but it stopped by 6:30am. Driver made me a copy of his comments and I will send it out when I can get to a scanner.

Regards,

Kevin Oyafuso Ford Motor Company PD / Powertrain Integration Management - C&C Quality (313) 805-4908

Nowaczyk, Rick (R.J.) Wednesday, November 14, 2012 9:35 AM Triplette, Wesley (.) Buyback Case - CAC Part Request Subject:

Importance:

High

Wes,

From:

Sent: To:

Has the dealer ordered the CAC under Emergency Order? If not, please have them order the part under Emergency Order and give me their P/A number. I will see if we can get them bumped a head of the line for these CAC backorders.

Regards, Rick Nowaczyk FCSD Product Concern Engineer F-150, Freestar/Monterey, Ford GT, Th!nk E-mail: rnowaczy@ford.com Diagnostic Service Center-I, Allen Park PH# 313-322-7251

From:	Tyler, Jim (J.S.)	
Sent:	Thursday, February 16, 2012 3:23 PM	
То:	Grabowski, Joseph (J.)	
Cc:	Meyer, Robert (R.H.); Andersen, Erik (E.); Hayes, Kenneth (K.J.); Huang, Larry (L.)	
Subject:	CAC Air Deflector revision to block top 6 P415 CAC tubes BL34-19E672-AA	

Joe, please make a CAD proposal using the current P415 CAC deflector BL34-19E672-AA to incorporate a front side panel that blocks the first 6 upper tubes of the core. The front section should be located with 9mm clearance from the core face and can use rubber bumpers like used on the fan shrouds to isolate vibration contact with the headers.

Please call me on Friday morning to go over details by phone. This is to support very high priority CAC water condensation vehicle issues.

Jim Tyler T1/P552 Cooling 313-805-2565 Bld-2 23P25

SECTION 303-12 Intake Air Distribution and Filtering

CONTENTS	PAGE
GENERAL PROCEDURES Charge Air Cooler (CAC) Cleaning	 303-12-2
Charge Air Cooler (CAC) Cleaning	 303-12-2

GENERAL PROCEDURES Charge Air Cooler (CAC) Cleaning

Material

Item	Specification
Metal Brake Parts Cleaner PM-4-A or PM-4-B (US); CPM-4 (Canada)	_

Charge Air Cooler (CAC) Cleaning

1. Remove the Charge Air Cooler (CAC). For additional information, refer to Charge Air Cooler in this section.

2. NOTICE:

Do not use a high-pressure power washer to clean the Charge Air Cooler (CAC) or the CAC may be damaged.

NOTE:

Drain all contaminates such as coolant, fuel and oil prior to cleaning the Charge Air Cooler (CAC).

NOTE:

Thoroughly clean the joint clamp areas as well as the turbocharger connections and the engine connection using metal brake parts cleaner.

Lay the CAC flat with the inlet and outlet ports pointing up.

3. **NOTE:**

Plug or cap the CAC openings prior to agitating.

Add an appropriate amount of commercially available detergent cleaner such as Simple Green® Pro HD, or equivalent, to the CAC. Follow the manufacturer's directions for cleaning. Fill the CAC to 40% of its volume with water.

- 4. Raise one end of the CAC and agitate it by hand for at least 5 minutes.
- 5. Raise the opposite end of the CAC and agitate it by hand for at least 5 minutes.
- 6. Drain the CAC.
- 7. Flush the CAC thoroughly with clean water.
- 8. Repeat Steps 1 through 6 until no contaminates are found in the flush water.
- 9. Allow the CAC to air dry.
- 10. NOTE:

The following leak test steps must be performed prior to installing the CAC.

NOTE:

Use a commercially available kit, such as the SPX/OTC Charged Air Cooler Tester No. 5039, or equivalent.

Install the commercially available CAC cooler tester on the CAC following the manufacturer's installation instructions.

- Tighten the clamps to 5 Nm (44 lb-in).
- 11.

∕∆ _{WARNING}:

Never exceed the specified pressure. Excessive pressure may cause the test adapter to blow off or may damage the charge air cooler (CAC). Failure to follow this instruction may result in serious personal injury.

Slowly apply air pressure to 150 kPa (22 psi).

- 12. Let the CAC stand for a few minutes and note any loss in pressure.
 - Release the air pressure.
- 13. Repeat Steps 11 and 12 as many times as necessary to verify the readings. The reading is considered verified when 3 consecutive tests show approximately the same pressure drop.
 - If the pressure loss exceeds 20 kPa (3 psi) per minute, install a new CAC. For additional information, refer to Charge Air Cooler in this section.

From:	Ridolfi, Dominic (D.R.)
Sent:	Monday, November 05, 2012 1:26 PM
То:	Abercrombie, Robert (R.); Barrett, Dale (D.); Chatfield, David (D.); Dowdy, Jonathon (J.); Fenning,
	Brett (B.); Ferret, Shawn (S.); French, Sean (S.P.); Gammon, Charles (C.); Girard, Mario (y.);
	Graham, Brian (B.); Hebert, Adam (A.); Higgs, Justin (J.); Houston, Willie (W.); Jacobs, Phil (P.);
	Johnson, Seth (S.); Kvenvold, Derek (D.); Mason, Nicholas (N.G.); Massey, Stephen (S.); McEntee,
	Alec (A.); Meers, Brian (B.); Messina, Matthew (M.); Ridolfi, Dominic (D.R.); Romano, Tony (T.);
	Samson, Jean (J.); Sanders, Kevin (K.); Schmidt, Matthew (M.); Schober, Michael (M.); Sheahan,
	Karen (K.); Singleton, Sylvain (S.); Smith, Walter (W.A.); Stendardo, David (D.)
Subject:	CAC Condensation

Team,

With 2013 F-150s hitting the street, and the service part CAC from TSB 12-10-19 being installed across the country, we've been able to gauge our responses moving forward in regards to CAC condensation on F-150 GTDI. Far and away the most important point regarding this topic is the following:

We are going to see water develop in the CAC during normal operation, regardless which CAC is installed on the vehicle.

Moving forward, this means that our previous recommendation to check the air inlet and throttle body for water tracking/marks is invalid and should no longer be used. A normally operating vehicle can still show signs of water tracking to the throttle plate, and exhibit no drivability concerns – therefore using the old recommendation of checking for this in order to verify a CAC condensation misfire is invalid and will lead to the misfire still being present after the CAC is replaced.

This is not to say we are never to recommend CAC replacement. We will still be contacted with clear CAC condensation misfires, but more likely, we will be contacted by a tech looking for clarification. With the recommendation to check for water staining no longer an option, the best way to respond to this type of contact is to fully identify the symptoms of a CAC misfire.

The following will be review for most, and some of these things will seem obvious – however all of these symptoms below were lifted directly from GCQIS reports where we recommended replacing the CAC...

A CAC misfire will:

- Cause a bank two misfire
- Occur during WOT acceleration, after extended highway driving
- Require road testing, often extended, to duplicate
- Can set a P0430

A CAC misfire will not:

- Cause a bank one misfire
- Set circuit codes
- Set a P0420
- Cause low compression on a cylinder
- Be present at startup, P0316
- Be present at idle
- Create a dead miss, or misfire/concern that can be duplicated at will, every time
- Cause a vibration present at all times or at all times when driving
- Cause a misfire/stumble/surge during steady cruise

• Be duplicated in the service bay

There is no doubt that we well get plenty of first contacts in to the Hotline where, prior to any communication is started with us, the vehicle has already had an unsuccessful CAC replacement. There isn't anything we can do about the TSB being performed before they contact us, outside of providing information as to what this updated CAC typically will fix, and continuing to assist the technician with normal diagnostics.

What we can do is, once contact is opened on these vehicles, advise the technician clearly and properly on the nature of the CAC condensation miss. We made quite a few of these trucks and it's likely every tech that asks us a question on one of these will deal with another one somewhere down the line. It's important we use the symptoms of the concern to accurately ID these contacts as CAC misfire, or normal diag.

If there are any questions as to a possible CAC miss, or a contact where we could be dealing with more than one concern, please come talk to Bob or myself about it.

Dominic Ridolfi

3.0/3.5/3.7/GTDI Subject Matter Expert Ford Technical Hotline Diagnostic Service Center 1 1700 Fairlane Dr. Allen Park, MI 48101 (313) 248-8241

From: Sent:	Whitehead, Joseph (J.P.) Wednesday, May 22, 2013 2:30 PM
То:	Leisenring, Kenneth (K.C.); Smith, Craig (C.A.); Syrylo, Tom (T.M.)
Cc:	Whitehead, Joseph (J.P.)
Subject:	CAC Demo Trucks

Ken and Craig,

Two 3.5L GTDI P415 vehicles are available for CAC condensate ingestion demonstrations.

- 1. Crew cab 4X2 3.15 RAR, 294W942, has a 8,000 lb. trailer connected and is parked behind APTL. The max GCWR for this configuration is 15,700 lbs. The rough weight of this truck & trailer is 14,000 lbs.
- 2. Crew cab 4X4 3.73 RAR, 579W103, w/o trailer is parked @ TEE spot #15.

Suggested drive route for truck w/ trailer:

- 1. APTL to Melvindale ice rink parking lot. WOP accel on Enterprise for base performance feel w/o misfire.
- 2. Add 6 oz. water to CAC @ ice rink.
- 3. WOP ingestion accel on Enterprise.
- 4. Return to APTL.
- 5. Probably 10 minutes total time.

These vehicles are immediately available upon your request. The trailer has been borrowed until next Friday, May 31.

Tom,

Really appreciate your help setting up the truck.

Thanks,

Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com 313 805-5481

From:	Nowaczyk, Rick (R.J.)
Sent:	Monday, October 22, 2012 2:16 PM
То:	White, Eric (E.)
Cc:	Nowaczyk, Rick (R.J.)
Subject:	CAC Emergency Order P/A Codes

High

Importance:

Eric,

Here are the current dealers that need CAC's ASAP to prevent a buyback that should have Emergency orders placed in the system.

Regards, Rick Nowaczyk FCSD Product Concern Engineer F-150, Freestar/Monterey, Ford GT, Th!nk E-mail: <u>rnowaczy@ford.com</u> Diagnostic Service Center-I, Allen Park PH# 313-322-7251 From:Dobbs, Dan (K.D.)Sent:Wednesday, February 20, 2013 10:40 AMTo:Ricks, Kevin (K.J.); Norton, John (J.K.)Cc:Nowaczyk, Rick (R.J.)Subject:CAC OverviewAttachments:CAC Overview.docx

Please find attached a summary of the 3.5L GTDI Misfire Concern.

If I can clarify or answer any additional questions, please let me know.

3.5L Ecoboost - Charge Air Cooler Related Misfire Overview:

In certain locations in the U.S. and Canada, the 3.5L "Ecoboost" engine may develop excessive condensation in the Charge Air Cooler (CAC) as a normal part of operation. The primary locations are near high humidity zones, or areas that are experiencing extended rainy periods. At this time of the year, we are seeing the typical conditions in:

- SouthEast U.S. (East Texas, LA, AL, MS, FL, GA)
- Northwest U.S (WA,OR)
- Canada (Manitoba, Ontario, Newfoundland)

We released TSB 12-10-19 on October 30th 2012. The TSB provides a repair procedure that may include replacing the CAC (BL3Z-6K775-B) with one that has been revised to reduce the condensation condition. There is no other performance benefit from installing the revised CAC.

We presently have ~ 4,300 CAC's on backorder. The CAC part has been on backorder since November 2012. The supplier is running at maximum to maintain production volumes and meet service demand. **NOTE**: *The service part is unique for 2011 and 2012 units, and the 2013 part is not backward compatible to previous model years.*

We are currently prioritizing orders where the CRC has open cases with the trucks noted as "out of service"." Dealers who need the revised CAC (and do not have a unit "out of service") are best served to enter an Emergency Order to PS&L to get in line for the parts as they become available.

Published Articles to Dealers

- SSM 22192 (released 1-24-12, deactivated 2-20-12)
 - o Highlighted that the Misfire condition is under investigation
 - o Do not replace Ignition parts to try and correct the concern
- TSB 12-2-10 (released 2-15-12)
 - Units built on of before 2-7-12
 - o Revised calibration for multiple issues
 - o Included an updated FMEM to protect Catalyst
- SSM 22225 (released 2-21-12, deactivated 6-7-12)
 - Referred Dealers to use TSB 12-2-10 for a broader spectrum of issues than the TSB stated

• TSB 12-6-4 (released 6-7-12, superceded elements of 12-2-10)

- Add deflector to the CAC for units builts before 5/24/12
- Reflash for FMEM and other items
- For units with P0430 replace the LH Catalyst
- TSB 12-10-19 (released 10-30-12, superceded TSB 12-6-4)
 - Units built before 9-18-12 (KCAP 9-17-12) with the described symptoms (loss of power, and specific DTC's)
 - o Applicable units will receive a revised Charge Air Cooler (CAC)
 - o Dealer will transfer the previously installed air deflector to the new CAC
 - o Units not previously flashed under TSB 12-6-4 will be reflashed
 - o If code P0430 is present they will replace the LH Catalyst

Technical Points:

- 1. The misfire condition can and often will damage the Left Hand Catalyst.
- 2. The amount of condensation required to induce the concern can be as low as \sim 8 oz.
- 3. The condensation will purge only under heavy acceleration (at or near WOT), the air volume has to break the surface tension of the condensation to get it into the airflow.
- 4. The flow of condensation in the airflow will impact cylinder #6 first, and then can impact Cylinders #5 and #4.
- 5. Dyno testing has shown that the condensation can be fully purged after ~ 2-3 WOT cycles.
- 6. Owners may or may not have stored DTC's from this condition.
- 7. Owners may also have no record of the misfire event in "freeze frame or Mode 6" memory.
- 8. We have 19 cases of the repeat misfire concerns after the revised CAC was installed issue is in emerging status at 76% of QSF threshold.

Reference and Observation Points:

1. The CAC is used in Turbocharged and Supercharged applications to cool the air before it enters the engine. The process of cooling the air will always create some condensation. In this case, the condensation can collect over time and cause the noted concern. The revised CAC pulls the condensation through at a higher rate than the previous CAC (reducing buildup of condensation). Preventing a large build-up of condensation will reduce the chance for the condition to occur.

2. Owners outside of the high humidity areas will have a low chance of experiencing the issue. If it does occur, the condition will will likely be gone by the time they arrive at the Dealership (condensation purges under heavy acceleration). The concern will also have a very slight chance of repeating.

3. The ingestion of CAC related condensation will not harm the engine. We have no cases where engine damage from condensation has been proven.

4. The vehicles that have experienced the misfire concern are driveable and should not be taken out of service. However, Dealers have the authority to do so if in their judgement there is a concern. Some owners have refused to take the units while they wait on parts, and these should be reported to the CRC to get on the "out of service list".

5. The issue has been noted on several Public Websites, and some owners are insisting on the revised part. As stated above, if owners in dry areas do not have a CAC condensation related misfire concern -they will see no performance gain by installing the revised CAC.

6. Some Dealers are not following the TSB, and are adding the revised CAC for other issues. The CAC related concern will only occur under heavy acceleration with excessive condensation present in the CAC. Light throttle surge, rough idle, or buck jerk on tip-in throttle are not related this issue. We have other TSB's in place or in process to address these concerns.

7. This issue will not impact fuel economy concerns. If there is a concern, most owners will have a "Service Engine Soon" lamp illuminated. Light throttle cruise mode at legal Highway speeds is not impacted by this concern.

8. Owners need to have the vehicle inspected by their local Dealer to assess the concern, and to see if the TSB 12-10-19 actually applies. There are other engine conditions including bad spark plugs, fuel supply, or ignition coils that can mimmick the condition.

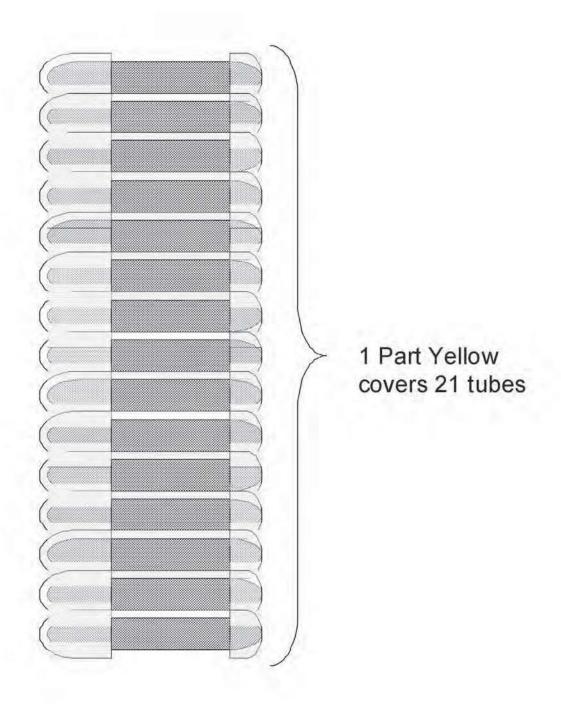
9. We have published multiple TSB's on this issue including revised calibrations to assist with diagnosis and operation. Dealers are likely frustrated with us, and are sometimes defaulting to adding the revised CAC as a result of multiple attempts to correct the concern.

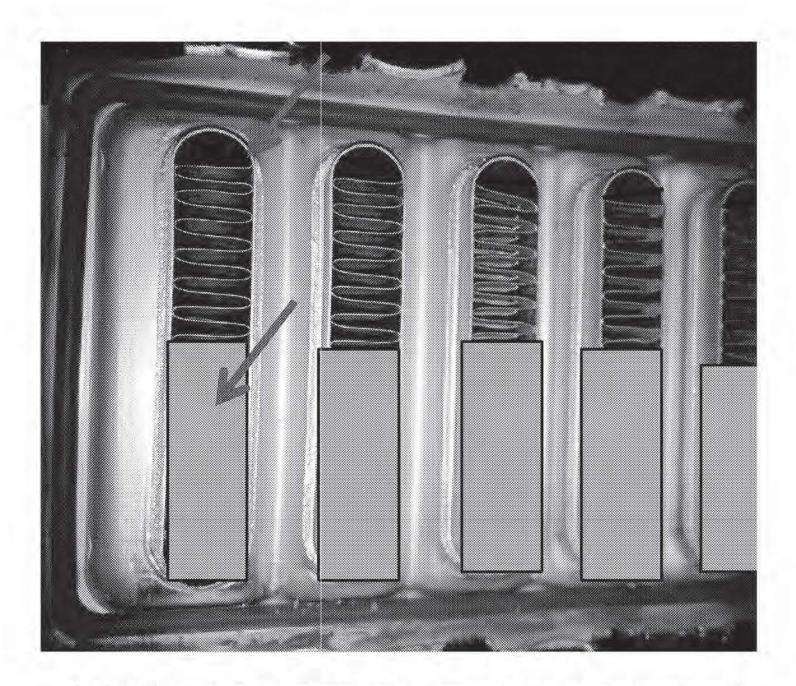
From:	Cockerill, AI (C.A.)
Sent:	Tuesday, March 13, 2012 11:31 AM
To:	Kurt@gualitymetalcraft.com
Cc:	Ladd, John (J.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.)
Subject:	Charge Air Cooler Stamping
Importance:	High

Kurt,

Your company did some work for us on engine lift eye stampings during the launch of the 2011 F150. I am in need of assistance again for a very simple stamping to be sent to a company in Mexico called Valeo. The part I am looking for is to block off part of our Charge Air Cooler, crude picture below. What I am thinking is a single aluminum stamping that will cover the inlets. The yellow part is the single stamping.

Timing is critical and we are looking for your assistance. Please contact me.





The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender. Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

3

From:	Cockerill, Al (C.A.)
Sent:	Monday, June 06, 2011 4:19 PM
To:	Hamilton, Steven (S.C.); Gorgol, Kevin (K.); Osepchook, William (W.R.); Reno, George
	(G.L.); Matera, Steve (S.L.); Mazuchowski, James (J.A.); Donahue, Francis (Fran.);
	Mazuchowski, James (J.A.)
Subject:	Customer Bring Back Investigation.xls

All, per our conversation today, the list attached are the Candidates to bring the customer back in for a G105 review. Kevin & Steve, please let me know which one you want to go after. The one the I highlighted is the repeat return for G105 and then a catalyst.



PROBABLE / SUSPECT	GCQIS			STATE /
ROOT CAUSE	REPORT	VIN	DEALERSHIP	PROVINCE
COP	N/A	1FTFX1ET0B	DONLEY FORD OF SHELBY	OH
COP	N/A	1FTFW1ET7B	HILLER FORD INC	WI
COP	N/A	1FTFW1ET3B	DON HINDS FORD INC	IN
COP	N/A	1FTFW1CT1B	BILLY HOWELL FORD LINCOLN-MERC	GA
СОР	N/A	1FTFW1ET8B	SOUND FORD, INC.	WA
DIAG - MISFIRE	N/A	1FTFW1ET7B	TOM HOLZER FORD, INC.	MI
DIAG - MISFIRE	BCWAN004	1FTFX1ET1B	YORK FORD SALES	ME
DIAG - MISFIRE	N/A	1FTFW1ET3B	DRUM HILL FORD INC	MA
DIAG - MISFIRE	N/A	1FTFW1ET5B	OROVILLE FORD LINCOLN MERCURY	CA
DIAG - MISFIRE	N/A	1FTFW1ET4B	STEVE MARSH FORD	TN
DIAG - MISFIRE	N/A	1FTFW1ET5B	ECKENROD FORD LINCOLN OF CULLM	AL
DIAG - MISFIRE	N/A	1FTFW1CT7B	LONG-LEWIS FORD LINCOLN	AL
DIAG - MISFIRE	BDKBE020	1FTFX1ET2B	FREEWAY FORD	MN
DIAG - MISFIRE	N/A	1FTFX1ET4B	CASKINETTE'S LOFINK MOTOR CO.	NY
DIAG - MISFIRE	N/A	1FTFW1ET0B	JIM O'NEAL FORD, INC.	IN
DIAG - MISFIRE	N/A	1FTFW1ET9B	COTRAC FORD LINCOLN SALES INC.	ON
DIAG - MISFIRE	N/A	1FTFW1ET3B	EINSPAHR AUTO PLAZA, INC.	SD
DIAG - MISFIRE	N/A	1FTFW1ETXB	KENTWOOD FORD SALES, INC.	AB
DIAG - MISFIRE	N/A	1FTFX1ET4B	VAN CLEVE FORD, INC.	WA
DIAG - MISFIRE	N/A	1FTFW1ET2B	WESTLIE MOTOR COMPANY	ND
DIAG - MISFIRE	BDUCN006	1FTFW1ET6B	ARCHIE COCHRANE MOTORS, INC.	MT
DIAG - MISFIRE	BDYA4019	1FTFW1ET6B	MILLS FORD OF WILLMAR	MN
DIAG - MISFIRE	N/A	1FTFW1ET0B	TENVOORDE FORD, INC.	MN
DIAG - MISFIRE	BDTAW017	1FTFW1ET4B	SIOUX CITY FORD LINCOLN MERCUR	IA
DIAG - MISFIRE	N/A	1FTFW1ET5B	BOURGEOIS MOTORS LIMITED	ON
DIAG - MISFIRE	N/A	1FTFW1ET1B	FRIENDLY FORD, INC.	MI
DIAG - MISFIRE	N/A	1FTFW1ET3B	RUXER FORD LINCOLN, INC.	IN
DIAG - MISFIRE	BEEAQ015	1FTFW1ET0B	HOFFMAN FORD, INC.	СТ
DIAG - MISFIRE	N/A	1FTFW1ET9B	RUXER FORD LINCOLN, INC.	IN
DIAG - MISFIRE	N/A	1FTFX1ET3B	PLAMONDON AUTOS INC.	QC
DIAG - MISFIRE	N/A	1FTFX1ET9B	BOUCHARD FORD	QC
DIAG - MISFIRE	N/A	1FTFW1ET6B	REINEKE LINCOLN, INC.	OH
DIAG - MISFIRE	N/A	1FTFW1ET0B	JOHN MEEGAN FORD, INC.	PA
DIAG - MISFIRE	N/A	1FTFW1ET2B	KEN STILLWELL FORD	MI
DIAG - MISFIRE	N/A	1FTFW1ET4B	ERIC VON SCHLEDORN FORD	WI

Primary Short Primary Short Primary Short Driver Short Driver Short

DIAG - MISFIRE	N/A	1FTFW1ETXBK	SAYVILLE FORD	NY
DIAG - MISFIRE	N/A	1FTFW1CT9BF	JOHNSON SEWELL FORD LINCOLN	TX
DIAG - MISFIRE	BEQBQ004	1FTFW1ET8BF	ASHE COUNTY FORD, INC.	NC
DIAG - MISFIRE	BETCA005	1FTFX1CT8BK	GARY CROSSLEY FORD, INC.	MO
DIAG - MISFIRE	BEXDD011	1FTFX1ET4BF	DARLING'S BANGOR FORD	ME
DIAG - MISFIRE	N/A	1FTFW1ET5BF	D.K. FORD SALES LTD.	AB
DIAG - MISFIRE	N/A	1FTFW1ET2BF	COTRAC FORD LINCOLN SALES INC.	ON
DIAG - MISFIRE	N/A	1FTFW1ET1BF	JOE HALL FORD LINCOLN MERCURY	ID
DIAG - MISFIRE	BEPA2001	1FTFW1ET2BK	GAYLORD FORD LINC-MERC, INC.	MI
DIAG - MISFIRE	N/A	1FTFW1ET6BF	SUNRISE FORD SALES LTD	BC
DIAG - MISFIRE	N/A	1FTFW1ET9BF	MAX PLATT FORD-LINCOLN, INC.	IN
CATALYTIC CONVERTER	BCHDP012	1FTFW1ET4BF	HAAG FORD SALES, INC.	IN
CATALYTIC CONVERTER	BDEBG011	1FTFW1ET2BF	CAPITAL FORD, INC.	NC
CATALYTIC CONVERTER	N/A	1FTFW1ETXBF	JEDDELOH, INC.	IA
CATALYTIC CONVERTER	N/A	1FTFW1ET5BF	CAPITAL FORD, INC.	NC
CATALYTIC CONVERTER	BDIAD012	1FTFW1ET9BF	BILLINGSLEY FORD LINCOLN MERCU	OK
CATALYTIC CONVERTER	BDLBS007	1FTFW1ET5BF	MIDDLEKAUFF FORD LINCOLN	ID
CATALYTIC CONVERTER	BDSAW011	1FTFW1ETXBF	JACQUES OLIVIER FORD INC.	QC
CATALYTIC CONVERTER	BDZCX005	1FTFW1CTXBF	HOLLINGSWORTH RICHARDS FORD	LA
CATALYTIC CONVERTER	N/A	1FTFW1ET9BF	RUXER FORD LINCOLN, INC.	IN
CATALYTIC CONVERTER	N/A	1FTFW1ET2BF	OAKRIDGE FORD SALES (1981) LTD	ON
CATALYTIC CONVERTER	N/A	1FTFW1ET7BF	A&B FORD SALES LTD	ON
CATALYTIC CONVERTER	BEBA3046	1FTFW1ET2BF	SIOUX FALLS FORD LINCOLN MERCU	SD
CATALYTIC CONVERTER	BECBN005	1FTFW1ET8BF	BARIL FORD LINCOLN INC.	QC
CATALYTIC CONVERTER	BEDCG011	1FTFW1ET9BF	BOB SWOPE FORD, INC.	KY
CATALYTIC CONVERTER	BDZCM016	1FTFX1ET0BF	EXPRESSWAY FORD	IN
CATALYTIC CONVERTER	N/A	1FTFW1ET1BF	BOB HURLEY FORD	OK
CATALYTIC CONVERTER	N/A	1FTFW1ETXBF	NORTHWAY FORD LINCOLN LTD.	ON
CATALYTIC CONVERTER	BCVCS014	1FTFW1ET0BF	MONTGOMERY FORD SALES LIMITED	ON
CATALYTIC CONVERTER	BETDJ009	1FTFX1ET1BF	TUBBS & SONS FORD SALES, INC.	KS
CATALYTIC CONVERTER	BD2CP010	1FTFW1ET5BF	D-PATRICK, INC.	IN
CATALYTIC CONVERTER	BC2DW002	1FTFW1ET1BF	ELKINS FORDLAND	WV
CATALYTIC CONVERTER	N/A	1FTFW1ET3BF	MIKE MURPHY FORD INC	IL
CATALYTIC CONVERTER	BETCA010	1FTFW1ET9BF	WATERTOWN FORD	SD
CATALYTIC CONVERTER	N/A	1FTFW1ET0BF	MILNES FORD, INC.	MI

From: Sent: To: Subject: Ricks, Kevin (K.J.) Thursday, February 14, 2013 7:58 AM Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.) data CAC

Dan, you had some preliminary findings from the data. Large orders from Canada, etc. What is the current status of the data findings? I guess no meeting yesterday. Maybe we should see who the top ordering dealers? I wonder which % are ordered emergency or unit down.

Kevin Ricks

Manager - Truck Service Engineering FCSD - Service Engineering Operations KRICKS@Ford.com 313-323-6574

From:	Osepchook, William (W.R.)
Sent:	Thursday, January 26, 2012 6:55 AM
To:	Cockerill, Al (C.A.)
Subject:	EcoBoost In The Rain
Importance:	High

Interesting......Appears the steam is coming off the CAC.

http://www.f150forum.com/f70/ecoboost-engine-steams-rain-90407/









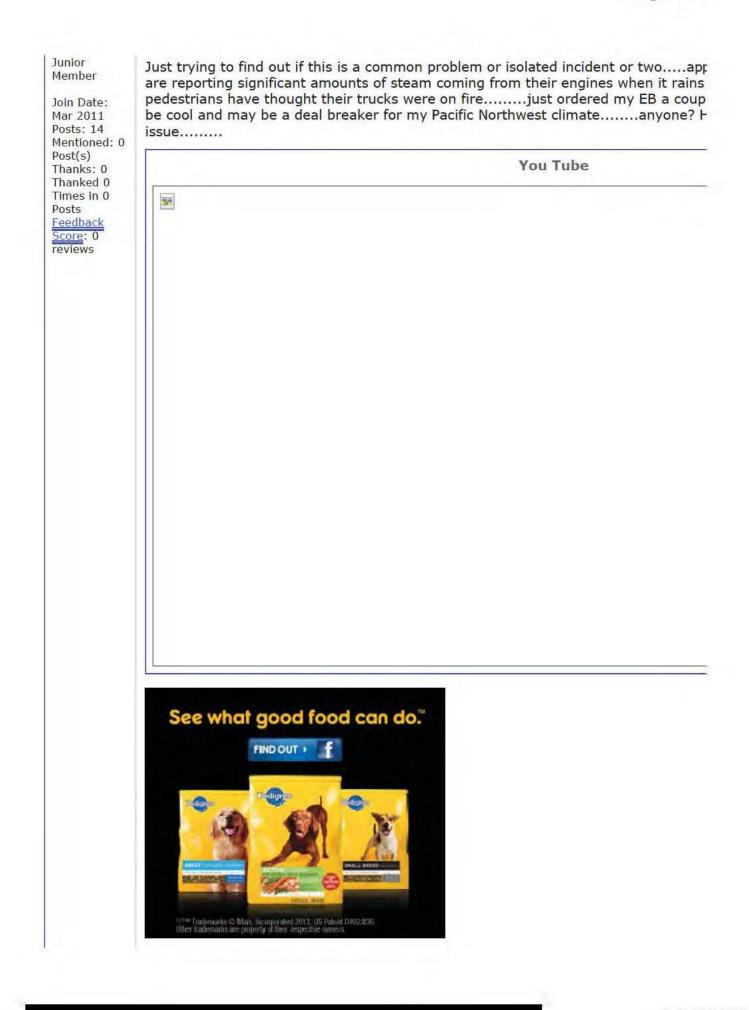
Search...

Welcome to F150 Forum,

Search

You are currently viewing ou limited access to view most (features. By joining our com access to post topics, commi (PM), respond to polls, uploa special features. Registration join our community today

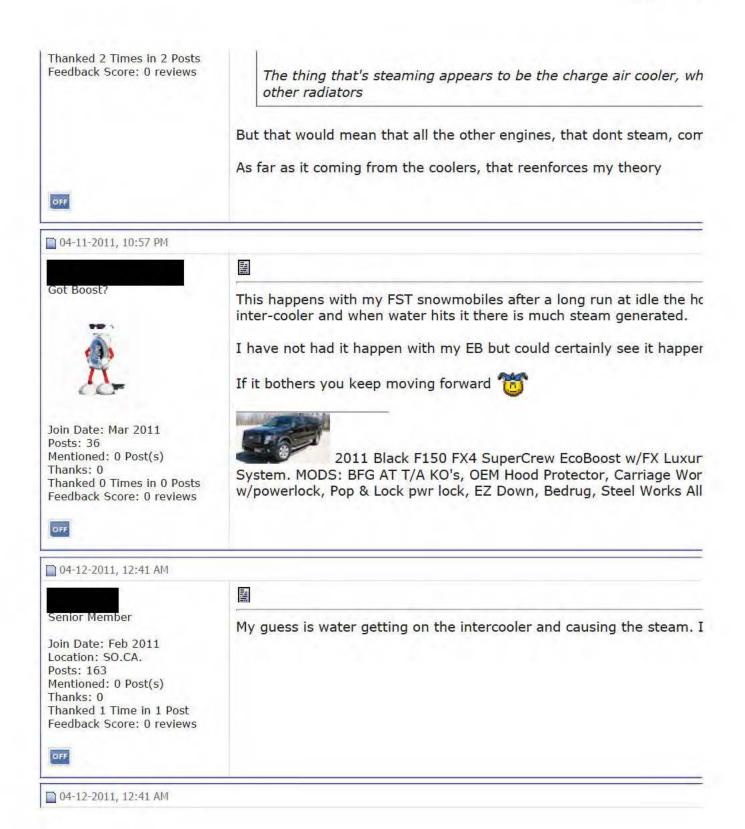
		POST REPLY
	Send 0 Tweet 0	Like 0
Thread Too		
		04-11-2011, 05:54 PM
	Ecoboost engine steams in the rain?	



PE13-018 000046 7/26/2013





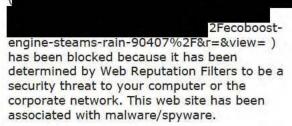


PE13-018 000049 7/26/2013



This Page Cannot Be Displayed

Based on your corporate access policies, this web site



Threat Type: adware Threat Reason: Domain reported and verified







۲

KNOW A PROBLEM GAMBL

« Previous Thread | Next Thread »

Posting Rules

You **may not** post new threads You **may not** post replies You **may not** post attachments You **may not** edit your posts

<u>BB code</u> is On <u>Smilies</u> are On <u>[IMG]</u> code is On HTML code is Off <u>Trackbacks</u> are Off <u>Pingbacks</u> are Off <u>Refbacks</u> are Off

Forum Rules

Similar Threads		
Thread	Thread Starter	Forum
Ecoboost engine	mtamor1	2009 - Present Ford F150
Engine guites when driving in rain	RR2115	2004 - 2008 Ford F150
I have engine problems in the rain. Any suggestions?	fordalltheyway	2004 - <u>2008 Ford</u> F150
Windshield steams up - bad heater core?	FirstFordTruck	1997 - 2003 Ford F150

Similar Threads

A lot of rain now engine misfiring

andrewk

2004 - 2008 Ford F150



5 Cheap Ways F-150 to get Better Mileage



Mistakes 458 Italia for Over it Anyway



EcoBoost Hottest Celebrity Blowup: The Sad Tale Of Boulder; Rolls GhostintheMach(recipie.com) F-150 Ecoboost



5 Really, **Really Fast** Ford F-150s Beach Bodies

Recommended by

All times are GMT -4. The time now is 03:00 PM.

-- F150Forum.com - New Header

Advertise - Contact Us - Ford F150 Forum - Terms of Service -

Powered by vBulletin® Version 3.8.7 Copyright ©2000 - 2013, vBulletin Solutions, Inc. SEO by <u>vBSEO</u> 3.5.2 Copyright © 2006 - 20011 F150forum.com This site is in no way affiliated with the Ford Motor Company. Our Network: Ford F150 Forum | Jeep Cherokee Forum

Garage Plus vBulletin Plugins by Drive Thru Online, Inc.

Internet Brands[®] Automotive

Kramer, Michael (M.T.)

From:	Ng, Paul (P.K.)
Sent:	Monday, July 23, 2012 4:25 PM
То:	Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.)
Cc:	Dixon, Mark (M.R.); Kramer, Michael (M.T.); Steslicki, Michael (M.E.)
Subject:	RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)
Attachments:	TSB 12-6-4.xls

Mr. Nowaczyk,

The breakdown of the 580 TSB 12-6-4 claims:

•	P0299 only	15
•	P0430 only	88
•	Misfire only	112
•	Other DTCs than Above	11
•	Combinations of the Above	17
•	No DTC	<u>337</u>
•	Total	<u>580</u>

Paul Ng

Paul K. Ng Ford Motor Company Powertrain Engineering 313-805-5766 png@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Thursday, July 19, 2012 1:17 PM
To: Ng, Paul (P.K.); McDonagh, Scot (S.M.)
Cc: Dixon, Mark (M.R.); Kramer, Michael (M.T.); Steslicki, Michael (M.E.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

The only thing is this TSB doesn't address just the misfire issue. The TSB also address another failure mode for the surge at cruise, which is not part of the water ingestion concern from the CAC. Of the 580 VIN's how many were for misfire and/or P0430/P0299 only? I don't think it's a clean 90% effectiveness calculation.

From: Ng, Paul (P.K.)
Sent: Thursday, July 19, 2012 11:44 AM
To: McDonagh, Scot (S.M.)
Cc: Dixon, Mark (M.R.); Kramer, Michael (M.T.); Steslicki, Michael (M.E.); Nowaczyk, Rick (R.J.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Scot,

There are 580 VINs as of yesterday that have went through TSB 12-6-4. 57 of the VINs have subsequent repairs to fix similar symptoms (CCCs and/or DTCs). The calculated effective for the TSB is 90% provided that the repeat repairs were valid.

Paul

From: McDonagh, Scot (S.M.)
Sent: Wednesday, July 18, 2012 12:56 PM
To: Ng, Paul (P.K.)
Cc: Dixon, Mark (M.R.); Kramer, Michael (M.T.); Steslicki, Michael (M.E.); Nowaczyk, Rick (R.J.)
Subject: FW: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

How many AWS claims to date for TSB 12-06-04 ? Original estimate was 60% effective repair rate for CAC Deflector. Would like to know % based on TSB usage with 12 vehicles unresolved. Thanks

OPERATION	DESCRIPTION	TIME
	2011-2012 F-150 3.5L GTDI: Check DTCs, Install CAC Air Deflector Plate if Necessary And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	0.5 Hr.
	2011-2012 F-150 3.5L GTDI: Check DTCs, Replace The Left Catalytic Converter, Install CAC Air Deflector Plate if Necessary And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	1.0 Hr.

Scot G. McDonagh

PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Wednesday, July 18, 2012 12:12 PM
To: McDonagh, Scot (S.M.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Looks like... 7 reports for vehicle built after the cutoff date 4-5 reports for vehicles still having the concern after the TSB was performed. 11-12 Total...

From: McDonagh, Scot (S.M.)
Sent: Wednesday, July 18, 2012 10:59 AM
To: Nowaczyk, Rick (R.J.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

What is total count for vehicles not fixed with Deflector ?

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com From: Nowaczyk, Rick (R.J.)
Sent: Wednesday, July 18, 2012 10:20 AM
To: Madej, Jeanette (J.); McDonagh, Scot (S.M.); Kramer, Michael (M.T.); Ladd, John (J.R.); Sowards, John (J.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Mazuchowski, James (J.A.); Nowaczyk, Rick (R.J.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)
Importance: High

Jeanette,

Any updates on this per your comment below?

From: Madej, Jeanette (J.)
Sent: Friday, July 13, 2012 2:57 PM
To: McDonagh, Scot (S.M.); Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.); Ladd, John (J.R.); Sowards, John (J.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Mazuchowski, James (J.A.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

We will discuss on Monday and get back to you

From: McDonagh, Scot (S.M.)
Sent: Wednesday, July 11, 2012 7:53 AM
To: Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.); Ladd, John (J.R.); Sowards, John (J.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Mazuchowski, James (J.A.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Thanks Rick- It is my understanding the Deflector is ICA for CAC condensate Misfire. Will ask PT Cooling for update on PCA Service proposals.

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Tuesday, July 10, 2012 4:42 PM
To: McDonagh, Scot (S.M.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Subject: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)
Importance: High

Powertrain Team,

Here is another case were the dealer performed the TSB for the misfire and the customer still experienced the condition when raining. The issue in this case this customer appears to have purchased 13 trucks for their company. If this TSB is going to be the final fix, we may need to look at communication to the field that if condition are right this concern may still occur.

Thanks....

From: DCHATFIE@ford.com [mailto:DCHATFIE@ford.com]
Sent: Tuesday, July 10, 2012 4:05 PM
To: Nowaczyk, Rick (R.J.)
Cc: Chatfield, David (D.)
Subject: Report Summary for the CQIS Report#CGJCV013

2012 misfire under load, tsb performed. Loaction Memphis, Tn.

Attachments : 0

Report# : CCRG/EPRC:	CGJCV013 NH	L Reviewed Status:		Received: Date:	07/10/2012
Vehicle:	2012,F150 4X4 ,1FTFW1ET0C	,F150 ,SUP CRW,ST F	YSD	Build Date:	01/21/2012
Odometer :	8,386 M	Engine:	3.5L-GTDI	Calibration:	CF613C0A
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES
Dealer:	USA 06422 But	cch Oustalet, Inc.		Phone#:	(228) 863- 5525
City:	Gulfport	State:	Mississippi	Country :	USA
Originator:	BEN PRIESTE	R			
Symptom:	5 50 2 39 DRV PERF, RUNS ROUGH, ACCEL, INTERMITTENT				
Status:					
VFG:	V52 DRIVEABILITY				
Additional Symptom:	BUCKS AND JERKS WHEN RAINING				
Fix:	Causal Component :				
Condition Code:					
Hotliner: DCHA	ATFIE	Phone: 313 317-63	315 R	egn Cd: C3 Mem	nphis
Engineering:		Phone:		TAR:	
Dlr Contact: BI	EN PRIESTER	Phone	: 000 000-0000	Title (Cde: OT
DTCs:					
KOEO:					
TADDA					

KOEC:

KOER:

Comments

:

REPAIR 07/10/2012 03:58PM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUST WAS DRIVING HIS TRUCK IN THE RAIN AND IT STARTED BUCKING AND JERKING DIAGNOSTICS: RUN DIAGNOSIS NO CODES WE HAXE ALREADY DONE TSB 12-6-4 LAST REPAI PARTS REPLACED:NONE TECH QUESTION:THIS TRUCK CONTINUES TO HAVE PROBLEM WHEN DRIVING IN THE RAIN. HAVE HAD IN THE SHOP 3 TIMES BEFORE. DONT KNOW WERE TO GO WITH IT. THIS CUST OWN A COMPANY THAT BOUGHT 13 TRUCKS FROM US LAST YEAR AND I VE GOT TO FIND A SOLUTION. ARE THER ANY LATER UPDATES OR SUGGESTIONS FOR THIS

RECOMM 07/10/2012 03:58PM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE BEN, DUE TO THE EFFICIENCY OF THE CHARGE AIR COOLER, THERE MAY BE SOME CONDITIONS WHERE SOME CONDENSATION BUILDS IN THE CAC, EVEN WITH

THE CAC SHIELD IN PLACE AND IS INJECTED INTO THE ENGINE. VERY WET OR EXTREMELY HUMID CONDITIONS MAY ENHANCE THIS CONCERN. THE SHIELD WAS

DESIGNED TO HELP WITH LESS CONDENSATION BUILD UP, BUT DUE TO HUMID CONDITIONS AND COMPRESSED AIR IN THE CAC, THIS WILL NOT TOTALLY ELIMINATE THE CONDENSATION FROM FORMING UNDER THESE CONDITIONS. AT THIS TIME, IF WATER HAS BEEN VERIFIED IN THE CAC, AIS AND AROUND THE THROTTLE BODY, CLEAN THE WATER AS BEST AS POSSIBLE AND INFORM THE CUSTOMER OF THE DESIGN OF THE SYSTEM AND THE POSSIBLY OF CONDENSATION

BUILD-UP UNDER THESE CONDITIONS.

From:	Hepburn, Mitch (M.)
Sent:	Friday, October 28, 2011 10:54 AM
То:	Smith, Craig (C.A.)
Subject:	RE: Emailing: CFA00017 10-27-11 PM .XML

Thanks Craig.

-----Original Message-----From: Smith, Craig (C.A.) Sent: Friday, October 28, 2011 10:16 AM To: Tatro, James (J.E.); De Coste, Bill (W.J.); Hepburn, Mitch (M.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Nickerson, Kurt (K.H.) Cc: Graham, Daniel (D.B.); Muntz, Nicole (N.); Sims, Ivan (I.D.); Cockerill, AI (C.A.); Mazuchowski, James (J.A.); Pierce, Michael (M.A.); Gernant, Tim (T.R.); Baskins, Robert (R.S.); Pierce, Michael (M.A.) Subject: RE: Emailing: CFA00017 10-27-11 PM .XML

I interviewed the driver and he indicated the following:

- 1) Started shift at ~4pm.
- 2) Vehicle was warm at engine start
- 3) Idled for 10 minutes while waiting for lead driver
- 4) Drove ~1 mile from garage to I-94 entrance ramp

5) While accelerating onto I-94 entrance ramp @ approximately 40mph, vehicle exhibited loss of power and flashing MIL

6) Pulled to side of road and let vehicle idle while he called garage for further instructions

7) Misfire & flashing MIL cleared up while idling on the side of the road

8) Driver thinks he may have pressed the VDR trigger while at side of the road (can't locate the file?)

9) Resumed route with no further incidents throughout the rest of his shift.

Based upon this description, the drivability symptoms and PCM codes are consistent with the bank 2 misfire issue that's currently being investigated by the team.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

-----Original Message-----From: Tatro, James (J.E.) Sent: Friday, October 28, 2011 9:56 AM To: Smith, Craig (C.A.); De Coste, Bill (W.J.); Hepburn, Mitch (M.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Nickerson, Kurt (K.H.) Cc: Graham, Daniel (D.B.); Muntz, Nicole (N.); Sims, Ivan (I.D.); Cockerill, AI (C.A.); Mazuchowski, James (J.A.); Pierce, Michael (M.A.); Gernant, Tim (T.R.); Baskins, Robert (R.S.); Graham, Daniel (D.B.) Subject: RE: Emailing: CFA00017 10-27-11 PM .XML

Craig, drivers name is his number is

>James Tatro
>VoCF Vehicle Coordinator
>C346 2012, D47X 2012, U22X 2012
VoCF Matrix Manager P415 2012
>734-679-9183
>jtatro@ford.com
>

-----Original Message-----From: Smith, Craig (C.A.) Sent: Friday, October 28, 2011 9:51 AM To: De Coste, Bill (W.J.); Hepburn, Mitch (M.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Tatro, James (J.E.); Nickerson, Kurt (K.H.) Cc: Graham, Daniel (D.B.); Muntz, Nicole (N.); Sims, Ivan (I.D.); Cockerill, AI (C.A.); Mazuchowski, James (J.A.); Pierce, Michael (M.A.); Gernant, Tim (T.R.); Baskins, Robert (R.S.) Subject: RE: Emailing: CFA00017 10-27-11 PM .XML

We reviewed the VDR file that was associated with these misfire codes on CFA00017.

Unfortunately, the VDR data that we found didn't show us anything. My guess is that the file was generated during a restart, immediately after the event that generated the codes. We didn't see any other pertinent file on the Qualifier web site for this vehicle.

See attached email that includes a screen capture of the VDR data. Note the no misfires (totnummis = 0) were present.

Can we interview the driver to understand what drivability symptoms were exhibited?

Per my prior note, this vehicle did have a history of misfire soft failures prior to R08 being installed.

Tim,

Do you see any other data on the Qualifier website for this vehicle that we may have missed?

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

-----Original Message-----From: De Coste, Bill (W.J.) Sent: Friday, October 28, 2011 7:22 AM To: Hepburn, Mitch (M.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Smith, Craig (C.A.); Tatro, James (J.E.); Nickerson, Kurt (K.H.) Cc: Graham, Daniel (D.B.); Muntz, Nicole (N.) Subject: RE: Emailing: CFA00017 10-27-11 PM .XML

Get the 3.5L misfire guys over to Livonia this morning to look at the truck.

-----Original Message-----From: Hepburn, Mitch (M.) Sent: Friday, October 28, 2011 7:20 AM To: De Coste, Bill (W.J.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Smith, Craig (C.A.); Tatro, James (J.E.); Nickerson, Kurt (K.H.) Cc: Graham, Daniel (D.B.); Muntz, Nicole (N.) Subject: FW: Emailing: CFA00017 10-27-11 PM .XML

Bill, UNIT CFA00017 Codes show Misfires detected from drive last night, This is the unit Kurt picked up this morning and it is at Livonia having trans. Swapped picked up at 5.30am by Kurt, Need next steps on this unit. Thanks Mitch

Codes attached.

-----Original Message-----From: Ross, Timothy (T.G.) Sent: Friday, October 28, 2011 7:08 AM To: Hepburn, Mitch (M.); Tatro, James (J.E.) Subject: Emailing: CFA00017 10-27-11 PM .XML

The message is ready to be sent with the following file or link attachments:

CFA00017 10-27-11 PM .XML

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.



United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

OMB #2060-0048

Validate Form

Emissions Defect Information Report (EDIR)

	Report / Manufacturer Information
New EDIR C Correct / Upd EPA EDIR Number * 1 3 0 1	ate EDIR * Manufacturers must submit EDIRs within 15 working days after an emission-related defect is found.
Manufacturer EDIR Number *	13-1D
Form Version Number *	0 0
Additional email address	
	Defect Information
Problem category *	Oxygen Sensor Secondary Air System Selective Catalytic Fleduction System Turbocharger/Supercharger
Defect description *	Some 2011 through 2013 model year F150 Trucks with 3.5L engines may experience driveability concerns related to condensation accumulated in the charge air cooler. Vehicles operated in hig humidity conditions may have water condensation build up in the charge air cooler. This water can be ingested by the engine and result in temporary misfire and/or slow burn conditions.
Defect identification source / method * (CTRL + Click to select multiple value(s))	Investigation based on warranty claims In-Use Testing (According to CAP 2000) Investigation based on customer feedback Manufacturer Internal Testing Manufacturer Technical/Data Analysis
Address(es) of plants *	Dearborn Truck Plant 3001 Miller Road Dearborn, MI 48121
	Kansas City Assembly Plant U.S. Highway #69 Claycomo_MO 64199
Evaluation of the emissions impact when the vehicle / engine exhibits the defect *	If an affected vehicle experiences misfire conditions, the Failure Mode Effects Management (FMEM) system will disable fuel injectors on up to two cylinders and limit the air/fuel ratio to a constant value. This FMEM will only remain active while misfire conditions are detected. It is estimated that exhaust emissions may be affected while the misfire FMEM system is active.

Are there any available emissions data that relates to the defect? * C Yes @ No

Page 1 of 4



United States Environmental Protection Agency
 U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

OMB #2060-0048

Validate Form

Emissions Del	fect Informatio	on Report	(EDIR)
----------------------	-----------------	-----------	--------

* = required field

Does the defect cause or result in Describe any drivability problems which a defective	On-Board Diagnostic Malfunction Indicator La	Lamp illumination? * • Yes No			
vehicle/engine would exhibit *					
Description of anticipated manufacturer follow up *	In February, 2012 Ford put a revised misfire monitor calibration into production. This calibration was designed to mitigate misfire induced catalyst damage. In September, 2012 Ford implemented a revised charge air cooler, including an external shield, to minimize condensation build up in high hurnidity conditions. Technical Service Bulletins (12-2-10, 12-6-4, 12-10-19 and 12-11-15) were issued to help technicians diagnose and correct the condition. No further follow				
Type of related documents to be (CTRL + Click to select multiple va	submitted to the Verify Document Module * alue(s))	No Related Documents to Submit Available Emissions Data Repair Instructions Technical Service Bulletin Other (Specify in 'Notes' field)			
Number of related documents to	be submitted to Verify Document Module *	0			
Notes	-Estimated values for Production Volumes and Vehicles Identified are based on Ford p and aggregate service data. -Ford does not, by filing this report, make a determination of an emissions defect sub Sections 207 of the Clean Air Act (42 U.S.C. § 7541), as amended, or Section 43204 of t Health and Safety Code, or a safety defect subject to 49 U.S.C. § 30118.				



* = required field

Add Test Group / Engine Family

Emissions Defect Information Report (EDIR) Affected Vehicles / Engines Description

next (EDIR)	Validate Form
port (EDIR)	
scription	

	Test Gi	roup / Engine Family Informati	on	Delete Test Group / Engine Family
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
BFMXT03.54EP	50-State (CA+177 States+FED)	26,982	26,982	459
Add Vehicle / Engine] [*]	whicle / Engine Information		
Make *	Model / Calibration *	Model Year*	Displacement (Liters) *	
Ford	F150	2011	3.5	Delete This Vehicle / Engine

	Test Gr	oup / Engine Family Information	on and the second s	Delete Test Group / Engine Family
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
CFMXT03.54EP	50-State (CA+177 States+FED)	31,692	31,692	539
Add Vehicle / Engine]	chicle / Engine Information		
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Ford	F150	2012	3.5	Delete This Vehicle / Engine

	Test Gr	oup / Engine Family Information	n i i i i i i i i i i i i i i i i i i i	Delete Test Group / Engine Family
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
CFMXT03.54DX	50-State (CA+177 States+FED)	108,358	108,358	1,842
Add Vehicle / Engine		whicle / Engine Information		
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Ford	F150	2012	3.5	Delete This Vehicle / Engine

OM8 #2060-0048



* = required field

Add Test Group / Engine Family

Emissions Defect Information Report (EDIR) Affected Vehicles / Engines Description

	Test G	iroup / Engine Family Informatio	'n	Delete Test Group / Engine Family
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
DFMXT03.54DX	50-State (CA+177 States+FED)	11,335	11,335	193
Add Vehicle / Engine	je de la serie de	/ehicle / Engine Information		
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Ford	F150	2013	3.5	Delete This Vehicle / Engine

OMB #2060-0048

Validate Form



^{tion} United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

General

Validate Form Button

Clicking this button will check to see if the form is valid and identify any form errors for correction. Failure to submit a valid form means you have not met reporting requirements and the system will reject the form.

Report Information

New EDIR or Correct / Update EDIR

If you are submitting this EDIR for the first time, you should select "New EDIR". If you are updating or correcting a previously submitted EDIR, you should select "Correct / Update EDIR". If you select "Correct / Update EDIR", you must enter the number of the original EDIR that you are correcting / updating and the reason that you are correcting or updating the EDIR.

EPA EDIR Number

You must enter a number for the EDIR. If you are submitting a new EDIR, the number should be exactly four digits and must contain zeroes for numbers with fewer than four significant digits (e.g., "0007"). If you are submitting a corrected / updated EDIR, you must enter a two-digit revision number (e.g., "04").

Manufacturer EDIR Number

You may enter information, up to 20 characters into this field, it is designed to allow manufacturers to internally track their defect reports. If you are using your own internal number for EDIR Purposes, you may enter it here. Otherwise, enter the EPA EDIR number here.

Form version number

You must enter a two digit form version number. If you are submitting a corrected or updated EDIR, increment the number of the previous submitted EDIR. The number should be exactly 2 digits and must contain zeroes for numbers with fewer than two significant digits (e.g., "01").

Reason for correction / update

If you selected "Correct/Update EDIR", you must enter the reason that you are correcting or updating the EDIR. If you are submitting the EDIR for the first time, you should select "New EDIR". (4000 Character Limit)

Additional email address

You may enter an additional e-mail that can be used in notifications or communications concerning this report. The primary e-mail used for notifications or communications will be the one provided during the Verify registration process.

Problem category

Even if there are multiple problems identified in the EDIR, you must select only one category identifying the primary problem. For example, if an exhaust gas recirculation (EGR) valve problem is defective and, subsequently, an On-Board Diagnostic (OBD) malfunction indicator lamp (MIL) is illuminated for an EGR fault, the problem category should identify the EGR components as defective, not the OBD system. In contrast, if an OBD MIL is being erroneously illuminated for EGR valves that are not defective and the OBD programming is being corrected, then the problem category should identify the OBD system as defective.

Defect description

Clearly identify the device, system, assembly or software that has the defect, what the defect is, and to the extent known at the time, the cause of the defect. (4000 Character Limit)

3/2011, Version 1.0

Page 1 of 4



^{tion} United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

Defect identification source / method

Select one or more sources/methods from this list used to determine that a defect(s) was present in the class/category of vehicles/engines in the EDIR.

Address of plants

Enter the address of the plant(s) at which the defective vehicles or engines were produced. (4000 Character Limit)

Evaluation of the emissions impact when the vehicle / engine exhibits the defect

Describe any emissions impact when the defect(s) is present and how the emissions impact was evaluated(e.g., emissions testing, or engineering analysis). (4000 Character Limit)

Are there any available emissions data that relates to the defect?

This field is used to indicate whether or not emissions data related the defect is available. If you select "Yes", you should also send any supporting documentation to the Verify Document Module along with the EDIR.

Does the defect cause or result in On-Board Diagnostic Malfunction Indicator Lamp illumination?

This field is used to indicate whether or not the defect(s) identified in the EDIR causes or results in illumination of the On-Board Diagnostic (OBD) Malfunction Indicator Lamp (MIL).

Describe any drivability problems which a defective vehicle/engine would exhibit

Describe any drivability problems that a vehicle or engine might exhibit or an owner might experience when the defect is present on the vehicle/engine. (4000 Character Limit)

Description of anticipated manufacturer follow up

Describe any follow-up that you anticipate will be performed to rectify/correct the defect indicated in the EDIR. (4000 Character Limit)

Type of related documents to be submitted to the Verify Document Module

If you are submitting documents related or supporting the EDIR to the Verify Document Module, you can use this list to identify one or more of these documents that you are submitting. If you are submitting documents containing confidential business information (CBI) you should select "Other (Specify in 'Notes' field" and indicate in the "Notes" field that a CBI document is being submitted separately (e.g., "CBI attached in separate document.")".

Number of related documents to be submitted to Verify Document Module

Enter the number of documents you will be submitting to the Verify Document Module. Since some documents may be combined, it is helpful to know how many related documents that accompany an EDIR should be retrieved from the Verify Document Module.

Notes

Use this field to enter any notes and/or comments. In addition, there are particular fields that require you to enter notes when certain options are selected and this field should be used for this that purpose. (4000 Character Limit)



United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

Affected Vehicles / Engines Description

Test Group / Engine Family

Enter the test group or engine family of the affected vehicle(s) or engine(s). [Example: 9EPAX04.23A1]

Certified Sales Area

Select the appropriate certified sales area for the applicable test group or engine family. For vehicles that were certified to exhaust emission standards for California and Section 177 states, select the "CA+177 States" option. For vehicles that were certified to exhaust emission standards for states other than California and Section 177 states, select the "FED" option. For vehicles that were certified to exhaust emission standards for California and Section 177 states, select the "FED" option. For vehicles that were certified to exhaust emission standards for California and Section 177 states and states other than California and Section 177 states, select the "50-State" option.

Total Production Volume Count

Enter the total production volume of the test group or engine family. If this test group/engine family is still in production, enter the total production volume to date. However, this number should be updated with the final production volume when it is available. If this test group or engine family production has been completed, enter the final production volume.

Potential Number Affected

Enter the number of vehicles or engines produced that may have the defect described in the EDIR. This number may be different than the total production volume count only if a subset of the total production volume is potentially affected. Conversely, this number may be the same if all of the total production volume is potentially affected.

Actual Number Identified

Enter the actual number of defects described in the EDIR on the affected vehicles or engines. This number may be different than the potential number affected only if a subset of the vehicles or engines have exhibited the defect or it has been determined that they will exhibit the defect described in the EDIR. Conversely, this number may be the same as the potential number affected if all of the vehicles or engines have exhibited the defect or it has been determined that they will exhibit the defect described in the EDIR. Conversely, this number may be the same as the potential number affected if all of the vehicles or engines have exhibited the defect or it has been determined that they will exhibit the defect described in the EDIR.

Make

Enter the specific make (i.e., name plate) for the affected vehicle(s) or engine(s). [Example: Buick, Lexus, Mercury]

Model / Calibration

Enter the model or calibration name that the manufacturer has designated for the vehicle or the calibration for the engine that is identified in the defect report.

Model Year

Enter the model year of the affected vehicle(s) or engine(s). [Example: 2001]

Displacement (liters)

Enter the engine displacement for the affected vehicle(s) or engine(s) in liters. [Example: 4.23] Note: The displacement will be shown without trailing zeroes. However, they will be captured when uploaded (e.g., 4.0 will be displayed as 4 on the form, but will be uploaded as 4.00).

Environmental Protection United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

Vehicle Information Page Buttons

United States

Add Test Group / Engine Family - This button is used if a report covers multiple Test Groups / Engine Families. Clicking this button creates additional Test Group / Engine Family tables at the end of the "Affected Vehicles / Engines Description" section. Each additional Test Group / Engine Family table will have a row to add Vehicle / Engine Information. Additional rows can be added if this Test Group / Engine Family covers multiple Vehicles / Engines (see instructions below for adding rows to the Vehicle / Engine Information section).

Delete Test Group / Engine Family - This button is used for deleting a Test Group / Engine Family Table. Clicking this button in a Test Group / Engine Family table will delete that Test Group / Engine Family table, and all associated Vehicle/Engine Information, only.

Add Vehicle / Engine - This button is used if a Test Group / Engine Family covers multiple Vehicles / Engines. Clicking this button in a Test Group / Engine Family table will add a new row to the bottom of the Vehicle / Engine Information section in that Test Group / Engine Family table only.

Delete Vehicle / Engine - This button is used for deleting a specific row of Vehicle / Engine Information in a Test Group / Engine Family table. Clicking the button at the end of a row will delete the a Vehicle / Engine information for just that row.

From:	Wilson, Marie (M.)
Sent:	Monday, November 12, 2012 3:51 PM
To:	Sparks, Douglas (D.S.); Cockerill, Al (C.A.); Dixon, Mark (M.R.); Kramer, Michael (M.T.);
	Madej, Jeanette (J.); Harrison, Michael (M.J.); Smith, Craig (C.A.); Dixon, Mark (M.R.);
	Ronzi, Bill (W.C.)
Cc:	McClenaghan, Dave (D.); Oswalt, Greg (G.G.)
Subject:	RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150
	3.5L Charge Air Cooler

Mike K. will you have an PERC fact sheet for meeting review on 11-15? Please advise.



Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Sparks, Douglas (D.S.)
Sent: Monday, October 29, 2012 1:39 PM
To: Wilson, Marie (M.); Cockerill, Al (C.A.); Dixon, Mark (M.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.); Harrison, Michael (M.J.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.)
Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Marie,

The CAC D&R is Mike Kramer. However, after quickly reviewing the Fact Sheet it appears the Calibration Team will need to help complete this document.

1

Mazen/Craig, Please work with Mike Kramer and help populate the EPRC fact Sheet.

Mark/Bill, Please ensure Mike has the correct warranty data for this document.

Thank you,

Douglas S. Sparks P/T Quality and PVT Manager FNA P/T Integration and Program Management (PTIM) <u>dsparks3@ford.com</u> 313-805-6096

Administrative Assistant: Tina Tessadri ttessadr 313 594-1115 From: Wilson, Marie (M.) Sent: Monday, October 29, 2012 12:53 PM To: Cockerill, Al (C.A.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Who owns D&R for the CAC?

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation 5 Compliance Phone: 313-248-2404 <u>MWILSO18@FORD.COM</u>

From: Cockerill, Al (C.A.)
Sent: Monday, October 29, 2012 11:57 AM
To: Sparks, Douglas (D.S.); Dixon, Mark (M.R.)
Cc: Wilson, Marie (M.)
Subject: FW: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Doug, Mark, Attached is the form that Marie is referring to. I do not feel that I am the correct person to be completing this. How do suggest we handle this? << File: FAF03-170-1.doc >>

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender. Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 Q

From: Wilson, Marie (M.)
Sent: Monday, October 15, 2012 1:58 PM
To: Cockerill, Al (C.A.); Smith, Craig (C.A.)
Cc: Mazuchowski, James (J.A.); Oberski, Christopher (C.); Oswalt, Greg (G.G.); McClenaghan, Dave (D.)
Subject: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Al, per our discussions (and attached e-mail), please prepare an EPRC fact sheet for the subject concern. << Message: RE: Charge Air Cooler - 2011 P415 >> << Message: RE: P415 3.5L Catalyst replacement 2011MY, 2012MY >>

Please prepare an Environmental Problem Review Committee (EPRC) Fact sheet for Some 2011 F150 rucks with 3.5L GTDI engines may experience misfire conditions due to condensation build up in the charge air cooler, per the instructions below.

Obtain EPRC fact sheet at https://www.tc2.ford.com/ts/VEE/certification/default.aspx (the fact sheet link is listed under "Reporting Compliance Sites" low on the left side of the page)

• Fill out both pages of the fact sheet as completely as possible. (NOTE: Please use Vehicle Line names like "Fusion" rather than Vehicle line codes like "CD338" in all sections referring to vehicles affected.)

11EPRC20 has been assigned to this item. Place this number in the Form Header.

• To facilitate an efficient review of the topic in EPRC, the CCM group will set up a fact sheet review meeting by the Friday before your scheduled EPRC presentation. Please plan to support this meeting. It will improve the quality of the EPRC meeting review and reduce your follow up requirements.

• Please send the completed fact sheet draft to me by close of business on the Monday prior to your scheduled EPRC meeting. (No paper copies are necessary for the meeting.)

• Please plan to present this item in the 11-15-12 EPRC meeting at 10:00 AM. Presentations should be made by LL6 or above employees with support from any employees required. Presentations should also be made in person (not via call in.) Please provide CDS id's for the appropriate meeting notice.

EPRC Background:

The Environmental Problem Review Committee is chaired by Vehicle Environmental Engineering. It has members from The Automotive Safety Office, Critical Concern Review Group (CCRG), Critical Concern Manager (CCM), The Ford Customer Service Division (FCSD) - Recall Group, The Office of the General Council (OGC)' Global Product Development and Vehicle Operations – GRC Manager. It's mission is to review all Production Vehicle/Engine Environmental Compliance related issues to determine the correct course of action for the company. Support from the organizations and individuals who have firsthand knowledge of environmental compliance related issues is critical to the committee's success.

Thanks in advance for your cooperation and support. Please feel free to contact me with any questions.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 <u>MWILSO18@FORD.COM</u>

3

 From:
 Wilson, Marie (M.)

 Sent:
 Wednesday, October 31, 2012 10:03 AM

 To:
 Bush, Janet (J.K.); Witczak, Rich (R.A.); Cockerill, AI (C.A.); Ronzi, Bill (W.C.); Kramer, Michael (M.T.)

 Subject:
 CAC follow up

Follow up from our meeting yesterday.

I do find CAC 6K775 in the parts coverage directory including California 7/70 warranty coverage. See attached.



I reviewed the Emissions application and still consider this part described. I am confirming with our certification engineers who normally provides this feedback to EPRC. See:

https://www.tc2.ford.com/ts/VEE/certification/applications/Applications%20%202011%20MY%20%20Confidential/CBI BFMXT03.54EP APP FIN R00.pdf

Search by the words Charge Air Cooled (not the part number) you will find reference to the CAC in two places.

Also, there is a new TSB on its way out now that I believe is related. Is it? If so, we should include 2013 MY in the fact sheet.



Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation 5 Compliance Phone: 313-248-2404 <u>MWILSO18@FORD.COM</u>

2011 MODEL 7/70 DEFECT WARRANTY COVERAGE

2011 California Passenger Cars, Light Duty Trucks, including Hybrid vehicles in PA., OR. & WA. (Vehicles 14000 GVWR or less)

												1					1											
Part Name	Part Number(s)	6. Festa	2 OL FOCUS	2.0L TransitConnect	C. Explorer	3. Ranger	2 6L FLEKON	25L Miar	2.5L Fusion-Hybid	2.6L. Milan Hybro	EL MKZ-Hybrd	51. Escape	2 5L Mariner	2 St. Escape-Hybrd	2.5L. Manner-Hybrd	3 OL Fusion	3 OL. Milar	3 OL Escape	3 OL Marmer	3 5L Fusion	SSL MKZ	S SL Flex	3.5L Tourus	3 AL MKS	3.5L MKT	3.5L Edge	35L Explorer	CELESSON
BS Module	2C219	+	100	1	102	10		- 12	1.1	1.4			-14	14		er		3.2	1.1	101	14	1 ci	112	-	1 ch	1		1
Catalytic Converter	5E212, 5E213, 5230(7), 5G232, 5F250, 5H270	×	x	×	x	x	x	x	×	x	x	x	x	x	x	×	x	×	x	x	x	x	x	×	x	x	x	×
Exhaust Convertor Intermediate Pipe	5G274	1-	1	-		-	-	-	-		-	-	-	-		X		-	-		-	1	-	1-	-		-	-
Diosei Particulate Filter	5H270	-	-	-									1	-	-	1	-		1	1.00	-				-			
Diese Exhaust Fluid Tank Assembly	5,1228	1	1						1		1		1	1	1-22	1	-	23	105.	-				-				
Cam Timing Assembly	6256	X	+								-	1				X	X	X	X	X	X	-	X			X	X	X
Variable Camshaft Timing Kit	6A257	1	-			-						1.11	1.3	1		1	-			X		X	X	X	X			-
Variable Camshaft Timing Housing (Right)	8C260															x	x	He is		x	x	x	x	×	x	x		
Variable Camshaft Timing Housing (Left)	6C251	Ι														x	×			x	x	x	×	x	x	×		
Variable Camshaft Timing Solenoic	6M280		1								1																	X
Variable Camshalt Timing Assembly	6C525	1														-		-	112				X				X	
Turbocharger	66682			L	35									5.	1		1	5-1										X
Charge Air Cooler	64775				×																							X
Transmission Furbine Shalt Speed Sensor	7M101				×	x																					x	
Transmission Output Shaft Speed Sensor	7H103										_								_									
Transmission Intermediate Speed Sensor	7M183					x		_								_	_											
ransmission Range Sensor	7F293	-	-	-	L-	-	X	X	-	-	-	-		-	-	X	X	_	-	X		-	-	-	-	-		-
Transmission Control Module	72369	-	-	-	X	-	-	-		-	-			-	-	_	-	-	-	X			X					-
Transmission Solerold Assembly	7A100(8), 7G391	-	-	-		-	X	X	_	-		X			-		-						X					-
uel Tarik	9002	X	X	X	×	X	X	X	X	x	X	X	X	x	X	X	X	X	X	X	X	X			X	X	X	X
Fuel Tank Shield	9A031, 9A032	+	1	-		-	-	_		-	-		2.0	-	-	-	-	-	-	-	-	-	X	X	-		-	-
Fuel Filler Pipe	9034	-	-	X	-	-	-	-	-	-	-	-	-	-	-		-	-	1.21	-	-	-	-	-	-			-
Fuel Supply Maniford Assembly	90280	X	-	-		-	-	-	-	-	-	-	_	-	-	-	-	_	-	-	-	X		X		-		-
Fuel Delivery Module	0H30?	X	-	-	X	-	-	-		-	-	-	-	-	-	6.34	-	-	-	-	-	-		X		<u>^</u>	X	
Fuel Pump Assembly	9350	+	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4)	(4)	-	-		12
Turpocharger Control Solenoic	9K378	-	-	-	X	-	-	-	-	-	-	-	-				-	1	-	-	-	-	-	-	-		-	12
ntake Manfold	9424	-	-	-		-	-	-	-	-	-	_	-	X	X	_	-		-		-	X		X	X	-		
Exhaust Manifold (Right-Hand)	9430	-	-	-		-		-			_	_		-	_	_	_	-	-	X	-	X		X		X	X	2
Exhaust Manifold (Left-Hand)	9431	-	1	-		-	-	-		-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	-	-	X
Exhaust Manifold Gaskel	9448	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	0	-	-	-	-	-	-	-	X	X	2
EGR Cooler	9F464	-	-	-		-	-	-	-	-	-	_	-	-	100		-	-	-	-	-	-	-	-	-	-	-	-
EGR Tube to Manifold Connector	9F485	-	-	-		-	-	-		-	-	-	-	-	-	X	X	-	-	-	-	-	-	-			-	-
Emission Vacuum Connector	9E498	+	+	-		-	-	-	-	-	-	-		-	-	-	-	-	-	-	-		X			-		-
Fuel Injector High Pressure Fuel Pump	9E527, 9F593 9A543	+	-	-		-	-	-		-	-	-	-	-	-	-	-		-	-	-	(9)	(4)	(4)	[4]		-	-
	94543 94589	-	+	-		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
Inrottle Body Spacer	94589	+	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1
Fuel Vapor Storage Canister Fuel Injector Fuel Supply Manifold	9F792	-	+	-		-	-	-	-	-	-	-	1	-	-	-	-	Y	~	-	-	-	v	-	-			-
		-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	X		-	-	X	X	-	-	-		K
Fuel Injector Winng Harness High Voltage Traction Battery	90930 109759	-	-	-	X	-	-	-	-	-	-	-	-	-	X		-	-	-	-	-	-	-	-	-			X
			+		-	-			X		X			×	×			-		-	-	-	-	-				F
High Voltage Battery Pack Sensing Module	108830	-	-	-	-	-	-	-	x	X	X	-	-	-	-	~		-	-	-	-	-	-	-	-	-	-	-
iskument Cluster (5)	10849	-	-	-	x	-	X	X	X		X	-	-	-	-		X	-		-	X	-	-				X	
Powertrain Control Wring Hameas	12A581	-	-	-	X	-	X	X	X	X	X	x	X	x	X	X	X	×	X	X	X	-	-	-	-		X	X
Engine Control Wiring Harness Powertrain Engine Control Unit (ECU)	128537 12A650	X	1.	V	35	X	v	V	X	X	Y	Y	Y	-	Y	Y	~	Y	Y	V	~	v	v	-	1	Y	v	-
		Ê	ŕ	1	A	-	X	^	^	ŕ	x	^	x	~	X	x	X	^	X	^	-	ŕ	ŕ	ŕ	Ê	^	X	ŕ
Engine Control Sensor Wiring Assembly	12A690 14A005	+	1	1		-		~	V	-	-	-	-	-	-	X		-	-	V	V	-	-	-	-	-	-	-
Main Body Wiring Harness (6) Desin Panel & Headlamp Junction Wiring Assembly(6)	14290	x	ŕ	×	x	×	x	×	×	x	x	x	x	×	×	x	×	×	x	×	x	x	x	x	x		x	-
Main Wring Assembly (6)	14290	1^	-	X	20	~	~	~	^	^	~	~	~	~	~	~	~	~	A	1	~	X	~	1	1	-	X	-
											1000		10.000				1	1000	tion in the							1	1 . 1	2

(1) for F-Superduly 4x4 Manual Shift on the Fly (MSOF) Transfer Case Vehicles ont

(2) for 4x4 only

(3) I rans Solenoid Asy requires replacement of Trans Valve/Control Asy

(4) for EcoBoost Engine only

(5) for Service Engine Soon / Malfunction Indicator Light [Mil.] functionality concerns onl

(6) for MIL illuminet on only

(7) for Flex, Taurus, MKS & MKT w/ 3.5L GTDI only (8) for 3.5L Fusion & MKZ and 5.4L Expedition & Navigalor only

234

Note: Parts were selected for 7/70 Defect Coverage on the basis of their estimated replacement cost at the time the California Air Resources Board certified the vehicle for sale in California.

3.5L GTDI-INTERMITTENT STUMBLE/MISFIRE ON ACCELERATION FROM HIGHWAY CRUISE IN HUMID OR DAMP CONDITIONS— BUILT ON OR BEFORE 9/18/2012

Concern Tracking# 069-2012-1953

FORD:

2013 F-150

ISSUE

Some 2013 F-150 vehicles built on or before 9/18/2012 and equipped with a 3.5L gasoline turbocharged direct injection (GTDI) Ecoboost engine may exhibit an intermittent stumble and/or misfire on hard acceleration after an extended drive at highway speeds during high humid or clamp conditions. This could result in a steady or flashing malfunction indicator lamp (MIL) with diagnostic trouble codes (DTCs) primarily for misfire P0300, P0304, P0305, P0306. DTC P0430 may also be present.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

Ensure all hard fault powertrain DTCs are addressed prior to performing this service procedure.

- 1. Check for DTC P0430. Is DTC P0430 present?
 - a. Yes Replace the left hand catalytic converter. Refer to Workshop Manual (WSM), Section 309-00. Proceed to Step 2.
 - b. No Proceed to Step 2.
- 2. Install a new Charge Air Cooler (CAC) and the original air deflector plate and shield using new retaining pushpins. Refer WSM, Section 303-12.

PART NUMBER	PART NAME
DL3Z-6K775-B	CAC
W711281-S300	Push Pin (2 Reg)
BL3Z-5E212-E	Catalytic Converter Assembly
W520514-S440	Nuts (2 Reg)

WARRANTY STATUS: Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And **Emissions Warranty** Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

OPERATION	DESCRIPTION	TIME
0691253A	2013 F-150 3.5L DOHC GTDI: Check DTCs,	0.9 Hr.
	Replace The Charge Air Cooler Assembly Includes	
	Time To Transfer	
	Turbocharger Exhaust Inlet and CAC Shield (Do Not	
	Use With Any Other Labor Operations)	
0691253B	2013 F-150 3.5L DOHC GTDI: Check DTCs,	1.2 Hrs.
	Replace The Charge Air Cooler Assembly And The	
	Left Hand Catalyst	
	Converter Includes Time To Transfer Turbocharger	
	Exhaust Inlet and CAC	
	Shield (Do Not Use With	
	Any Other Labor Operations)	

NOTE: The Information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do The job property and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

PROOF 30-OCT-12 Copyright © 2012 Ford Motor Company

069-2012-1953

PAGE 1

Concern Tracking# 069-2012-1953 (Continued)

DEALER CODING	CONDITION	OASIS CODES: 2**** , 227***
BASIC PART NO.	CODE	, 2270**
	12	, 227Q30
	(OPERATION	, 227Q68
5E212	B)	, 5*****
6K775 (OPERATION A)	42	, 550***
		, 5502**
		EE0004
		550000
		, 550239
		, 550339
		, 554***
		, 5542**
		, 554234
		, 554239
		, 554299
		, 5543**
		, 554334
		, 554339
		, 554399
		, 557***
		, 5572**
		, 557234
		, 557239
		, 5573**
		EE700A
		, 557339
		, 558***
		ECOOK*
		ECOODA
		, 558239
		, 5583**
		, 558334
		, 558339
		000000
		, 606000
		, 606000
		, 609000
		, 609500
		, 609600
		, 610000
		, 610500
		, 610600
		011000
		, 611500
		, 612000
		, 612500
		, 612600
		, 614000
		, 614500
		, 614600
		, 623000
		, 698298
		1 000200

069-2012-1953

PROOF 30-OCT-12

PAGE 2

From:	Wilson, Marie (M.)
Sent:	Tuesday, May 14, 2013 12:59 PM
To:	Christensen, Kris (K.S.); Fuher, Michael (M.J.); King, Lamar (L.L.); Edie, Mark (M.D.);
	Johnston, Dennis (D.T.); Londy, George (G.L.); McClenaghan, Dave (D.); Oswalt, Greg
	(G.G.); Parks, James (J.); Wickenheiser, Francis (F.J.); Cadagin, Ed (E.J.); Welch, Sharon
	(S.L.); Kinnie, Yvonne (Y.C.); Goebel, Ken (K.M.); Mills, Linda (L.S.); Tuneff, Mark (M.S.);
	Fagerman, Todd (T.M.); Khan, Mohammod (T.); Patel, Bharat (B.J.); Spencer, Beth (B.);
	Schiltges, Dave (D.); Holzheuer, Bill (W.P.); Condron, Brian (B.G.); Woodring, Christopher
	(C.A.); Hanshaw, Jamie (J.C.); Lenox, James (J.M.); Gomes, Enio (D.); Selthofer, Adam (A.)
Subject:	EPRC Meeting Agenda - 16 May 2013

Attached please find the subject meeting agenda.



Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 <u>MWILSO18@FORD.COM</u>

EPRC MEETING AGENDA FOR May 16, 2013 WHQ 2AW

	Time	EPRC #	Concern	Open Assignment(s)	Activity
Announcements	10 00				
	10 05		14D/FRC/DPAC Updates	08EPRC29 - Easy Fuel 13EPRC07 - 2.0L P0030 11EPRC19 - 6.7L OBD 12EPRC21 - Can Tire	CCM's
edacted	for F	Relevar	nce	12EPRC21 - Can Tire	_
U/Med Duty/Lg SUV	11 15	11EPRC20	Some 2011 F150 trucks with 3.5L GTDI engines may experience misfire conditions due to condensation build up in the charge air cooler.	To close with signed fact sheet	PTO
					VEE-CE
	for F	Relevar		JACCE	VEE-CE
	for F	Relevar			VEE-CE
	for F	Relevar			VEE-CE
	for F	Relevar			VELLE
	for F	Relevar			VEELE
	for F	Relevar			VEELE
	for F	Relevar			VEELE
	for F	Relevar			VEELE
	for F	Relevar			VEELE
edacted 1	for F	Relevar			VEELE
	for F	Relevar			VEE-LE
	for F	Relevar			VEELE

From:	Nowaczyk, Rick (R.J.) [mowaczy@ford.com]
Sent:	Monday, February 04, 2013 1:01 PM
То:	McDonagh, Scot (S.M.); Oyafuso, Kevin (K.G.); Selthofer, Adam (A.); Dixon, Mark (M.R.); Hughes, Scott (S.R.)
Cc:	Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.); Shekleton, James (J.)
Subject:	**Escalated Case*** 2012 F-150 CAC Misfire TAR REOPENED AT SAYBROOK FORD, INC. 08844USA Phone : (860) 388-3572 FOR MUNCASTER , DAVID ON 2012 F150 4X4 ,F150 ,SUP CRW,STYSD VIN : 1FTFW1ET7CF
Importance:	High

Engineering Team,

Here is a 2012 F-150 3.5L with what appears to be a continued CAC Misfire after the latest updates. The FSE (James Shekleton is CC: on the note) looking for further digestion. Dealer has not been able to replicate the concern. Customer does state the concern only happens after an extended cruise at highway speed then go to WOT vehicle losses power mode 6 data shows #6 cylinder.

What are the next steps, should we have the FSE get some VDR data?

From: Shekleton, James (J.) Sent: Monday, February 04, 2013 11:26 AM To: Nowaczyk, Rick (R.J.) Cc: Raboin, Matt (M.) Subject: FW: TAR REOPENED AT SAYBROOK FORD, INC. 08844--USA Phone : (860) 388-3572 FOR MUNCASTER , DAVID ON 2012 F150 4X4 ,F150 ,SUP CRW,STYSD VIN : 1FTFW1ET7CF

Rick,

I left you a voicemail regarding this TAR and concern on this 2012 F 150. I was reviewing the "Emerging Detailed Reports" and "Emerging Reports >75% of QSF Threshold" that Jason Kahn sends out. Line 20 of the Truck and SUV tab in the "Emerging Detailed Reports" is where I have some questions.

There are no DTCs set in this truck and mode six data shows one misfire on cylinder 6,

At your earliest convenience, please call me regarding this concern. Thank you.

Jim Shekleton

Field Service Engineer Ford Customer Service Division Boston Region Mobile: (201) 788-7004 Fax: 1-888-410-2801 Email: <u>isheklet@ford.com</u> This e-mail and any attachments is intended only for the use of the person or persons addressed hereto and may contain legally privileged and/or confidential information. If you are not the intended recipient of this e-mail, you are hereby notified that any dissemination, distribution or copying of this e-mail, and any attachments, is strictly prohibited. If you have received this e-mail in error, please notify me via return e-mail and permanently delete the original and any copy of any e-mail and any printout.

From: CQIS, Help (.) Sent: Monday, February 04, 2013 9:44 AM

To: Jakob, Diana (D.); Paff, Curtis (C.L.); Shekleton, James (J.); Avery, Kevin (K.); Raboin, Matt (M.); Stawiecki, Bob (R.); Todisco, Ronald (R.J.); Atkinson, Bill (B.W.); Wynn, David (D.); Yurowski, Daniel (D.E.); Clark, John (J.J.); Manning, Justin (J.E.); Tomaso, James (J.C.); Krawczyk, Kevin (R.); Palmer, Ken (L.); Peters, Paul (P.); Koulakjian, Robert (J.) Cc: Barrett, Dale (D.); Barrett, Dale (D.); Harmon, Derek (D.M.); Stendardo, David (D.); Mceachern, Matthew (M.); Johnson, Seth (S.); Houston, Willie (W.) Subject: TAR REOPENED AT SAYBROOK FORD, INC. 08844-JISA Phone : (860) 388-3572 FOR MUNCASTER. DAVID ON

Subject: TAR REOPENED AT SAYBROOK FORD, INC. 08844--USA Phone : (860) 388-3572 FOR MUNCASTER , DAVID ON 2012 F150 4X4 ,F150 ,SUP CRW,STYSD VIN : 1FTFW1ET7CF

A request for technical assistance has been REOPENED for :

MUNCASTER, DAVID T 08844-USA Name : SAYBROOK FORD, INC

By : US-TECHNICAL SERVICE HOTLINE

Unit Down

The dealer requires additional assistance to resolve a concern on : 2012 F150 4X4,F150,SUP CRW,STYSD VIN.1FTFW1ET7CF

It is filed under GCQIS report number : CJBB6001

Following TECH ASSIST REFERRAL procedure, the dealership has been notified that someone from the Region will contact them in the near future. This letter is notification of the referral. The report will be in GCQIS for your review.

https://www.gcqis.dealerc! on! nection com/gcqis/asp/WBRES_RptSummaryUpdMain asp?rptnbr=CJBB6001

THANK YOU, FROM THE US-TECHNICAL SERVICE HOTLINE

Attachments: 0

Report# :	CJBB6001 NHL			Received:	10/02/2012
CCRG/EPRC:		Reviewe	d Status:	Date:	
Vehicle:	2012,F150 4X4 ,F150 .SUF ,1FTFW1ET7CF	CRW,STYSD		Build Date:	02/21/2012
Odometer :	19,142 M	Engine:	3 5L-GTDI	Calibration	: CF613K0A
Transmission:	6R80E	Axle:	3800F3.31C	A/C:	YES

Dealer:	USA 08844	Saybrook Ford, Inc.	Phone#:	(860) 388-3572			
City:	Old Saybro	ok	State:	Connecticut	Country: USA		
Originator:	BRANDON						
Symptom:	5 54 2 39 D	RV PERF, LACK/LO	SS PWR ,	ACCEL, INTERN	IITTENT		
Status:							
VFG:	V52 DRIVI	EABILITY					
Additional Symptom:	RUNS ROI	JGH PASSING					
Fix:Y	Causal Con	nponent :		COOLER ASS	Y RPL		
Condition Cod	e:						
Hotliner: PJA	ACOB45	Phone: 000 000	0000-	Regn	Cd: N2 Boston		
Engineering:		Phone:		TAR: OP	EN		
Dlr Contact:		Phone:		Title Cde	: T		
	RESPONSE, HA FINE. HAPPENI DUPLICATE YET. DIAGNOS SIDE CAT, REP TSB A COUPLE RESCANNED A HAS NO CODE:	S TO PULL OVER, ED TO HIM TWICE TICS: ALREADY PI ROGRAM TO LATE OF WEEKS AGO. V ND S. PARTS REPLACE	SHUT ENG LAST WE ERFORME ST LEVE WHEN TRU D LEFT S	GINE OFF AND EK. I HAVENT D TSB#12-06-04 L AND INSTALI UCK CAME BAG IDE CAT, INSTA	4. REPLACED LEFT CAC SHIELD, DID THI CK TODAY, ALL CAC SHIELD AND		
		TECH QUESTION:A					
	10/02/2012 09:04AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE BRANDON, VERIFY WITH THE CUSTOMER IF THE CONCERN TYPICALLY OCCUBS ON						
RECOMM	BRANDON, VE OCCURS ON						
RECOMM	OCCURS ON	RIFY WITH THE CU	JSTOMER	IF THE CONCE	RN TYPICALLY		
RECOMM	OCCURS ON RAINY OR HUN	RIFY WITH THE CU MID DAYS. IF THIS	JSTOMER IS THE C	IF THE CONCE ASE, INSPECT T			
RECOMM	OCCURS ON RAINY OR HUN AND THE CAC OF	RIFY WITH THE CU MID DAYS. IF THIS SYSTEM FOR SIGN	JSTOMER IS THE CA IS OF WA	IF THE CONCE ASE, INSPECT T FER SPOTS, DU	RN TYPICALLY THE THROTTLE BODY		
RECOMM	OCCURS ON RAINY OR HUN AND THE CAC OF THE CHARGE A	RIFY WITH THE CU MID DAYS. IF THIS SYSTEM FOR SIGN AIR COOLER, THER	JSTOMER IS THE CA IS OF WA RE MAY B	IF THE CONCE ASE, INSPECT T FER SPOTS. DU E SOME COND	RN TYPICALLY THE THROTTLE BODY E TO THE EFFICIENCY		
RECOMM	OCCURS ON RAINY OR HUN AND THE CAC OF THE CHARGE A CONDENSATION BY	RIFY WITH THE CU MID DAYS. IF THIS SYSTEM FOR SIGN AIR COOLER, THER	JSTOMER IS THE CA IS OF WA RE MAY B CAC, DUE	IF THE CONCE ASE, INSPECT T FER SPOTS, DU E SOME COND TO HUMID AI	RN TYPICALLY THE THROTTLE BODY E TO THE EFFICIENCY TIONS WHERE SOME R BEING COMPRESSED		
RECOMM	OCCURS ON RAINY OR HUM AND THE CAC OF THE CHARGE A CONDENSATIO BY THE TURBOCH	RIFY WITH THE CU MID DAYS. IF THIS SYSTEM FOR SIGN AIR COOLER, THER ON BUILDS IN THE ARGERS AND THE	JSTOMER IS THE CA IS OF WAT E MAY B CAC, DUE N COOLE	IF THE CONCE ASE, INSPECT T FER SPOTS. DU E SOME COND E TO HUMID AI D BY THE CAC	RN TYPICALLY THE THROTTLE BODY E TO THE EFFICIENCY TIONS WHERE SOME R BEING COMPRESSED		
RECOMM	OCCURS ON RAINY OR HUN AND THE CAC OF THE CHARGE / CONDENSATIO BY THE TURBOCH HUMID/COMPE GRAINS	RIFY WITH THE CU MID DAYS. IF THIS SYSTEM FOR SIGN AIR COOLER, THER ON BUILDS IN THE ARGERS AND THE RESSED AIR IS COO	JSTOMER IS THE CA IS OF WA' E MAY B CAC, DUE CAC, DUE IN COOLE DLED BY T	IF THE CONCE ASE, INSPECT T FER SPOTS. DU E SOME COND E TO HUMID AI D BY THE CAC THE CAC, IT CA	RN TYPICALLY THE THROTTLE BODY E TO THE EFFICIENCY ITIONS WHERE SOME R BEING COMPRESSED . WHEN THE		

	ENGINEERING IS CURRENTLY DEVELOPING A REPAIR FOR THIS CONCERN
	THAT
	SHOULD BE AVAILABLE DURING THE 4TH QUARTER OF THIS YEAR. IF THE
	CUSTOMER STATES THAT THE CONCERN WILL OCCUR UNDER ANY WEATHER
	CONDITIONS AND SIGNS OF WATER WERE NOT FOUND IN THE THROTTLE BODY OR
	CAC SYSTEM, ATTEMPT TO DUPLICATE THE CONCERN WHILE MONITORING THE
	FOLLOWING PID'S TO HELP DETERMINE THE CAUSE OF THE CONCERN; APP(%),
	BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, EQ_RAT11 (RATIO), EQ_RATIO21
	(RATIO), FRP (PRESS), FRP_DSD, GEAR, KNK_CNTR_CYL (1-6),
	KNK_RATE_LRND, LOAD, LONGFT1, LONGFT2, MA! P(! PRESS), NUM_MISFIRE,
	OCTADJ R LRND, O2S11 CUR, O2S21 CUR, RPM, RUNTM, SHRTFT1, SHRTFT2,
	TQ_CNTRL, TR, VPWR, VREF, VSS. IF THE MISFIRES CAN BE ISOLATED TO
	A SPECIFIC CYLINDER, SWAP THE IGNITION COILS AND THE SPARK PLUGS WITH
	KNOWN GOOD CYLINDERS AND RETEST. REPLACE THE AFFECTED IGNITION
	COMPONENTS IF THE MISFIRE FOLLOWS THE COMPONENT. IF THE CONCERN STILL
	PERSIST AFTER IGNITION COIL SWAP AND COMPRESSION TESTS DO NOT INDICATE
	A CONCERN, REPLACE THE INJECTOR FOR THE MISFIRING CYLINDER(S).
REPAIR	10/02/2012 12:20PM DAVID STENDARDO MSS - FCSD - TECH SVC HOTLINE
	REMOVED CAC TUBE FROM THROTTLE BODY TO COOLER, FOUND WATER INTRUSION
	IN TUBE AND COOLER. I KNOW ENGINEERING IS WORKING ON A FIX FOR THIS
	BUT WHAT SHOULD WE DO IN THE MEAN TIME. REPLACE COOLER FOR NOW?
	CUSTOMER IS NOT TO HAPPY AS IS.
RECOMM	10/02/2012 12:20PM DAVID STENDARDO MSS - FCSD - TECH SVC HOTLINE
	BRANDO, NO SERVICE ACTIONS SHOULD BE PERFORMED AT THIS TIME, AS A
	REPLACEMENT CAC WILL RESULT IN THE SAME CONCERN DUE TO THE REPLACEMENT
	PART BEING EXACTLY THE SAME. AT THIS POINT, THE ONLY PROCEDURE TO BE
	PERFORMED WOULD BE CLEANING OF THE CAC AS PER SECTION 303-12 INTAKE
	AIR DISTRIBUTION AND FILTERING / CHARGE AIR COOLER (CAC) CLEANING
	IN THE ONLINE WSM. KEEP IN MIND THAT THIS IS NOT A REPAIR FOR THE
	CONCERN AT HAND, JUST A CLEANING OF ANY WATER OR OIL SLUDGE BUILD UP.
REPAIR	10/10/2012 03:23PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
	SPOKE TO FSE TOLD TO MONITOR AND RECORD ETC ACTUAL AND ETC DESIRED
	4

FOUND UNDER HEAVY ACCEL DIFFRENCE WAS @ 4 DEGRESS WAS TOLD THAT 1
COULD TRY A THROTTLE BODY BUT WILL NOT FIX CONCERN. DID RECHECK INTERCOOLER AGAIN DEFFINETLY WATER IN INTERCOOLER AND WATER SIGNS IN
CAC TUBES CUSTOMER DOES DRIVE MOSTLY HIGHWAY MILES.
10/10/2012 03:23PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
BRANDON, THE FORD TECHNICAL HOTLINE HAS REVIEWED YOUR REQUEST AND HAS
DETERMINED THAT IT IS NECESSARY TO DISCUSS THIS MATTER VERBALLY OVER
THE TELEPHONE. YOU WILL BE CONTACTED SHORTLY BY A FORD TECHNICAL HOTLINE REPRESENTATIVE.
10/10/2012 03:34PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
AN OUT BOUND CALL WAS PLACED TO THE DEALER; SPOKE TO SERVICE STEVEN
MOSSBERG. THE CUSTOMER IS UPSET WITH THE VEHICLE PERFORMANCE
(HESITATION ON ACCELERATION). VEHICLE IS PRESENTLY AT THE DEALER, OUT
OF SERVICE FOR 17 DAYS.
10/10/2012 03:34PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
STEVEN, TECHNICAL ASSISTANCE HAS BEEN REQUESTED BY THE HOTLINE FOR
THIS VEHICLE. THE FSE IN YOUR AREA SHOULD CONTACT THE DEALER
MANAGEMENT (SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN 1 BUSINESS DAY
TO DISCUSS AND ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.
10/10/2012 03:34PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
NOTE TO FSE: TECHNICAL ASSISTANCE HAS BEEN REQUESTED BY THE HOTLINE
FOR THIS VEHICLE DUE TO THE DAYS OUT OF SERVICE AND LACK OF PROGRESS
IN REPAIRING A HESITATION ON ACCELERATION AFTER A HIGHWAY CRUISE.
WATER HAS BEEN FOUND IN THE CAC, THE CAC DEFLECTOR IS INSTALLED, PCM
AT THE LATEST LEVEL. THE VEHICLE HAS AN OPEN CUDL REQUESTING BUY BACK.
PLEASE ASSIST THE TECHNICIAN IN R! ES! OLVING THE VEHICLE
CONCERN. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 3 ESTIMATED NUMBER OF
DAYS OUT OF SERVICE: 17
10/19/2012 11:15AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON VERIFED COMPLAINT AND ADVISED CUSTOMER TO PERFORM OCCAISONAL

	HARD
	ACCELS AFTER LONG CRUISE. CUSTOMER IS WNWILLING TO DRIVE BECAUSE
	HE
	SAYS HE FEARS FOR HIS SAFETY. HAD TECH REPLACE THROTTLE BODY BECAUSE
	RECORDING SHOWED 4 DEHGREE VARIANCE FROM ACTUAL VS. DESIRED, MODIFIED
	CAC WITH WICK INSTALLED IN BASE TO TRY TO REMOVE WATER FROM IT. DEALER
	WILL ADVISE ME IF SUCCESSFUL
ADD-ON	11/09/2012 09:20AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON SCHEDULED FOR 11/14
ADD-ON	12/11/2012 11:35AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON CAC REPLACED. CUSTOMER REPORTS NO PROBLEMS
AUDIT	12/11/2012 11:35AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON TECH ASSIST REFERRAL HAS BEEN CLOSED
REPAIR	02/01/2013 10:17AM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE
	WEB FORM DATA - CONCERN: HESITATION, BUCKING, LACK OF POWER ON
	ACCELERATION MAINLY AFTER CRUISE THAN ACCELERATE AND AFTER IT
	RAINS DIAGNOSTICS: HOOK -UP IDS AND SCAN, NO CODES. MODE 6 DATA
	SHOWED #6 WITH ONLY 1 COUNT FOR LAST 10 DRIVE CYCLES PARTS
	REPLACED: PERFORM TSB# 12-10-19. INSTALLED NEW CAC, DEFLECTOR PLATE
	AND REPROGRAM PCM. ALSO REPLACED #6 COIL AND PLUG. REPLACED ETB PER
	ENGINEER FROM PREVIOUS REPAIR. TECH QUESTION: ANY NEW FIXES FOR
	THIS CONCERN OR ANOTHER ROUTE TO TAKE?
RECOMM	02/01/2013 10:17AM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE
ni commu	DAVID, SINCE THE TSB 12-10-19 HAS ALREADY BEEN COMPLETED, AND THIS
	CONDITION CONTINUES, PLEASE INSPECT THE FUEL QUALITY OF THIS VEHICLE.
	POOR FUEL QUALITY CAN INDUCE RUNNING MISFIRE RELATED ISSUES. IF THE
	FUEL SAMPLE INDICATES ANY ISSUES, PLEASE COMPLETELY DRAIN THE FUEL
	TANK. FILL THE VEHICLE WITH KNOWN GOOD FRESH FUEL, AND REEVALUATE.
	IF NO FUEL QUALITY ISSUES ARE DISCOVERED, PLEASE INSPECT THE
	THROTTLE INLET PRESSURE (TIP) SENSOR FOR ANY CONCERNS. A CONTAMINATED
	TID OFNIGOD CAN DIDUGE WHILE CONDUCION IN A LUCE LOUTER AND THE FOR
	TIP SENSOR CAN INDUCE THIS CONDITION. IF A LIKE UNIT IS AVAILABLE,
	PLEASE SWAP THE TIP SENSOR WITH A KNOWN GOOD UNIT, AND REEVALUATE.
	PLEASE SWAP THE TIP SENSOR WITH A KNOWN GOOD UNIT, AND

	REVIEW. A
	SERVICE ENGINEER FROM THIS TEAM WILL CONTACT YOU BY PHONE OR THROUGH
	THIS HOTLINE ASSISTANCE REQUEST WITHIN ONE (1) BUSINESS DAY TO PROVIDE
	ADDITIONAL INFORMATION AND/OR RECOMMENDATIONS TO ASSIST IN THE
	RESOLUTION OF THE CUSTOMERÂ?TS CONCERN. OUR TEAM AT THE HOTLINE WILL
	CONTINUE TO WORK WITH YOU AND YOUR DEALERSHIP TO HELP GET THE CONCERN
11	RESOLVED AND THE VEHICLE BACK TO THE CUSTOMER IN A TIMELY MANNER. IF
	WE HAVE EXHAUSTED ALL OF OUR RESOURCES AND ARE STILL UNABLE TO RESOLVE
	THE CUSTOMERÂ?TS CONCERN THROUGH THESE ADDITIONAL STEPS, THE HOTLINE
	WILL ALERT YOUR FIELD SERVICE ENGINEER BY OPENING A TECHNICAL
	ASSISTANCE REQUEST, PLEASE BE PREPARED TO DISCUSS ALL DIAGNOSTICS
	PERFORMED AND TEST RESULTS WITH THE TECHNICAL SERVICE HOTLINE SERVICE
	ENGINEER IN MORE DETAIL. THANK YOU IN ADVANCE.
ESCLHD	02/01/2013 10:17AM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE
	106074185 CONCERN RE-ESCALATED DUE TO PAST FSE INVOLVEMENT. THE
	RUNNING ROUGH IN HUMID (RAINING) CONDITION CONTINUES. TSB 12-10-19 HAS
	BEEN COMPLETED.
AUDIT	02/01/2013 10:17AM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE
	ODOMETER 9531 M CHANGED TO 19142 M BY MMESSIN4
REPAIR	02/04/2013 09:39AM DALE BARRETT MSS - FCSD - TECH! S! VC HOTLINE
	AN OUT BOUND CALL WAS PLACED TO THE DEALER; SPOKE TO TECHNICIAN DAVID
	MUNCASTER. THE TECHNICIAN HAS NOT DUPLICATED THE CONCERN. CUSTOMER
	STATES AFTER STEADY STATE CRUISE IN RAINY CONDITIONS FOR EXTENDED
	PERIODS OF TIME THE VEHICLE WILL LOSE POWER ON HARD ACCELERATION. THE
	LOST POWER EVENT WILL NOT RE-OCCUR UNTIL THE VEHICLE IS DRIVEN AGAIN
	AT A STEADY STATE CRUISE. VEHICLE HAS THE LATEST UPDATED CAC AND PCM
	SOFTWARE. ! !
TAR	02/04/2013 09-39AM DALE RADDETT MSS. ECSD. TECH SVC HOTLINE

DALE BARRETT MSS - FCSD - TECH SVC HOTLINE NOTE TO FSE: TECHNICAL ASSISTANCE IS BEING REQUESTED BY THE HOTLINE

	DUE TO THE DAYS OUT OF SERVICE AND LACK OF PROGRESS IN REPAIRING A
	LOSES POWER CONCERN. CUSTOMER STATES AFTER STEADY STATE CRUISE IN
	RAINY CONDITIONS FOR EXTENDED PERIODS OF TIME THE VEHICLE WILL LOSE
	POWER ON HARD ACCELERATION. THE LOST POWER EVENT WILL NOT RE- OCCUR
	UNTIL! T! HE VEHICLE IS DRIVEN AGAIN AT A STEADY STATE CRUISE. VEHICLE
	HAS THE LATEST UPDATED CAC AND PCM SOFTWARE. THE VEHICLE WAS TECH
	ASSISTED FOR THIS ISSUE 10/10 12. PLEASE ASSIST THE TECHNICIAN IN
	RESOLVING THE VEHICLE CONCERN. ESTIMATED NUMBER OF DAYS OUT OF
	SERVICE: 18 ESTIMATED NUMBER OF REPAIR ATTEMPTS: 4
RECOMM	02/04/2013 09:39AM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
	DAVID, TECHNICAL ASSISTANCE HAS BEEN REQUESTED FOR THIS VEHICLE BY
	THE TECHNICAL HOTLINE. THE FSE IN IN YOUR AREA WILL CONTACT THE
	SERVICE MANAGER OR SERVICE DIRECTOR WITHIN 1 BUSINESS DAY TO ASSIST IN
	REPAIRING THE VEHICLE CONCERN.
ADD-ON	02/04/2013 09:44AM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
	RE-OPENING TAR
AUDIT	02/04/2013 09:44AM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
	TECH ASSIST REFERRAL HAS BEEN REOPENED

This email was generated by the server ECCWS686

From:Kramer, Michael (M.T.)Sent:Tuesday, June 04, 2013 7:11 AMTo:Ronzi, Bill (W.C.)Cc:Alcaraz andrade, Alejandro (M.); Andersen, Erik (E.); Tyler, Jim (J.S.); Kramer, Michael (M.T.)Subject:External 7 tube / 8 fin blocker '11 & 12 MY P415 Only TSB

Bill. Are you starting the draft of the subject in anticipation of successful corrosion test completion?

- Need to include a cleaning procedure to ensure blocker sticks.
- Also need to ensure the existing top 6 tube external blocker is not used with the 7 tube / 8 fin stick-on blocker.
- Any further discussions with FCSD on how to prevent installing the 7 tube / 8 fin stick-on blocker on a PCA CAC?

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From:	Nowaczyk, Rick (R.J.)
Sent:	Tuesday, February 14, 2012 2:40 PM
То:	Mazuchowski, James (J.A.); Hammoud, Mazen (M.); Norman, Kristofor (K.R.); Baum, Joe (J.M.); Smith, Craig (C.A.); Baltusis, Paul (P.A.); Sims, Ivan (I.D.); Cockerill, Al (C.A.); Gernant, Tim (T.R.); Graham, David (D.L.); McDonagh, Scot (S.M.); Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Wright, Robin (R.A.); Norton, John (J.K.); Stephens, Craig (C.); McNamara, Patrick (P.S.); Gardner, Greg (G.D.); Osepchook, William
Subject:	(W.R.) F-150 3.5L GTDI PCM reflash has gone to FINAL as 12-2-10 (enUSA)
Importance:	High

Team Members,

TSB 12-2-10 for 3.5L GTDI reflash is now released to the field.

I will be submitting the SSM for approval today with the article # 12-2-10 included in the message.

Thanks

-----Original Message-----From: Siplus, G (G.) Sent: Tuesday, February 14, 2012 2:17 PM To: Nowaczyk, Rick (R.J.) Subject: 069-2012-1106 has gone to FINAL as 12-2-10 (enUSA) Importance: High

English TSB Article 12-2-10 has been released for publication

The following Technical Service Bulletin (TSB) article has been moved from collaboration and is now final. Dealers may view this article on the next business day via OASIS and fmcdealer.com (<u>http://www.fmcdealer.dealerconnection.com</u>). Company personnel may view it at: http://www.protechnician.com/.

Concern Tracking Number: 069-2012-1106

TSB Article Number: 12-2-10

Description: 3.5L GTDI Calibration Update - Various Issues - Built On Or Before 2/7/2012.

Vehicles: F-150

If this message should not have been sent to this address please forward it to <u>gsiplus@ford.com</u>.

Subject:	F-150 CAC
Start: End: Show Time As:	Mon 5/20/2013 11:00 AM Mon 5/20/2013 12:00 PM Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer: Required Attendees:	Britton, Eric (E.J.) Fronckowiak, Todd (T.M.); Oswalt, Greg (G.G.); Ott, David (D.J.); Kramer, Michael (M.T.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.); Ronzi, Bill (W.C.); Andersen, Erik (E.)

Please forward this meeting notice to anyone else who may want to attend.

Reason: NHTSA has raised several questions regarding this warranty issue and the TSB. They have also requested to drive a vehicle under the subject conditions.

Objective (Agenda): Discuss NHTSA questions (projected rate of occurrence, worst case, etc.) Begin planning the NHTSA test drive in Dearborn TSB's status

Eric Britton invites you to an online meeting using WebEx.

WebEx meeting information

Meeting Number: 712 830 639 Meeting Link: <u>https://ford.webex.com/ford/j.php?J=712830639</u> Meeting Password: This meeting does not require a password.

Audio conference information

To receive a call back, provide your phone number when you join the meeting, or call the number below and enter the access code.

US Toll Free Number: +1-888-628-3668

FordNet 248-3668 / Toll: +1-313-248-3668

Global call-in numbers: <u>https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=201672582&tollFree=1</u> Toll-free dialing restrictions: <u>http://www.webex.com/pdf/tollfree_restrictions.pdf</u>

Access code

http://www.webex.com

From: Sent: To: Cc: Subject: Christoff, Donald (D.A.) Wednesday, October 10, 2012 8:55 AM Nowaczyk, Rick (R.J.) Johnson, Jim (J.S.) F-150 CAC

Good Morning Rick,

I have a few of our FSEs now saying that the new CAC are being shipped if the dealer puts in an order. I know you said that we were trying to get some "feed stock" of the parts before the release of the TSB, is this going to delay the release?

Don Christoff

Technical Operations Coordinator Southeast (Atlanta, Orlando & Miami Regions) Phone 407- 467-5007 Email - <u>dchrist2@ford.com</u>

Subject:	F-150 CAC
Location:	Teleconference
Start:	Tue 6/25/2013 12:00 PM
End:	Tue 6/25/2013 12:30 PM
Show Time As:	Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Britton, Eric (E.J.)
Required Attendees:	Ott, David (D.J.); Kramer, Michael (M.T.); Andersen, Erik (E.)

Let me know if this time works. There are no assignments for this meeting. I want to understand what tests were done in the wind tunnel. What data was recorded. What format is it in. How difficult would it be to produce the data. When could we do a data review.

Eric Britton invites you to an online meeting using WebEx.

WebEx meeting information

Meeting Number: 710 389 217 Meeting Link: <u>https://ford.webex.com/ford/j.php?J=710389217</u> Meeting Password: This meeting does not require a password.

This meeting may include the option for video. The recording of meetings is prohibited. For company policies on using video click here:

https://comm.sp.ford.com/sites/digitalworker/Pages/HowiWorkItem.aspx?UCTitle=to%20use%20Video&UCID=&Page= 2&Section=2.001

Audio conference information

To receive a call back, provide your phone number when you join the meeting, or call the number below and enter the access code.

US Toll Free Number: +1-888-628-3668

FordNet 248-3668 / Toll: +1-313-248-3668

Global call-in numbers: <u>https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=236875992&tollFree=1</u> Toll-free dialing restrictions: <u>http://www.webex.com/pdf/tollfree_restrictions.pdf</u>

Access code:710 389 217

MC06

http://www.webex.com

From:	Lehmkuhl, David (D.B.)
Sent:	Tuesday, February 08, 2011 12:42 PM
To:	Kuehn, Dave (D.E.); Collareno, Philip (P A.); Wood, Jeffery (J.C.); Hoskins, Anthony (A.L.); Kuehn,
	Dave (D.E.); Green, Ann (A.D.); DiMarco, Jackie Marshal (J.M.); Wishnousky, Dale (D.S.)
Cc:	Reid, Patricia (P.B.); Cowell, William (W.E.); Rothmann, Rich (R.P.); Carrier, Jeffrey (J.J.); Ickes, Bill
	(B.K.); Vahratian, Adam (A.J.); Galas, Dean (C.K.); Ufford, Donald (D.A.); Manzano, Deborah (D.);
	Lowe, Walter (W.E.); Edmonds, Mark (M.); Barthelemy, Bruno (B.); Keller, Mark (M.E.); Medley,
	Steven (S.D.); Katinas, Dana (D.J.); Taylor, James (J.D.); Thornton, George (G.A.); Ernat, Mike
	(M.G.); Rothmann, Rich (R.P.); Kiselis, Michael (M.S.); Bushey, David (D.R.); Stoltz, Jeffery (J.A.);
	Rothmann, Rich (R.P.); Sovoda, Richard (R.P.); Bresky, Aaron (A.); Arbitter, Daniel (D.S.);
	Kosztowny, Brian (B.P.); McCarthy, Mark (M.W.); Stoltz, Jeffery (J.A.); Opaleski, Edward (E.J.);
	Medley, Steven (S.D.); Coleman, Al (A.); Miller, Brian (B.J.); Lehmkuhl, David (D.B.)
Subject:	F150 DTP and KCAP Stop Ship Status Updates / Tuesday update

This week's update (#s as of noon):

Stop Ship #2892: F150 3.5L suspect misfire during cold weather

- Robustness calibration proposal for R10 to reflash units after proveout.
- Team reviewing proposal for accelerated calibration proveout (discussion at 1 pm)
- On hold at DTP: 2236

Redacted for Relevancy

1

Thanks, Dave Lehmkuhl PVT Manager F150 / DTP / KCAP (313) 805-2751

Redacted for Relevancy

From:	Levine, Michael (M.)
Sent:	Tuesday, October 23, 2012 3:10 PM
то:	Scott, Douglas (D.VV.); Sarkar, Raj (R.); Collareno, Philip (P A.); DiMarco, Jackie Marshal (J.M.); Mazuchowski, James (J.A.); Lehmkuhl, David (D.B.); Smith, Craig (C.A.)
Subject:	F-150 EcoBoost CAC condensation Q&A
Attachments:	EcoBoost CAC TSB QA FINAL.docx

Team,

Here's our Q&A to address the engine shudder issue some F-150 EcoBoost owners may encounter in humid conditions.

Thanks very much for all of your help.

Thanks,

- Mike

Mike Levine Ford Motor Company Truck Communications Manager 313.323.6854 office 313.806.1741 mobile 310.776.5018 google voice <u>mlevine5@ford.com</u> email



F-150 EcoBoost Power and Shudder Issues in High Humidity

Situation: Some F-150 EcoBoost owners operating their truck in conditions of high humidity or during rain have reported instances of engine shudder, misfire and power loss, particularly when towing or at wide open throttle. The issue occurs when the charge-air-cooler (CAC) allows moisture to form. This condensed water can enter the engine, causing the misfire. In certain cases, the engine may enter into protective "limp" home mode. In response, Ford has implemented corrective actions that prevent recurrence of these issues.

Main Messages:

- To address this issue, all F-150 EcoBoost trucks built since Sept 18, 2012 are fitted with a new, redesigned charge-air-cooler.
- From October 29, customers with an engine affected by this issue will be able to take their
 pickup to a dealer to receive a redesigned charge-air-cooler installed free of charge.
- No instances of accidents or incidents involving this issue have been reported.

Q. Is Ford having engine misfire problems with F-150 EcoBoost?

A. Some F-150 customers with EcoBoost engines may experience engine shudder or misfire during conditions of high humidity and hot weather. The issue occurs when the charge-air-cooler (CAC) allows moisture to form. In some instances, this condensed water could enter the engine, causing a misfire. In certain cases, the engine may enter into its protective "limp home" mode.

Q. How many units are affected?

A. This condition affects some trucks in areas with high humidity or in similar environmental conditions.

Q. Is there a permanent fix for this condition? What is it?

A. All F-150 EcoBoost trucks built since Sept 18, 2012 have been fitted with a redesigned charge-air-cooler that prevents moisture buildup.. From October 29, 2012, owners of earlier F-150 EcoBoost trucks affected by this issue will be able to receive the same charge-air-cooler Installed free of charge by a dealer

Q. How reliable are F-150 EcoBoost engines?

A. EcoBoost has excellent reliability, at 99.8% to date. EcoBoost is a huge success running over 40 percent of F-150 retail volume or more than 200,000 sales since its launch in February 2011. Contact(s): Mike Levine 313-323-6854 mlevine5@ford.com

Go to http://media.ford.com for news releases and high-resolution photographs.

From: Sent: To: Cc: Subject: Attachments:	Stawiecki, Bob (R.) Friday, January 06, 2012 11:16 AM Oyafuso, Kevin (K.G.); Osepchook, William (W.R.) Atkinson, Bill (B.W.); Todisco, Ronald (R.J.) F150 inspection IMG00318-20120106-0951.jpg; IMG00317-20120106-0948.jpg; IMG00316-20120106-0944.jpg; IMG00315-20120106-0943.jpg; IMG00313-20120106-0914.jpg
Importance:	High

Gentlemen, spark plugs have been installed and ground strap as well. Attached are photos of inspection re; #6 misfire 3.5 GTDI. I don't have Photoshop editor so I can't draw arrows on the pics but I'll try to describe in detail.

<u>Image 318</u> is viewed looking down into airbox for air filter. Your right hand side shows water intrusion witness marks from intake snout which is pointed to inner fender well.

<u>Image 313</u> is view from under driver's side of cab looking up at front of fender well area. In the middle of screen you will note a gap between fender skirt and front fender extension. It initially looks like it was broken off but examination shows that the contour mimics it's facing piece so it appears to be designed like this. Gap is approximately 1 ¼ " at it's widest point. There is evidence of substantial water spray up behind apron.

Image 315 is viewing into the bottom of CAC discharge port. Note water and oil puddling.

Image 317 is graduated beaker with CAC contents. Measured fluid is just over ¼ ounce

Image 316 is CAC discharge tube disconnected from CAC and residual oil.

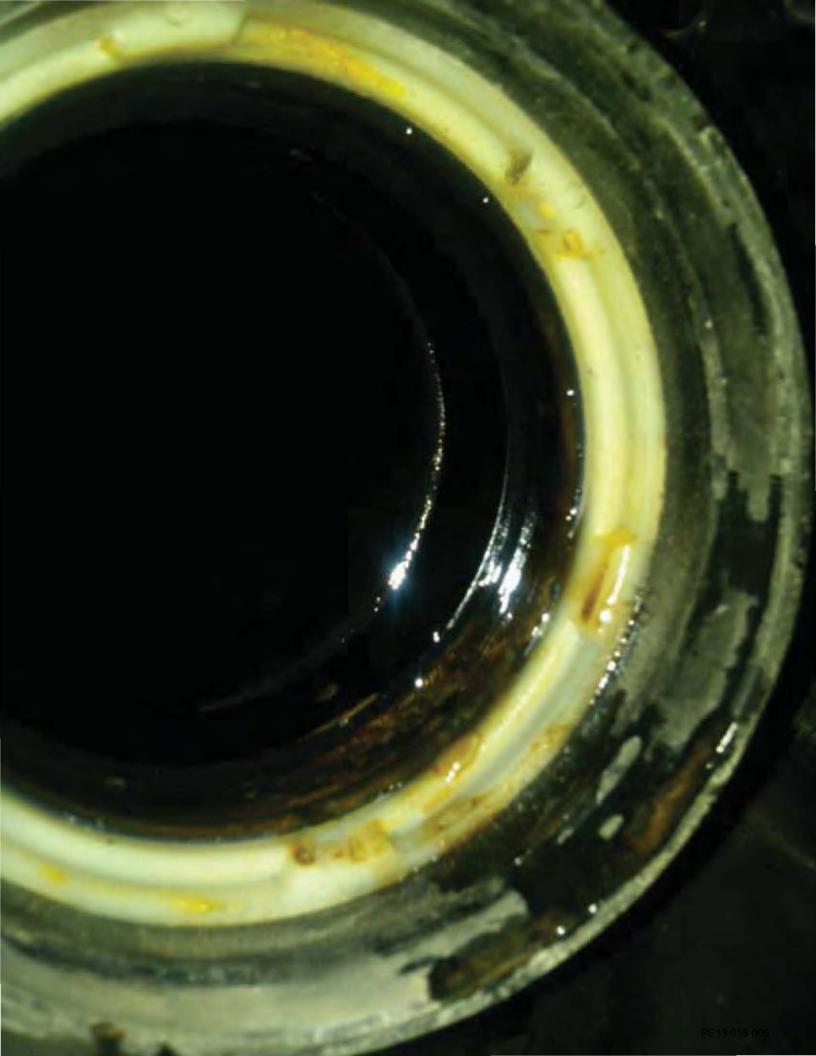
The technician is removing the driver's side cam cover so that I can inspect ventilation baffle.

The dealer is requesting that I take whatever measures necessary to prevent a reoccurrence because customer has run out of patience and threatening buyback. Unless you have objections I intend to do the following;

Fabricated material to close or substantially reduce gap in fender area near airbox. Inspect oil baffle in cam cover and drill a bleed hole as necessary.













^{on} United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

OMB #2060-0048

Validate Form

Emissions Defect Information Report (EDIR)

Report / Manufacturer Information					
New EDIR C Correct / Upd EPA EDIR Number * 1 3 0 1	late EDIR * Manufacturers must submit EDIRs within 15 working days after an emission-related defect is found.				
Manufacturer EDIR Number *	13-1D				
Form Version Number *	0 0				
Additional email address					
	Defect Information				
Problem category *	Oxygen Sensor Secondary Air System Selective Catalytic Reduction System Turbocharger/Supercharger				
Defect description *	Some 2011 through 2013 model year F150 Trucks with 3.5L engines may experience driveability concerns related condensation accumulated in the charge air cooler. Vehicles operated in high humidity conditions may have water condensation build up in the charge air cooler. This water can be ingested by the engine and result in temporary misfire and or slow burn conditions.				
Defect identification source / method * (CTRL + Click to select multiple value(s))	Investigation based on warranty claims: In-Use Testing (According to CAP 2000) Investigation based on customer feedback Manufacturer Internal Testing Manufacturer Technical/Data Analysis				
Address(es) of plants *	Dearborn Truck Plant 3001 Miller Road Dearborn, MI 48121				
	Kansas City Assembly Plant U.S. Highway #69 Claycomo MO 64199				
Evaluation of the emissions impact when the vehicle / engine exhibits the defect *	If an affected vehicle experiences misfire conditions, the Failure Mode Effects Management (FMEM) system will disable fuel injectors on up to two cylinders and limit the air/fuel ratio to a constant value. This FMEM will only remain active while misfire conditions are detected. It is estimated that exhaust emissions may be affected while the misfire FMEM system is active.				

Are there any available emissions data that relates to the defect? * C Yes 🕟 No

Page 1 of 4



United States Environmental Protection Agency
 U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Validate Form

Emissions Defect Information Report (EDIR)

Describe any drivability problems which a defective	Customers driving affected vehicles will	experience	rough and noisy operating conditions.
vehicle/engine would exhibit *	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Description of anticipated manufacturer follow up *	was designed to mitigate misfire induced implemented a revised charge air cooler,	d catalyst d , including chnical Ser	an external shield, to minimize condensation vice Bulletins (12-2-10, 12-6-4, 12-10-19 and
Type of related documents to be s (CTRL + Click to select multiple val	ubmitted to the Verify Document Module * lue(s))	Availab Repair I Technic	nted Documents to Submit le Emissions Data Instructions cal Service Bulletin Specify in 'Notes' field)
Number of related documents to l	be submitted to Verify Document Module *	0	
Notes	and aggregate service data. -Ford does not, by filing this report, make	e a determi C. § 7541),	as amended, or Section 43204 of the California



Add Test Group / Engine Family

" = required field

Emissions Defect Information Report (EDIR) Affected Vehicles / Engines Description

(大学)的主义。	Test Gr	Delete Test Group / Engine Family		
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
BFMXT03.54EP	50-State (CA+177 States+FED)	26,982	26,982	459
Add Vehicle / Engine	v	ehicle / Engine Information		
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Ford	F150	2011	3.5	Delete This Vehicle / Engine

	Delete Test Group / Engine Family			
Test Group / Engine Family *	Certified Sales Area *	ertified Sales Area * Total Production Volume Count *		Actual Number Identified *
CFMXT03.54EP	50-State (CA+177 States+FED)	31,692	31,692	539
Add Vehicle / Engine]. 1977 - R. C. A. X	whicle / Engine Information		
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Ford	F150	2012	3.5	Delete This Vehicle / Engine

行之皇者皇皇	Delete Test Group / Engine Family			
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *
CFMXT03.54DX	50-State (CA+177 States+FED)	108,358	108,358	1,842
Add Vehicle / Engine	Vehicle / Engine Information			
Make *	Model / Calibration *	Model Year *	Displacement (Liters) *	
Ford	F150	2012	3.5	Delete This Vehicle / Engine

OMB #2060-0048

Validate Form



* = required field

Add Test Group / Engine Family

Emissions Defect Information Report (EDIR) Affected Vehicles / Engines Description

TO FRE D	Test Group / Engine Family Information					
Test Group / Engine Family *	Certified Sales Area *	Total Production Volume Count *	Potential Number Affected *	Actual Number Identified *		
DFMXT03.54DX	50-State (CA+177 States+FED)	11,335	11,335	193		
Add Vehicle / Engine] Vehicle / Engine Information					
Make *	Model / Calibration *	Model Year *	Displacement (Liters)*			
Ford	F150	2013	3.5	Delete This Vehicle / Engine		

OMB #2060-0048

Validate Form

United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

General

Validate Form Button

Clicking this button will check to see if the form is valid and identify any form errors for correction. Failure to submit a valid form means you have not met reporting requirements and the system will reject the form.

Report Information

New EDIR or Correct / Update EDIR

If you are submitting this EDIR for the first time, you should select "New EDIR". If you are updating or correcting a previously submitted EDIR, you should select "Correct / Update EDIR". If you select "Correct / Update EDIR", you must enter the number of the original EDIR that you are correcting / updating and the reason that you are correcting or updating the EDIR.

EPA EDIR Number

You must enter a number for the EDIR. If you are submitting a new EDIR, the number should be exactly four digits and must contain zeroes for numbers with fewer than four significant digits (e.g., "0007"). If you are submitting a corrected / updated EDIR, you must enter a two-digit revision number (e.g., "04").

Manufacturer EDIR Number

You may enter information, up to 20 characters into this field, it is designed to allow manufacturers to internally track their defect reports. If you are using your own internal number for EDIR Purposes, you may enter it here. Otherwise, enter the EPA EDIR number here.

Form version number

You must enter a two digit form version number. If you are submitting a corrected or updated EDIR, increment the number of the previous submitted EDIR. The number should be exactly 2 digits and must contain zeroes for numbers with fewer than two significant digits (e.g., "01").

Reason for correction / update

If you selected "Correct/Update EDIR", you must enter the reason that you are correcting or updating the EDIR. If you are submitting the EDIR for the first time, you should select "New EDIR". (4000 Character Limit)

Additional email address

You may enter an additional e-mail that can be used in notifications or communications concerning this report. The primary e-mail used for notifications or communications will be the one provided during the Verify registration process.

Problem category

Even if there are multiple problems identified in the EDIR, you must select only one category identifying the primary problem. For example, if an exhaust gas recirculation (EGR) valve problem is defective and, subsequently, an On-Board Diagnostic (OBD) malfunction indicator lamp (MIL) is illuminated for an EGR fault, the problem category should identify the EGR components as defective, not the OBD system. In contrast, if an OBD MIL is being erroneously illuminated for EGR valves that are not defective and the OBD programming is being corrected, then the problem category should identify the OBD system as defective.

Defect description

Clearly identify the device, system, assembly or software that has the defect, what the defect is, and to the extent known at the time, the cause of the defect. (4000 Character Limit)

3/2011, Version 1.0

Page 1 of 4



United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

Defect identification source / method

Select one or more sources/methods from this list used to determine that a defect(s) was present in the class/category of vehicles/engines in the EDIR.

Address of plants

Enter the address of the plant(s) at which the defective vehicles or engines were produced, (4000 Character Limit)

Evaluation of the emissions impact when the vehicle / engine exhibits the defect

Describe any emissions impact when the defect(s) is present and how the emissions impact was evaluated(e.g., emissions testing, or engineering analysis). (4000 Character Limit)

Are there any available emissions data that relates to the defect?

This field is used to indicate whether or not emissions data related the defect is available. If you select "Yes", you should also send any supporting documentation to the Verify Document Module along with the EDIR.

Does the defect cause or result in On-Board Diagnostic Malfunction Indicator Lamp illumination?

This field is used to indicate whether or not the defect(s) identified in the EDIR causes or results in illumination of the On-Board Diagnostic (OBD) Malfunction Indicator Lamp (MIL).

Describe any drivability problems which a defective vehicle/engine would exhibit

Describe any drivability problems that a vehicle or engine might exhibit or an owner might experience when the defect is present on the vehicle/engine. (4000 Character Limit)

Description of anticipated manufacturer follow up

Describe any follow-up that you anticipate will be performed to rectify/correct the defect indicated in the EDIR. (4000 Character Limit)

Type of related documents to be submitted to the Verify Document Module

If you are submitting documents related or supporting the EDIR to the Verify Document Module, you can use this list to identify one or more of these documents that you are submitting. If you are submitting documents containing confidential business information (CBI) you should select "Other (Specify in 'Notes' field" and indicate in the "Notes" field that a CBI document is being submitted separately (e.g., "CBI attached in separate document.")".

Number of related documents to be submitted to Verify Document Module

Enter the number of documents you will be submitting to the Verify Document Module. Since some documents may be combined, it is helpful to know how many related documents that accompany an EDIR should be retrieved from the Verify Document Module.

Notes

Use this field to enter any notes and/or comments. In addition, there are particular fields that require you to enter notes when certain options are selected and this field should be used for this that purpose. (4000 Character Limit)

United States Environmental Protection Agency Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

Affected Vehicles / Engines Description

Test Group / Engine Family

Enter the test group or engine family of the affected vehicle(s) or engine(s). [Example: 9EPAX04.23A1]

Certified Sales Area

Select the appropriate certified sales area for the applicable test group or engine family. For vehicles that were certified to exhaust emission standards for California and Section 177 states, select the "CA+177 States" option. For vehicles that were certified to exhaust emission standards for states other than California and Section 177 states, select the "FED" option. For vehicles that were certified to exhaust emission standards for California and Section 177 states, select the "FED" option. For vehicles that were certified to exhaust emission standards for California and Section 177 states, select the "FED" option. For vehicles that were certified to exhaust emission standards for California and Section 177 states and states other than California and Section 177 states, select the "50-State" option.

Total Production Volume Count

Enter the total production volume of the test group or engine family. If this test group/engine family is still in production, enter the total production volume to date. However, this number should be updated with the final production volume when it is available. If this test group or engine family production has been completed, enter the final production volume.

Potential Number Affected

Enter the number of vehicles or engines produced that may have the defect described in the EDIR. This number may be different than the total production volume count only if a subset of the total production volume is potentially affected. Conversely, this number may be the same if all of the total production volume is potentially affected.

Actual Number Identified

Enter the actual number of defects described in the EDIR on the affected vehicles or engines. This number may be different than the potential number affected only if a subset of the vehicles or engines have exhibited the defect or it has been determined that they will exhibit the defect described in the EDIR. Conversely, this number may be the same as the potential number affected if all of the vehicles or engines have exhibited the defect or it has been determined that they will exhibit the defect described in the EDIR. Conversely, this number may be the same as the potential number affected if all of the vehicles or engines have exhibited the defect or it has been determined that they will exhibit the defect described in the EDIR.

Make

Enter the specific make (i.e., name plate) for the affected vehicle(s) or engine(s). [Example: Buick, Lexus, Mercury]

Model / Calibration

Enter the model or calibration name that the manufacturer has designated for the vehicle or the calibration for the engine that is identified in the defect report.

Model Year

Enter the model year of the affected vehicle(s) or engine(s). [Example: 2001]

Displacement (liters)

Enter the engine displacement for the affected vehicle(s) or engine(s) in liters. [Example: 4.23] Note: The displacement will be shown without trailing zeroes. However, they will be captured when uploaded (e.g., 4.0 will be displayed as 4 on the form, but will be uploaded as 4.00).

3/2011, Version 1.0

Page 3 of 4

EPA United States Environmental Protection United States Environmental Protection Agency U.S. EPA 2000 Traverwood Drive, Ann Arbor, MI, 48105

Emissions Defect Information Report (EDIR) Help Section

Vehicle Information Page Buttons

Add Test Group / Engine Family - This button is used if a report covers multiple Test Groups / Engine Families. Clicking this button creates additional Test Group / Engine Family tables at the end of the "Affected Vehicles / Engines Description" section. Each additional Test Group / Engine Family table will have a row to add Vehicle / Engine Information. Additional rows can be added if this Test Group / Engine Family covers multiple Vehicles / Engines (see instructions below for adding rows to the Vehicle / Engine Information section).

Delete Test Group / Engine Family - This button is used for deleting a Test Group / Engine Family Table. Clicking this button in a Test Group / Engine Family table will delete that Test Group / Engine Family table, and all associated Vehicle/Engine Information, only.

Add Vehicle / Engine - This button is used if a Test Group / Engine Family covers multiple Vehicles / Engines. Clicking this button in a Test Group / Engine Family table will add a new row to the bottom of the Vehicle / Engine Information section in that Test Group / Engine Family table only.

Delete Vehicle / Engine - This button is used for deleting a specific row of Vehicle / Engine Information in a Test Group / Engine Family table. Clicking the button at the end of a row will delete the a Vehicle / Engine information for just that row.

From:Kramer, Michael (M.T.)Sent:Wednesday, September 26, 2012 6:53 AMTo:Russo, Scott (S.); Madej, Jeanette (J.); Andersen, Erik (E.)Subject:FW: **Update on** 1 of the 12 New CAC install under engineering evaluation from
Down in Florida (VIN# 1FTFW1ET68F

Additional feedback from FSE on P415 PCA CAC that did not resolve concern.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Kramer, Michael (M.T.) Sent: Wednesday, September 26, 2012 6:52 AM To: Hall, Christopher (C.) Cc: Kramer, Michael (M.T.) Subject: RE: **Update on** 1 of the 12 New CAC install under engineering evaluation from Down in Florida (VIN# 1FTFW1ET6BF

Thx. How long does he cruise at 75 mph? Is he towing (trailer weight?) during this time?

In our testing for the CAC related misfire, it has been difficult to get it to occur when not raining. It is not impossible, just much more likely to happen when raining ("super-cooling" effect of the rain on the CAC).

If you can get some pictures of the truck (overall, front end, CAC, etc.) that would also be helpful.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Hall, Christopher (C.) Sent: Tuesday, September 25, 2012 10:13 PM To: Kramer, Michael (M.T.) Subject: RE: **Update on** 1 of the 12 New CAC install under engineering evaluation from Down in Florida (VIN# 1FTFW1ET6BF

I am inspecting this vehicle tomorrow morning and will have the IDS session. I spoke with the customer today and he works 12 hour shifts and if it is 70 degrees early in the morning and he set the cruise at 75 mph when he gets off the interstate and gives it the gas it will miss and bog down for approximately 30 seconds unless he lets off the gas. It is not raining when this happens. If he drives it when it is 90 degrees there is no problem according to him. It does have the blocker plate and the pcm is at the latest level.

Regards,

Chris Hall

Field Service Engineer Ford Customer Service Division Orlando Region cell-727-643-9285

"Fix it right every time with Rotunda!" << OLE Object: Picture (Device Independent Bitmap) >>

From: Kramer, Michael (M.T.)
Sent: Tuesday, September 25, 2012 2:16 PM
To: Hall, Christopher (C.)
Cc: Kramer, Michael (M.T.)
Subject: FW: **Update on** 1 of the 12 New CAC install under engineering evaluation from Down in Florida (VIN# 1FTFW1ET6BF
Importance: High

In addition to Rick's request to verify the external blocker plate is also installed, does the misfire condition only happen when raining?

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Tuesday, September 25, 2012 10:52 AM
To: Sparks, Douglas (D.S.); Kramer, Michael (M.T.); Tyler, Jim (J.S.); McDonagh, Scot (S.M.)
Cc: Hall, Christopher (C.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.)
Subject: **Update on** 1 of the 12 New CAC install under engineering evaluation from Down in Florida (VIN# 1FTFW1ET6BF
Importance: High

Engineering Team,

The FSE (Chris Hall) left me a voice mail message this morning indicating that one of the vehicle's he installed the new CAC experience a repeat misfire/stumble from moisture in the CAC. The customer did state that it seem to be a little better with the new CAC, but he was still getting the concern to happen. This customer drives over 100 miles a day to and from work. I have attached the GCQIS report for this vehicle.

2

Is there anything the FSE should do or look for on this vehicle?

Chris, can you confirm that the deflector plate was installed on the new CAC when the repair was made?

<< Message: Report Summary for the CQIS Report#CHNB9001 >>

Regards, Rick Nowaczyk FCSD Product Concern Engineer F-150, Freestar/Monterey, Ford GT, Th!nk E-mail: <u>rnowaczy@ford.com</u> Diagnostic Service Center-I, Allen Park PH# 313-322-7251

Subject: Location:	FW: 11/12MY P415 CAC TSB Approval webex
Start: End: Show Time As:	Wed 6/19/2013 4:00 PM Wed 6/19/2013 4:30 PM Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	Ronzi, Bill (W.C.)

-----Original Appointment-----From: Ronzi, Bill (W.C.) Sent: Wednesday, June 19, 2013 8:40 AM To: Ronzi, Bill (W.C.); Ott, David (D.J.); Halseth, Craig (C.M.) Subject: FW: 11/12MY P415 CAC TSB Approval When: Wednesday, June 19, 2013 4:00 PM-4:30 PM (UTC-05:00) Eastern Time (US & Canada). Where: webex

David – FYI.

-----Original Appointment-----From: Ronzi, Bill (W.C.) Sent: Tuesday, June 18, 2013 7:27 PM To: Ronzi, Bill (W.C.); Halseth, Craig (C.M.) Subject: FW: 11/12MY P415 CAC TSB Approval When: Wednesday, June 19, 2013 4:00 PM-4:30 PM (UTC-05:00) Eastern Time (US & Canada). Where: webex

Craig, Pls join us for this discussion if possible.

Thx, Bill Ronzi

----Original Appointment----From: Ronzi, Bill (W.C.)
Sent: Tuesday, June 18, 2013 3:44 PM
To: Ronzi, Bill (W.C.); Ricks, Kevin (K.J.); Norton, John (J.K.); Madej, Jeanette (J.); Russo, Scott (S.); Kramer, Michael (M.T.); Andersen, Erik (E.); Sparks, Douglas (D.S.) (dsparks3@ford.com); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Cc: Falahee, Thomas (T.M.); Logel, Jay (J.D.)
Subject: 11/12MY P415 CAC TSB Approval
When: Wednesday, June 19, 2013 4:00 PM-4:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: webex

[Do not add or change anything below this line. The information in this section may be replaced with your meeting details after you click Send.]

WebEx Meeting Information

Meeting Number: 710 469 451 Meeting Password: This meeting does not require a password. Meeting Link: <u>https://ford.webex.com/ford/j.php?J=710469451</u>

This meeting may include the option for video. The recording of meetings is prohibited. For company policies on using video click here:

https://comm.sp.ford.com/sites/digitalworker/Pages/HowiWorkItem.aspx?UCTitle=to%20use%20Video&UCID=&Page= 2&Section=2.001

Audio conference information

To receive a call back, provide your phone number when you join the meeting, or call the number below and enter the access code.

US Toll Free Number: +1-888-628-3668

FordNet 248-3668 / Toll: +1-313-248-3668

Global call-in numbers: <u>https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=236384877&tollFree=1</u> Toll-free dialing restrictions: <u>http://www.webex.com/pdf/tollfree_restrictions.pdf</u>

Access code:710 469 451

MC12

http://www.webex.com

From:	Nowaczyk, Rick (R.J.)
Sent:	Thursday, January 10, 2013 4:04 PM
To:	McDonagh, Scot (S.M.); Kramer, Michael (M.T.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Selthofer, Adam (A.)
Cc:	Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject:	FW: '13 F-150 B2 CAC Misfire - CQIS Report#CK2EB014

importance:

High

Powertrain Team,

Here is another 2013MY CAC misfire with the new CAC. The concern acts up for the customer after driving on the highway for extended periods (2-4 hours) in raining/damp conditions. Stumble on acceleration and setting bank 2 misfire codes. This customer was traded out of their 2011 3.5L GTDI for the CAC misfire into this 2013 MY truck having the same concern.

From: Ridolfi, Dominic (D.R.) Sent: Thursday, January 10, 2013 3:33 PM To: Nowaczyk, Rick (R.J.) Subject: '13 F-150 B2 Miss - CQIS Report#CK2EB014

From: Ridolfi, Dominic (D.R.) Sent: Thursday, January 10, 2013 3:32 PM To: Ridolfi, Dominic (D.R.) Subject: OBC - '13 F-150 B2 Miss - CQIS Report#CK2EB014

Attachments: 0

Report# :	CK2EB014 N	HL		Received:	11/28/2012
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2013,F150 43 ,1FTFW1ET8	4 ,F150 ,SUP CRW.STYS	D	Build Date:	10/24/2012
Odometer :	4,207 M	Engine:	3.5L-GTDI	Calibration	:
Transmission:	6R80E	Axle:		A/C:	YES
Dealer:	USA 00469 E	ondy's Ford Lincoln		Phone#:	(334) 792- 5171
City:	Dothan	State:	Alabama	Country :	USA
Originator:	MARTY FORSTER				
Symptom:	5 50 2 39 DRV PERF, RUNS ROUGH, ACCEL, INTERMITTENT				
Status:					
VFG:	V52 DRIVEABILITY				
Additional Symptom:	STUMBLE ON ACCEL				

Causal Component :

Fix: Condition Code:

Condition Code:			
Hotliner:	DRIDOLF2	Phone: 313 248-8241	Regn Cd: S1 Atlanta
Engineerin	ıg:	Phone:	TAR:
Dlr Contac	et: MARTY FORSTER	Phone: 334 792	2-5171 Title Cde: T
DTCs:			
KOEO:			
KOEC:			
KOER:			
Comments			
: REPAIR		OMINIC RIDOLFI MSS - FCSD ONCERN:CS WHILE DRIVINC	
	THE TRUCK WILL ST		HT FLASHES DIAGNOSTICS: CK
		SB 12-11-15 PARTS REPLACE	
	the first strategy is the second strategy and the		TSB BUT HAS SAME CONCERN
DECOMM		SB ON THIS TRUCK AND REI	
RECOMM		OMINIC RIDOLFI MSS - FCS	
			PERFORM TSB 12-11-15 ON THIS
			CAC LISTED IN THE TSB FROM
			D HAVE NO EFFECT ON THE
		TE IF YOU HAVE BEEN ABL	
			ODULES FOR DTCS AND UPDATE
		Y RETURNED. IF YOU ARE A AKE A RECORDING OF THE	
		PRESS), CHT(TEMP), CYL (1-0	5) ACCL EO BATH
			DSD, GEAR, KNK CNTR CYL
			T2, MAP(PRESS), NUM MISFIRE,
			RUNTM, SHRTFT1, SHRTFT2, TIP
			, VREF, VSS. MONITOR THE
	이야지 않는 것은 소문에 집에 집에 들었다.		FORMATION. READINGS NEAR -1
			FIRE, VERIFY THAT, WITH THE
			FRP DESIRED CLOSELY. IF FRP
		2	

ACTUAL IS DROPPING LOWER THAN DESIRED, THIS INDICATES A FUEL DELIVERY CONCERN. MONITOR TIP VOLTAGE FOR A SAW-TOOTHED PATTERN, INDICATING A POSSIBLE TIP SENSOR OR TIP SENSOR CIRCUIT CONCERN. WITH THE CONCERN PRESENT MONITOR FUEL TRIMS FOR A LEAN/RICH CONDITION. PLEASE UPDATE THIS FORM WITH THE ABOVE INFORMATION, THANK YOU.

REPAIR 11/28/2012 07:46PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE ON HVBOM IT SHOWS A DL3Z-6K775-A THIS IS THE SAME CAC AS THE DL3Z-6K775-B IN THE TSB?

RECOMM 11/28/2012 07:46PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE MARTY, THE HOTLINE HAS LIMITED PART LOOK UP CAPABILTY, THE BEST PLACE

TO CHECK PART NUMBERS WOULD BE PACO. PLEASE DIRECT YOUR QUESTION ON

THIS PARTS ISSUE TO THE PARTS ASSISTANCE CENTER. SELECT PACO (PARTS ASSISTANCE CENTER ONLINE) UNDER PARTS & SERVICE TAB ON FMCDEALER.

- REPAIR 01/07/2013 11:28AM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: CS ENGINE HESITATES AND STUMBLES UNDER ACCEL WHILE DRIVING IN WET CONDITIONS DIAGNOSTICS ALREADY COMPLETED: CK CODES HAS MIFIRE CODES PARTS REPLACED: NONE MADE HOTLINE CONTACT ON LAST VISIT WITH NO REPAIR SUGGESTION TECH'S QUESTION: IS THERE ANY NEW INFOR OUT ON 2013 ON THE HESTATION OR STUMBLE WHILE DRIVING IN THE RAIN FOR A PERIOD OF TIME THEN ACCELL? IT HAS HAPPENED TWO TIMES SINCE THE LAST CONTACT. DTC: P0300 MODULE: PCM DTC: P0304 MODULE; PCM DTC: P0305 MODULE: PCM DTC: P0306 MODULE: PCM
- RECOMM 01/07/2013 11:28AM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE MARTY, THERE IS NO ADDITIONAL INFORMATION FOR THIS CONCERN ON THIS BUILD DATE VEHICLE. THIS REPORT WILL BE FORWARDED ON FOR ADDITIONAL REVIEW. AFTER ADDITIONAL RESEARCH CAN BE PERFORMED, YOU WILL BE CONTACTED BY PHONE WITHIN 1 BUSINESS DAY.
- ADD-ON 01/07/2013 11:28AM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE CONSULTED ROBERT ABERCROMBIE ON THIS CONTACT. ROBERT OR DOMINIC WILL

PERFORM ADDITIONAL RESEARCH AND CONTACT THE DEALER BY PHONE.

AUDIT 01/07/2013 11:28AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE ODOMETER 600 M CHANGED TO 4207 M BY DKVENVOL

REPAIR 01/08/2013 06:46PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE MARTY, AN ATTEMPT WAS MADE TO REACH YOU AT THE DEALER HOWEVER IT WAS

3

INDICATED YOU HAD LEFT FOR THE DAY.

RECOMM 01/08/2013 06:46PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE A REPRESENTATIVE FROM THE HOTLINE WILL CONTACT YOUR DEALER BY PHONE

TOMORROW.

- **REPAIR** 01/09/2013 05:19PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE ATTEMPTED TO CONTACT MARTY AGAIN, UNABLE.
- **RECOMM 01/09/2013 05:19PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE** MARTY, WE WILL CALL BACK TOMORROW AM.
- REPAIR 01/10/2013 03:31PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE CALLED MARTY TO DISCUSS VEHICLE CONCERN. DEALER HAS NOT BEEN ABLE TO

DUPLICATE CONCERN DUE TO SPECIFIC CONDITIONS THAT NEED TO BE PRESENT FOR CONCERN TO OCCUR. THE CUSTOMER DESCRIPTION OF THE CONCERN WAS DISCUSSED AT LENGTH WITH MARTY AND IS AS FOLLOWS: CONCERN IS VERY INTERMITTENT IN NATURE AND IS DEPENDENT ON WEATHER. CONCERN CAN ONLY

BE DUPLICATED WHEN CUSTOMER DRIVES VEHICLE FOR EXTENDED PERIODS OF TIME "2-4 HOURS" IN RAINY CONDITIONS. AFTER EXTENDED DRIVING ON HIGHWAY DURING RAIN, CUSTOMER WILL ATTEMPT TO PASS ANOTHER VEHICLE.

WHEN ATTEMPTING TO PASS, THE VEHICLE WILL LOSE POWER/STUMBLE, SETTING

THE BANK TWO P030X DTCS. THE VEHICLE IS CURRENTLY NOT AT THE DEALERSHIP, IT HAS BEEN RETURNED TO THE CUSTOMER SO THE CUSTOMER IS ABLE TO DRIVE HIS VEHICLE WHILE THE DEALER DETERMINES A DIRECTION FOR

THIS CONCERN.

RECOMM 01/10/2013 03:31PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE MARTY, THANK YOU FOR THIS INFORMATION. A REPRESENTATIVE FROM THE HOTLINE WILL CONTACT YOU BY PHONE WITHIN ONE (1) BUSINESS DAY TO DISCUSS THIS ISSUE.

4

ADD-ON 01/10/2013 03:31PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE MARTY FORSTER (SHOP FOREMAN) CELL PHONE: (229) 220-6804 From: Sent: To: Subject: Smith, Craig (C.A.) Thursday, January 10, 2013 1:27 PM Leisenring, Kenneth (K.C.) FW: '13 F-150 B2 CAC Misfire - CQIS Report#CK2EB014

Importance:

High

Ken,

We seeing misfires/customer complaints on some F150 3.5L GTDI's with the PCA CAC. While the occurrence rate may be less with the PCA CAC (need data analysis to confirm), I believe that FCSD is now carrying this in the emerging deck based upon the complaints that are still coming into the dealerships.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Nowaczyk, Rick (R.J.)
Sent: Thursday, January 10, 2013 4:04 PM
To: McDonagh, Scot (S.M.); Kramer, Michael (M.T.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Selthofer, Adam (A.)
Cc: Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject: FW: '13 F-150 B2 CAC Misfire - CQIS Report#CK2EB014
Importance: High

Powertrain Team,

Here is another 2013MY CAC misfire with the new CAC. The concern acts up for the customer after driving on the highway for extended periods (2-4 hours) in raining/damp conditions. Stumble on acceleration and setting bank 2 misfire codes. This customer was traded out of their 2011 3.5L GTDI for the CAC misfire into this 2013 MY truck having the same concern.

From: Ridolfi, Dominic (D.R.) Sent: Thursday, January 10, 2013 3:33 PM To: Nowaczyk, Rick (R.J.) Subject: '13 F-150 B2 Miss - CQIS Report#CK2EB014

From: Ridolfi, Dominic (D.R.) Sent: Thursday, January 10, 2013 3:32 PM To: Ridolfi, Dominic (D.R.) Subject: OBC - '13 F-150 B2 Miss - CQIS Report#CK2EB014

Attachments : 0

Report# :	CK2EB014 NHL	Received: 1	1/28/2012
CCRG/EPRC:	Reviewed Status:	Date:	
Vehicle:	2013,F150 4X4 ,F150 ,SUP CRW,STYSD	Build Date: 1	0/24/2012

1

,1FTFW1ET8DF

Odometer :	4,207 M	Engine:		3.5L-GTDI	Calibration	12
Transmission:	6R80E	Axle:			A/C:	YES
Dealer:	USA 00469 E	Bondy's Ford Linco	ln		Phone#:	(334) 792- 5171
City:	Dothan	State:		Alabama	Country :	USA
Originator:	MARTY FOI	RSTER				
Symptom:	5 50 2 39 DR	V PERF, RUNS RO	UGH, ACCEL, IN	TERMITTENT		
Status:						
VFG:	V52 DRIVE	BILITY				
Additional Symptom:	STUMBLE ON ACCEL					
Fix:	Causal Component :					
Condition Code:						
Hotliner: DR	UDOLF2	Phone: 3	13 248-8241	Regn (Cd: S1 Atlant	a
Engineering:			Phone:		TAR:	
DIr Contact:	MARTY FOR	STER	Phone: 334	792-5171	Title C	Cde: T
DTCs:						
KOEO:						
KOEC:						
KOER:						

Comments

:

REPAIR 11/28/2012 05:42PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE
 WEB FORM DATA - CONCERN:CS WHILE DRIVING IN THE RAIN AND ACCELARATES
 THE TRUCK WILL STUMBLE AND CK ENGINE LIGHT FLASHES DIAGNOSTICS: CK OASIS AND FOUND TSB 12-11-15 PARTS REPLACED:NONE TECH
 QUESTION:THE BUILD DATE IS NOT WITHIN THE TSB BUT HAS SAME CONCERN SHOULD I USE THE TSB ON THIS TRUCK AND REPLACE THE CAC?
 RECOMM 11/28/2012 05:42PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE
 MARTY, IT WOULD NOT BE RECOMMENDED TO PERFORM TSB 12-11-15 ON THIS VEHICLE. THIS VEHICLE IS EQUIPPED WITH THE CAC LISTED IN THE TSB FROM THE FACTORY, SO PERFORMING THIS TSB WOULD HAVE NO EFFECT ON THE

VEHICLE. PLEASE NOTE IF YOU HAVE BEEN ABLE TO DUPLICATE THIS

CONCERN. IF NOT ALREADY DONE, SCAN ALL MODULES FOR DTCS AND UPDATE THIS FORM WITH ANY RETURNED. IF YOU ARE ABLE TO DUPLICATE THIS CONCERN, PLEASE MAKE A RECORDING OF THE EVENT FEATURING THE FOLLOWING

PIDS: APP(%), BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), FRP (PRESS), FRP_DSD, GEAR, KNK_CNTR_CYL (1-6), KNK_RATE_LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TIP VOLTAGE, TIP_PRS-BOOST, TQ_CNTRL, TR, VPWR, VREF, VSS. MONITOR THE CYLINDER ACCELERATION PIDS FOR MISFIRE INFORMATION. READINGS NEAR -1 ON THE HISTOGRAM INDICATE A DETECTED MISFIRE. VERIFY THAT, WITH THE CONCERN PRESENT, FRP ACTUAL IS MATCHING FRP DESIRED CLOSELY. IF FRP ACTUAL IS DROPPING LOWER THAN DESIRED, THIS INDICATES A FUEL DELIVERY CONCERN. MONITOR TIP VOLTAGE FOR A SAW-TOOTHED PATTERN, INDICATING A POSSIBLE TIP SENSOR OR TIP SENSOR CIRCUIT CONCERN. WITH THE CONCERN PRESENT MONITOR FUEL TRIMS FOR A LEAN/RICH CONDITION. PLEASE UPDATE THIS FORM WITH THE ABOVE INFORMATION, THANK YOU.

REPAIR 11/28/2012 07:46PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE ON HVBOM IT SHOWS A DL3Z-6K775-A THIS IS THE SAME CAC AS THE DL3Z-6K775-B IN THE TSB?

RECOMM 11/28/2012 07:46PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE MARTY, THE HOTLINE HAS LIMITED PART LOOK UP CAPABILTY, THE BEST PLACE

TO CHECK PART NUMBERS WOULD BE PACO. PLEASE DIRECT YOUR QUESTION ON

THIS PARTS ISSUE TO THE PARTS ASSISTANCE CENTER. SELECT PACO (PARTS ASSISTANCE CENTER ONLINE) UNDER PARTS & SERVICE TAB ON FMCDEALER.

REPAIR 01/07/2013 11:28AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: CS ENGINE HESITATES AND STUMBLES UNDER ACCEL WHILE DRIVING IN WET CONDITIONS DIAGNOSTICS ALREADY COMPLETED: CK CODES HAS MIFIRE CODES PARTS REPLACED: NONE MADE HOTLINE CONTACT ON LAST VISIT WITH NO REPAIR SUGGESTION TECH'S QUESTION: IS THERE ANY NEW INFOR OUT ON 2013 ON THE HESTATION OR STUMBLE WHILE DRIVING IN THE RAIN FOR A PERIOD OF TIME THEN ACCELL? IT HAS HAPPENED TWO TIMES SINCE THE LAST CONTACT. DTC: P0300 MODULE: PCM DTC: P0304 MODULE: PCM DTC: P0305 MODULE: PCM DTC: P0306 MODULE: PCM

RECOMM 01/07/2013 11:28AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE MARTY, THERE IS NO ADDITIONAL INFORMATION FOR THIS CONCERN ON THIS BUILD DATE VEHICLE. THIS REPORT WILL BE FORWARDED ON FOR ADDITIONAL REVIEW. AFTER ADDITIONAL RESEARCH CAN BE PERFORMED, YOU WILL BE CONTACTED BY PHONE WITHIN 1 BUSINESS DAY.

ADD-ON 01/07/2013 11:28AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE CONSULTED ROBERT ABERCROMBIE ON THIS CONTACT. ROBERT OR DOMINIC WILL

PERFORM ADDITIONAL RESEARCH AND CONTACT THE DEALER BY PHONE.

- AUDIT 01/07/2013 11:28AM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE ODOMETER 600 M CHANGED TO 4207 M BY DKVENVOL
- REPAIR 01/08/2013 06:46PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE MARTY, AN ATTEMPT WAS MADE TO REACH YOU AT THE DEALER HOWEVER IT WAS

INDICATED YOU HAD LEFT FOR THE DAY.

- RECOMM 01/08/2013 06:46PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE A REPRESENTATIVE FROM THE HOTLINE WILL CONTACT YOUR DEALER BY PHONE TOMORROW.
- REPAIR 01/09/2013 05:19PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE ATTEMPTED TO CONTACT MARTY AGAIN, UNABLE.
- RECOMM 01/09/2013 05:19PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE MARTY, WE WILL CALL BACK TOMORROW AM.
- REPAIR 01/10/2013 03:31PM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE CALLED MARTY TO DISCUSS VEHICLE CONCERN. DEALER HAS NOT BEEN ABLE TO

DUPLICATE CONCERN DUE TO SPECIFIC CONDITIONS THAT NEED TO BE PRESENT FOR CONCERN TO OCCUR. THE CUSTOMER DESCRIPTION OF THE CONCERN WAS DISCUSSED AT LENGTH WITH MARTY AND IS AS FOLLOWS: CONCERN IS VERY INTERMITTENT IN NATURE AND IS DEPENDENT ON WEATHER. CONCERN CAN ONLY

BE DUPLICATED WHEN CUSTOMER DRIVES VEHICLE FOR EXTENDED PERIODS OF TIME "2-4 HOURS" IN RAINY CONDITIONS. AFTER EXTENDED DRIVING ON HIGHWAY DURING RAIN, CUSTOMER WILL ATTEMPT TO PASS ANOTHER VEHICLE.

WHEN ATTEMPTING TO PASS, THE VEHICLE WILL LOSE POWER/STUMBLE, SETTING

THE BANK TWO P030X DTCS. THE VEHICLE IS CURRENTLY NOT AT THE DEALERSHIP, IT HAS BEEN RETURNED TO THE CUSTOMER SO THE CUSTOMER IS ABLE TO DRIVE HIS VEHICLE WHILE THE DEALER DETERMINES A DIRECTION FOR

THIS CONCERN.

RECOMM 01/10/2013 03:31PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

4

MARTY, THANK YOU FOR THIS INFORMATION. A REPRESENTATIVE FROM THE HOTLINE WILL CONTACT YOU BY PHONE WITHIN ONE (1) BUSINESS DAY TO DISCUSS THIS ISSUE.

ADD-ON 01/10/2013 03:31PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE MARTY FORSTER (SHOP FOREMAN) CELL PHONE: (229) 220-6804 From: Sent: To: Subject: Andersen, Erik (E.) Thursday, May 02, 2013 11:57 AM Widmann, Carl (C.A.) FW: 2011 P415 w/ 7 tube blocker

FYI....we are quickly progressing a plan for the bottom 7-tube blocker. Latest test data indicates we deliver equivalent or better performance than the PCA setup on the 2011 / 12 my CAC's.

Next steps are to repeat the exercise on the 2013 and beyond. I think Erik is aligned based on my earlier conversations with him, but wanted to make sure you were aware there are additional workstreams that we need to manage.

We have engaged the supplier, but given the angle of the CAC the DV isn't as straight forward. We are working through that now.

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966

From: Andersen, Erik (E.) Sent: Thursday, May 02, 2013 10:56 AM To: Weber, Erik (E.M.) Subject: RE: 2011 P415 w/ 7 tube blocker

Can we repeat this same exercise with the latest CAC minus the internal blockers? My guess is that it should perform similarly, maybe slightly worse than the original CAC from an MCT perspective.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Weber, Erik (E.M.)
Sent: Wednesday, April 24, 2013 9:20 AM
To: Andersen, Erik (E.); Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Cc: Widmann, Carl (C.A.)
Subject: RE: 2011 P415 w/ 7 tube blocker

I installed the original 2013 CAC into TASE's workhorse P415, 566w329. In doing so, I discovered that the compressor bypass valve assembly we have on that truck still has a sterolith prototype housing. Functionally it should be okay though. The vehicle is all ready to go for Thursday's test slot.

Erik M. Weber

Ford Motor Company TASE - FNA VE P552 Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Andersen, Erik (E.)
Sent: Tuesday, April 23, 2013 3:16 PM
To: Weber, Erik (E.M.); Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Cc: Widmann, Carl (C.A.)
Subject: RE: 2011 P415 w/ 7 tube blocker

Thanks Erik!

I will set some time for us to get together tomorrow to talk about a test plan. I think it will involve variants of the external block with and without the latest grill insert proposal.

We can provide different external blocker configurations.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Weber, Erik (E.M.)
Sent: Tuesday, April 23, 2013 1:46 PM
To: Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Cc: Widmann, Carl (C.A.); Andersen, Erik (E.)
Subject: RE: 2011 P415 w/ 7 tube blocker

Looks like I will be able to swap the CACs myself over at the wind tunnel. We're on the schedule for Thursday morning.

Jim, do you still need to examine the CAC before I install it? I will be bringing it over to the WT around 2:15 this afternoon. You're welcome to join me in the "busted knuckles garage" while I wrench on this thing...

Erik M. Weber

Ford Motor Company TASE - FNA VE P552 Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Kramer, Michael (M.T.)
Sent: Tuesday, April 23, 2013 9:28 AM
To: Tyler, Jim (J.S.)
Cc: Widmann, Carl (C.A.); Andersen, Erik (E.); Weber, Erik (E.M.)
Subject: RE: 2011 P415 w/ 7 tube blocker

Jim, please take a look at this CAC. High priority and visibility on testing an original J1 CAC with an external lower tube blocker.

If any doubt not the right part then need to get the right one. Do you have any original level (J1) CACs on hand?

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt

Cell Phone: (313) 805-0190 Text Page: mkramer1 <u>Page from outside Ford</u>, External email: <u>mkramer1@ford.com</u>

From: Andersen, Erik (E.) Sent: Tuesday, April 23, 2013 8:26 AM To: Weber, Erik (E.M.); Kramer, Michael (M.T.) Cc: Widmann, Carl (C.A.) Subject: RE: 2011 P415 w/ 7 tube blocker

Mike,

Can you please have someone confirm it is the correct level CAC? We need to ensure we have the right config.

It should be the 14 cell, internal louvered CAC.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Weber, Erik (E.M.) Sent: Tuesday, April 23, 2013 7:36 AM To: Andersen, Erik (E.); Kramer, Michael (M.T.) I located a non-PCA 2013 CAC in the VEMC parts crib yesterday. I need to extract it from the pellet it's on and get it over to the wind tunnel. I believe the CAC can be swapped out on site; there aren't that many connections.

Erik M. Weber

Ford Motor Company TASE - FNA VE P552 Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Andersen, Erik (E.)
Sent: Monday, April 22, 2013 4:44 PM
To: Weber, Erik (E.M.); Kramer, Michael (M.T.)
Subject: RE: 2011 P415 w/ 7 tube blocker
Importance: High

Erik,

We just met with Julie and need to get priority to test this ASAP. I've got a call into Carl for whatever help is needed to get this run. Essentially what I'd be looking for is how much lower blocker you can tolerate from an MCT perspective on the original CAC. Whatever configuration you come up with, I'd go test for condensate. At the same time, we could give the configuration to Valeo to assess various proposals to deliver equivalent performance.

Can you please get the request out for tunnel time? Honestly, Julie is looking for a test to be completed this week.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Weber, Erik (E.M.)
Sent: Wednesday, April 17, 2013 10:41 AM
To: Andersen, Erik (E.); Kramer, Michael (M.T.)
Subject: RE: 2011 P415 w/ 7 tube blocker

Not exactly sure. The schedule is booked solid for a few weeks, but cancellations always happen. Plus, we might be able to pull rank and bump a less critical test.

Erik M. Weber

Ford Motor Company TASE - FNA VE P552 Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Andersen, Erik (E.)
Sent: Wednesday, April 17, 2013 10:12 AM
To: Kramer, Michael (M.T.); Weber, Erik (E.M.)
Subject: RE: 2011 P415 w/ 7 tube blocker

When do you think it could be run?

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Kramer, Michael (M.T.)
Sent: Wednesday, April 17, 2013 8:51 AM
To: Weber, Erik (E.M.)
Cc: Andersen, Erik (E.)
Subject: RE: 2011 P415 w/ 7 tube blocker

Great. This could be a potential high value service fix and is getting some attention

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: <u>mkramer1@ford.com</u>

From: Weber, Erik (E.M.) Sent: Wednesday, April 17, 2013 8:48 AM To: Kramer, Michael (M.T.) I think I still have the original non-PCA 2013 CAC, fully instrumented. Let me check my storage crib and see if it's readily available...

Erik M. Weber

Ford Motor Company TASE - FNA VE P552 Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Kramer, Michael (M.T.)
Sent: Wednesday, April 17, 2013 8:04 AM
To: Weber, Erik (E.M.)
Cc: Andersen, Erik (E.); Kramer, Michael (M.T.)
Subject: FW: 2011 P415 w/ 7 tube blocker

Erik, can you squeeze this in near term? It is an interesting idea.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Andersen, Erik (E.)
Sent: Tuesday, April 16, 2013 7:26 PM
To: Widmann, Carl (C.A.)
Cc: Kramer, Michael (M.T.)
Subject: 2011 P415 w/ 7 tube blocker

Carl,

Would it be possible to run a P415 with the original 2011MY CAC and 7-tube external blocker to understand the impact to MCT? It has the higher fin density, internal louvers, and no internal blocker. It should perform much better than the PCA CAC and blocker from an MCT perspective. We need to understand if it is a feasible, better solution versus the CAC replacements we are doing today.

We have a vehicle you could use, but it would need to be instrumented for your needs.

Please let me know. We are meeting with Robert Brown tomorrow and will be going through next steps with him.

Thanks,

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From:
Sent:
To:
Subject:

Smith, Craig (C.A.) Friday, October 28, 2011 8:45 AM May, David (D.A.); Moore, Brian (B.M.) FW: 3.5 Mis

Just to keep you guys informed regarding the 12MY P415 GTDI R08 VOCF testing.....

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

 From:
 Smith, Craig (C.A.)

 Sent:
 Friday, October 28, 2011 8:42 AM

 To:
 Hepburn, Mitch (M.); Gernant, Tim (T.R.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Graham, Daniel (D.B.); De Coste, Bill (W.J.); Lehmkuhl, David (D.B.)

 Cc:
 Tatro, James (J.E.); Sims, Ivan (I.D.); Cockerill, Al (C.A.); Mazuchowski, James (J.A.)

 Subject:
 RE: 3.5 Mis

Digging into this issue a little further, per DEMS driver feedback contained in AIMS 3192618, this vehicle (CKD00034) had also experienced a similar issue on 9/14 @8:00pm (before R08).

See driver comment "DC 77921" in the link below

https://web.aim.ford.com/owa.cgi/Frameset.Main?psRD=2011.09.12.06.52.27&psIssueID=3192618

Two independent reviews of the latest VDR data captured w/R08 indicated that the system reacted quickly and appropriately to the misfire that occurred on 10/26.



The cross functional misfire investigation team also reviewed the VDR data in detail yesterday and came to the same conclusion.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

 From:
 Hepburn, Mitch (M.)

 Sent:
 Thursday, October 27, 2011 1:43 PM

 To:
 Gernant, Tim (T.R.); Garrett, David (D.P.); Whitehead, Joseph (J.P.); Smith, Craig (C.A.); Graham, Daniel (D.B.); De Coste, Bill (W.J.)

 Cc:
 Tatro, James (J.E.)

 Subject:
 3.5 Mis

Here is the lastest, CKD00034 Grounded in Denver, Chris white (Denver) is working with powertrain. The other three units seem to be fine.

<< File: 3 5L MIS Daily Report 10-26-2011.xls >>

Mitch Hepburn Roush Industries Vehicle Coordinator U377-2012 VN127-2012 C346-2012.25 BEV mhepbur1@ford.com Cell - 734-748-5728

From:	Baskins, Robert (R.S.)	
Sent:	Friday, October 28, 2011 7:18 AM	
To:	Gernant, Tim (T.R.); Smith, Craig (C.A.); Pawlak, Greg (G.J.)	
Cc:	Baskins, Robert (R.S.)	
Subject:	RE: Issue Alert: 1FTFW1ET0CK CK P0306(Cylinder 6 Misfire Detected),	
	3.5L ECO / P415 / ATX	

After looking at the data, this does look like a bank misfire from the monitor signals. The misfire counts after the "mis_pb_norm" signals faded on bank 2 would have come from the PC-rev signal. So, the Monitor changes all appear to have worked as intended here.

Bob Baskins PT Control Design Sr. Engineer – Gasoline Ignition Subsystem Global Powertrain Control Systems Engineering Powertrain Controls & Calibration Engineering Ford Motor Company / Building #2 / Cube 22M35 E-mail: <u>rbaskins@ford.com</u> Mob: (313) 805-7023 ONE FORD: ONE Plan - ONE Team - ONE Goal

From: Gernant, Tim (T.R.) Sent: Wednesday, October 26, 2011 1:42 PM To: Smith, Craig (C.A.); Pawlak, Greg (G.J.); Baskins, Robert (R.S.) Subject: FW: Issue Alert: 1FTFW1ET0CK

Head's up! I have not reviewed the data yet. It looks like we set 3 DTC's.

Tim Gernant OBD Calibration Technical Expert Powertrain Feature Calibration TEE 1AE33 - Ph: (313) 805-4962 mailto:tgernant@ford.com From: gualifier@control-tec.com [mailto:gualifier@control-tec.com]

Sent: Wednesday, October 26, 2011 1:38 PM Subject: Issue Alert: 1FTFW1ETOCK

Hello,

The following trigger was detected by Qualifier on vehicle 1FTFW1ET0CK	CK	and 3.5L ECO
/ P415 / ATX:		Ċ.

Event Name : P0306 - Cylinder 6 Misfire Detected Event ID : <u>8696</u> Module: E8 Occurred on: 2011-10-26 17:19:43 Location : Brush, CO Datafile : 1FTFW1ET0CK __DTC---Active-or-Pending_2011-10-26 17-19-43.csv.zip

Manage your issue alert settings here.

Thank you,

The Qualifier Team at Control-Tec



×

999 Republic Dr. Suite 100, Allen Park, MI 48101 www.control-tec.com

This e-mail, and any attachments, is intended solely for use by the addressee(s) named above. It may contain confidential or proprietary information of Control-Tec LLC, its subsidiaries, affiliates or business partners. If you are not the intended recipient of this e-mail or are an unauthorized recipient of the information, you are hereby notified that any dissemination, distribution or copying of this e-mail or any attachments, is strictly prohibited. If you have received this e-mail in error, please immediately notify the sender by reply e-mail and permanently delete the original and any copies or printouts.

Computer viruses can be transmitted via email. The recipient should check this e-mail and any attachments for the presence of viruses. Control-Tec LLC accepts no liability for any damage caused by any virus transmitted by this e-mail.

From: Sent:	Gernant, Tim (T.R.) Wednesday, October 26, 2011 1:56 PM
То:	Garrett, David (D.P.)
Cc:	Michela, Mike (M.); Baskins, Robert (R.S.); Smith, Craig (C.A.); Wagers, Sue (S.K.); Weber,
	Michael (M.J.); Mingo, Paul (P.C.); Sims, Ivan (I.D.)
Subject:	RE: 2012 P415 Job #1 Options - Follow Up Mtg

This vehicle set both a P0305 & P0306. The vehicle was running fine until it downshifted into 2^{nd} gear and rev'd up to ~4600 rpm with and engine load greater than 1. Then the monitor detected a misfiring condition (55 counts on cyl #6 and 20 counts on cyl #5) and went into FMEM. This is what the calibration release was designed to do, it protected the catalyst.

Now we're left with the question that this calibration release does not address, why does cylinder #6 start misfiring?

Tim Gernant

OBD Calibration Technical Expert Powertrain Feature Calibration TEE 1AE33 - Ph: (313) 805-4962 mailto:tgernant@ford.com

From: Garrett, David (D.P.)
Sent: Wednesday, October 26, 2011 1:46 PM
To: Wagers, Sue (S.K.); Weber, Michael (M.J.); Mingo, Paul (P.C.); Gernant, Tim (T.R.); Sims, Ivan (I.D.)
Cc: Michela, Mike (M.)
Subject: FW: 2012 P415 Job #1 Options - Follow Up Mtg

What should we be recommending next steps should be?

 From:
 De Coste, Bill (W.J.)

 Sent:
 Wednesday, October 26, 2011 1:39 PM

 To:
 Mazuchowski, James (J.A.); Sims, Ivan (I.D.); Garrett, David (D.P.); Cockerill, AI (C.A.); Smith, Craig (C.A.); Lehmkuhl, David (D.B.); Mosquera, Frank (F.); Massara, Michael (M.G.); Sparks, Douglas (D.S.); Hart, Phillip (P.C.); Tejada, Angelito (A.S.); Loeher, Christopher (C.T.); DiMarco, Jackie Marshal (J.M.); Bld-1 13D112 (15)

 Subject:
 RE: 2012 P415 Job #1 Options - Follow Up Mtg

FYI: We have a flashing check engine light on the flashed 3.5L misfire cal unit on test in Denver right now.

From:	Mazuchowski, James (J.A.)
Sent:	Wednesday, October 26, 2011 8:55 AM
То:	Mazuchowski, James (J.A.); Sims, Ivan (I.D.); Garrett, David (D.P.); Cockerill, AI (C.A.); Smith, Craig (C.A.); Lehmkuhl, David
	(D.B.); Mosquera, Frank (F.); Massara, Michael (M.G.); Sparks, Douglas (D.S.); Hart, Phillip (P.C.); Tejada, Angelito (A.S.); De Coste, Bill (W.J.); Loeher, Christopher (C.T.); DiMarco, Jackie Marshal (J.M.); Bld-1 13D112 (15)
Subject:	2012 P415 Job #1 Options - Follow Up Mtg
When:	Thursday, October 27, 2011 11:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where:	13D112 / Audio PC 16891945
When: Thurs Canada).	day, October 27, 2011 11:00 AM-12:00 PM (GMT-05:00) Eastern Time (US $\&$
,	.12 / Audio PC 16891945

~~*~*~*~*~*~*

1

Purpose:

Follow-up assignment from 10/17 PDQR re: GTDI misfire ICA and implementation options.

Agenda:

1) What are the current MP1/MP2 2012 M.Y. dates ?

2) Discuss options of containing the vehicles and reflash to catch all vehicles prior to shipment.

3) What are the Oct/Nov (2012 M.Y.) weekly volumes (GTDI)?

4) Next steps.

From:	Fronckowiak, Todd (T.M.)
Sent:	Thursday, May 16, 2013 9:27 AM
То:	Britton, Eric (E.J.)
Subject:	FW: 3.5-liter

What we already knew and what I told Mark (P/T Communications) yesterday.

Best Regards, Todd Fronckowiak Assistant Director Global Automotive Safety and Compliance Automotive Safety Office Ford Motor Company Phone: (313) 337-6777 | Cell: (734) 837-9409

-----Original Message-----From: Schirmer, Mark (M.) Sent: Wednesday, May 15, 2013 6:04 PM To: Fronckowiak, Todd (T.M.); Kenner, Steve (S.M.); Felker, Kelli (K.F.) Subject: 3.5-liter

FYI -- no commonality between the F150 issue and the SHO issue. mhs

-----Original Message-----From: Mazuchowski, James (J.A.) Sent: Wednesday, May 15, 2013 5:52 PM To: Schirmer, Mark (M.) Cc: Madej, Jeanette (J.) Subject: RE: Per my voicemail...

Mark, new CAC was implemented on the F-150 on 9/2012.

FWD 3.5L Ecoboost doesn't have the problem. Different CAC design, different vehicle installation, underhood airflow, how hard we work the vehicle and engine, different speed and load operating points, etc..

Jim Mazuchowski Manager, V6 Engine Programs GEE; 313-337-9935 Help me raise \$\$ to fight Multiple Sclerosis - 2013 Bike MS <u>http://main.nationalmssociety.org/site/TR/Bike/MIGBikeEvents?px=4458825&pg=p</u> ersonal&fr_id=19330

-----Original Message-----

From: Schirmer, Mark (M.) Sent: Wednesday, May 15, 2013 4:55 PM To: Mazuchowski, James (J.A.) Subject: Per my voicemail...

Quick question related to the 3.5Ecoboost. Hot media story right now - we are trying to damp down. The CAC issue with the F-150. Understand that has been handled. Does that issue also cover the FWD versions of the 3.5-Liter. Same fix? Has that been implemented? Let me know ASAP, please.

Mark H. Schirmer Global Product Communications Manager Ford Motor Company Cell: 313-354-4962 www.ford.com From: Whitehead, Joseph (J.P.) Sent: Monday, March 26, 2012 6:43 AM To: Smith, Craig (C.A.); Syrylo, Tom (T.M.); Lisi, Paul (P.); Pierce, Michael (M.A.); Devries, Jason (J.E.) Subject: FW: AI and Kevin's end plates

Pictures of the latest CAC condensate "fix", blocking plates on the hot & cold ends of the CAC core.

Thanks,

Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com 313 805-5481



Yamada, Shuya Shark (S.Y.) Friday, March 23, 2012 3:51 PM Whitehead, Joseph (J.P.) FW: Al and Kevin's end plates



IMG_1098.JPG







IMG 1103.JPG



IMG_1102.JPG

Shown here is 32mm opening but Al made 27 and 30mm versions as well.

Let's see how good of a seal we can make to minimize the flow to the outer tubes.

Shark.

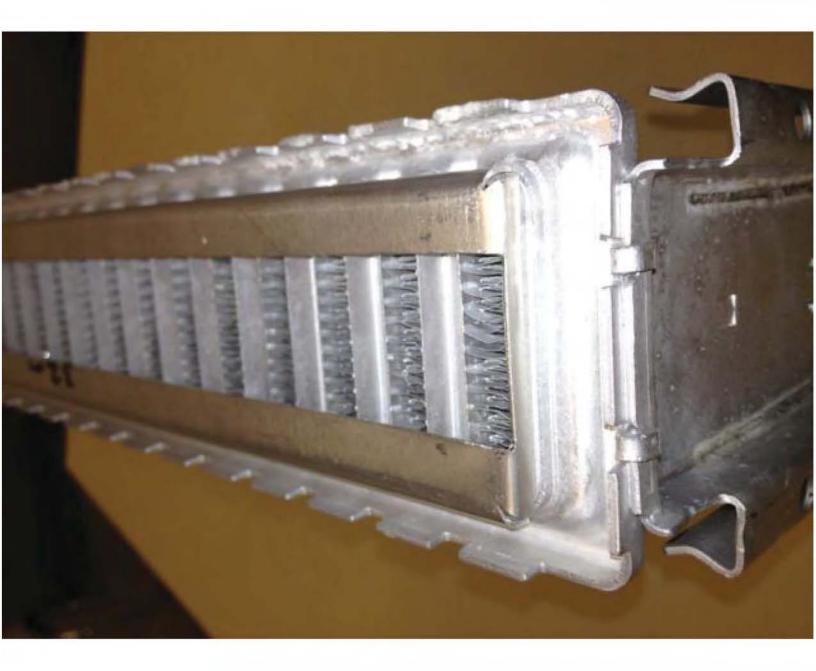












From: Sent:	Yamada, Shuya Shark (S.Y.) Tuesday, October 23, 2012 11:10 AM
То:	Kramer, Michael (M.T.); Andersen, Erik (E.); Ladd, John (J.R.); Sowards, John (J.); Norman, Kristofor (K.R.); Glugla, Chris (C.P.); Whitehead, Joseph (J.P.); Giunta, Michael (M.J.);
Subject:	Shaikh, F Zafar (.); Abarham, Mehdi (M.); Styles, Daniel (D.J.) FW: CAC Coating - Nano Pattern w/ Oil Film

Misfire Team,

Joe Whitehead found this interesting coating that helps to move the condensate on the surface. It sounds better than Teflon. Was the CAC surface coating that we tested in March similar to this?

It may be a "futuristic" but perhaps we could study the prototype CAC on the bench for stripping effectiveness and heat transfer.

May be Dupont could coat one of our CAC cores for us.

Shark.

From: Glugla, Chris (C.P.) Sent: Tuesday, October 23, 2012 9:30 AM To: Yamada, Shuya Shark (S.Y.) Subject: FW: CAC Coating - Nano Pattern w/ Oil Film

How about this coating?

Chris Glugla Technical Expert Advanced Controls Implementation Powertrain Controls Research and Development Research and Innovation Center 2101 Village Road Dearborn, MI. 48121 Cube 1625.g Phone: (313) 322-4692 Ford Cell: (313) 269-4471 Fax: (313)-2487857 MD: 2036 email: cglugla@ford.com

Whitehead, Joseph (J.P.) Tuesday, October 23, 2012 9:14 AM Cc:Whitehead, Joseph (J.P.)Subject:CAC Coating - Nano Pattern w/ Oil Film

http://www.pddnet.com/news/2012/10/better-way-shedwater?et_cid=2909559&et_rid=45614493&linkid=http%3a%2f%2fwww.pddnet.com%2fnews%2f2012%2f10%2fbetterway-shed-water

Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com 313 805-5481 From: Sent: To: Subject: Attachments: Ladd, John (J.R.) Tuesday, January 08, 2013 1:46 PM Kramer, Michael (M.T.); Tyler, Jim (J.S.); Hayes, Kenneth (K.J.) FW: CAC Freezing follow-up FW: Report Summary for the CQIS Report#DAGDQ021 DSCF2525.JPG JPG; DSCF2523.JPG; DSCF2520.JPG

Warranty.

From: Mohan, Robert (R.) Sent: Tuesday, January 08, 2013 12:25 PM To: Ladd, John (J.R.) Subject: FW: CAC Freezing follow-up FW: Report Summary for the CQIS Report#DAGDQ021

John Are you getting these reports?

Robert Mohan Air Induction Systems Supervisor 313-805-9810 rmohan@ford.com

From: Galas, Dean (C.K.)
Sent: Tuesday, January 08, 2013 11:35 AM
To: Sparks, Douglas (D.S.); Schaffer, Scott (S.A.); Mohan, Robert (R.); Dixon, Mark (M.R.)
Cc: Saad, Thomas (T.J.); Galas, Dean (C.K.); Miller, Brian (B.J.)
Subject: CAC Freezing follow-up FW: Report Summary for the CQIS Report#DAGDQ021

The following notes and attached photos are in response to a follow-up to my conversation with Dan Dobbs, P415 FCSD resident engineer. The Canadian FSE's were already discussing the freezing concern.

4

The pictures are from an old level CAC.

Live Long and Prosper

C. K. (Dean) Galas

P/T Resident Engineer Dearborn Truck Plant 313-337-9583 Dialnet 337-9583 cell phone 734-652-7907 dgalas@ford.com

From: Dobbs, Dan (K.D.) Sent: Tuesday, January 08, 2013 10:37 AM To: Galas, Dean (C.K.); Jabbour, Paul (P.) Subject: FW: Report Summary for the CQIS Report#DAGDQ021

Ice in CAC from Canada

From: Davis, Craig (C.B.) Sent: Tuesday, January 08, 2013 10:22 AM To: Dobbs, Dan (K.D.) Subject: RE: Report Summary for the CQIS Report#DAGDQ021

Dan, found an email with photos of ice in the CAC this vehicle still had the original level CAC.

1FTFW1ET0CF 30,951 KM

From: Davis, Craig (C.B.) Sent: Tuesday, January 08, 2013 10:05 AM To: Dobbs, Dan (K.D.) Subject: RE: Report Summary for the CQIS Report#DAGDQ021

Dan, we had a conference call with the Canadian FSEs yesterday, I had talked to them about a couple of issues relating to the CAC

- freeze up, on both levels of the CAC (pre and post TSB repairs)

- repeat issues following TSB 12-10-19 (CQIS Folder # 130002120000)

Looking at areas that would increase moisture/condensation, drive cycles, remote start use, fuel quality, distance of drive and air filter status

As I hear back I will advise you

From: Dobbs, Dan (K.D.) Sent: Tuesday, January 08, 2013 9:49 AM To: Davis, Craig (C.B.) Subject: Report Summary for the CQIS Report#DAGDQ021

Craig. We are interested in these concern. Can you advise your FSE's to let me know if they hear of any. We will watch the Hotline reports like usual. But, we thought the FSE's might be engaged indirectly.

Attachments : 0

Report# :	DAGDQ021 N	AT-IL.		Received:	01/07/2013
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2012,F150 4X ,1FTFW1ET3	4 ,F150 <u>,SUP</u> CRW,STYSD CF		Build Date:	04/12/2012
Odometer :	11,465 M	Engine:	3.5L-GTDI	Calibration:	CF613C0A
Transmission:	6 R 80E	Axle:		A/C:	YES
Dealer:	CAN A6040 (Iniversal Ford Lincoln Sales I.		Phone#:	(403) 291- 2800
City:	Calgary	Province	Alberta	Country :	CAN
Originator:	BRENT MAY				
Symptom:	5 52 2 39 DRV	V PERF, STALLS/QUITS, ACCE	L,INTERMIT	TENT	
Status:					

VFG: V52 DRIVEABILITY Additional Symptom: WATER IN CAC, SUSPECTS ICING Fix: Causal Component : Condition Code:

Hotliner: TROMANO7	Phone: 313 337+9132	Regn Cd: 06 06 FC	SD REGION-CANADA
Engineering:	Pho	one:	TAR:
Dir Contact: BRENT MAY	Phone	: 000 000-0000	Title Cde: T

DTCs: KOEO: KOEC:P2101 P2111 P0316 KOER:

Comments

:

REPAIR 01/07/2013 07:53PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA + CONCERN: CUSTOMER REPORTED THAT THE TRUCK STALLED AT

A LIGHT AND WAS HARD TO RESTART. ONCE RESTATED, MOVED IT TO A PARKING

RECOMM 01/07/2013 07:53PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE BRENT, IT IS POSSIBLE WATER FROZE ON THE THROTTLE AREA, RECOMMEND PERFORMING THE TSB AND RE-EVALUATING THE CONCERN. WITH THE SYMPTOMS

AND CODES RECEIVED YOU MAY BE CORRECT ABOUT THE ICING.







From: Sent: To: Cc: Subject: Whitehead, Joseph (J.P.) Friday, May 17, 2013 7:35 AM Baskins, Robert (R.S.) Smith, Craig (C.A.) FW: CAC Misfire - FMEM Demonstration

Bob,

Thanks much for the flashing light background note.

Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com 313 805-5481

From: Baskins, Robert (R.S.) Sent: Friday, May 17, 2013 5:54 AM To: Whitehead, Joseph (J.P.); Gernant, Tim (T.R.) Subject: RE: CAC Misfire - FMEM Demonstration

Joe,

I can't think of a way to do this with poking. Give me a call to discuss.

The PPT document in the attached note describes the rational for disabling the flashing MIL.

 \sum

2013 My 3.5L GTDI P415 Misfire...

Bob Baskins PT Control Design Sr. Engineer – Gasoline Ignition Subsystem Global Powertrain Control Systems Engineering Mob: (313) 805-7023

From: Whitehead, Joseph (J.P.) Sent: Thursday, May 16, 2013 4:36 PM To: Baskins, Robert (R.S.); Gernant, Tim (T.R.) Cc: Whitehead, Joseph (J.P.) Subject: CAC Misfire - FMEM Demonstration Importance: High

Bob and Tim,

Ken Leisenring has requested a demonstration of the CAC misfire FMEM action tomorrow. He has asked for this demonstration to be activated by a calibration change which simulates what happens with an actual water ingestion event. What parameter(s) can be poked to enable FMEM (injector cutouts and load limiting)?

Also, do you recall the rational for disabling the flashing MIL on a CAC type misfire?

Thanks,

Joe Whitehead 3.5L GTDI P415 Calibration <u>iwhiteh4@ford.com</u> 313 805-5481 From: Sent: To: Cc: Subject: Dumler, Jeff (J.D.) Tuesday, January 10, 2012 8:02 AM Sims, Ivan (I.D.); Fabien, Phil (P.A.) Baldwin, Damien (D.K.); Wagers, Sue (S.K.); Kramer, Michael (M.T.) FW: CAC_Condensation_workplan_V4.xls

Ivan,

Just passing along an SEA paper that was published last year by Ying Tang at Valeo. "The Condensation within a CAC - Thermodynamics Analysis" provides insight, science, and criteria for how condensate develops within a CAC tube.



SAE Paper, The Condensation wit..

Jeff Dumler PTIM 6-Sigma Master Black Belt Ford Motor Company Location: Bldg-2, 24B31 Phone: 313-805-3996

SAE International[®]

The Condensation within a CAC - Thermodynamics Analysis

2011-01-1168 Published 04/12/2011

Ying Tang Valeo

> Copyright © 2011 SAE International doi:10.4271/2011-01-1168

ABSTRACT

With more emphasis on developing a better fuel-economic vehicle, applications of charged air cooler (CAC) in turbo charged gas and diesel engine plays an increasing critical role in both aspects of reduction of engine intake manifold temperature level and increase of intake air density. However, there is a limitation on how far charged air can be cooled when it starts to condensate within the charged air cooler (CAC).

In this paper, staring from basic thermodynamics principles, a thermal flow model is developed and explains the physical reasons for the condensation generation inside charged air cooler (CAC) tubes.

INTRODUCTION

Since late 1990, under high level of public pressures and opinions for producing more fuel efficiency and less emission vehicle, application of a charged air cooler (CAC) was become more common and having critical importance on both gas turbo charged engine powered and diesel engine powered vehicles. Especially in diesel engine powered heavy duty pickup truck, by further pushing the engine power level and being compliant with fuel economy and emission requirements, the charged air, taken from ambient environment, is needed to be compressed by turbocompressor system to a new higher level of pressure and temperature, and then, charged air is also needed to maximize cooling down its temperature while minimizing its pressure loss. To meet such a challenge, a better and high level thermal effectiveness CAC shall be selected and installed.

For any installed component in today's vehicle, the high level functional performance, such as thermal flow characteristics,

is only a requirement partially satisfied the overall specifications. Other requirements such as durabilityperformances under all driving profile environments are also needed to be fulfilled. Therefore, the CAC design is not only focused on typical maximum power and maximum torque operational points but also for less challenged vehicle operating conditions. To applied in all the described vehicle operating environments, however, condensation may occurred with this high level thermal effectiveness CAC, which may lead to potential corrosion issue if the condensation's acid level is not properly controlled, especially when driving in coastal area [1,2,3]. And this may also lead to potential engine misfire if a high level accumulation of condensation existed at engine entrance location if a non-ideal CAC flow path design is used.

In this technical paper, the physical reason for the generation of condensation was presented. And also, all pertinent formulas were derived from basic principles of thermodynamics and fluid flow. Additionally, some examples related to vehicle operations were presented to illustrate the theory. Finally, discussions and comments on the range of the condensation theory and its applications were also provided.

THEORY AND EXAMPLE

Any CAC or air to air heat exchanger will experience the condensation phenomena when the heat exchanger core is exposed to cold air flow environment. Typically, when contacted with cold tube wall or less cold internal tabulator wall (or inside tube fin), the moist air flow inside CAC tube will condensate. This condensation will form as water pond like mainly located in bottom tubes of CAC. However, in this paper, the above mechanism of condensation generation is not the main focus point of discussion.

During the operation (or testing) of a high thermal effectiveness CAC in diesel engines, a high amount condensation is typically observed. One of the possibilities of the origin of this condensation is that might have been generated inside of the tube air space and away from tube wall and/or tube turbulator wall. This means that even without consideration of cold solid surface, the moist air under high pressure and low temperature can condense within airflow stream itself, mainly inside of end portion of CAC tubes.

To analyze this problem, based on the moist air thermodynamics principals, the environments of condensation generation as second mechanism can be regarded as same as when the condensation happens under high level pressure, low charged air flow rates and low average temperature of charged air, in which any high level thermal effectiveness CAC will created the lowest possible CAC outlet charged air temperatures.

Following charged air flow path, for a typical constant amount of moist air being drawn directly from ambient, the total air pressure of this inlet point can be expressed as the combination of water vapor and dry air portions $[\underline{4}]$:

$$p_{am} = p_a + p_v = p_v + \frac{0.622}{\omega} p_v = \left(1 + \frac{0.622}{\omega}\right) p_v$$
(1)

Here, the ω is the humidity ratio of the ambient air [4].

When considering the turbo-compressor system's compressor action, the pressure p_e and temperature T_e at the compressor outlet will be increased and can be expressed as follows, by taking into account the effect of losses within the compressor system:

$$\frac{p_e}{p_{atm}} = \pi$$
(2)

$$\frac{T_e}{T_{atm}} = 1 + \frac{1}{T_{atm}} \frac{T_{es} - T_{atm}}{\eta_{comp}} = 1 + \frac{1}{\eta_{comp}} \left[\left(\frac{p_{atm}}{p_e} \right)^{\frac{1-k}{k}} - 1 \right]$$
$$= 1 + \frac{\frac{k-1}{k}}{\eta_{comp}}$$
(3)

Where T_{es} is isotropic process temperature and η_{comp} is compressor efficiency.

Then, as the charged air passing through a charged air cooler (CAC), its charged air outlet temperature T_m and pressure p_m are further reduced with heat transfer (Q) out to outside air stream:

$$\frac{p_m}{p_{atm}} = \frac{p_e}{p_{atm}} \frac{p_m}{p_e} = \pi \left(1 - \frac{\Delta p_{cac}}{p_e} \right) = \pi - \frac{\Delta p_{cac}}{p_{atm}}$$
(4)

$$\frac{T_m}{T_{atm}} = \frac{T_e}{T_{atm}} - \frac{\dot{Q}}{C_p \dot{m}_{cac} T_{atm}} = 1 + \frac{\pi^{\frac{k-1}{k}} - 1}{\eta_{comp}} - \frac{\dot{Q}}{C_p \dot{m}_{cac} T_{atm}}$$
(5)

Then, the charged air cooler outlet vapor partial pressure p_{vm} of moist content can be expressed as the ratio of itself over atmospheric pressure as follows:

$$\frac{p_{vm}}{p_{atm}} = \frac{\pi - \frac{\Delta p_{cac}}{p_{atm}}}{1 + \frac{0.622}{\omega}}$$
(6)

As in most cases, the assumption can be applied for gas volume is much larger than liquid one. Along the moist air saturated curve, the typical saturated water vapor pressure and its saturated temperature can be expressed as $[\underline{4}]$:

$$\frac{dp_{v}}{dT} = \frac{h_{fg}}{Tv_{fg}} \approx \frac{h_{fg}}{Tv_{g}} = \frac{h_{fg}}{RT^{2}} p_{v}$$

$$\left(\frac{p_{vm}}{p_{v}}\right)_{sat} = e^{-\frac{h_{fg}}{RT_{m}} \left(1 - \frac{T_{m}}{T_{adm}}\right)}$$
(8)

By combining <u>equations (1)</u>, (5), (8) and definition of relative humidity of air ϕ_{ν} , the non-dimensional partial moist air pressure at charged air cooler (CAC) outlet (or manifold inlet if the minor pressure drops of manifold itself can be ignored) can be expressed as:

$$\frac{(p_{vm})_{sat}}{p_{alm}} = \frac{(p_{vm})_{sat}}{p_{v}} \frac{p_{v}}{p_{alm}} \left(\frac{p_{vm}}{p_{v}}\right)_{sat} = \frac{(p_{vm})_{sat}}{p_{v}} \frac{p_{v}}{p_{alm}} \left(\frac{h_{fg}}{RT_{alm}} \frac{T_{alm}}{T_{m}} \left(1 - \frac{T_{m}}{T_{alm}}\right)\right)$$

(9)

$$\frac{(p_{vm})_{sal}}{p_{atm}} = \frac{1}{\phi_v} \left(1 + \frac{0.622}{\omega} \right)^{-1} \exp \left[-\frac{h_{jg}}{RT_{atm}} \left(\left(1 + \frac{\pi^{\frac{k-1}{k}} - 1}{\eta_{comp}} - \frac{\dot{Q}}{C_p \dot{m}_{cac} T_{atm}} \right)^{-1} - 1 \right) \right]$$
(10)

Based on equations (6) and (10), the final state of charged air relative humidity level at the engine intake manifold can be expressed as:

$$\phi_{m} = \frac{p_{vm}}{p_{atm}} \frac{p_{atm}}{(p_{vm})_{sat}} = \phi_{v} \left(\pi - \frac{\Delta p_{cac}}{p_{atm}} \right) \exp \left\{ -\frac{h_{fg}}{RT_{atm}} \left(1 - \frac{1}{1 - \left(\frac{\dot{Q}}{C_{p}\dot{m}_{cac}}T_{atm} - \frac{\pi^{\frac{k-1}{k}} - 1}{\eta_{comp}}\right)} \right) \right\}$$
(11)

Based on equation (11), the criteria of condensation can be established when the relative humidity level of the engine intake manifold is equal to 100% ($\phi_m = 100\%$). If the condensation criterion is written as ambient air relative humidity level and compressor pressures increase ratio, the condensation characteristic related to this turbo-compressor-CAC system and can be expressed as:

$$\frac{1}{\phi_{\nu}\pi} = \left(1 - \frac{\Delta p_{cac}}{\pi p_{aun}}\right) \exp\left\{-\frac{h_{fv}}{RT_{atm}} \left(1 - \frac{1}{1 - \left(\frac{\dot{Q}}{C_{p}\dot{m}_{cac}T_{atm}} - \frac{\pi^{\frac{k-1}{k}} - 1}{\eta_{comp}}\right)\right)\right\}$$
$$= factor (system)$$
(12)

In the following <u>Figure-1</u>, the calculations of the criteria curves of condensation were based on a typical charge air cooler (CAC) internal pressure drop assumed to be at 100 mbar, and when the charged air of the engine manifold temperatures (T_f) are at 20, 25 and 30 degree C. Of which, the T_f =20 degree C condition corresponds to the "ideal" thermal performance CAC with its manifold temperature (T_f) equals to ambient air temperature. For these charged air temperatures of engine manifold, if the vehicle charge air booster system operates above the areas of the respective plotted curves, then the condensation will occur inside the later section of charge air cooler tubes.

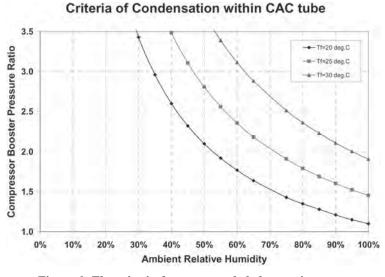
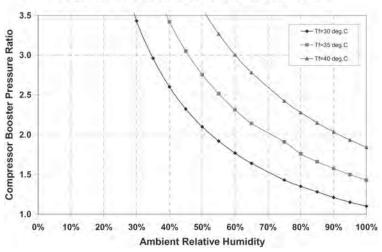


Figure 1. The criteria for an exampled charge air system, including turbo-compressor-CAC at 20 degree C ambient

In the Figure-2, the similar calculations were conducted for higher ambient temperature: 30 degree C. Here, with the same assumption on charge air cooler (CAC) internal pressure drop, the plots curves below were for the charged air of the engine manifold temperatures (T_f) are at 30, 35 and 40 degree C levels.



Criteria of Condensation within CAC tube

i

All the analysis presented here had been carried out without taking into account the extensive design and operation features of the turbo-compressor-CAC, and therefore minor errors may be generated.

If a charge air cooler providing its maximum theoretical thermal performance, the final state or the engine manifold charge air temperature will be closed to that of the ambient air temperature. Then, the only lower order terms of exponent expression in the <u>equation (11)</u> should be maintained and its limitation value will be close to 1.0. The <u>equation (11)</u> may be then simplified as follows:

$$\begin{split} \phi_{m} &\approx \phi_{v} \left(\pi - \frac{\Delta p_{cac}}{p_{aim}} \right) \\ \left[1 + \frac{h_{fg}}{RT_{aim}} \left(\frac{\dot{Q}}{C_{p} \dot{m}_{cac} T_{aim}} - \frac{\pi^{\frac{k-1}{k}} - 1}{\eta_{comp}} \right) \right] \\ &\approx \phi_{v} \left(\pi - \frac{\Delta p_{cac}}{p_{aim}} \right) \end{split}$$
(13)

And its respective criteria of condensation expression can be shown as:

$$\begin{aligned} \frac{1}{\phi_{v}\pi} \approx \left(1 - \frac{\Delta p_{cac}}{\pi p_{atm}}\right) \\ \left[1 + \frac{h_{jg}}{RT_{atm}} \left(\frac{\dot{Q}}{C_{p}\dot{m}_{cac}T_{atm}} - \frac{\pi^{\frac{k-1}{k}} - 1}{\eta_{comp}}\right)\right] \\ \approx \left(1 - \frac{\Delta p_{cac}}{\pi p_{atm}}\right) \end{aligned}$$
(14)
$$\phi_{v} \left(\pi - \frac{\Delta p_{cac}}{p_{atm}}\right) = \phi_{v}\pi^{*} \approx 1$$

Here, π^* is defined as effective pressure boost ratio for this entire turbo-compressor-CAC system.

Even the <u>equation (15)</u> here only represents the ideal situation. However, it is obvious that the condensation inside of CAC tubes will occur more easily for the high boost diesel engine system with a high level thermal effectiveness CAC. And also as indicated, the condensation phenomenon occurs when the product of ambient air relative humidity level and the effective booster pressure ratio of the entire turbo-compressor-CAC system is closed to 1.0.

In reality, the saturation transform surface between vapor phase and fluid phase of moist air is a curvature surface instead of flat one. The pressure at fluid side surface of r_f size water droplet is larger than gas phase side, and is balanced by this droplet surface tension as follow [5,6,7,8]:

$$p_f - p_v = \frac{2\sigma}{r_f} \tag{16}$$

The Kelvin-Helmholtz equation, which is reflected the curvature surface influence, may be applied here [6,7,8]:

$$\frac{p_v}{p_v^{eq}} = \exp\left(\frac{2}{r_f \rho_f R} \frac{\sigma}{T}\right)$$
(17)

(15)

Then, the <u>equation (7)</u> can be modified as the following for the curvature surface of phase transform of moist:

$$\frac{p_{vm}}{p_v} = \left(\frac{p_{vm}^{eq}}{p_v^{eq}}\right)_{sat} e^{\frac{2}{r_f \rho_f R} \left(\frac{\sigma_{vm}}{T_m} - \frac{\sigma_v}{T_{amm}}\right)} = \exp\left[-\frac{h_{fg}}{RT_m} \left(1 - \frac{T_m}{T_{atm}}\right) + \frac{2}{r_f \rho_f R} \left(\frac{\sigma_{vm}}{T_m} - \frac{\sigma_v}{T_{atm}}\right)\right]$$
(18)

Typically, unless water droplet size is smaller than 10^{-8} m, the second term of above is always being ignored [6]. Also, due to pressure balancing and heat transfer impacts, not all the water droplet can be developed within charged airflow stream, smaller than a stable (critical) size one will be evaporated [6].

CONCLUSIONS

Based on the derivations and analysis on examples, the author is drawing the conclusions as the following:

1). Condensation within charged air away from cold solid wall surfaces is very possible for high level compressed and cooled turbo-compressor-CAC system, such as in heavy duty pickup diesel vehicle.

2). The product of relative humidity of ambient air and vehicle turbo-compressor-CAC system effective boost pressure ratio can be applied as the judgmental factor regarding the described condensation phenomena.

3). From the condensation viewpoint, the questions may be posed as how far can charged air be cooled and compressed without dehumidification of the intake air and what is the limitation of charged air cooler (CAC) design for any high level compressed system, if such limitation is existed.

4). Normally, for any moist or condensation droplet size, the variations or corrections on the pressure due to the curvature phase transformation surface between fluid and vapor could be ignored.

Of course to fully simulate the physical phenomenal of condensation, both mechanisms-the condensation on the cold surfaces of charged air cooler (CAC) tubes and volumetrically (or spatial) condensed within the charged air stream should be counted and applied at same time.

REFERENCES

1. Zaldivar, Jose Garcia, Exhaust Gas Condensates Corrosion Evaluation on Low Pressure EGR, ACAC and WCAC Aluminum brazed heat Exchangers, 6th International Congress Aluminum Brazing, May 2010

2. Morozl, S., Bourgoin, G., Luján, J. M., Pla, B., A 2.0 litre Diesel Engine with Low Pressure Exhaust Gas Recirculation

and Advanced Cooling Systems, SAE The Diesel Engine Conference, May 2008, Rouen

3. Zaldivar, Jose Garcia, The Role of Different Parameters on the Corrosion Of Aluminum Heat Exchangers By Exhaust Gases Condensates, 14TH Annual Invitational Aluminum Brazing Seminar, October, 2010, Novi, Michigan U.S.A.

4. Fundamentals-ASHRAE Handbook, 1997

5. Pai, Shih-I, Luo, Shijun, Theoretical and Computational Dynamics of a Compressible Flow, Springer, 1991

6. Moore, M J, Two-Phase Steam Flow in Turbines and Separators: Theory, Instrumentation, Engineering, Hemisphere Pub. Corp., 1976

7. Hewitt, Geoffrey Frederick, Hall-Taylor, N. S., Annular Two-phase Flow, Pergamon Press, 1970

8. Rowlinson, J. S. and Widom, B., Molecular Theory of Capillarity, Dover Publications, 2003

CONTACT INFORMATION

Ying Tang Valeo Engine Cooling, Inc. 4100, North Atlantic Boulevard, Auburn Hill, MI USA 48326 <u>ying.tang@valeo.com</u>

ACKNOWLEDGMENTS

The author would like to acknowledge and thank Mr. Refki Elbourini (Meggitt Defense Systems, Inc.) for his constant suggestions, advices and writing revisions of this paper. And the author would like also express sincerely thanks to Dr. Jose-Zaldivar Garcia (Valeo Engine Cooling, Inc) and to Mr. Robert H. Meyer (FORD Motor P/T Cooling) for the highly inspired and valuable discussions on the topics related to the impacts of condensation inside of charged air cooler.

DEFINITIONS/ABBREVIATIONS

Cp

Heat Capacity at constant pressure

 C_v

Heat Capacity at constant volume

k

C_p/C_v

h

Enthalpy

ṁ

Mass flow rate

Q	Heat transfer rate
R	Gas constant, specific for each gas
r	Radius
р	Pressure
Т	Temperature
π	Pressure Ratio
σ	Surface Tension
φ	Relative Humidity
v	Volume
ω	Humidity Ratio

η

Efficiency

SUBSCRIPT

a

Air

atm

Ambient

cac

Charged Air Cooler

comp

Compressor

E	At compressor outlet state
Es	Isotropic Process
Μ	Final state, Engine manifold intake
Fg	Change for phase transition
G	Gas phage
sat	Saturation
V	Vapor phase
vm	Vapor phase at final state
SUP	ERSCRIPT
Eq	Equilibrium
*	Additional term or entire

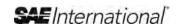
The Engineering Meetings Board has approved this paper for publication It has successfully completed SAE's peer review process under the supervision of the session organizer This process requires a minimum of three (3) reviews by industry experts

All rights reserved No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE

ISSN 0148-7191

Positions and opinions advanced in this paper are those of the author(s) and not necessarily those of SAE The author is solely responsible for the content of the paper

SAE Customer Service: Tel: 877-606-7323 (inside USA and Canada) Tel: 724-776-4970 (outside USA) Fax: 724-776-0790 SAE Web Address: http://www.sae.org Printed in USA



PE13-018 FORD 8-23-2013 APPENDIX G Engineering Review 2

From: Sent: To: Cc: Subject: Ladd, John (J.R.) Monday, April 16, 2012 12:34 PM Tyler, Jim (J.S.) Kramer, Michael (MI.T.) FW: Charge Air Cooler - 2011 P415

Jim, is the CAC an emission's item?

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Wilson, Marie (M.)
Sent: Monday, April 16, 2012 12:29 PM
To: Ladd, John (J.R.); Behnke, David (D.P.)
Cc: Cockerill, Al (C.A.); Howard, Steven (S.M.); Londy, George (G.L.); Walkowicz, Erin (E.A.)
Subject: RE: Charge Air Cooler - 2011 P415

The reason that I started this chain below has nothing to do with emission warranty (which is Dave's responsibility). My concern is for EPA defect reporting which requires reporting on all components "described" in the emission certification application. I reviewed the application and found CAC described. If you would like further confirmation you should work with the application engineer for P415.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 Fax: 313-594-0338 MWILSO18@FORD.COM

From: Ladd, John (J.R.)
Sent: Monday, April 16, 2012 11:17 AM
To: Behnke, David (D.P.)
Cc: Cockerill, Al (C.A.); Wilson, Marie (M.); Howard, Steven (S.M.); Londy, George (G.L.); Walkowicz, Erin (E.A.)
Subject: RE: Charge Air Cooler - 2011 P415

David, is the subject CAC a regulatory item?

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241 From: Walkowicz, Erin (E.A.)
Sent: Monday, April 16, 2012 10:56 AM
To: Ladd, John (J.R.); Behnke, David (D.P.)
Cc: Cockerill, Al (C.A.); Wilson, Marie (M.); Howard, Steven (S.M.); Londy, George (G.L.)
Subject: RE: Charge Air Cooler - 2011 P415

John,

2012 MY is the last EWPR that I was responsible for. Dave Behnke is your new contact for current EWPR status of CAC components. From my records of 12 MY, 6K775 was listed as an "X" for the 3.5L GTDI P415 program (which means it was NOT covered for emissions warranty). However, I do not have access to the most recent information. I believe that the RFR was the only GTDI program that was covered for the 12 MY (though again, that may have changed).

Per Steve Howard, 6K775 is not listed in the Certification reportable parts list for 13 MY (and 12 MY as well, I believe).

Dave - please confirm if my direction above is incorrect for EWPR for the Charge Air Cooler.

Erin Walkowicz

Evaporative and Advanced Certification Allen Park Test Laboratory (APTL) 3BH13 Work Cell (313) 805-6656 Text page: http://vm7.dearborn.ford.com/cgi/textpage?PAGETO=EWALKOW2

From: Ladd, John (J.R.) Sent: Monday, April 16, 2012 8:48 AM To: Walkowicz, Erin (E.A.) Cc: Cockerill, Al (C.A.) Subject: FW: Charge Air Cooler - 2011 P415

Erin, please confirm P415 3.5L GTDI CAC is a regulatory item. Thanks.

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Cockerill, Al (C.A.)
Sent: Sunday, April 15, 2012 8:10 PM
To: Ladd, John (J.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.)
Cc: Wilson, Marie (M.)
Subject: FW: Charge Air Cooler - 2011 P415

FYI this is about compliance reporting to EPA and CARB. John, I thought the CAC was listed as an emissions item. Is it listed as an intercooler and not a charge air cooler?

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender.
Vince Lombardi

 From:
 Wilson, Marie (M.)

 Sent:
 Tuesday, April 10, 2012 1:00 PM

 To:
 Cockerill, AI (C.A.)

 Subject:
 Charge Air Cooler - 2011 P415

Confirming our discussion today: I did find the charge air cooler described in our emission certification documents. Therefore we should plan to follow up on this item when we have enough information on root cause/corrective actions to determine whether or not a defect exists. I set a reminder for follow up on this note for 6-12-12. Please feel free to contact me any time prior to that date. Otherwise we can circle back and assess the situation at that time. Thanks.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 Fax: 313-594-0338 MWILSO18@FORD.COM



From: Sent: To: Cc: Subject: Allan, Valerie (V.J.) Wednesday, May 16, 2012 2:52 PM Madej, Jeanette (J.) Kramer, Michael (M.T.) FW: DENSO CAC Condensate Solutions

Here's the final word from DENSO on misfires due to condensate.

Valerie J. Allan Ford Motor Company Powertrain Cooling Heat Exchangers 313-805-4421 vallan@ford.com

From: <u>ROB_BRINKER@denso-diam.com [mailto:ROB_BRINKER@denso-diam.com]</u> Sent: Tuesday, May 15, 2012 4:19 PM To: Allan, Valerie (V.J.) Subject: DENSO CAC Condensate Solutions

1 have continued that through out all regions within DENSO the approach is a good defense as opposed to additional management main stream designs for dealing with high humidity situations in CAC systems. Special care is taken to size the outlets to maximize velocity and minimize any area where water could collect. In applications where that is not possible we have worked, with or proposed solutions, that either shut off front end air flow to minimize cooling when not required or bypass CAC within the ducting to prevent cooling and condensing of water in high humidity low cooling need conditions. Additionally we have a design solution for water ingestion from the intake perspective that can be seen in the link to the patent that could be adapted to a CAC, however it is what I would consider a somewhat exotic solution and would need a containment system as opposed to a duck bill drain. Please review and let me know if you have further questions or need for DN on CAC applications.

http://www.google.com/patents/US20090241515

Best regards. Robert Brinker DENSO International America, Inc. Telephone (248) 372 - 8807 Cell Phone (248) 763 - 3623

The information contained in and transmitted with this Email may be privileged, proprietary, confidential and protected from disclosure. No privilege is hereby intended to be waived. This Email is intended only for the person to whom it is addressed. If you are not the intended recipient/addressee, any use of the Email and/or its contents, including, but not limited to, dissemination, distribution or copying is strictly prohibited and may be unlawful, and you must not take any action in reliance on it. If you receive this Email in error, please immediately notify the sender and delete the original message and any copies of it from your computer system. We deny any liability for damages resulting from the use of this Email by the unintended recipient, including the recipient in error.

From: Sent: To: Subject: Glugla, Chris (C.P.) Wednesday, October 12, 2011 8:54 AM Smith, Craig (C.A.); Sims, Ivan (I.D.) FW: DTF time extension

I can call in - but would it be more meaningful to have a manager type?

Chris Glugla Technical Expert Advanced Controls Implementation Powertrain Controls Research and Development Research and Innovation Center 2101 Village Road Dearborn, MI. 48121 Cube 1625.t Phone: (313) 322-4692 Fax: (313)-2487857 MD: 2036 email: cglugla@ford.com

From: Doyle, Bob (R.J.)
Sent: Wednesday, October 12, 2011 8:51 AM
To: Smith, Craig (C.A.); Hammoud, Mazen (M.); Baum, Joe (J.M.); Payne, Dave (D.L.)
Cc: Sims, Ivan (I.D.); 'Dominski, Joe M'; Glugla, Chris (C.P.); Mazuchowski, James (J.A.); Shimon, Richard (R.L.)
Subject: RE: DTF time extension

Can Richard or Chris attend our scheduling meeting today 9:00? We can figure out our option and develop a plan for containment during that meeting.

Joe D. Please forward the conference call details to Richard and Chris.

Thanks

From: Smith, Craig (C.A.)
Sent: Wednesday, October 12, 2011 8:46 AM
To: Hammoud, Mazen (M.); Baum, Joe (J.M.); Payne, Dave (D.L.); Doyle, Bob (R.J.)
Cc: Sims, Ivan (I.D.); Dominski, Joe M; Glugla, Chris (C.P.); Mazuchowski, James (J.A.); Shimon, Richard (R.L.)
Subject: RE: DTF time extension

Dave/Bob,

The P415 misfire team requires additional DTF test time as part of our ongoing root cause investigation. Details of our DTF needs are contained within Chris Glugla's note below. The DTF appears to be booked throughout the end of the month per Joe Dominski's note below. Given the other Job1 release pressures on the DTF, we may require additional DTF resources and/or help with crossfunctional prioritization, etc. to secure the requested time. Can you please assist in helping us acquire the requested time?

Joe/Mazen,

In follow-up to Friday's PTIM discussion, we'll likely need help with DTF priority for the P415 GTDI misfire work.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Dominski, Joe M [mailto:Joe.Dominski@jacobs.com]
Sent: Wednesday, October 12, 2011 7:19 AM
To: Glugla, Chris (C.P.)
Cc: Smith, Craig (C.A.); Sims, Ivan (I.D.)
Subject: RE: DTF time extension

We are booked with CD4 and B515 testing and I don't have openings to meet your timing. I don't have a Monday or Tuesday or much of anything open until the week of 10/31.

Joe Dominski Wind Tunnel Scheduler 313-294-6105

From: Glugla, Chris (C.P.) [mailto:cglugla@ford.com]
Sent: Tuesday, October 11, 2011 3:21 PM
To: Dominski, Joe M
Cc: Smith, Craig (C.A.); Sims, Ivan (I.D.)
Subject: DTF time extension
Importance: High

We have been working off TR ab3559 vehicle 566w331 to resolve a Production QSF service action

We need to secure Monday and Tuesday Day shift 8hr blocks for the next 4 weeks beginning 10/17. (no soak, no altitude - just elevated temperatures, and road load + grade + trailer tow loading capability) These dates / times are need to allow critical engineering test support, data analysis, and upper management report out.

After week 3 we will then need to review our progress and potentially secure additional time. The team is prepare to escalate this to the highest management position needed to support this critical f150 misfire warranty issue.

Can you please provide the time we need to perform critical root cause testing.

Chris Glugla Technical Expert Advanced Controls Implementation Powertrain Controls Research and Development Research and Innovation Center 2101 Village Road Dearborn, MI. 48121 Cube 1625.t Phone: (313) 322-4692 Fax: (313)-2487857 NOTICE - This communication may contain confidential and privileged information that is for the sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message by unintended recipients is strictly prohibited. If you have received this message in error, please notify us immediately by replying to the message and deleting it from your computer.

From:	Andersen, Erik (E.)
Sent:	Wednesday, May 08, 2013 6:28 PM
To:	Widmann, Carl (C.A.)
Subject:	FW: Eco Boost

Info...background on the pressure we're getting.

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966

From: Sparks, Douglas (D.S.)
Sent: Wednesday, May 08, 2013 5:01 PM
To: Ricks, Kevin (K.J.); Gardner, Greg (G.D.)
Cc: Kramer, Michael (M.T.); McCoy, Julie (.); Dobbs, Dan (K.D.); Norton, John (J.K.); Madej, Jeanette (J.); Andersen, Erik (E.); Ronzi, Bill (W.C.)
Subject: RE: Eco Boost

Rick,

Our testing priority was to lower the cost of the current Misfire fix. As you know the CAC replacements are driving our WS performance. We tested the 11-12MY F150 with the new lower shield and it proved equal to/better performance than our current 13MY PCA CAC. The team is aggressively completing the DV (retention, system interaction...) of this new shield and is kicking off tooling this week (so the parts are ready when DV is complete). I need to get back with you on DV timing, but the parts will be available before testing is completed. We would like to follow a similar process as we did on the PCA CAC release, and work with FSE to expedite parts into the high humidity regions.

The Team is now testing the new shield on the PCA CAC to further improve its field performance. First level of testing was to aggressive (shield to large blocked to much air flow) and failed for MCT (manifold charge temperature) being too high. The next step is for additional testing with smaller shields that meet the MCT with the new PCA production CAC. This testing will begin next week and should be finished within two weeks. All DV work for shield retention on 11-12MY CAC will apply to the 13MY + CAC.

Please call if you want to discuss further.

Thank you,

Douglas S. Sparks

P/T Quality and PVT Manager FNA P/T Integration and Program Management (PTIM) <u>dsparks3@ford.com</u> 313-805-6096

Administrative Assistant: Tina Tessadri ttessadr 313 594-1115

From: Ricks, Kevin (K.J.) Sent: Wednesday, May 08, 2013 2:51 PM To: Sparks, Douglas (D.S.); Gardner, Greg (G.D.) Cc: Kramer, Michael (M.T.); McCoy, Julie (.); Dobbs, Dan (K.D.); Norton, John (J.K.) Subject: FW: Eco Boost

Where are we on the progress of this fix, we still have a fair number of customers waiting for the final fix. We have been tracking this concern as a non-QSF but customers and the dealers in most affected areas are eager to get this behind us and have been contacting us repeatedly.

From: Farabee, Todd (T.)
Sent: Wednesday, May 08, 2013 2:40 PM
To: Ricks, Kevin (K.J.); Johnson, Jim (J.S.)
Cc: Uvaydova, Kristina (K.); McClung, Shannon (S.T.); Christoff, Donald (D.A.); Brisson, Richard (R.S.)
Subject: FW: Eco Boost

Kevin & Jim,

Steve Everett is looking for an update from us on the EcoBoost blocker plate fix. Do we have any news to report & can you help answer/respond to his below inquiry?

Sincerely,

Todd G. Farabee • Parts & Service Operations Manager • Orlando Region • Ford Motor Company <u>tfarabee@ford.com</u> • ph: (425) 241-4704 • fx: (866) 397-3443

From: Steve Everett [mailto:theboss@langdaleford.com]
Sent: Wednesday, May 08, 2013 2:23 PM
To: Farabee, Todd (T.)
Cc: Jack Howell; Jack Strayhorn
Subject: Re: Eco Boost

Hey Todd,

You can read this email string to familiarize yourself with this customer's issue or you may recall. This customer has a newer Eco Boost F-150 with the supposedly 'New" part installed but continues to have issues while driving in the rain.

You and I talked on the phone about this issue and you said they were testing another new part and that maybe we could field test it on my customer's truck. He is more than willing and so am I. The problem is not going away and I feel we are headed towards another "Lemon Law" case that neither you or I want to see.

I would appreciate an update on the potential fix for this problem and also the possibility of using my customer to beta test the new part.

Thanks, Steve Everett

----- Original Message ----From: Farabee, Todd (T.)
To: McClung, Shannon (S.T.)
Cc: <u>'theboss@langdaleford.com'</u>; <u>Uvaydova, Kristina (K.)</u>; <u>Johnson, Jim (J.S.)</u>; <u>Christoff, Donald (D.A.)</u>; <u>Brisson, Richard (R.S.)</u>
Sent: Thursday, April 04, 2013 2:36 PM
Subject: Fw: Eco Boost

Shannon,

Can you please reach out to

to see what we can do to assist with these customer concerns? Thanks.

Sincerely,

Todd G. Farabee Parts & Service Operations Manager Orlando Region Ford Motor Company cell ph: (425) 241-4704 fx: (866) 397-3443 tfarabee@ford.com

Sent via Blackberry device.

From: Steve Everett [mailto:theboss@langdaleford.com] Sent: Thursday, April 04, 2013 01:53 PM To: Brisson, Richard (R.S.); Farabee, Todd (T.) Subject: Eco Boost

Good Afternoon Gentleman,

I hate to burden you with a problem but at this point, I'm not sure what to do.

As you know, we have had a major issue with some F-150 Pick Ups equipped with the 3.5 liter Eco Boost engine. When it rains water is getting into the induction system and the engines either hesitate on acceleration, will not operate over a certain speed or will quit altogether. We all know that it's not occurring on every Eco Boost truck but when it does it is really a problem. I and some of my staff have had several Eco Boost equipped trucks as demos and personally I have never had an issue. We have probably 6-8 customers who we are working with at this time and most of them are simply waiting on the replacement parts that are supposed to take care of the problem, by the way, these parts are on backorder. I have also had one very good customer who we traded back his truck for a V-8 and I had to give him full price for the Eco Boost or lose his business altogether. I also had one other customer that I tried to trade with but he ended up seeking Lemon Law and Ford bought his truck back without a fight.

Now I have a new problem......A good customer who recently purchased a new Eco Boost equipped F-150 complained of the same problem and when we checked it out, it has the new part already installed that is supposed to fix the concern. Apparently this unit was recently built and is equipped with the new part. Hot Line said there was nothing else we could do and they would take it under advisement. The upset customer called Ford Motor Co. and the person who handled the case told the customer that they were aware of the concern and were working towards a correction and in the meantime, not to drive it in the rain. What kind of answer was that? Now my customer wants to know what I am going to do about his truck. He is a good customer and his wife (who drives a year old Expedition) manages a local Credit Union that finances a lot of vehicles for customers of Langdale Ford.

I do a lot of things at the dealership level to take care of my customers that you all never know about. We pay for repairs that Ford will not, provide rentals when Ford will not and even trade or repurchase vehicles to keep our good customers happy. The problem here is that even if I elect to trade back with the customer I have a truck that I cannot resell.

I am proud and excited to be a Ford Dealer and I love our new products and think our quality has improved tremendously. My concern is that when we have a legitimate problem, Ford does not acknowledge the concern and take appropriate steps to address it. The concern with the Eco Boost has gotten around the community and a few of my customers are hesitant to give it a try. In fact, we are seeing the V-8's start to gain a little traction in recent months. We have a good thing going with the Eco Boost story but we must address these concerns before they become headlines.

I would appreciate some guidance on how to proceed with this particular customer at this time.

Thanks for your time......Steve Everett, Langdale Ford

No virus found in this message. Checked by AVG - <u>www.avg.com</u> Version: 2012.0.2240 / Virus Database: 2641/5724 - Release Date: 04/04/13 From: Sent: To: Subject: Madej, Jeanette (J.) Tuesday, October 23, 2012 11:05 AM Kramer, Michael (M.T.); Andersen, Erik (E.) FW: EcoBoost condensation articles

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

-----Original Message-----From: Smith, Craig (C.A.) Sent: Tuesday, October 23, 2012 3:42 PM To: Mazuchowski, James (J.A.); DiMarco, Jackie Marshal (J.M.); Levine, Michael (M.); Gernant, Tim (T.R.) Cc: Sparks, Douglas (D.S.); Sarkar, Raj (R.); Lapine, Marc (M.J.); Bell, Brian (B.D.); Piechocki, Dawn (D.M.); Dobbs, Dan (K.D.); Madej, Jeanette (J.); Russo, Scott (S.); Norman, Kristofor (K.R.); Baltusis, Paul (P.A.); Hammoud, Mazen (M.) Subject: RE: EcoBoost condensation articles

Jim,

The misfire-related strategy and calibration changes included the following:

1. Improved misfire detection robustness during multi-cylinder misfire events.

2. Added engine load limiting during misfire FMEM to reduce the probability of component damage.

3. Disabled the flashing MIL when the misfire event occurred in the high rpm/high load operating region that's associated with CAC-condensate-induced misfire events.

4. Minimized the amount of time that's required to clear the FMEM action once the misfire event is no longer present.

Tim,

Anything else to add?

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08 -----Original Message-----From: Mazuchowski, James (J.A.) Sent: Tuesday, October 23, 2012 7:49 AM To: DiMarco, Jackie Marshal (J.M.); Levine, Michael (M.); Smith, Craig (C.A.) Cc: Sparks, Douglas (D.S.); Sarkar, Raj (R.); Lapine, Marc (M.J.); Bell, Brian (B.D.); Piechocki, Dawn (D.M.); Dobbs, Dan (K.D.); Madej, Jeanette (J.); Russo, Scott (S.); Norman, Kristofor (K.R.) Subject: RE: EcoBoost condensation articles

Deflector shield was an interim fix that reduced the CAC condensate build-up [the amount of water in the CAC]. Testing validated no degradation to vehicle cooling or vehicle performance as a result of the deflector shield add.

Revised CAC is the PCA that also 1) reduces the amount of CAC condensate build-up within the CAC and 2) modifies the air flow thru the CAC which enables regular & consistent stripping away of the condensate build-up.

Again vehicle cooling and vehicle performance not affected with the revised CAC. Our estimation is PCA approx 98% effective, the guy in high humidity, raining, towing a trailer may still have a problem.

Craig Smith could provide the details around the 1st item revised calibration {TSB 12-2-10}.

Jim Mazuchowski Manager, New V6 Engine Programs V-Engine Eng'r; 33-79935

-----Original Message-----From: DiMarco, Jackie Marshal (J.M.) Sent: Monday, October 22, 2012 9:10 PM To: Levine, Michael (M.); Mazuchowski, James (J.A.) Cc: Sparks, Douglas (D.S.); Sarkar, Raj (R.); Lapine, Marc (M.J.); Bell, Brian (B.D.); Piechocki, Dawn (D.M.); Dobbs, Dan (K.D.) Subject: FW: EcoBoost condensation articles Importance: High

Mike, see below for TSB details. The relevant details here are that the 6/7/12 TSB offered an improvement but not a full fix. Customers experiencing the issue will be able to get a replacement CAC shortly for a full fix (targeting 10/29/12). All units built after 9/18/12 already have that fix. Our field data, although its early, has indicated no concerns from the field since the new CAC's went online 9/18/12.

I want to be careful that we don't send a bunch of customers unnecessarily to dealers for the fix and run out of service parts/cause a needless warranty spike - please temper the words. Jim, please provide the technical detail discussed earlier - Mike needs to get ahead of this ASAP.

-----Original Message-----From: Dobbs, Dan (K.D.) Sent: Monday, October 22, 2012 11:06 AM To: DiMarco, Jackie Marshal (J.M.) Cc: Mazuchowski, James (J.A.); Sparks, Douglas (D.S.); Ricks, Kevin (K.J.); Nowaczyk, Rick (R.J.) Subject: RE: EcoBoost condensation articles

Jackie, Here you go. We are trying to get the latest TSB out by 10-29-12 (parts inventory is being procured)

TSB 12-2-10 (released 2-15-12)

- * Units built on of before 2-7-12
- * Revised calibration for multiple issues
- * Included an updated FMEM to protect Catalyst

SSM 22225 (released 2-21-12, deactivated 6-7-12)

* Referred Dealers to use TSB 12-2-10 for a broader spectrum of issues than the TSB addressed

TSB 12-6-4 (released 6-7-12, superceded elements of 12-2-10)

- * Add deflector for units builts before 5/24/12
- * Reflash for FMEM and other items
- * For units with P0430 replace the LH Catalyst

New TSB (Yet to be numbered eta = as soon as parts meet launch threshold)

* Units built before 9-18-12 (KCAP 9-17-12) with the described symptoms (loss of power, and specific DTC's)

- * Applicable units will receive a revised Charge Air Cooler (CAC)
- * Dealer will transfer the previously installed deflector to the new CAC
- * Units not previously flashed under TSB 12-6-4 will be reflashed
- * If code P0430 is present they will replace the LH Catalyst
- * NOTE: We are adding another TSB to handle the few weeks of 2013 production before the revised CAC went in.

From: DiMarco, Jackie Marshal (J.M.) Sent: Monday, October 22, 2012 10:26 AM To: Mazuchowski, James (J.A.); Sparks, Douglas (D.S.); Dobbs, Dan (K.D.) Cc: Levine, Michael (M.); Bell, Brian (B.D.); Scott, Douglas (D.W.); Sarkar, Raj (R.); Lapine, Marc (M.J.); Piechocki, Dawn (D.M.) Subject: RE: EcoBoost condensation articles

Dan, please summarize latest TSB's regarding 3.5L misfire.

Doug, Jim, can you help with a high level technical description of the improvements we've implemented for misfire? Thanks.

From: Levine, Michael (M.) Sent: Monday, October 22, 2012 10:05 AM To: Bell, Brian (B.D.); Scott, Douglas (D.W.); Sarkar, Raj (R.); Lapine, Marc (M.J.); DiMarco, Jackie Marshal (J.M.); Piechocki, Dawn (D.M.) Subject: RE: EcoBoost condensation articles

Can you please remind me of what the fix is? I'll create a Q&A.

From: Bell, Brian (B.D.) Sent: Monday, October 22, 2012 10:04 AM To: Scott, Douglas (D.W.); Sarkar, Raj (R.); Lapine, Marc (M.J.); Levine, Michael (M.); DiMarco, Jackie Marshal (J.M.); Piechocki, Dawn (D.M.) Subject: EcoBoost condensation articles

FYI - TundraHeadquarters.com posted an article on Oct 18th talking about the condensation issues EcoBoost is having in high humidity areas.

http://www.tundraheadquarters.com/blog/2012/10/18/ford-f-150-problems-shudde ring-power-loss-limp-mode/

Autospies.com picked up the article over the weekend:

http://www.autospies.com/news/EcoBoost-F150-Owners-Experiencing-Engine-Problems-Shudder-Stalling-and-Loss-of-Power-73001

I spoke to Jackie and the fix is in place and is shipping on vehicles now.

Brian

From: Sent: To: Subject: Ladd, John (J.R.) Monday, April 30, 2012 7:44 AM Kramer, Michael (M.T.); Tyler, Jim (J.S.) FW: Emailing: 2013 P415 CAC Condensation Study 20120228.ppt

You guys have this covered?

>Regards, >John Ladd >Supervisor - Cooling Development Engineering >Ph: (313) 62-16626 Cell: (313) 805-4627 >Fax: (313) 317-9241

-----Original Message-----From: Mazuchowski, James (J.A.) Sent: Monday, April 30, 2012 7:41 AM To: Ladd, John (J.R.); Weber, Erik (E.M.) Cc: Moore, Brian (B.M.); May, David (D.A.); Cockerill, Al (C.A.) Subject: RE: Emailing: 2013 P415 CAC Condensation Study 20120228.ppt

John, as you work thru this approval on current production 2012 MY, pls make sure you take into account updating 2013 MY P415's. We are just building <TT> vehicles now. Need to make sure we're compatible there as well unless there is a different solution in that timeframe?

Jim Mazuchowski Manager, New V6 Engine Programs V-Engine Eng'r; 33-79935

Help me raise \$\$ to fight Multiple Sclerosis
http://main.nationalmssociety.org/site/TR?px=4458825&pg=personal&fr id=15101&et=GLWrHQdMhjKES
SjoqyZpAA..&s tafId=172675

-----Original Message-----From: Ladd, John (J.R.) Sent: Monday, April 30, 2012 7:30 AM To: Weber, Erik (E.M.) Cc: Kramer, Michael (M.T.); Rodgers, Thomas (T.A.); Palm, Jim (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.); Lewis, Jeffrey (J.E.) Subject: RE: Emailing: 2013 P415 CAC Condensation Study 20120228.ppt

The misfire team is looking for a TSE declaration for acceptability of the 6 tube blocker panel across the top of the CAC. You have forwarded me the results, but there isn't any clear statement of acceptability.

PT Cooling is moving forward with the release of the top row blocker panel with mid-May incorporation into production. Your input is required. Thanks.

>Regards, >John Ladd >Supervisor - Cooling Development Engineering >Ph: (313) 62-16626 Cell: (313) 805-4627
>Fax: (313) 317-9241
----Original Message----From: Weber, Erik (E.M.)
Sent: Monday, April 23, 2012 10:18 AM
To: Ladd, John (J.R.)
Subject: Emailing: 2013 P415 CAC Condensation Study 20120228.ppt

Your message is ready to be sent with the following file or link attachments:

2013 P415 CAC Condensation Study 20120228.ppt

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

From:	Smith, Craig (C.A.)
Sent:	Wednesday, August 01, 2012 9:47 AM
To:	Hammoud, Mazen (M.); Baum, Joe (J.M.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.);
	Dobson, Kevin (K.E.); Ducklow, Corey (C.S.); Pierce, Michael (M.A.)
Subject:	FW: F-150 3.5I GTDI Continued Misfire Aft TSB is at Emerging Level
Importance:	High

Unfortunately, It does not look like the P415 GTDI CAC tube blocker plate ICA was very successful at mitigating condensate misfires. Per FCSD's note below, the condensate misfire issue is back as an emerging concern and could quickly escalate to QSF. A vast majority of our V52, as well as a significant portion of our V40 & V29 TGWs, are associated with misfires due to CAC condensation. To my knowledge, there are no longer plans to investigate grill shutters on P415 so hopefully the revised CAC design that's going into production this September will be a more effective fix.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: McDonagh, Scot (S.M.)
Sent: Wednesday, August 01, 2012 9:36 AM
To: Sparks, Douglas (D.S.); Madej, Jeanette (J.); Mazuchowski, James (J.A.); Dixon, Mark (M.R.); Smith, Craig (C.A.)
Subject: FW: F-150 3.5I GTDI Continued Misfire Aft TSB is at Emerging Level
Importance: High

INFO



Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.) Sent: Wednesday, August 01, 2012 8:58 AM To: McDonagh, Scot (S.M.) Cc: Dobbs, Dan (K.D.) Subject: F-150 3.5I GTDI Continued Misfire Aft TSB is at Emerging Level Importance: High Scot,

Not good news. The F-150 3.5L GTDI continued misfire in damp/humid condition after TSB 12-6-4 has reached Emerging Level now (two units are being bought back). In addition, I have a folder for unit's built from production with the misfire under the same conditions which is also at Emerging level. I think our plan is to open an Emerging concern on the TSB side and add the reports for units built the deflector still having a concern. However, this could move to QSF quickly combining the two folders.

Regards, Rick Nowaczyk FCSD Product Concern Engineer F-150, Freestar/Monterey, Ford GT, Th!nk E-mail: <u>rnowaczy@ford.com</u> Diagnostic Service Center-I, Allen Park PH# 313-322-7251

Subject:	P415 Misfire CAC Release
Location:	Teleconference: x13673 Passcode: 21340179#
Start:	Fri 8/3/2012 9:00 AM
End:	Fri 8/3/2012 9:30 AM
Recurrence:	(none)
Meeting Status:	Meeting organizer
Organizer:	McDonagh, Scot (S.M.)
Required Attendees:	Kramer, Michael (M.T.); Dixon, Mark (M.R.) (mdixon@ford.com); Wagner, Glen (G.C.) Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); Tyler, Jim (J.S.)

Please join the Powertrain Quality Team to discuss Production & Service release of new P415 3.5L GTDI Charge Air Cooler. Thanks



Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

	onagh, Scot (S.M.) day, July 31, 2012 12:00 PM
To: Krar	ner, Michael (M.T.); Tyler, Jim (J.S.)
Cc: Now	/aczyk, Rick (R.J.); Dobbs, Dan (K.D.); Wagner, Glen (G.C.)
Subject: RE: 2	2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

I will set up a meeting with FCSD for next week to discuss plan for PCA CAC service release

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Kramer, Michael (M.T.)
Sent: Tuesday, July 31, 2012 10:17 AM
To: McDonagh, Scot (S.M.)
Cc: Tyler, Jim (J.S.)
Subject: FW: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Note request for review of CAC 6 tube blocker shield to ensure clarity. We should also begin discussions on the TSB/s for the revised CAC PCA. When?

Mike Kramer RWD PT Cooling Supv.

Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: <u>mkramer1@ford.com</u>

From: Madej, Jeanette (J.)
Sent: Tuesday, July 31, 2012 10:08 AM
To: Gardner, Greg (G.D.); Sparks, Douglas (D.S.)
Cc: Kramer, Michael (M.T.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

I think we should review and make sure it's ok

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

From: Gardner, Greg (G.D.)
Sent: Monday, July 23, 2012 12:44 PM
To: McDonagh, Scot (S.M.); Sparks, Douglas (D.S.); Madej, Jeanette (J.); Mazuchowski, James (J.A.); Ricks, Kevin (K.J.); Mazuchowski, James (J.A.); Norman, Kristofor (K.R.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

I had some time today and reviewed a portion of the repeat claims in this file ... I looked at 23 of the repeat claims and noted the following:

1. 7 of the 23 repeats or 30% did not have the TSB properly performed, 3 of the 6 had a P0430 code present at initial service and even though the TSB states to replace the catalyst the dealer did not complete a catalyst

repair. Of these three, two of them did not get a CAC shield on the first visit ... one vehicle had shield installed on the second visit, one has never had the shield installed. Of the other four claims, one was a surge complaint, recal was done per TSB but no CAC shield was installed, another has been in to dealer twice and been reflashed but no CAC shield has been installed, one did not get the TSB performed even though the codes pointed to the TSB, and the last one did not get the shield installed on either visit but did set a P0430 between first and second visit and ended up with a new CAC.

2. Of the remaining claims in the 23 repeats, 5 were actual misfire repeats where the TSB was completed correctly and the vehicle had a subsequent claim for misfire and the remainder were repeats for non misfire related concerns, second claims for part installation when the shield was not available on the first visit, or two claims on the first day for unrelated issues

Based on this data, the effectiveness of the misfire fix looks very good but I am somewhat concerned with the number of vehicles that are not getting the TSB properly performed. Do we need to review the TSB and make sure that it is written clearly enough? Is it possible to bold the section on replacing the catalyst if a P0430 claim is present? Also, is there some automated way in the warranty system to identify when a 120604A or 120604B labor op occurs on a precontainment vehicle (i.e. built before May 17, 2012) but no catalyst shield or push-pin parts show up on the claim?

100				
Improper				
	1	`		(Claims occurred on same day, one for misfire fix, one for coil
	Line 8 and 9)		replacement)
	1 Lines 11 and	4 10		(Dealer did not follow TSB there was a P0430 code and they installed)
-				installed) (Not a stoody state misfire claim, surge complaint and then miss
-				(Not a steady state misfire claim, surge complaint and then mis a
				(Two separate claims, one for misfire, one for surge on the same
				(Misfire TSB performed, issue was not steady state misfire, deal
				(Claims occurred on same day, one claim entered for misfire TS
				(One claim for ordering parts, one claim for installing parts)
				(First claim was NPF, second claim cylinder #2 coil was replace
				(Complaint was shudder up hill, final repair was to repair front p
				(Two complaints on same day, first was surge, TSB performed,
				(TSB not peformed properly, vehicle had P0430 and cat not repl
	Lines 132 an	nd 133		(TSB performed, follow-up visit to replace fouled plug and coil (Two claims on same day, one for misfire, one for reported fuel
	Lines 134 ar	nd 135		economy)
1	1 Lines 136 an	ad 137		(TSB not performed properly, P0430 code and cat not replaced. (TSB not performed properly, no CAC shield installed, vehicle
-	1 Lines 143 ar	nd 144		repair)
-	1 Lines 155 ar	nd 156		(TSB not performed even though SSM points to misfire TSB ba
	Lines 168 ar	nd 169		(Two claims on same day, one for surge and one for crank issue
	Lines 170 ar	nd 171		(Two claims on same day, one for misfire fix, one for coil replaced
	Lines 225 an	nd 226		(First claim for misfire, second claim was for poor fuel econom (Two claims for misfire at same dealer, PCM reprogrammed bu
	1 Lines 227 ar	nd 228		repair)
		14 220		ropun,
			205	
Builling,	Ciuins	Repeat Claims		
	Renea	_		
	Repea			
	Effec		7170	
		Followed	98%	
		Line 8 and 9 1 Lines 11 and 1 Lines 21 and Lines 25 and Lines 25 and Lines 50 and Lines 50 and Lines 66 and Lines 72 and Lines 94 and 1 Lines 94 and 1 Lines 134 an 1 Lines 136 an 1 Lines 136 an 1 Lines 136 an 1 Lines 143 an 1 Lines 155 an Lines 170 an Lines 227 an 7 Summary Claims Repea	Line 8 and 9 1 Lines 11 and 12 1 Lines 21 and 22 Lines 25 and 26 Lines 37 and 38 Lines 50 and 51 Lines 57 and 58 Lines 66 and 67 Lines 72 and 73 Lines 94 and 95 1 Lines 96 and 97 Lines 132 and 133 Lines 134 and 135 1 Lines 136 and 137 1 Lines 143 and 144 1 Lines 155 and 156 Lines 168 and 169 Lines 170 and 171 Lines 225 and 226 1 Lines 227 and 228 7 Summary Claims Repeat Claims Repeat Summary Claims	Line 8 and 9 1 Lines 11 and 12 1 Lines 21 and 22 Lines 25 and 26 Lines 37 and 38 Lines 50 and 51 Lines 57 and 58 Lines 66 and 67 Lines 72 and 73 Lines 94 and 95 1 Lines 96 and 97 Lines 132 and 133 Lines 134 and 135 1 Lines 136 and 137 1 Lines 143 and 144 1 Lines 155 and 156 Lines 168 and 169 Lines 170 and 171 Lines 225 and 228 7 Summary Claims 205 Repeat Claims 23 Repeats and TSB Not Followed 7 Effectiveness if TSB Properly

Gregory D. **Gardner** Global Powertrain Quality Manager

Not

TSB

From: McDonagh, Scot (S.M.)
Sent: Thursday, July 19, 2012 11:50 AM
To: Sparks, Douglas (D.S.); Gardner, Greg (G.D.); Madej, Jeanette (J.); Mazuchowski, James (J.A.); Ricks, Kevin (K.J.)
Subject: FW: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

INFO

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Ng, Paul (P.K.)
Sent: Thursday, July 19, 2012 11:44 AM
To: McDonagh, Scot (S.M.)
Cc: Dixon, Mark (M.R.); Kramer, Michael (M.T.); Steslicki, Michael (M.E.); Nowaczyk, Rick (R.J.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Scot,

There are 580 VINs as of yesterday that have went through TSB 12-6-4. 57 of the VINs have subsequent repairs to fix similar symptoms (CCCs and/or DTCs). The calculated effective for the TSB is 90% provided that the repeat repairs were valid.

Paul

From: McDonagh, Scot (S.M.)
Sent: Wednesday, July 18, 2012 12:56 PM
To: Ng, Paul (P.K.)
Cc: Dixon, Mark (M.R.); Kramer, Michael (M.T.); Steslicki, Michael (M.E.); Nowaczyk, Rick (R.J.)
Subject: FW: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

How many AWS claims to date for TSB 12-06-04? Original estimate was 60% effective repair rate for CAC Deflector. Would like to know % based on TSB usage with 12 vehicles unresolved. Thanks

OPERATION	DESCRIPTION	TIME
120604A	2011-2012 F-150 3.5L GTDI: Check DTCs, Install CAC Air Deflector Plate if Necessary And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	0.5 Hr.
	2011-2012 F-150 3.5L GTDI: Check DTCs, Replace The Left Catalytic Converter, Install CAC Air Deflector Plate if Necessary And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	1.0 Hr.

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com From: Nowaczyk, Rick (R.J.)
Sent: Wednesday, July 18, 2012 12:12 PM
To: McDonagh, Scot (S.M.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Looks like... 7 reports for vehicle built after the cutoff date 4-5 reports for vehicles still having the concern after the TSB was performed. 11-12 Total...

From: McDonagh, Scot (S.M.)
Sent: Wednesday, July 18, 2012 10:59 AM
To: Nowaczyk, Rick (R.J.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

What is total count for vehicles not fixed with Deflector ?

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Wednesday, July 18, 2012 10:20 AM
To: Madej, Jeanette (J.); McDonagh, Scot (S.M.); Kramer, Michael (M.T.); Ladd, John (J.R.); Sowards, John (J.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Mazuchowski, James (J.A.); Nowaczyk, Rick (R.J.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)
Importance: High

Jeanette, Any updates on this per your comment below?

From: Madej, Jeanette (J.)
Sent: Friday, July 13, 2012 2:57 PM
To: McDonagh, Scot (S.M.); Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.); Ladd, John (J.R.); Sowards, John (J.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Mazuchowski, James (J.A.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

We will discuss on Monday and get back to you

From: McDonagh, Scot (S.M.)
Sent: Wednesday, July 11, 2012 7:53 AM
To: Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.); Ladd, John (J.R.); Sowards, John (J.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Mazuchowski, James (J.A.)
Subject: RE: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)

Thanks Rick- It is my understanding the Deflector is ICA for CAC condensate Misfire. Will ask PT Cooling for update on PCA Service proposals.

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Tuesday, July 10, 2012 4:42 PM
To: McDonagh, Scot (S.M.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.)
Cc: Chatfield, David (D.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Subject: 2012 F-150 3.5I GTDI Continued aft Misfire TSB (CQIS Report#CGJCV013)
Importance: High

Powertrain Team,

Here is another case were the dealer performed the TSB for the misfire and the customer still experienced the condition when raining. The issue in this case this customer appears to have purchased 13 trucks for their company. If this TSB is going to be the final fix, we may need to look at communication to the field that if condition are right this concern may still occur.

Thanks....

From: DCHATFIE@ford.com [mailto:DCHATFIE@ford.com] Sent: Tuesday, July 10, 2012 4:05 PM To: Nowaczyk, Rick (R.J.) Cc: Chatfield, David (D.) Subject: Report Summary for the CQIS Report#CGJCV013

2012 misfire under load, tsb performed. Loaction Memphis, Tn.

Attachments : 0

Report# :	CGJCV013 NH	L		Received:	07/10/2012
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2012,F150 4X4 ,1FTFW1ET0C	,F150 ,SUP CRW,STY F	/SD	Build Date:	01/21/2012
Odometer :	8,386 M	Engine:	3.5L-GTDI	Calibration:	CF613C0A
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES
Dealer:	USA 06422 But	ch Oustalet, Inc.		Phone#:	(228) 863- 5525
City:	Gulfport	State:	Mississippi	Country :	USA
Originator:	BEN PRIESTE	R			
Symptom:	5 50 2 39 DRV	PERF,RUNS ROUGH	ACCEL,INTERM	IITTENT	
Status:					
VFG:	V52 DRIVEAB	ILITY			
Additional Symptom:	BUCKS AND J	ERKS WHEN RAININ	١G		

Fix: Causal Component :

Hotliner: DCHATFIE	Phone: 313 317-6315	Regn Cd: C3 Memphis
Engineering:	Phone:	TAR:
Dlr Contact: BEN PRIESTER	Phone: 000 000-0000	Title Cde: OT

DTCs:

KOEO:

KOEC:

KOER:

Comments

:

REPAIR 07/10/2012 03:58PM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUST WAS DRIVING HIS TRUCK IN THE RAIN AND IT

STARTED BUCKING AND JERKING DIAGNOSTICS: RUN DIAGNOSIS NO CODES WE HAXE ALREADY DONE TSB 12-6-4 LAST REPAI PARTS REPLACED:NONE TECH QUESTION:THIS TRUCK CONTINUES TO HAVE PROBLEM WHEN DRIVING IN THE RAIN. HAVE HAD IN THE SHOP 3 TIMES BEFORE. DONT KNOW WERE TO GO WITH IT. THIS CUST OWN A COMPANY THAT BOUGHT 13 TRUCKS FROM US LAST YEAR AND I VE GOT TO FIND A SOLUTION. ARE THER ANY LATER UPDATES OR SUGGESTIONS FOR THIS

RECOMM 07/10/2012 03:58PM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE

BEN, DUE TO THE EFFICIENCY OF THE CHARGE AIR COOLER, THERE MAY BE SOME CONDITIONS WHERE SOME CONDENSATION BUILDS IN THE CAC, EVEN WITH

THE CAC SHIELD IN PLACE AND IS INJECTED INTO THE ENGINE. VERY WET OR EXTREMELY HUMID CONDITIONS MAY ENHANCE THIS CONCERN. THE SHIELD WAS

DESIGNED TO HELP WITH LESS CONDENSATION BUILD UP, BUT DUE TO HUMID CONDITIONS AND COMPRESSED AIR IN THE CAC, THIS WILL NOT TOTALLY ELIMINATE THE CONDENSATION FROM FORMING UNDER THESE CONDITIONS. AT THIS TIME, IF WATER HAS BEEN VERIFIED IN THE CAC, AIS AND AROUND THE THROTTLE BODY, CLEAN THE WATER AS BEST AS POSSIBLE AND INFORM THE CUSTOMER OF THE DESIGN OF THE SYSTEM AND THE POSSIBLY OF CONDENSATION

BUILD-UP UNDER THESE CONDITIONS.

3.5L GTDI CALIBRATION UPDATE—VARIOUS ISSUES—BUILT ON OR BEFORE 5/24/2012

FORD:

2011-2012 F-150

ISSUE

Some 2011-2012 F-150 vehicles built on or before 5/24/2012 and equipped with a 3.5L gasoline turbocharged direct injection (GTDI) Ecoboost engine exhibit a steady or flashing malfunction indicator lamp (MIL) with various diagnostic trouble codes (DTC) and drivability concerns.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

The calibration update contains improvement actions and enhancements to address the following conditions:

- Intermittent stumble and/or misfire on hard acceleration after an extended drive at highway speeds being more noticeable during humid or damp conditions.
- Intermittent engine surge during moderate to light loads at cruise.
- Powertrain control module (PCM) Misfire DTC P030x.
- PCM DTC P0430 and/or P0299.

NOTE

INSURE ALL HARD FAULT POWERTRAIN DTCS ARE ADDRESSED PRIOR TO PERFORMING THE CALIBRATION UPDATE.

- 1. Check for DTC P0430. Is DTC P0430 present?
 - a. Yes Replace the left bank catalytic converter assembly. Refer to Workshop Manual (WSM), Section 309-00. Proceed to Step 2.
 - b. No Proceed to Step 2.
- 2. Is the Charge Air Cooler (CAC) equipped with an air deflector plate? (Figure 1A)

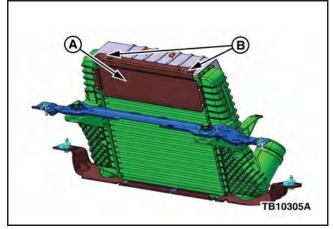


Figure 1 - Article 12-6-4

- a. Yes Proceed to Step 4.
- b. No Proceed to Step 3.
- 3. Install CAC air deflector plate with two new push pins. (Figure 1B) Proceed to step 4.
- Reprogram the PCM to the latest calibration using IDS release 79.02A or higher. This new calibration is not included in the 2012.5 DVD. Calibration files may also be obtained at www.motorcraft.com.

NOTE

PLEASE ADVISE THE CUSTOMER THAT THIS VEHICLE IS EQUIPPED WITH AN ADAPTIVE TRANSMISSION SHIFT STRATEGY WHICH ALLOWS THE VEHICLE'S COMPUTER TO LEARN THE TRANSMISSION'S UNIQUE PARAMETERS AND IMPROVE SHIFT QUALITY. WHEN THE ADAPTIVE STRATEGY IS RESET, THE COMPUTER WILL BEGIN A RE-LEARNING PROCESS. THIS RE-LEARNING PROCESS MAY RESULT IN FIRMER THAN NORMAL UPSHIFTS AND DOWNSHIFTS FOR SEVERAL DAYS.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

TSB 12-6-4 (Continued)

PART NUMBER	PART NAME
BL3Z-5E212-E	Catalytic Converter Assembly
W520514-S440	Nuts (2 Req)
CL3Z-19E672-A	Deflector Plate
W711281-S300	Push Pin (2 Req)

WARRANTY STATUS: Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And Emissions Warranty Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

OPERATION	DESCRIPTION	TIME
120604A	2011-2012 F-150 3.5L	0.5 Hr.
	GTDI: Check DTCs, Install	
	CAC Air Deflector Plate if	
	Necessary And Reprogram	
	The PCM (Do Not Use	
	With Any Other Labor	
	Operations)	
	Necessary And Reprogram The PCM (Do Not Use With Any Other Labor	

120604B 2011-2012 F-150 3.5L 1.0 Hr. GTDI: Check DTCs, Replace The Left Catalytic Converter, Install CAC Air Deflector Plate if Necessary And Reprogram The PCM (Do Not Use With Any Other Labor Operations)

DEALER CODING

CONDITION
CODE
12
42

 From:
 McDonagh, Scot (S.M.)

 Sent:
 Tuesday, September 04, 2012 12:00 PM

 To:
 Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Smith, Craig (C.A.); Oyafuso, Kevin (K.G.); McCoy, Jim (D.)

 Subject:
 FW: F-150 EcoBoost - Olliver

We are installing 27mm PCA CACs in (2) P415 GTDI customer vehicles at buy back status

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Friday, August 31, 2012 3:20 PM
To: Tyler, Jim (J.S.); Ricks, Kevin (K.J.); Kramer, Michael (M.T.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Dobbs, Dan (K.D.)
Subject: RE: F-150 EcoBoost - Olliver

Yes, thanks Jim.

The two CAC assemblies are shipping out FedEx this afternoon. Thanks again to everyone for all their help.

From: Tyler, Jim (J.S.)
Sent: Friday, August 31, 2012 3:16 PM
To: Nowaczyk, Rick (R.J.); Ricks, Kevin (K.J.); Kramer, Michael (M.T.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Dobbs, Dan (K.D.)
Subject: RE: F-150 EcoBoost - Olliver

Note to all...Rick received two BL34-9L440-AE PCA CACs at 2:20pm today.

Sent with Good (<u>www.good.com</u>) Jim Tyler T1/P552 Cooling 313-805-2565

----Original Message----From: Nowaczyk, Rick (R.J.)
Sent: Friday, August 31, 2012 01:10 PM Eastern Standard Time
To: Tyler, Jim (J.S.); Ricks, Kevin (K.J.); Kramer, Michael (M.T.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Dobbs, Dan (K.D.)
Subject: RE: F-150 EcoBoost - Olliver

Jim,

Left you a voice mail message. If you can bring them over that would be great. I am vacation for Tuesday, but will be back Wednesday.

From: Tyler, Jim (J.S.)
Sent: Friday, August 31, 2012 10:34 AM
To: Nowaczyk, Rick (R.J.); Ricks, Kevin (K.J.); Kramer, Michael (M.T.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Dobbs, Dan (K.D.)
Subject: RE: F-150 EcoBoost - Olliver

Rick, two BL34-9L440-AE service CACs arrived at Bld-1 this morning. Currently the parts are being released from the shipping dock to my desk. Are you available around 11-11:15? I can bring them to you.

Jim Tyler T1/P552 Cooling 313-805-2565 Bld-2 23P25

From: Nowaczyk, Rick (R.J.)
Sent: Thursday, August 30, 2012 12:35 PM
To: Ricks, Kevin (K.J.); Kramer, Michael (M.T.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Tyler, Jim (J.S.); Dobbs, Dan (K.D.)
Subject: RE: F-150 EcoBoost - Olliver

Yes, Jim Tyler please work with me on these. I just spoke to the FSE (Chris Hall) on this vehicle to let him know we are getting a CAC for this customer. I will be shipping this one directly to the FSE and he can carry it into the dealer once they schedule the customer in for the repair. Thanks everyone for all their help on this one.

From: Ricks, Kevin (K.J.)
Sent: Thursday, August 30, 2012 12:17 PM
To: Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Tyler, Jim (J.S.); Dobbs, Dan (K.D.)
Subject: RE: F-150 EcoBoost - Olliver

Rick is FCSD lead for coordination of repairs / availability.

From: Nowaczyk, Rick (R.J.)
Sent: Thursday, August 30, 2012 11:58 AM
To: Kramer, Michael (M.T.); Ricks, Kevin (K.J.); McDonagh, Scot (S.M.); Hanson, Chris (C.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Tyler, Jim (J.S.)
Subject: RE: F-150 EcoBoost - Olliver

We need to make this one customer listed below a top priority and get a CAC for this customer ASAP. From my understanding Shannon has been able to hold off her customer for a little while longer. I have attached the GCQIS report for this vehicle.

Chris Hanson, do you know who the FSE is that handles dealer P/A 04991.

From: Kramer, Michael (M.T.)
Sent: Thursday, August 30, 2012 11:23 AM
To: Ricks, Kevin (K.J.); McDonagh, Scot (S.M.)
Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.); Tyler, Jim (J.S.); Nowaczyk, Rick (R.J.)
Subject: RE: F-150 EcoBoost - Olliver

We are following up on an unfilled order. This would satisfy attached and Rick's previous request. Parts by mid-next week should be reasonable, however, need to confirm delivery date.

Mike Kramer RWD PT Cooling Supv.

Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Ricks, Kevin (K.J.) Sent: Thursday, August 30, 2012 11:09 AM To: McDonagh, Scot (S.M.); Kramer, Michael (M.T.) Cc: Arledge, Lynn (L.); Sparks, Douglas (D.S.) Subject: FW: F-150 EcoBoost - Olliver Importance: High

Scot, high visibility customer, can we get a new CAC?

From: Berardi, Michael (M.A.) Sent: Thursday, August 30, 2012 9:40 AM To: Arledge, Lynn (L.) Cc: Ricks, Kevin (K.J.) Subject: RE: F-150 EcoBoost - Olliver Importance: High

Kevin, When can we get a cooler for this customer? Can we pull one ahead?

Mike Berardi Director - Service Engineering Operations Ford Customer Service Division Administrative Assistant - Sandy Schwartzenberger (38468) Phone - (313) 323-8467 Fax - (313) 845-2580

Share the Ford Story at <u>www.TheFordStory.com</u> Save Paper - Do not print this email unless absolutely necessary

From: Arledge, Lynn (L.) Sent: Wednesday, August 29, 2012 3:49 PM To: Berardi, Michael (M.A.); Scott, Douglas (D.W.) Subject: FW: F-150 EcoBoost - Olliver

Mike,

I've been speaking with the customer below. He has retained an attorney, but is still willing to work with Ford if we can resolve this issue. Do you have an approximate date in September for the new cooler?

Thanks,

Privileged and Confidential

Lynn Arledge Senior Executive Representative Ford Executive Offices - CCGO Ford Motor Company

3

(313) 845-5808 Email: larledge@ford.com

From: Sloan, Jeffrey (J.) Sent: Wednesday, August 22, 2012 6:36 PM To: Tansil-Marshall, Robin (R.) Cc: Berardi, Michael (M.A.) Subject: FW: F-150 EcoBoost

Robin,

Please provide this additional information to the EL Agent.

Not certain we need to do an RAV if it can be fixed. Please send Mile and I a closing report.

Thank you

Sent with Good (<u>www.good.com</u>)

----Original Message----From: Berardi, Michael (M.A.) Sent: Wednesday, August 22, 2012 05:12 PM Eastern Standard Time To: Czubay, Kenneth (M.); Scott, Douglas (D.W.); Sloan, Jeffrey (J.) Subject: RE: F-150 EcoBoost

We have a Technical Service Bulletin (TSB) on an engine misfire in high humidity areas or during the rain. The TSB involves a new calibration and a deflector for the cooler and fixes most of the concerns. There are some instances where this will not repair it completely in certain geographic areas, and engineering is working on a new cooler which should be available in September. I suggest we expedite the part for the customer as soon as it is available.

4

Jeff – Question – Would we lose money on a trade assist if the customer paid the difference (A to A) and mileage? I would assume the truck should bring a decent buck at auction, but you're the expert.

Mike Berardi Director - Service Engineering Operations Ford Customer Service Division Administrative Assistant - Sandy Schwartzenberger (38468) Phone - (313) 323-8467 Fax - (313) 845-2580

Share the Ford Story at <u>www.TheFordStory.com</u> Save Paper - Do not print this email unless absolutely necessary

From: Czubay, Kenneth (M.) Sent: Tuesday, August 21, 2012 9:15 AM To: Sloan, Jeffrey (J.) Cc: Berardi, Michael (M.A.); Scott, Douglas (D.W.) Subject: FW: F-150 EcoBoost Hi Jeff | have not seen another note about this issue, Mike/Doug ??? thanks ken

Kenneth M Czubay Vice President US Marketing, Sales and Service

Go Ford !!

From: Mulally, Alan (A.R.) Sent: Tuesday, August 21, 2012 5:32 AM To: Czubay, Kenneth (M.) Subject: FW: F-150 EcoBoost

From:

Sent: Monday, August 20, 2012 6:21 PM To: Mulally, Alan (A.R.) Subject: F-150 EcoBoost

Mr. Mulally

Would be very surprise if you even are the one that reads this, but as I am sure you know you have a problem with your F-150 EcoBoost intercooler that engineering is not coming up with a fix they are trying but are not succeeding.

Mine is really bad and came close a couple of times to a very bad accident, and I have tried to work it out with customer service(which has been very nice) but they say Ford will not trade me for a V8.

I am not asking for my money back and moving to a Chevy, I am asking for to be moved into the same truck but a V8 or give me a trade in allowance for what I paid and I will buy a V8 or a Raptor.

Now we are a Ford Family

011 FX4 2012 Ford Fusion daughter Grad school 2012 Focus son Naval Officer 2012 Escape

as you see we are a Ford family please give this some consideration

My truck Vin number is 1FTFX1ET4BF

Please if you are not going to respond or help do not send back to customer service

From: Sent: To: Subject: Signed By: Smith, Craig (C.A.) Friday, February 01, 2013 11:36 AM Leisenring, Kenneth (K.C.) FW: F150 GTDI AIS Water Ingestion csmith24@ford.com

Ken,

Please see note below. It looks like the CAC team isn't planning any additional actions for the P415 misfire QSF that's nearly upon us. I'd be surprised if water ingestion was a significant factor for misfire based upon our DTF experience. If it's not, then I'm not sure what's left in the tank for potential solutions short of AGS. Adding AGS will require participation from a broad cross-section of teams and agreement to add non-trivial cost to the vehicle. As such, if we plan to proceed down this path then direction will need to come from a high enough level to quickly get everyone aligned and moving forward.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08 -----Original Message-----From: Hughes, Scott (S.R.) Sent: Friday, February 01, 2013 9:10 AM To: Smith, Craig (C.A.); Whitehead, Joseph (J.P.) Subject: FW: F150 GTDI AIS Water Ingestion

-----Original Message-----From: McDonagh, Scot (S.M.) Sent: Friday, February 01, 2013 8:53 AM To: Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Hughes, Scott (S.R.); Dumler, Jeff (J.D.) Subject: FW: F150 GTDI AIS Water Ingestion

I gave John Sowards our 13MY P415 GTDI test vehicle for AIS video experiment. Jeanette advised there are no further actions planned with CAC to address upcoming Misfire QSF.

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

-----Original Message-----From: Sowards, John (J.) Sent: Friday, February 01, 2013 8:17 AM To: Ronzi, Bill (W.C.); Andersen, Erik (E.); Madej, Jeanette (J.); Russo, Scott (S.); Hermann, Erik (E.H.) Cc: McDonagh, Scot (S.M.); Ladd, John (J.R.) Subject: RE: F150 GTDI AIS Water Ingestion

I would not consider the filter saturated but it was damp and in similar condition as was seen during the RFR stop ship water ingestion/CAC condensate investigation. I believe during WOT, enough air mass goes through the filter to strip most of the water collected leaving the filter damp to the touch.

During the **RFR** testing, we would weigh the filters to try and put a number on the amount of water ingested but found that an unreliable measurable based on video of the CAC inlet. In other words - we would see a large amount of water ingested at the CAC inlet but the weight of the filter would not correspond.

There was a small amount of puddling at the bottom of the airbox as well as witness marks from previous standing water.

I had attempted to run back to back testing with the fenderwell gap taped and un-taped but could not make a taped run in the time we had with the vehicle.

I agree that further testing should be done to determine the effects but suspect it isn't a large contributor to CAC condensate misfire.

I can make arrangements with the Video Imaging folks at EVB to have a camera installed in the clean and/or dirty side of the airbox. I believe we'll have more time with the vehicle I received from Scot McD to perform back to back testing. Standing by for further instructions.

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Thursday, January 31, 2013 4:45 PM To: Andersen, Erik (E.); Madej, Jeanette (J.); Russo, Scott (S.); Hermann, Erik (E.H.); Sowards, John (J.) Subject: RE: F150 GTDI AIS Water Ingestion

We'll put it on the agenda for next week then. I can give Julie a brief

update tomorrow if she asks.

I just looked at the video from John Sowards. Appears to be some droplets but it's difficult to see much beyond that. Do you know if the air filter was saturated following the drive?

If pulling any significant water through the AIS, I'd expect the filter to be saturated and there to be water standing in the bottom of the air box.

I'd suggest that we re-run the test next week, if we can get some wet roads, or run at DPG if the sprinklers aren't shut down for winter.

Bill

-----Original Message-----From: Andersen, Erik (E.) Sent: Thursday, January 31, 2013 4:05 PM To: Ronzi, Bill (W.C.); Madej, Jeanette (J.); Russo, Scott (S.); Hermann, Erik (E.H.) Subject: RE: F150 GTDI AIS Water Ingestion

I don't think we will have much information tomorrow. Is it possible to do it next week? We should have more to talk about.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Thursday, January 31, 2013 1:47 PM To: Madej, Jeanette (J.); Russo, Scott (S.); Andersen, Erik (E.); Hermann, Erik (E.H.) Subject: F150 GTDI AIS Water Ingestion Importance: High

Julie would like to discuss the plan to test the above and ID possible improvements. She'd like to discuss in her Friday FQR. Could we discuss for 5-10 minutes tomorrow or is that too soon?

Bill William C. Ronzi PTI Quality Supervisor (313) 805-6140 cell & pgr From:Cockerill, Al (C.A.)Sent:Tuesday, January 22, 2013 11:40 AMTo:Kramer, Michael (M.T.); Madej, Jeanette (J.); Norman, Kristofor (K.R.); Osepchook,
William (W.R.)Subject:FW: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

FYI, and confused

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender.

Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From: Parnell, Bill (W.) Sent: Tuesday, January 22, 2013 10:18 AM To: Cockerill, Al (C.A.); Mazuchowski, James (J.A.) Subject: FW: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

FYI on my 2013 F150. If the dealer didn't have the two CAC side by side they might not have noticed this and fitted a new "bad" CAC.

From: Parnell, Bill (W.) Sent: Tuesday, January 22, 2013 10:14 AM To: Hughes, Scott (S.R.) Cc: Galas, Dean (C.K.) Subject: RE: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

Hi Scott. Yes Dean did send me one down and it's a good thing he did. The dealer had called me on Thursday last week to tell me the one they had ordered had arrived. I had my truck scheduled for it to be fitted today. I gave them the one that Dean had sent and told them to use it for the next customer so that they wouldn't have to wait. Turns out when they opened the box the special order one they had been sent was the old level! So they are now fitting the one Dean sent. We should probably have someone in FCSD look into why we are still sending out the old level part, I would've expected we would have scrapped out all the old level parts we have, no?

I told the dealer about the erratic shifting when using cruise control and asked them to flash the PCM with the latest cal.

Thanks.

From: Hughes, Scott (S.R.) Sent: Saturday, January 19, 2013 8:16 AM To: Parnell, Bill (W.) Subject: RE: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

I heard that Dean Galas sent a CAC down to you. I'm hoping that you can still install it. Would like to hear if it improves your issues.

Thinking about mycanic, if something goes wrong, your truck would be dead. I think it would be best if you got the "latest" cal at dealership. Tell them you have a trans concern. If you are in Dearborn, I'd be happy to flash it for you.

From: Parnell, Bill (W.)
Sent: Monday, January 14, 2013 4:44 PM
To: Hughes, Scott (S.R.)
Subject: RE: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

I've never used a mycanic, I'd be happy to give it a go if you've time to talk me through it.

Thanks

From: Hughes, Scott (S.R.)
Sent: Monday, January 14, 2013 4:22 PM
To: Parnell, Bill (W.)
Subject: RE: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

Bill –

I just talked to the trans calibrator. Oddly enough, there was a change made after your truck was built to cruise control. I think I heard that your cal will give it 2 sec to get to set speed. If not there, it will downshift. New cal is 10 sec or more. This new cal is certified and in the plant, but I don't think it is at dealer yet.

Have you ever used a mycanic? I could send you one and you could reflash your truck. Or when your cac comes in, you could ask for latest cal as well.

Let me know what you'd like to do.

From: Parnell, Bill (W.)
Sent: Monday, January 14, 2013 12:26 PM
To: Hughes, Scott (S.R.)
Subject: RE: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

Thanks for trying Scott. I took a long drive to Canada this weekend, with the roads wet with melting snow it happened again. Kinda apprehensive to floor the throttle at all now. I do have another powertrain calibration question/issue. Why when the engine has such a huge fat torque curve does the transmission insist on kicking down from 6th to 5th gear when I hit resume on the cruise control at 65MPH to get the truck back up to 70MPH? This was on flat ground with a light load on board (3 people and their gear) Seems like it would waste fuel and the noise is just annoying.

Thanks again.

From: Hughes, Scott (S.R.)
Sent: Friday, January 11, 2013 2:56 PM
To: Parnell, Bill (W.)
Subject: FW: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

Bill –

I guess your dealer had the latest info. No spare parts in Dearborn. When you do eventually get your new CAC, I would be very curious to know your opinion on the effectiveness. Thanks.

Sorry I couldn't help.

Scott

From: Dobbs, Dan (K.D.)
Sent: Wednesday, January 09, 2013 2:32 PM
To: Hughes, Scott (S.R.)
Subject: RE: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

Sorry we are > 2,000 CAC's on backorder. We don't have anything here at DTP that would fit, or that I can weasel.

His Dealer will have to emergency order and get in line. We are getting like 400 a week from Valeo. Messy.

Good news is that we are now having CAC's freeze internally in Canada. Air flows funny around an ice ball plugging the outlet. I bet you can Cal that out....grin... ! Physics are a pain sometimes.

Overall, the revised CAC has made a good positive dent as best we can tell. Weather shifted in Southeast Gulf area so we won't be certain until Spring and Late Summer. We have a few leakers in Washington State and Oregon, it's hard to be certain with COP issues popping at times.

We appreciate what you are doing with the TGW driveability items.

From: Hughes, Scott (S.R.)
Sent: Wednesday, January 09, 2013 2:23 PM
To: Dobbs, Dan (K.D.)
Subject: FW: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

Dan –

Below is a Ford employee that works out of Cleveland. He is very in tune with his CAC issue, but has been put on hold by the dealer in getting the part put in his vehicle. I was hoping that there may be a part in Dearborn that we could get to Bill's dealer a little quicker. Bill had promised that he would provide feedback on the effectiveness of his fix. Dealer info is below.

Please let me know if this is possible. Thanks.

Also - what is your take on the effectiveness of the new CAC? As good as advertised?

Scott

From: Parnell, Bill (W.)
Sent: Wednesday, January 09, 2013 1:56 PM
To: Hughes, Scott (S.R.)
Subject: F150 Water in CAC concern - Management lease vehicle 1FTFW1ET1DF

F

Hi Scott, as we discussed I had previously taken my truck to Liberty Ford in Brunswick. The service writer I was dealing there was Jay (sorry don't know his last name). The truck was in there on 1-3-13, they had advised I needed the new CAC and that the parts would be on back order for 3 - 4 weeks.

Dealer Address is

Liberty Ford 3101 Center Road Brunswick OH 44212

Tel: 330-225-9141

Thanks for your help.

Bill Parnell Ford Motor Company T: 313 283 2646 From: Sent: To: Subject: Alcaraz andrade, Alejandro (M.) Wednesday, June 26, 2013 9:44 AM Kramer, Michael (M.T.) FW: FW: Surface prep question

Mike,

No issue with cleaning the CAC with alcohol, but I think we should specify that dealers must make sure CAC is dry before installation Thank you

-----Original Message-----From: Stein, James (J.R.) Sent: Wednesday, June 26, 2013 09:00 AM Eastern Standard Time To: Alcaraz andrade, Alejandro (M.) Subject: Re: FW: Surface prep question

Hi Alejandro, No this is not an issue. Thank you,

>>> "Alcaraz andrade, Alejandro (M.)" <<u>malcara2@ford.com</u>> 6/26/2013 8:57 AM >>> For the service blocker, DL34 3G4610 AA, previous to the installation we would like to clean the CAC is there any known concern with the 3M adhesive if we do so with alcohol? Thanks

From: Kramer, Michael (M.T.) Sent: miércoles, 26 de junio de 2013 06:58 a.m. To: Alcaraz andrade, Alejandro (M.) Cc: Kramer, Michael (M.T.) Subject: FW: Surface prep question

Please also have Creative Foam check with 3M to see if there are any concerns with using an alcohol wipe for cleaning the surface prior to sticking the blocker to it.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Kramer, Michael (M.T.)
Sent: Wednesday, June 26, 2013 7:57 AM
To: Blas-Fernando GUTIERREZ (<u>blas-fernando.qutierrez@valeo.com</u>); Tyler, Jim (J.S.)
Cc: Reaume, Alan (A.C.); Alcaraz andrade, Alejandro (M.); Kramer, Michael (M.T.)
Subject: FW: Surface prep question

Please provide name and details of the paint used on the P415 CAC

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Reaume, Alan (A.C.)
Sent: Wednesday, June 26, 2013 7:35 AM
To: Kramer, Michael (M.T.); Kowalski, George (G.S.); Romano, Ron (R.)
Cc: Alcaraz andrade, Alejandro (M.); Dobbs, Dan (K.D.); Ronzi, Bill (W.C.)
Subject: RE: Surface prep question

Mike, The paint specification is not attached, the two methods below are for paint adhesion. If you can give us the paint trade name or specification, we can evaluate the cleaner, but generally any fully cured paint will not be affected by an alcohol wipe. I would recommend using iso-propyl alcohol to remove oily residue.

Thanks,

Alan Reaume Engine Materials Engineering Engine Non-Metals Technical Expert phone/fax 313 337-2879 20000 Rotunda, Cube 12B038 Dearborn MI, 48121-2053

From: Kramer, Michael (M.T.)
Sent: Tuesday, June 25, 2013 3:54 PM
To: Reaume, Alan (A.C.); Kowalski, George (G.S.); Romano, Ron (R.)
Cc: Kramer, Michael (M.T.); Alcaraz andrade, Alejandro (M.); Dobbs, Dan (K.D.); Ronzi, Bill (W.C.)
Subject: Surface prep question

We have an aluminum charge air cooler painted per the following spec:

<< OLE Object: Picture (Device Independent Bitmap) >>

Want to add a surface cleaning procedure to a TSB to clean a portion of the face prior to adding a stick-on blocker shield.

Would denatured alcohol be a suitable cleaner/degreaser that would not remove the paint? Other cleaner/degreaser?

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com This transmission may contain information that is privileged, proprietary, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of the information contained herein (including any reliance thereon) is STRICTLY PROHIBITED. If you received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format. Thank you.

From:	Sims, Ivan (I.D.)	
Sent:	Thursday, January 05, 2012 8:22 AM	
To:	Kramer, Michael (M.T.)	
Subject:	FW: GM patent describing CAC condensate leading to misfire	
Importance:	High	
Per our discussion		

IVAN D. SIMS Hardware/Controls Interface Section Component Design C Department, GEE Phone: 313-805-9971

 From:
 Glugla, Chris (C.P.)

 Sent:
 Wednesday, January 04, 2012 2:57 PM

 To:
 Mancini, Michael (M.A.); Mazuchowski, James (J.A.); Russ, Stephen (S.G.); Sirns, Ivan (I.D.); Smith, Cralg (C.A.); Mandjack, Michael (M.P.); Morrow, Bill (N.W.); Norman, Kristofor (K.R.); Boerger, Jim (J.G.); Tallio, Kevin (K.V.); McCoy, Jim (D.); Fabien, Phil (P.A.); Fought, Matthew (M.S.); Cockerill, AI (C.A.)

 Subject:
 GM patent describing CAC condensate leading to misfire

 Importance:
 High

From GM patent 20110107760

U520110107760(A
1).pdf

BACKGROUND OF INVENTION

The present invention relates generally to turbocharger systems used with internal combustion engines in vehicles, and more particularly to intercooler assemblies used with turbocharger systems in vehicles.

Many high output turbocharged engines used in vehicles employ a base boost at relatively low engine speeds, such as during steady state highway driving. This base boost is essentially an always-on turbo boost and helps reduce turbo lag, which is a common complaint for older turbocharged engines on vehicles. A high level of base boost, together with a high thermal efficiency charge-air-cooler (CAC) heat exchanger (i.e., an intercooler), can cause condensation to form inside the CAC. This condensation typically occurs during steady state driving when ambient conditions are warm with humidity levels near one hundred percent. Such a condition may occur for an automotive vehicle during steady state highway driving in the rain.

The concern with forming this condensation occurs when a significant amount of condensate has been generated during steady state driving, and the vehicle operator subsequently performs a hard acceleration of the vehicle. The collected condensate can be ingested into the engine at too high of a rate, causing engine misfire. If the misfire is severe enough, the vehicle's engine control module may light the "service engine soon" light, which is undesirable. Moreover, the driver may also notice poor vehicle performance or rough acceleration, which are also undesirable.

One way to minimize the condensate collection is by employing a turbocharger system that provides a very low base boost. However, this increases the undesirable turbo-lag that base boost is meant to minimize in the first

1

place. Another possibility to deal with the condensate is to use engine vacuum to extract condensate, but this may create powertrain integration concerns. Also, another way is to allow the condensate to leak to atmosphere, however, this may be undesirable when attempting to meet certain vehicle emissions requirements.

Another possible solution is to create an integrated condensate trap, as is shown in FIG. 1. In this turbocharger system 10, a pair of integrated condensate trap tubes 12 are built into the bottom of an intercooler heat exchanger 14. As air passes from an inlet tube 16 at a first end of the heat exchanger 14 to an outlet tube 18 at a second end of the heat exchanger, excess condensate that is formed in the heat exchanger 14 is stored in the integral trap tubes 12. For example, for a vehicle traveling at steady state highway speeds during a rain storm, the condensate may be produced in the intercooler heat exchanger 14 at a rate of about two hundred milliliters of water per hour, but the engine may only be able to handle ingesting water at a rate of about sixty milliliters of water per hour from the intercooler heat exchanger before engine misfire is detected. Thus, with the condensate trap tubes 12, the vehicle may only be able to travel for a relatively limited time before the ingestion rate of the condensate is high enough to cause a misfire.

Chris Glugla

Technical Expert Advanced Controls Implementation Powertrain Controls Research and Development Research and Innovation Center 2101 Village Road Dearborn, MI. 48121 Cube 1625.t Phone: (313) 322-4692 Fax: (313)-2487857 MD: 2036 email: cglugla@ford.com



US 20110107760A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2011/0107760 A1 Quinn et al.

May 12, 2011 (43) Pub. Date:

(54) INTERCOOLER HAVING CONDENSATE RESERVOIR

Publication Classification

- (51)Int. Cl. F02B 29/04 (2006.01)
- U.S. Cl. (52) 60/599

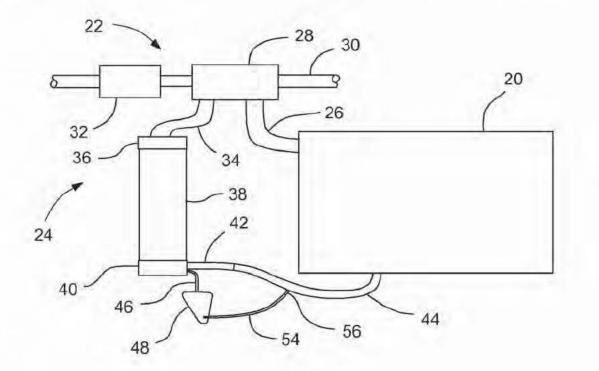
(57) ABSTRACT

An engine air intake system for a vehicle having an internal combustion engine may include a turbocharger; a CAC heat exchanger having an inlet end for receiving compressed intake air from the turbocharger and an outlet end; a remote condensate reservoir spaced from the CAC heat exchanger. for storing condensate therein; a condensate drain tube extending from the outlet end to the remote condensate reservoir to allow condensate produced in the CAC heat exchanger to flow into the remote condensate reservoir; an air duct connecting the outlet end to the engine to direct air flow from the outlet end to the engine; and a reservoir outlet hose connected to the remote condensate reservoir at a first end and connected to the air duct at a second end to allow condensate evaporating from the remote condensate reservoir to flow through the reservoir outlet hose into the air duct.

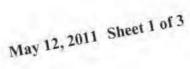
(75) Inventors: Richard D. Quinn, Clarkston, MI (US): Brandon S. Helton, Hartland, MI (US); Kenneth J. Murphy, Carleton, MI (US); Tuan

A. Tran, Dearborn Heights, MI (US); Lawrence E. Walla. Washington, MI (US)

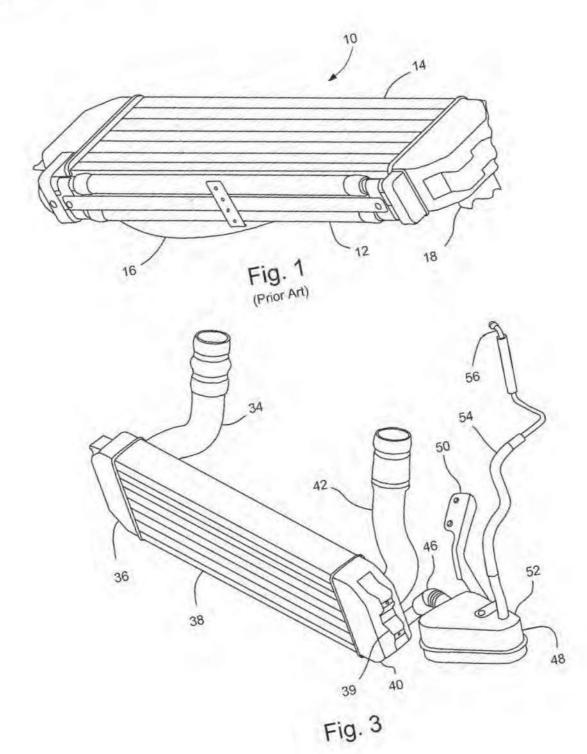
- GM GLOBAL TECHNOLOGY (73) Assignee: **OPERATIONS, INC., DETROIT,** MI (US)
- (21) Appl. No.: 12/617,010
- (22) Filed: Nov, 12, 2009

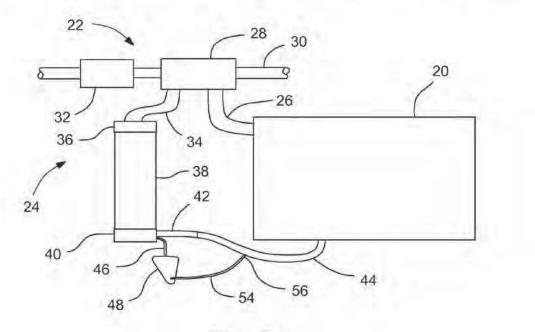


US 2011/0107760 A1

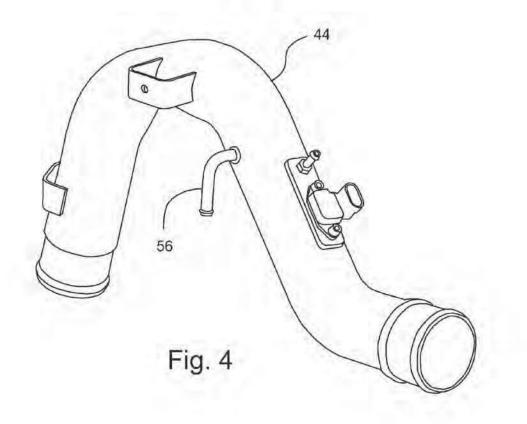


Patent Application Publication









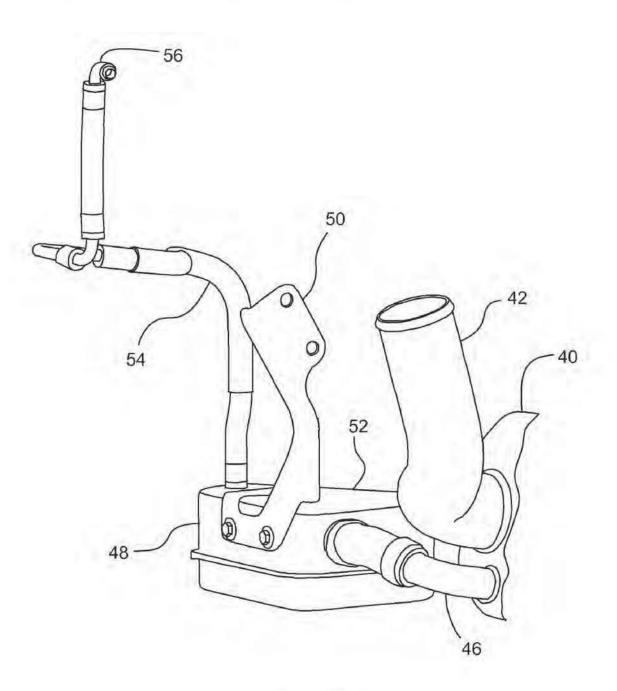


Fig. 5

INTERCOOLER HAVING CONDENSATE RESERVOIR

BACKGROUND OF INVENTION

[0001] The present invention relates generally to turbocharger systems used with internal combustion engines in vehicles, and more particularly to intercooler assemblies used with turbocharger systems in vehicles.

[0002] Many high output turbocharged engines used in vehicles employ a base boost at relatively low engine speeds, such as during steady state highway driving. This base boost is essentially an always-on turbo boost and helps reduce turbo lag, which is a common complaint for older turbocharged engines on vehicles. A high level of base boost, together with a high thermal efficiency charge-air-cooler (CAC) heat exchanger (i.e., an intercooler), can cause condensation to form inside the CAC. This condensation typically occurs during steady state driving when ambient conditions are warm with humidity levels near one hundred percent. Such a condition may occur for an automotive vehicle during steady state highway driving in the rain.

[0003] The concern with forming this condensation occurs when a significant amount of condensate has been generated during steady state driving, and the vehicle operator subsequently performs a hard acceleration of the vehicle. The collected condensate can be ingested into the engine at too high of a rate, causing engine misfire. If the misfire is severe enough, the vehicle's engine control module may light the "service engine soon" light, which is undesirable. Moreover, the driver may also notice poor vehicle performance or rough acceleration, which are also undesirable.

[0004] One way to minimize the condensate collection is by employing a turbocharger system that provides a very low base boost. However, this increases the undesirable turbo-lag that base boost is meant to minimize in the first place. Another possibility to deal with the condensate is to use engine vacuum to extract condensate, but this may create powertrain integration concerns. Also, another way is to allow the condensate to leak to atmosphere; however, this may be undesirable when attempting to meet certain vehicle emissions requirements.

[0005] Another possible solution is to create an integrated condensate trap, as is shown in FIG. 1. In this turbocharger system 10, a pair of integrated condensate trap tubes 12 are built into the bottom of an intercooler heat exchanger 14. As air passes from an inlet tube 16 at a first end of the heat exchanger 14 to an outlet tube 18 at a second end of the heat exchanger, excess condensate that is formed in the heat exchanger 14 is stored in the integral trap tubes 12. For example, for a vehicle traveling at steady state highway speeds during a rain storm, the condensate may be produced in the intercooler heat exchanger 14 at a rate of about two hundred milliliters of water per hour, but the engine may only be able to handle ingesting water at a rate of about sixty milliliters of water per hour from the intercooler heat exchanger before engine misfire is detected. Thus, with the condensate trap tubes 12, the vehicle may only be able to travel for a relatively limited time before the ingestion rate of the condensate is high enough to cause a misfire.

SUMMARY OF INVENTION

[0006] An embodiment contemplates an engine air intake system for a vehicle having an internal combustion engine.

The engine air intake system may include a turbocharger; a charge-air-cooler (CAC) heat exchanger having an inlet end that receives compressed intake air from the turbocharger and an outlet end; a remote condensate reservoir spaced from the CAC heat exchanger that stores condensate; a condensate drain tube extending from the outlet end to the remote condensate reservoir to allow condensate produced in the CAC heat exchanger to flow into the remote condensate reservoir; an air duct connecting the outlet end to the engine to direct air flow from the outlet end to the engine; and a reservoir outlet hose connected to the top surface of the remote condensate reservoir at a first end and connected to the air duct at a second end to allow condensate evaporating from the remote condensate reservoir to be drawn through the reservoir outlet hose into the air duct.

[0007] An embodiment contemplates an engine air intake system for a vehicle having an internal combustion engine. The engine air intake system may include a turbocharger; a CAC heat exchanger having an inlet end for receiving compressed intake air from the turbocharger and an outlet end; a remote condensate reservoir spaced from the CAC heat exchanger, for storing condensate therein; a condensate drain tube extending from the outlet end to the remote condensate reservoir having a first end connected to the outlet end and a second end connected to the remote condensate reservoir at an elevation that is lower than the first end of the condensate drain tube to allow condensate produced in the CAC heat exchanger to flow into the remote condensate reservoir; an air duct connecting the outlet end to the engine to direct air flow from the outlet end to the engine; and a reservoir outlet hose connected to the remote condensate reservoir at a first end and connected to the air duct at a second end and configured to allow condensate evaporating from the remote condensate reservoir to flow through the reservoir outlet hose into the air duct.

An advantage of an embodiment is that a remote [0008] coolant reservoir allows for improved intercooler performance, especially when operating the vehicle in wet conditions. The condensate can be stored and fed into the engine in a controlled rate while still allowing for maximum chargeair-cooler heat exchanger effectiveness within the packaging space allowed for the heat exchanger by allowing for maximizing the frontal area in the CAC heat exchanger. Maximizing the frontal area in this way reduces the air flow restriction and reduces the pressure drop, which leads to the improved overall cooling of the charge air. This may allow for improved horsepower and torque output from the engine. Moreover, the remote coolant reservoir allows for more flexibility in the size and shape of the reservoir to provide the desired storage capacity for the condensate without reducing the cooling effectiveness of the charge air cooler heat exchanger and while providing more packaging flexibility in locating the reservoir.

[0009] Another advantage of an embodiment is that the remote condensate reservoir allows the vehicle to travel for longer periods of time without ingestion of condensate in the engine creating a significant engine misfire concern, even with an intercooled, high base boost turbocharger system. The ingestion of the condensate into the engine may be maintained at desired controlled rates, with the relatively higher pressure at a condensate drain tube and the relatively lower pressure at an intake duct connector causing a flow through the remote condensate reservoir that will draw condensate into the air stream.

[0010] Another advantage of an embodiment is that the condensate does not have to be released to atmosphere, thus avoiding concerns with vehicle emissions requirements.

[0011] Still another advantage of an embodiment is that the condensate reservoir, condensate drain tube and reservoir outlet hose do not require any moving parts, thus reducing concerns with reliability and making the assembly simple to fabricate and assemble and easy to service.

BRIEF DESCRIPTION OF DRAWINGS

[0012] FIG. 1 is a perspective view of a prior art intercooler heat exchanger.

[0013] FIG. 2 is a schematic, plan view of an engine and turbocharger system for a vehicle.

[0014] FIG. 3 is a perspective view of a portion of the turbocharger system.

[0015] FIG. 4 is a perspective view of a portion of the turbocharger system.

[0016] FIG. 5 is another perspective view of a portion of the turbocharger system.

DETAILED DESCRIPTION

[0017] FIGS. 2-5 illustrate portions of an engine 20 and engine air intake system 22 that is employed with a vehicle. The engine air intake system 22 includes a turbocharger system 24 that compresses and cools intake air before being delivered to the engine 20. The engine 20 connects to an exhaust pipe 26 leading to a turbocharger 28 that is driven by the flow of exhaust gas from the pipe 26. An exhaust outlet of the turbocharger 28 directs air into a vehicle exhaust pipe 30. Intake air is directed through an air cleaner 32 to the turbocharger 28, which directs the charged air into an intercooler inlet tube 34.

[0018] The intercooler inlet tube 34 directs compressed air into an intake end 36 of a charge-air-cooler (CAC) heat exchanger 38 that cools the charged air. The CAC heat exchanger 38 may include mounting brackets 39 for mounting the heat exchanger in a condenser, radiator, fan module. An outlet end 40 of the CAC heat exchanger 38 directs the compressed, cooled air into an intercooler air outlet tube 42, which is connected to and directs the air into an engine air intake duct 44. The engine air intake duct 44 directs the air into the engine 20.

[0019] The outlet end 40 also connects to a condensate drain tube 46 that leads to a remote condensate reservoir 48 that is spaced from the CAC heat exchanger 38. A support bracket 50 may mount to the reservoir 48 to vehicle body structure to support the reservoir 48 in the vehicle. The reservoir 48 is preferably packaged in the vehicle such that the condensate drain tube 46 is level or lower at the reservoir end than the end connected to the heat exchanger 38. Accordingly, the height the condensate has to travel up the drain tube 46 is minimized or eliminated. The condensate drain tube 46 should have a large enough inside diameter to allow condensate to easily flow from the heat exchanger 38 into the reservoir 48 under conditions that cause a high rate of condensate production, such as under a hard acceleration.

[0020] Extending from the top 52 of the reservoir 48 is a reservoir outlet hose 54. The reservoir outlet hose 54 connects to an intake duct connector 56, which is mounted to the engine air intake duct 44. The reservoir outlet hose 54 has a significantly smaller inner diameter than the engine air intake duct 44 in order to limit the amount of condensate relative to the

volume of the air flowing into the engine 20. The significant size difference may be as much as an order of magnitude different, with the smaller diameter being one-tenth or less of the larger diameter, thus making the flow area difference even greater. The air flowing through the engine air intake duct 44 may possibly create somewhat of a venturi effect as it flows past the intake duct connector 56, thus drawing the air and condensate mixture from the reservoir outlet hose 54. The difference in pressure between the air in the condensate drain tube 46 and the air in the intake duct connector 56 will cause an air flow through the remote condensate reservoir 48, which will draw some of the condensate into the air stream. Consequently, this reservoir assembly is an active system that operates continuously as the engine is on-rather than a passive system-assuring that the condensate will be drawn into the engine at a desirable controlled rate.

[0021] Portions of the condensate drain tube **46** and reservoir outlet hose **54** are preferably made of silicone. The silicone material is preferred in order to avoid swelling and cracking from exposure to oil from the turbocharger unit that may occur with other materials. The silicone also provides the ability to expand should the condensate freeze in cold weather.

[0022] During operation of the vehicle in high humidity conditions, such as driving on a highway during a rain storm, condensate that forms in the CAC heat exchanger 38 and collects at the bottom of the heat exchanger 38 is drawn into the remote condensate reservoir 48 through the condensate drain tube 46. The reservoir outlet hose 54 is attached to the top 52 of the reservoir 48, which allows the incoming mix of condensate and air to separate. The excess condensate produced while driving under the high humidity conditions will be stored in the reservoir 48.

[0023] Then, when the vehicle is operated under driving conditions with lower humidity, the condensate evaporates into the air flowing through the remote condensate reservoir 48, with this air drawn from the reservoir 48 through the reservoir outlet hose 54 into the engine air intake duct 44 and into the engine 20. The vacuum in the engine air intake duct 44 may possibly employ a venturi effect to draw the air/ condensate mixture through the reservoir outlet hose 54. The inside diameter of the reservoir outlet hose 54, being much smaller than the inside diameter of the engine air intake duct 44 assures that the amount of condensate in the incoming air to the engine 20 will minimize the chance of the condensate causing an engine misfire. The particular difference in diameters may be determined for particular combinations of specific engines and turbocharger systems to assure that the condensate is ingested at a controlled rate below that which may cause misfires. The intake duct connector 56 connects to the engine air intake duct 44 close to the intake of the engine 20 to take advantage of the pressure differential in order to draw the evaporated condensate through the reservoir outlet hose 54.

[0024] While certain embodiments of the present invention have been described in detail, those familiar with the art to which this invention relates will recognize various alternative designs and embodiments for practicing the invention as defined by the following claims.

What is claimed is:

1. An engine air intake system for a vehicle having an internal combustion engine comprising:

3

a turbocharger:

- a CAC heat exchanger having an inlet end configured to receive compressed intake air from the turbocharger and an outlet end;
- a remote condensate reservoir mounted in the vehicle spaced from the CAC heat exchanger, configured to store condensate therein, and having a top surface;
- a condensate drain tube extending from the outlet end to the remote condensate reservoir configured to allow condensate produced in the CAC heat exchanger to flow into the remote condensate reservoir;
- an air duct connecting the outlet end to the engine and configured to direct air flow from the outlet end to the engine; and
- a reservoir outlet hose connected to the top surface of the remote condensate reservoir at a first end and connected to the air duct at a second end and configured to allow condensate evaporating from the remote condensate reservoir to be drawn through the reservoir outlet hose into the air duct.

2. The engine air intake system of claim 1 wherein the condensate drain tube has a first end connected to the outlet end and a second end connected to the remote condensate reservoir at an elevation that is lower than the first end of the condensate drain tube.

 The engine air intake system of claim 1 wherein the reservoir outlet hose has an inside diameter that is at least an order of magnitude smaller than an inside diameter of the air duct.

4. The engine air intake system of claim 1 wherein at least a portion of the condensate drain tube is made of silicone.

5. The engine air intake system of claim 1 wherein at least a portion of the reservoir outlet hose is made of silicone.

6. The engine air intake system of claim 1 wherein the condensate drain tube connects to a side of the remote condensate reservoir at an elevation below the top surface of the remote condensate reservoir.

 An engine air intake system for a vehicle having an internal combustion engine comprising: a turbocharger:

- a CAC heat exchanger having an inlet end configured to receive compressed intake air from the turbocharger and an outlet end;
- a remote condensate reservoir spaced from the CAC heat exchanger, configured to store condensate therein;
- a condensate drain tube extending from the outlet end to the remote condensate reservoir having a first end connected to the outlet end and a second end connected to the remote condensate reservoir at an elevation that is lower than the first end of the condensate drain tube to allow condensate produced in the CAC heat exchanger to flow into the remote condensate reservoir;
- an air duct connecting the outlet end to the engine and configured to direct air flow from the outlet end to the engine; and
- a reservoir outlet hose connected to the remote condensate reservoir at a first end and connected to the air duct at a second end and configured to allow condensate evaporating from the remote condensate reservoir to flow through the reservoir outlet hose into the air duct.

8. The engine air intake system of claim 7 wherein the reservoir outlet hose has an inside diameter that is at least an order of magnitude smaller than an inside diameter of the air duct.

9. The engine air intake system of claim 8 wherein the remote condensate reservoir has a top surface and the first end of the reservoir outlet hose is connected to the top surface of the remote condensate reservoir.

10. The engine air intake system of claim 9 wherein the condensate drain tube connects to a side of the remote condensate reservoir at an elevation below the top surface of the remote condensate reservoir.

11. The engine air intake system of claim 7 including a pair of heat exchanger brackets secured to the CAC heat exchanger and configured to mount the CAC heat exchanger to vehicle structure, and a reservoir bracket secured to the remote condensate reservoir and configured to secure the remote condensate bracket to the vehicle structure.

* * * * *

From:	Andersen, Erik (E.)
Sent:	Tuesday, February 26, 2013 6:17 PM
То:	Devries, Jason (J.E.)
Subject:	FW: Heads-up - 13MY F150 GTDI CAC Misfire 80% QSF Threshold

we don't have any room on the CAC. This is going to get a lot more attention once it hits the QSF threshold, as if it isn't already.

So, what else can we do in the calibration? Do we need to start talking more seriously about shift schedules?

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Sparks, Douglas (D.S.)
Sent: Tuesday, February 26, 2013 12:31 PM
To: McCoy, Julie (.); Madej, Jeanette (J.); Ronzi, Bill (W.C.); Andersen, Erik (E.); Renwick, Rick (R.J.); Wright, Robin (R.A.); Beltramo, Joel (J.J.); Mazuchowski, James (J.A.); Crudo, Frank (F.J.); Baum, Joe (J.M.); Leisenring, Kenneth (K.C.); Smith, Craig (C.A.)
Subject: Heads-up - 13MY F150 GTDI CAC Misfire 80% QSF Threshold

Team,

FYI - the F150 3.5L GTDI is on the emerging QSF list; is currently 80% of QSF threshold (20 calls into the hot line for help post revised CAC). We will continue to monitor and keep you posted. However, at this rate there will be another QSF for CAC induced misfire.

Eric,

What is the testing status of controlling system pressure with CBV and or waste gate? Has there been any progress on H2O contribution from the AIS ?

Thank you,

Douglas S. Sparks P/T Quality and PVT Manager FNA P/T Integration and Program Management (PTIM) <u>dsparks3@ford.com</u> 313-805-6096

Administrative Assistant: Tina Tessadri ttessadr 313 594-1115

From: Sent: To: Subject: Madej, Jeanette (J.) Friday, February 17, 2012 11:02 AM Kramer, Michael (M.T.); Ladd, John (J.R.) Fw: Kick off tooling for P415 misfire fixes

Pls see we need timing for both

From: Mazuchowski, James (J.A.) Sent: Friday, February 17, 2012 10:40 AM To: Hermann, Erik (E.H.); McCoy, Julie (.) Cc: Madej, Jeanette (J.) Subject: RE: Kick off tooling for P415 misfire fixes

Erik, the 1000 pc number was for a service fix and an estimate on my part. You need to assume for both service and production based on yesterday's direction.

Jim Mazuchowski Manager, New V6 Engine Programs V-Engine Eng'r; 33-79935

 From:
 Hermann, Erik (E.H.)

 Sent:
 Thursday, February 16, 2012 2:46 PM

 To:
 McCoy, Julie (.)

 Cc:
 Madej, Jeanette (J.); Mazuchowski, James (J.A.)

 Subject:
 RE: Kick off tooling for P415 misfire fixes

There is not yet a feasible design to tool. I reviewed the concept earlier this week and agreed assumptions that we think would be feasible but the team is still working on creating the design. The CAC duct change is not minor. A feasible version is a totally new tooled duct with a completely different manufacturing approach.

Request was low volume (~1000 parts) so our assumption is aluminum tooling using a fast local shop similar to what we did for the C520 turbo whine resonators. Timing will be similar at 10-12 weeks from now to customer usable parts.

Erik Hermann

Manager - PTI Global Air Intake Systems 313-323-8715 Share the Ford Story at <u>www.TheFordStory.com</u> << OLE Object: Picture (Metafile) >>

From: McCoy, Julie (.) Sent: Thursday, February 16, 2012 2:22 PM To: Madej, Jeanette (J.); Hermann, Erik (E.H.); Mazuchowski, James (J.A.) Subject: Kick off tooling for P415 misfire fixes Importance: High

Jeanette/Erik, need you to kick off the highest confidence tooling for the P415 misfire fixes TODAY. Per Joe, he will help elevate with the suppliers in next week's quality meeting if timing is not expedited or to your expectations. Please make sure that this is done before you leave for the day and let me know if you have any questions. Suggest that you very closely scrub the timing and ensure that the suppliers have the proper sense of urgency. Please let me know if any help is needed, many thanks.

Julie McCoy

Chief Engineer, Powertrain Installations (PTI) jmccoy, 313-805-6374 Administrative assistant: Angie Perkins x47391 From:Kramer, Michael (M.T.)Sent:Monday, April 08, 2013 4:03 PMTo:Sowards, John (J.); Huang, Larry (L..)Cc:Andersen, Erik (E.)Subject:FW: LATE SCHEDULE CHANGE - Tuesday 7:30am

Importance:

High

Per our discussions today.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Weber, Erik (E.M.) Sent: Monday, April 08, 2013 3:23 PM To: Sarkozi, Gerald (G.); Rohrhoff, Bob (J.) Cc: Weber, Erik (E.M.); Kramer, Michael (M.T.) Subject: LATE SCHEDULE CHANGE - Tuesday 7:30am Importance: High

Gerry,

I need to make a late schedule change.

Please replace 294w448 AD5834 with 566w329 AD1260. Vehicle is on-site already.

This change is required to support and emerging 2014 P415 late content change related to ongoing CAC condensation field issues and a new bumper grill insert.

Erile M. Weber

Ford Motor Company TASE - FNA VE P552 Thermal & Cooling 313.805.4349

TASI)

From:Kramer, Michael (M.T.)Sent:Monday, September 17, 2012 11:42 AMTo:Ladd, John (J.R.); Tyler, Jim (J.S.)Cc:Weber, Erik (E.M.); Kramer, Michael (M.T.)Subject:FW: Meeting Forward Notification: Lower Grille (bumper design)

The P415 program is continuing to investigate a grill cover in the lower bumper opening due to appearance concerns of the CAC showing through.

Jim. Erik needs a PCA CAC next week for his cooling evaluation of the latest grill cover proposal.

John. We should also consider evaluating from a CAC condensation standpoint.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Massara, Michael (M.G.)
Sent: Monday, September 17, 2012 11:27 AM
To: Sullivan, Raymond (R.)
Cc: Harris, Wilding (W.G.); Rodgers, Thomas (T.A.); Weber, Erik (E.M.); Palm, Jim (J.R.); Kramer, Michael (M.T.); Kasper, Kenneth (K.T.); DiMarco, Jackie Marshal (J.M.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

Ray, please verify when the SLA will be available. Eric told me that once he knows this info, he will compose the test request. He is optimistic the testing can happen next week. Thanks

From: Weber, Erik (E.M.)
Sent: Monday, September 17, 2012 11:14 AM
To: Massara, Michael (M.G.); Sullivan, Raymond (R.)
Cc: Harris, Wilding (W.G.); Rodgers, Thomas (T.A.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

Michael,

Yes, I'm sure we can accommodate a test of this grill proposal very soon. Based on previous test information, I believe this proposal will be acceptable.

There was a separate request of our group to accommodate a CAC condensation water spray test for P415 the week of 9/24. Beyond the requested timing, I'm not really certain what that request entails, but I would suggest piggybacking onto that request in the interest of DV efficiency.

Erik M. Weber

Ford Motor Company TASE - FNA VE P415 / U22x Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Massara, Michael (M.G.) Sent: Monday, September 17, 2012 10:03 AM To: Sullivan, Raymond (R.); Weber, Erik (E.M.) Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

On that note Eric, are there any plans for getting analytical and empirical (wind tunnel) testing done on this design?

From: Sullivan, Raymond (R.) Sent: Monday, September 17, 2012 9:38 AM To: Weber, Erik (E.M.) Cc: Massara, Michael (M.G.) Subject: FW: Meeting Forward Notification: Lower Grille (bumper design)

Erik,

Sorry I could not remember if I sent this to you already for a preview of the latest proposal from the studio. I should have a sterolith part in a couple of days. There is a lot of interest in getting a cooling evaluation as soon as possible (of course).

<< File: bumper.stp >>

From: LaMontagne, Trevor (T.)
Sent: Wednesday, September 05, 2012 2:16 PM
To: Massara, Michael (M.G.); Sullivan, Raymond (R.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

I reviewed w Sean Tant ,the design manager and he made some changes... << OLE Object: Picture (Device Independent Bitmap) >>

From: Massara, Michael (M.G.) Sent: Wednesday, September 05, 2012 12:11 PM To: LaMontagne, Trevor (T.); Sullivan, Raymond (R.) Subject: RE: Meeting Forward Notification: Lower Grille (bumper design) Thanks Trevor. Ray, if you are satisfied w/the geometric detail, let's get a surface to Weber for assessment.

From: LaMontagne, Trevor (T.)
Sent: Wednesday, September 05, 2012 11:41 AM
To: Massara, Michael (M.G.); Sullivan, Raymond (R.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

I have a proposal ready for review. Let me know if you want the file shared somewhere or a meeting to review... << OLE Object: Picture (Device Independent Bitmap) >>

From: Massara, Michael (M.G.) Sent: Wednesday, September 05, 2012 9:51 AM To: Sullivan, Raymond (R.); LaMontagne, Trevor (T.) Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

Thanks guys, please keep me in the loop where you are on this and guesstimate timing when we can get a basic asurface to TASE for assessment. Again, this isn't artwork at this point, just some basic design to determine whether it's viable and worth going forward.

From: Sullivan, Raymond (R.)
Sent: Wednesday, September 05, 2012 7:06 AM
To: LaMontagne, Trevor (T.)
Cc: Massara, Michael (M.G.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

Trevor,

Sorry I have been out of the office and just returned today. Let me know a good time for you and we can get together to look at the lower bumper grille proposal. Thank you.

From: Massara, Michael (M.G.)
Sent: Tuesday, September 04, 2012 1:22 PM
To: LaMontagne, Trevor (T.)
Cc: Sullivan, Raymond (R.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

Ray, please get with and line up Trevor on the design. I will most likely be out this and next week. Thanks

From: LaMontagne, Trevor (T.)
Sent: Tuesday, September 04, 2012 12:22 PM
To: Massara, Michael (M.G.)
Cc: Sullivan, Raymond (R.)
Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

I have not heard from anyone on this issue yet.

From: Massara, Michael (M.G.) Sent: Tuesday, September 04, 2012 12:17 PM To: LaMontagne, Trevor (T.) Cc: Sullivan, Raymond (R.) Subject: RE: Meeting Forward Notification: Lower Grille (bumper design)

Have you and Ray gotten together on this?

----Original Appointment----From: Microsoft Outlook On Behalf Of LaMontagne, Trevor (T.) Sent: Tuesday, September 04, 2012 10:45 AM To: Massara, Michael (M.G.) Subject: Meeting Forward Notification: Lower Grille (bumper design) When: Friday, August 31, 2012 9:00 AM-9:30 AM (UTC-05:00) Eastern Time (US & Canada). Where:

Your meeting was forwarded

LaMontagne, Trevor (T.) has forwarded your meeting request to additional recipients.

Meeting Lower Grille (bumper design)

Meeting Time Friday, 31 August 2012 09:00-09:30.

Recipients Lacelle, Michael (M.G.)

All times listed are in the following time zone: (UTC-05:00) Eastern Time (US & Canada)

Sent by Microsoft Exchange Server 2010

From:Kramer, Michael (M.T.)Sent:Monday, May 07, 2012 12:00 PMTo:Marowelli, Bart (B.); Tejada, Angelito (A.S.); DiMarco, Jackie Marshal (J.M.); Sparks,
Douglas (D.S.); Massara, Michael (M.G.); Sirgedas, Vitas (V.J.)Cc:Kramer, Michael (M.T.); Tyler, Jim (J.S.); Madej, Jeanette (J.)Subject:FW: misfire ICA's

Team, please do not reject either of the recently approved P415 misfire related WERS concerns.

C12559877 actions are being implemented next week.

C12559964. Further refinements of these actions are being evaluated in the wind tunnel this Friday (5/11/12). Given the urgency around addressing the misfire concern, concern authorization was done in parallel with notice release being held until the wind tunnel testing is complete.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Madej, Jeanette (J.) Sent: Monday, May 07, 2012 11:44 AM To: Kramer, Michael (M.T.) Subject: FW: misfire ICA's

They keep missing you

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

 From:
 Marowelli, Bart (B.)

 Sent:
 Monday, May 07, 2012 11:28 AM

 To:
 Tejada, Angelito (A.S.); DiMarco, Jackie Marshal (J.M.); Sparks, Douglas (D.S.); Madej, Jeanette (J.); Tyler, Jim (J.S.); Massara, Michael (M.G.); Sirgedas, Vitas (V.J.)

 Subject:
 RE: misfire ICA's

Based on this we are not building them in TT. From Doug's note it looks like we should be rejecting that CR

Doug can you please confirm we should reject the Louver change C12559964

~BART MAROWELLI Cell: (313) 805-6600 bmarowel@ford.com From: Tejada, Angelito (A.S.)
Sent: Monday, May 07, 2012 11:26 AM
To: Marowelli, Bart (B.); DiMarco, Jackie Marshal (J.M.); Sparks, Douglas (D.S.); Madej, Jeanette (J.); Tyler, Jim (J.S.); Massara, Michael (M.G.); Sirgedas, Vitas (V.J.)
Subject: RE: misfire ICA's

Team, For TT we are building our trucks with the CAC cover/shield. We do not have the louver fins change. Jim was going to provide the timeline on when we can have parts with louver fins change and asses proper VOCF proveout plan.

Lite Tejada

New Model Program CDS: <u>ATEJADA@FORD.COM</u> Cell: (313) 805-6585 Dearborn Truck Land Line - 313-337-8538

Marowelli, Bart (B.)
Monday, May 07, 2012 10:08 AM
Tejada, Angelito (A.S.)
FW: misfire ICA's

We may need to put a pin in this change

~BART MAROWELLI

Cell: (313) 805-6600 bmarowel@ford.com

From: Sirgedas, Vitas (V.J.)
Sent: Monday, May 07, 2012 8:20 AM
To: DiMarco, Jackie Marshal (J.M.); Sparks, Douglas (D.S.)
Cc: Madej, Jeanette (J.); Tyler, Jim (J.S.); Marowelli, Bart (B.); Massara, Michael (M.G.)
Subject: RE: misfire ICA's

Plan I have is that TT builds were going to be updated through Approved On-Site Mod Alert A12562506. (captures intent of C12559877/C12559964)

I have no information that either C12559877 nor C12559964 Approved CR's need to be rejected...

From: DiMarco, Jackie Marshal (J.M.) Sent: Monday, May 07, 2012 7:54 AM To: Sirgedas, Vitas (V.J.); Sparks, Douglas (D.S.) Cc: Madej, Jeanette (J.) Subject: RE: misfire ICA's

OK, what is in our TT's that we started building today?

Do we need to reject this CR?

From: Sirgedas, Vitas (V.J.) Sent: Monday, May 07, 2012 7:53 AM To: DiMarco, Jackie Marshal (J.M.); Sparks, Douglas (D.S.) Cc: Madej, Jeanette (J.) Subject: RE: misfire ICA's

Status of 2 CR's in this note:

C12559877 (add CAC front face cover) – Authorized and Released for 2012 P415 PJ1 Running Change C12559964 (CAC tube plate revision) – Authorized, but not yet released for 2012 P415 PJ1 Running Change and as flowthru for 2013 P415 J1...

From: DiMarco, Jackie Marshal (J.M.) Sent: Sunday, May 06, 2012 7:25 PM To: Sparks, Douglas (D.S.) Cc: Madej, Jeanette (J.); Sirgedas, Vitas (V.J.) Subject: RE: misfire ICA's

Has the CR been rejected?

From: Sparks, Douglas (D.S.) Sent: Thursday, May 03, 2012 2:07 PM To: DiMarco, Jackie Marshal (J.M.) Cc: Madej, Jeanette (J.) Subject: RE: misfire ICA's

Jackie,

It is not planned at this time. The increased velocity theory did not net measurable benefit (did not work). Based on current test results I do not think this will got to production.

Thank you,

Douglas S. Sparks P/T Quality and PVT Manager FNA P/T Integration and Program Management (PTIM) <u>dsparks3@ford.com</u> 313-805-6096

Administrative Assistant: Tina Tessadri ttessadr 313 594-1115

From: DiMarco, Jackie Marshal (J.M.) Sent: Thursday, May 03, 2012 2:00 PM To: Sparks, Douglas (D.S.) Subject: RE: misfire ICA's

Thanks, that's C12559877. But what about the CAC internal tube cover we released on C12559964?

From: Sparks, Douglas (D.S.) Sent: Thursday, May 03, 2012 11:22 AM To: DiMarco, Jackie Marshal (J.M.); Madej, Jeanette (J.) Subject: RE: misfire ICA's

Jackie,

The ICA is the shield only, please see attached file: << File: April 17th Misfire Update_v2.pptx >>

At this time ICA is only the shield. We do have a misfire cal update that allows FMEM to be active below 15% fuel level (currently does not run below 15% fuel level).

Thank you,

Thank you,

Douglas S. Sparks

P/T Quality and PVT Manager FNA P/T Integration and Program Management (PTIM) <u>dsparks3@ford.com</u> 313-805-6096

Administrative Assistant: Tina Tessadri ttessadr 313 594-1115

From: DiMarco, Jackie Marshal (J.M.) Sent: Thursday, May 03, 2012 11:07 AM To: Sparks, Douglas (D.S.); Madej, Jeanette (J.) Subject: misfire ICA's

Doug or Jeanette, Phil Collareno requested some screen shots of the 2 actions (air deflector and drain tube) so that he can better understand the strategy. Can you help?

Jackie Marshall Di Marco Chief Engineer - F150/Expedition/Navigator Mobile: 313-805-3346 From: Sent: To: Subject: Dobbs, Dan (K.D.) Monday, April 09, 2012 10:31 AM Osepchook, William (W.R.) FW: Misfire Tech Posting

-----Original Message-----From: Dobbs, Dan (K.D.) Sent: Monday, April 09, 2012 10:30 AM To: Dobbs, Dan (K.D.) Subject: RE: Misfire Tech Posting

Okay I pulled the claims and they made no mention of any mods.

Brian Jay is the FSE, and he will handle the Dealer.

-----Original Message-----From: Dobbs, Dan (K.D.) Sent: Monday, April 09, 2012 10:23 AM To: Osepchook, William (W.R.) Subject: RE: Misfire Tech Posting

Okay - FSE not a part of the fix.

I have to look at the reports for this store.

From: Osepchook, William (W.R.) Sent: Monday, April 09, 2012 9:57 AM To: Dobbs, Dan (K.D.) Subject: Misfire Tech Posting

Hi Dan,

Per conversation please read tech posting. Concern is; what is the fix.

<< File: http <u>www.db.fmcdealer.dealerconnection.pdf</u> >>

PATRICK WALTON Tipton Ford, Inc. Nacogdoches, TX (936) 564-7337

William Osepchook GEE Global Engine Engineering V-Engine Service Engineer 313-805-9191 wosepcho@ford.com

From:	Martin, Thomas (T.C.)
Sent:	Tuesday, February 14, 2012 3:41 PM
To:	Smith, Craig (C.A.)
Cc:	Devries, Jason (J.E.); Whitehead, Joseph (J.P.)
Subject:	FW: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI
Importance:	High

Jason looked this over and we both agree that the fault appears due to misfire FMEM, resulting in P0299 underboost code. Jason/Joe have previously proven this can happen with the flashing MIL, ending in P0299 code. I believe we need to somehow attach this concern to the CAC condensation issue?

From:	Nowaczyk, Rick (R.J.)
Sent:	Tuesday, February 14, 2012 11:05 AM
То:	Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Selthofer, Adam (A.); Cockerill, Al (C.A.); Martin, Thomas (T.C.); Osepchook, William (W.R.)
Cc:	McDonagh, Scot (S.M.); Dobbs, Dan (K.D.)
Subject:	New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI
Importance:	High

Engineering Team,

We have a New Emerging Concern for 2011 F-150 MIL DTC P0299 3.5L GTDI for low boost. This issue is ramping up quickly in Concern Management based on GCQIS report volume coming into the Tech Hotline.



Regards, Rick Nowaczyk FCSD Product Concern Engineer F-150, Freestar/Monterey, Ford GT, Th!nk E-mail: <u>rnowaczy@ford.com</u> Diagnostic Service Center-I, Allen Park PH# 313-322-7251 RUN DATE:02/14/2012 FORD CUSTOMER SERVICE DIVISION PAGE: 1 SERVICE, WARRANTY, AND FINANCIAL SYSTEMS DEPARTMENT CS0115F1 13:20 102111 COMMON QUALITY INDICATOR SYSTEM _____ TEP20 COIS Concern Folder Folder: 110008200000 2 11 V29/E29 3.5 P0299 Status (T,A,C): A ACCEPT/DEFINITE Status Date: 07/06/2011 Follow-up Date: 12/31/9999 Owner: RNOWACZY Part Nbr: Index Points: _ Part Desc: YTD Part Sales: 150 Resp Person: Backorder: Resp Phone: () -Total Reports: 6 Folder Comments Comments Date 09/19/2011 INTERIM ISM MESSAGE RELEASED WASTE GATE

ADJUSTMENT. WSM UPDATED PLANNED

Rpt#: CBGBX007 NHL Rpt: 02/07/2012 Odom: 23,564 M RPL: 02/07/2012 Odom ,F150 ,SUP CRW,STYSD Vehicle: 2011 F150 4X4 Vin:1FTFW1ET4BFBld: 05/04/2011Engine: 3.5L-GTDICalb: BF613C0A Trans: 6R80EAxle: 3800F3.55L A/C: YESDealer ID:USA 00341Billy Howell Ford Lincoln, Inc Phone:(770) 887-2311State:GeorgiaCity: CummingOrig/Caller: AARON DYKES Symptom: 2 27 Q 00 AID/INFO, WNG IND/MESS/C, ENGINE IMAGE, UNKNOWN Addl Sym: P0299 Attchmnts: 0 Condition Code: Fix: Caus. Comp: KOEO: KOEO: KOEC: KOEC: KOER: KOER: Hotliner: AHUFFMA4 Phone: 313 248-8050 Dist Cd: S1 Atlanta Engineering: Phone: TAR: Dlr Contact: AARON DYKES Phone: 770 887-2311 Title Cde: T Type Comments REPAIR WEB FORM DATA - CONCERN: WHILE PULLING A TRAILER STARTED TO ACCEL TO PASS ENGINE STARTED CUTTING OUT MIL CAME ON, PULLED OVER, RESTARTED ALL OK DIAGNOSTICS: CHECKED FOR CODES, TEST DROVE CND CONDITION, PERFORMED SMPKE TEST ON CAC TUBES AND TURBOS. NO LEAKS. WATCHED ALL TURBO PIDS NO FAULTS OR UNDER BOOST CONDITIONS. WASTE GATE VALVES OPERATING AS DESIGNED. CLEARED CODES DID NOT RETURN ON TEST DRIVES PARTS REPLACED:NONE AT THIS TIME TECH QUESTION:HAS THIS ISSUE BEEN SEEN, PERHAPS A STICKING BYPASS VALVE OR WASTEGATE VALVE. 02/07/2012 10:22AM ALEXANDER HUFFMAN MSS - FCSD - TECH SVC HOTLINE RECOMM AARON, IF NOT ALREADY PERFORMED RECOMMEND TO FOLLOW PINPOINT TEST HN. RECOMMEND TO ALSO LOAD TEST (WITH THE WASTEGATE REGULATING VALVE SOLENOID AND THE PCM UNPLUGGED ELECTRICALLY) THE TURBOCHARGER WASTEGATE REGULATING VALVE SOLENOID CIRCUITS CE328 AND CBK03. WHILE LOAD TESTING THE CIRCUITS, RECOMMEND TO PERFORM A WIGGLER TEST AND A VOLTAGE DROP TEST. THERE SHOULD BE NO MORE THAN .2V DROP PRESENT ON THE CIRCUIT/S. IF A CIRCUIT CONCERN IS PRESENT, RECOMMEND TO OVERLAY THE AFFECTED CIRCUIT/S FROM PIN TO PIN USING NEW PINS. PAST REPORTS HAVE SHOWN THAT THIS SOLENOID IS THE CAUSE FOR THIS CONCERN.

Rpt: 02/06/2012 Odom: 7,025 M Rpt#: CBFBE018 NHL ,F150 ,SUP CAB,STYSD Vehicle: 2011 F150 4X4 Vin:1FTFX1ETXBF Bld: 07/31/2011 Engine: 3.5L-GTDICalb: BF613C0A Trans: 6R80EAxle: 3800F3.73L A/C: YESDealer ID:CAN B6274Heartland Ford Sales Inc.Phone:(780) 998-5450Province AlbertaCity: Fort Saskatchewa Orig/Caller: SEAN, MCILROY Symptom: 2 27 Q 68 AID/INFO, WNG IND/MESS/C, ENGINE IMAGE, STAYS ON Addl Sym: P0299 Attchmnts: 0 Condition Code: Fix: Caus. Comp: KOEO: P0299 KOEO: KOEC: KOEC: KOER: KOER: Hotliner: SFERRET Phone: 313 317-9124 Dist Cd: 06 06 FCSD REGION-CANADA Engineering: Phone: TAR: Dlr Contact: SEAN, MCILROY Phone: 000 000-0000 Title Cde: T Type Comments REPAIR WEB FORM DATA - CONCERN: ENGINE LITE ON-NO DRIVEABILITY CONCERNS MENTIONED DIAGNOSTICS: RETRIEVE P0299:00-EC-PCM IN MEMORY-INSPECTED CAC TUBES ETC- NOTHING OBVIOUS NO SMOKE MACHINE AVAILABLE PARTS REPLACED:NONE HERE TECH QUESTION:ANY KNOWN CONCERNS SEAN, IF A SMOKE MACHINE IS NOT AVAILABLE THE CAC TUBES CAN BE RECOMM PRESSURIZED WITH UP TO 15 PSI OF REGULATED SHOP AIR AND SUSPECT AREAS SPRAYED WITH SOAPY WATER. VERIFY THE TIP, MAP, AND BARO PIDS READ THE SAME VALUE WITH KOEO. IF NOT, SUSPECT A BIASED SENSOR IS CAUSING THIS DTC TO SET. CARRY OUT PIN POINT TEST HN IN THE PC/ED TO ISOLATE THE CAUSE OF THE P0299. IF THE PIN POINT TEST RESULTS ARE INCONCLUSIVE, HOTLINE DATA INDICATES AN INTERMITTENTLY STICKING WASTEGATE SOLENOID IS THE MOST COMMON CAUSE OF THIS CONCERN.

Rpt#: BLPCJ004 NHL Rpt: 12/16/2011 Odom: 19,931 M ,F150 ,SUP CRW,STYSD Vehicle: 2011 F150 4X4 Vin:1FTFW1ET0BF Bld: 03/17/2011 Engine: 3.5L-GTDICalb: BF613C0A Trans: 6R80EAxle: 3800F3.73L A/C: YESDealer ID:CAN B2531Fecteau Ford Inc.Phone:(418) 459-3431Province QuebecCity: La GuadeloupeOrig/Caller: ERIC LAPIERRE Symptom: 2 27 Q 30 AID/INFO, WNG IND/MESS/C, ENGINE IMAGE, FLASHES Attchmnts: 0 Addl Sym: MIL ON Condition Code: Fix: Caus. Comp: KOEO: KOEO: KOEC: P0299 KOEC: KOER: KOER: Hotliner: MGIRARD1 Phone: 313 317-7064 Dist Cd: 02 02 FCSD REGION-CANADA Engineering: Phone: TAR: Dlr Contact: ERIC LAPIERRE Phone: 418 459-3431 Title Cde: T Type Comments REPAIR WEB FORM DATA - CONCERN: MOTEUR LUMIÞ]RE CHECK ENGINE LIGHT ET FLASH, QUAND ELLE FLASH CLIENT ENTEND COMME DES DE TONATION ET A DES RATE, ET MANQUE DE PUISSANCE, QUAND LA LUMIE]RE ARRETE DE DE FLASHER LE MOTEUR PLUS DANOMALIE.FAITE 1 DEUX REPRISES. DIAGNOSTICS: PRISE CODE, P0299 EN Mb, MOIRE . OASIS SSM#21872.CONTROLE Db, TAILLb, HN1-HN2-HN19 ET HN20 RIEN TROUVER.JAI 3 CLIENT AVEC MOTEUR ECOBOOST QUI ONT DES PLAINTE SEMBLABLE ET MEME CODE ET INCAPABLE DE REPRODUIRE SYMPTOME. PARTS REPLACED:NONE TECH QUESTION:AVEZ-VOUS EU DES PLAINTE DE CE GENRE.

RECOMM ERIC V^RIFIE POUR MAUVAIS CONTACTE AU G105 , ET FAIT UNE INSPECTION DES BOUGIES , AUSSI V^RIFIE L'OP^RATION DES COILS POUR LES BOUGIES

Rpt#: BLPCP010 NHL Rpt: 12/16/2011 Odom: 11,533 M

 Rpt#: BLPCP010 NHL
 Rpt: 12/16/2011 Odom

 Vehicle: 2011 F150 4X2
 ,F150 ,SUP CAB,STYSD

 Vin:1FTFX1CTXBF
 Bld: 08/23/2011

 Vin:1FTFX1CTXBF Bld: 08/23/2011 Engine: 3.5L-GTDICalb: BF613G0A Trans: 6R80EAxle: 3800F3.55L A/C: YESDealer ID:USA 05539Sunrise FordPhone:(909) 822-4401State:CaliforniaCity: FontanaOrig/Caller: JOSE MORENO Symptom: 2 27 Q 68 AID/INFO, WNG IND/MESS/C, ENGINE IMAGE, STAYS ON Addl Sym: P0299 UNDER LOAD CEL FLASHES Attchmnts: 0 Condition Code: Fix: Caus. Comp: KOEO: KOEO: KOEC: P0299 KOEC: KOER: KOER: Hotliner: MMESSIN4 Phone: 313 322-5105 Dist Cd: W1 Los Angeles Phone: TAR: Engineering: Dlr Contact: JOSE MORENO Phone: 000 000-0000 Title Cde: T Type Comments REPAIR WEB FORM DATA - CONCERN: CHECK ENGINE LIGHT COMES ON WHILE GOIN UP HILLS , LIGHT ALSO FLASHES DIAGNOSTICS: TEST EEC SYSTEM CODE PO299 RUN OASIS FOUND MESSAGE 21872 PERF SMOKE TEST TO CHECK AIR INTAKE HOSES NO LEAKS FOUND, PARTS REPLACED:NONE TECH QUESTION:ANY KNOWN ISSUES WITH THIS VEHICLE? PROBLEM ONLY OCCURS WHEN GOIND UP HILLS ENGINE LIGHT WITH START TO FLASH AND THEN REMAINS SOLID, PO299 WAS ONLY CODE FOUND IN SYSTEM. 12/16/2011 02:52PM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE RECOMM JOSE, WHEN SMOKE TESTING THE CAC SYSTEM, PLEASE INDUCE 15 PSI OF REGULATED SHOP AIR PRESSURE INTO THE HOSES. THIS AIR PRESSURE WILL SIMULATE A BOOST EVENT, AND HELP LOCATE A SMALL LEAK. PLEASE REPAIR OR REPLACE AS NECESSARY.7 USING IDS, MAP AND TIP_PRS-BOOST WILL MATCH KOEO AT 14.7 PSI (AT SEAL LEVEL). IF MAP SENSOR IS READING LOW, SUSPECT A MAP SENSOR CONCERN IS PRESENT. PLEASE ALSO MEASURE THE EXHAUST BACK PRESSURE OF THIS VEHICLE FOR BOTH BANKS. PLEASE USE ROTUNDA TOOL 309-D002 FOR EXHAUST BACK PRESSURE TESTING. EXHAUST BACK PRESSURE SHOULD NOT EXCEED 3 PSI IN BAY (AFTER 3-4 WOT SNAPS) AND 8 PSI UNDER A HIGH LOAD DRIVING EVENT. IF EXCESSIVE EXHAUST BACK PRESSURE IS DISCOVERED, PLEASE REPLACE THE CATALYST AND RETEST FOR THIS CONCERN. 12/29/2011 03:01PM ADAM HEBERT MSS - FCSD - TECH SVC HOTLINE REPAIR JOSE STATED THAT WHILE VIEWING THE DATALOGGER THE BANK 2 UEGO WENT DOWN TO .9 EQ_RAT WHILE BANK 1 REMAINED AT 14.7 WHEN THE VEHICLE WAS RUNNING ROUGH. THERE ARE 5 COUNTS ON CYLINDER 4 AND 10 COUNTS ON CYLINDER 5. 12/29/2011 03:01PM ADAM HEBERT RECOMM MSS - FCSD - TECH SVC HOTLINE JOSE, RECOMMEND TO FIRST PERFORM AN EXHAUST BACKPRESSURE TEST. IF EXCESSIVE BACKPRESSURE IS IDENTIFIED, RECOMMEND TO REPLACE THE CATALYST THEN RE-EVALUATE. IF BACKPRESSURE PROVES OUT OK, RECOMMEND TO APPLY A SUITABLE LOAD WHILE VOLTAGE DROPPING THE UEGO CIRCUITS. NO MORE THAN .2V SHOULD BE DROPPED ON ANY ONE CIRCUIT. IF NO CIRCUIT ISSUES ARE FOUND, PLEASE REPLACE THE BANK 2 UEGO SENSOR THEN RETEST. 12/29/2011 03:01PM ADAM HEBERT MSS - FCSD - TECH SVC HOTLINE AUDIT

ODOMETER 8860 M CHANGED TO 11533 M BY AHEBERT8 REPAIR 12/29/2011 06:03PM ROBERT GARY MSS - FCSD - TECH SVC HOTLINE Page: 02

Rpt#: BLPCP010 NHL

Rpt: 12/16/2011

Type Comments JOSE STATED THAT EXHAUST BACK PRESSURE IS LESS THAN 1 PSI IN PARK, ALL OF THE O2 CIRCUITS PROVED OUT OK, HE REPLACED THE O2 SENSOR AND IT SOLVED THE CONCERN. RECOMM 12/29/2011 06:03PM ROBERT GARY MSS - FCSD - TECH SVC HOTLINE JOSE, THANKS FOR THE UPDATE AND NICE JOB ON THE REPAIR. WHEN YOU GET SOME TIME CAN YOU PLEASE FILL OUT THE ON-LINE SURVEY SO THAT THE REPAIR CAN BE DOCUMENTED IN THE DATA BASE FOR FUTURE RECOMMENDATIONS.

 Vehicle: 2011 F150 4X4
 Rpt: 12/02/2011 Odom

 Vin:1FTFW1ET1BF
 Bld: 09/02/2011

 Engine: 2 51 51
 Bld: 09/02/2011

 Rpt: 12/02/2011 Odom: 6,581 M Vin:1FTFW1ET1BFBld: 09/02/2011Engine: 3.5L-GTDICalb: BF613C0A Trans: 6R80EAxle: 3.73 LOCK A/C: YES Dealer ID:USA 04036All American Ford of Kingston, Phone: (845) 338-7800State:New YorkCity: KingstonOrig/Caller: BRYAN WOLFF Symptom: 2 27 Q 68 AID/INFO, WNG IND/MESS/C, ENGINE IMAGE, STAYS ON Attchmnts: 0 Addl Sym: P0299 Condition Code: Fix: Caus. Comp: KOEO: P0299 KOEO: KOEC: KOEC: KOER: KOER: Hotliner: RCUSHIO1 Phone: Dist Cd: N1 New York Phone: TAR: Engineering: Phone: 000 000-0000 Title Cde: OT Dlr Contact: BRYAN WOLFF Type Comments REPAIR WEB FORM DATA - CONCERN: CUSTOMER STATES UNDER LOAD CHECK ENGINE LIGHT FLASHES. DIAGNOSTICS: CKD FOR CODES FOUND P0299 LOW BOOST DETECTED. CKD AS PER SSM 21872 CKD FOR CAC AIR LEAKS USED SOAPY WATER AND POWER BRAKED VEHICLE TO BUILD BOOST AND NONE FOUND. ROAD TESTED VEHICLE AND MONITORED BOOST ACTUAL AND DESIRED AND THEY FOLLOWED EACH OTHER CLOSELY. PARTS REPLACED:NONE TECH QUESTION:ARE THERE ANY KNOW ISSUES RELATED TO THIS CODE AND OR PROBLEMS WITH THE CAC KNOW? IF NOT WHAT DIRECTION SHOULD I TAKE? 12/02/2011 04:31PM RCUSHIO1 RECOMM BRYAN, THERE ARE NO COMMON CONCERNS BEING TRACKED FOR THIS CONCERN AT THE HOTLINE. PLEASE INSPECT FOR ANY AFTERMARKET PERFORMANCE COMPONENTS, AS THERE HAVE BEEN REPORTS OF NON-STOCK AIR INLET COMPONENTS CREATING TURBULENT AIR FLOW THROUGH THE MAF. ALSO ENSURE THE AIR FILTER BOX IS SECURE, SEALED AND THERE ARE NO CRACKS, AS THIS CAN ALSO CREATE A TURBULENT AIR FLOW THROUGH THE MAF. SUGGEST MONITORING THE MAP, TIP AND BARO PIODS IN THE IDS KOEO, SINCE THERE IS NO PRESSURE CHANGE AT THIS POINT ALL THREE SHOULD READ APPROXIMATELY 14.7, THIS WILL VALIDATE THEIR STARTING POINT. IF ANY DO NOT, IT WOULD INDICATE A SENSOR IS CAUSING THE CONCERN. A RESTRICTED EXHAUST MAY CONTRIBUTE TO A LOW BOOST CONCERN, SUGGEST PERFORMING AN EXHAUST BACK PRESSURE TEST. INSTALL THE GAUGE IN THE O2 BUNG AND GIVE THE THROTTLE 3-4 WOT SNAPS AND THE PRESSURE SHOULD NOT EXCEED 3PSIAND WHILE DRIVING IT SHOULD NOT EXCEED 8 PSI. THIS WOULD INDICATE A RESTRICTED CATALYTIC CONVERTER. 12/07/2011 04:07PM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE REPAIR TOOK FOR A ROAD TESTED AND ENGINE LIGHT CAME BACK ON HAD P0430 CAT CODE. RAN THROUGH PPT AND CAT BAD. REMOVED AND FOUND DEBRIS IN MIDDLE SECTION OF CAT. REPLACED CAT ON BANK 2 AND ROAD TESTED OK. 12/07/2011 04:07PM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE RECOMM BRYAN, THANK YOU FOR PROVIDING US WITH YOUR FEEDBACK ON WHAT FIXED THE VEHICLE CONCERN. PLEASE FILL OUT THE SURVEY TO HELP US MONITOR

COMMON TRENDS AND EMERGING CONCERNS. THANKS AGAIN FOR YOUR RESPONSE.

Rpt#: BK2BH011 NHL Rpt: 11/28/2011 Odom ,F150 ,SUP CRW,STYSD Bld: 07/15/2011 Rpt: 11/28/2011 Odom: 2,436 M Vehicle: 2011 F150 4X4 Vin:1FTFW1ET6BK Engine: 3.5L-GTDICalb: BF613C0A Trans: 6R80EAxle: 3.73 LOCK A/C: YESDealer ID:USA 09201Landers FordPhone:(501) 315-4700State:ArkansasCity: BentonOrig/Caller: LARRY BROWN Symptom: 5 57 2 39 DRV PERF, HESITATES/STUM, ACCEL, INTERMITTENT Addl Sym: P0299 Attchmnts: 0 Fix: Caus. Comp: Condition Code: KOEO: KOEO: KOEC: P0299 KOEC: KOER: KOER: Hotliner: DRIDOLF2 Phone: 000 248-8241 Dist Cd: C3 Memphis Phone: TAR: Engineering: Dlr Contact: LARRY BROWN Phone: 000 000-0000 Title Cde: T Type Comments REPAIR WEB FORM DATA - CONCERN:TICKET= ENGINE LIGHT ON,FLUTTERING AND VIBRATING WHEN ACCELRATING TO PASS SOME ONE,,, WRITE UP SHEET VEHICLE VIBRATING BAD AT TIMES, ENGINE LIGHT FLASHING WHEN THIS HAPPENS, FUEL MILEAGE DROPPED WHEN THIS STARTED DIAGNOSTICS: LAST WEEK SOME ELSE CKED IT, HAD ALL PASS CODES, CUST DROVE IT, IT HAPPEN AGAIN, I GOT THIS MORNING, KOEC P0299, ALL OTHERS PASS, WENT THRU PPT HN, FOUND NO PROBLEMS, TESTDROVE HAVE NOT VERFIED CONCERN, BUT AVE MILEAGE WAS 7.3 WHEN I STARTED, IT WAS 8.8 WHEN I GOT BACK TO THE SHOP, THATS WHEN I SEEN THE WRITE-UP SHEET, I SURE THERES A PROBLEM, BUT I DO NOT SEE A TURBO OR CAC CONCERN, BUT SEEING FUEL MILAGE? PARTS REPLACED:NONE TECH QUESTION:I DO MOSTLY DIESEL,UNTIL WE DO NOT HAVE ANY, DO THESE HAVE ANY INJ OR FUEL PUMP CONCERNS OR WIRING THAT WILL NOT SET A CODE? IVE SEEN P0299 IN DIESELS, BUT IT WAS ANOTHER SYSTEM THAT CAUSED BOOST CODE. 11/28/2011 11:34AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE RECOMM LARRY, -FIRST, WE SHOULD TAKE A FUEL SAMPLE AND CHECK FOR BOTH POOR QUALITY FUEL AS WELL AS PRESENCE OF E85. TO CHECK FOR E85 CONTENT IN THE FUEL, RECOMMEND PERFORMING A WATER TEST. USING A CLEAR BOTTLE, FILL IT HALFWAY WITH WATER, MARK THE LINE, ADD THE SAME AMOUNT OF FUEL FROM THE VEHICLE, MIX TOGETHER, AND ALLOW TO SEPARATE. THE ETHANOL WILL COMBINE WITH THE WATER INCREASING THE WATER LEVEL. AN INCREASE OF WATER LEVEL UP TO 10% IS NORMAL GASOLINE. ANY MORE THAN 10% IS AN E85 MIX. IF AN E85 MIX IS EVIDENT, RECOMMEND DRAINING THE FUEL TANK COMPLETELY, DRY IT OUT, ADD KNOWN GOOD FUEL, CLEAR KAM, AND RETEST. -NEXT, PLEASE INSPECT G105. THIS IS THE GROUND FOR THE BANK TWO IGNITION COILS AND IS LOCATED ON THE BACK OF THE BANK TWO CYLINDER HEAD. 1. ARE YOU ABLE TO LOOSEN THE G105 BOLT USING ONLY FINGER PRESSURE? 2. IF YOU ARE NOT ABLE TO LOOSEN G105 WITH YOUR FINGERS, CAN IT BE TIGHTENED USING ONLY A SOCKET AND A SIX-EIGHT INCH 3/8 DRIVE EXTENSION? (NO RATCHET) 3. PLEASE ENSURE G105 IS CLEANED AND TORQUED TO 10 NM + 45 DEGREES. -THIS CONCERN IS CURRENTLY UNDER INVESTIGATION AND YOUR RESPONSES ARE IMPORTANT AND APPRECIATED. PLEASE UPDATE THIS FORM WITH YOUR FINDINGS REGARDING THE ABOVE TESTS AS WELL AS ANY ADDITIONAL QUESTIONS YOU MAY HAVE, THANK YOU. -THE P0299 MAY BE CAUSED BY THE MISFIRE, OR THE MISFIRE MAY BE CAUSED BY THE P0299. PLEASE PERFORM THE ABOVE TESTS AND RE-EVALUATE FOR THE P0299. IF THE

Page: 02

Rpt#: BK2BH011 NHL

Rpt: 11/28/2011

----- C O M M E N T S ------Type Comments CONCERN IS STILL PRESENT WITH P0299, CONDUCT A CAREFUL INSPECTION OF ALL CAC TUBING. SEE SSM 21872. CHECK THE BANK ONE TURBO (TURBO A) WASTEGATE ROD FOR A LOCKING CLIP THAT FITS OVER THE LOCK NUTS. CHECK FOR DAMAGE/TAMPERING TO THIS ROD. -THIS CODE MAY ALSO BE CAUSED BY EXCESSIVE BACKPRESSURE ON THE BANK IN QUESTION. CHECK BACKPRESSURE AT THE UPSTREAM O2 PORT, USING AN EXHAUST BACKPRESSURE TESTER. AFTER 3-4 WOT SNAPS IN THE STALL BACKPRESSURE SHOULD REMAIN UNDER 3 PSI, OR UNDER 8 PSI DURING WOT ACCELERATION UNDER LOAD. -THE P0299, WHEN NOT CAUSED BY A MISFIRE, IS TYPICALLY CAUSED BY LOOSE OR DAMAGED CAC TUBING. ISM 11-11-021 3.5L GTDI MISFIRE BANK TWO CYLINDERS 4,5,6 MSS - FCSD - TECH SVC HOTLINE 11/28/2011 03:18PM SHAWN FERRET REPAIR FUEL WAS AT 10%, G105 BOLT WAS TIGHT RECOMM 11/28/2011 03:18PM SHAWN FERRET MSS - FCSD - TECH SVC HOTLINE LARRY, THANK YOU FOR THE RESPONSE ABOUT G105. PLEASE CONTINUE WITH THE RECOMMENDED BACK PRESSURE AND CAC TUBE CHECKS FOR THE P0299 CODE. WITH KOEO THE PIDS FOR TIP, MAP, AND BARO SHOULD ALL READ APPROXIMATELY THE SAME, IF NOT, SUSPECT A BIASED SENSOR OR FAULTY CIRCUIT IS CAUSING THIS DTC. MONITOR FRP AND FRP_DSD DURING THE MISFIRE CONCERN AND VERIFY THEY REMAIN VERY CLOSE TO EACH OTHER AT ALL TIMES. MONITOR LOW SIDE FUEL PRESSURE WITH A MECHANICAL GAUGE AND CONFIRM IT IS BETWEEN 62-75 PSI DURING THE CONCERN. 11/28/2011 05:53PM ALEC MCENTEE MSS - FCSD - TECH SVC HOTLINE REPAIR I DROVE IT MORE AND STILL HAVENT VERFIED, WE HAVE ANOTHER TRUCK WITH SAME CONCERN, FIRST BOTH HAVE ALMOST A FULL TANK OF FUEL, COMING OFF THE FULL MARK, WE HAVENT VERFIED IT YET. IF IT ONLY HAPPEN AT FULL TANK, EVAP. ??, BUT THE SECOND GUY SAID HE COULD SHUT THE TRUCK OFF AND RESTART IT RAN FINE UNTIL IT HAPPEN AGAIN, SA JUST CAME IN SAID THEY HAVE 2 MORE TO BE COMING IN, WHEN ACC. SHUTTERS NO POWER AT TIMES, FUEL MILEAGE DROPS OUT. 11/28/2011 05:53PM ALEC MCENTEE MSS - FCSD - TECH SVC HOTLINE RECOMM LARRY, -RECOMMEND TO DIAGNOSE THE TRUCKS SEPARATELY, FROM THE DESCRIPTION THERE COULD BE TWO DIFFERENT VEHICLE CONCERNS CAUSING THE SAME DTC ON TWO DIFFERENT VEHICLES. -IN REGARDS TO THE VEHICLE LISTED, TO DIAGNOSE THE DTC LISTED, FIRST OBTAIN MAP AND TCBP PID READINGS KOEO, KOER AT IDLE AND DURING A WOT ACCELERATION (WHILE DRIVING THIS VEHICLE, NOT STATIONARY). * MAP AND TIP_PRS-BOOST WILL MATCH KOEO. THE WILL READ ATMOSPHERIC PRESSURE (14.7 PSI AT SEA * THE TIP_PRS-BOOST WILL STILL READ ATMOSPHERIC PRESSURE LEVEL). KOER BUT THE MAP PID WILL READ ABOUT 4.7 PSI, ASSUMING 20 HG (EVERY 2 HG EQUALS 1 PSI SO 20 HG EQUALS 10 PSI, TAKE 10 PSI AWAY FROM THE KOEO READING AND THIS IS HOW THE 4.7 PSI READING IS DETERMINED). - IF NOT ALREADY PERFORMED SMOKE TEST THE CAC LINES AND THE INTAKE. -IN REGARDS TO THE OTHER VEHICLE, IF THE CONCERN ONLY OCCURS AFTER THE CUSTOMER RE-FUELS THE VEHICLE OR WHEN THERE IS A FULL TANK OF FUEL, FOR TESTING PURPOSES BLOCK OFF THE EVAP SYSTEM. IF THE ISSUE IS NO LONGER PRESENT INSPECT THE EVAP CHARCOAL CANISTER FOR RAW FUEL (TYPICALLY RAW FUEL IN THE EVAP SYSTEM IS CAUSED BY THE CUSTOMER OVER PE13-018 000244 Rpt#: BK2BH011 NHL

Rpt: 11/28/2011

----- C O M M E N T S ------

Type Comments RE-FUELING THE VEHICLE). IF THERE IS RAW FUEL IN THE EVAP SYSTEM AND THE CUSTOMER IS NOT OVER RE-FUELING THE VEHICLE, REPLACE THE CANISTER PURGE VALVE (LOCATED IN THE ENGINE COMPARTMENT). FOR FURTHER ASSISTANCE WITH THE OTHER VEHICLE, PLEASE SUMMIT A WEB REQUEST FORM FOR THAT VEHICLE VIN#.

From: Sent:	Oyafuso, Kevin (K.G.) Tuesday, November 27, 2012 8:12 AM
To:	Nowaczyk, Rick (R.J.); Gernant, Tim (T.R.)
Cc:	Massey, Stephen (S.); Dixon, Mark (M.R.); McDonagh, Scot (S.M.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject: Signed By:	FW: P-415 3.5L GTDI MISFIRE - Report Summary(s) from a GCQIS Query Disposition koyafuso@ford.com

Tim,

Take a look at the first CQIS report in this note. The improved CAC to mitigate condensation is on back order but there is at least one customer that ended up with a suspect CAT, most likely due to misfiring. I think our recommendation should be to NOT change the CAT until the new CAC is available. This would prevent possible damage to the new CAT if the new CAC was not installed (tech could still install shield and calibration). Any recommendation on your side?

Regards, Kevin Oyafuso Ford Motor Company - North America Engineering PD / Powertrain Integration Management - C&C Quality Vehicle Operations General Office (VOGO) 17000 Oakwood, Allen Park, MI , 48101 6-Sigma Garage, Office 4B Phone (313) 805-4908 (koyafuso@ford.com)

From: Nowaczyk, Rick (R.J.)
Sent: Tuesday, November 27, 2012 4:44 AM
To: Oyafuso, Kevin (K.G.)
Subject: P-415 3.5L GTDI MISFIRE - Report Summary(s) from a GCQIS Query Disposition

This email contains 5 report summary(s).

Attachments : 0

Report# :	CKZC5003 NHI			Received:	11/26/2012	
CCRG/EPRC:	Reviewed Status:			Date:		
Vehicle:	2012,F150 4X4 ,F150 ,SUP CRW,STYSD ,1FTFW1ET5CK			Build Date:	02/27/2012	
Odometer :	15,065 M	Engine:	3.5L-GTDI	Calibration:	CF613C0A	
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES	
Dealer:	CAN A3258 Cabot Ford Lincoln Sales Limit			Phone#:	(709) 722- 8877	
City:	St Johns	Province	Newfoundland	Country :	CAN	
Originator:	TREVOR BUTT					
Symptom:	5 57 2 39 DRV PERF,HESITATES/STUM,ACCEL,INTERMITTENT					
Status:						
VFG:	V52 DRIVEAB	LITY				

Additional Symptom:	P0430						
Fix:	Causal (Compone	nt:				
Condition Code:							
Hotliner: SMA	SSE16	Phone:	313 317-4491	Regn Cd	: 03 03 F	CSD REGION-CANA	DA
Engineering:				Phone:		TAR:	
Dlr Contact: T	REVOR B	UTT		Phone: 000 00	00-0000	Title Cde	:Т
DTCs:							

KOEO:P0430 KOEC: KOER:

Comments

REPAIR 11/26/2012 02:24PM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: CHECK FOR HESITATION WHEN ACCELLERATOR APPLIED AT HIGHWAY SPEEDS AND VIBERATION AND CHECK ENGINE LIGHT ON. DIAGNOSTICS: CONFIRMED RETRIVED DTCS P0430, NO MISSFIRE CODES BUT SOME MISSFIRES IN MODE 6 RECORDED .CHECKED OASIS AND FOUND TSB 12-10-19 PARTS REPLACED:NONE TECH QUESTION:WE ONLY HAVE A CAT. CONV. IN STOCK AND THE C.A.CS ARE BACK ORDERED, WOULD IT BE POSSIBLE TO PUT THE CAT. CONV. IN THE THE VEHICLE AND WHEN THE C.A.C COMES IN HAVE CUSTOMER COME IN GET IT INSTALLED AND THE RECALIBRATION DONE. OR WOULD THE OLD C.A.C CAUSE THIS NEW CAT. CONV. TO FAIL. RECOMM 11/26/2012 02:24PM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE TREVOR, IF THE CAC IS UNAVAILABLE, RECOMMEND TO CONTINUE WITH CATALYST REPLACEMENT. DO NOT PERFORM THE PCM PROGRAMMING LISTED IN THE TSB UNTIL THE CAC IS AVAILABLE. WHEN THE CAC ARRIVES, SCHEDULE A SERVICE APPOINTMENT WITH THE CUSTOMER TO HAVE THE CAC INSTALLED AND THE TSB PERFORMED. ADD-ON 11/26/2012 02:24PM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE

	Reviewed Status: 50 ,SUP CRW,STYSD		Received: Date: Build Date:	11/26/2012 02/17/2012	
20,771 M	Engine:	3.5L- GTDI	Calibration:	CF613C0A	
6R80E	Axle:	3.73 LOCK	A/C:	YES	
CAN B6251 Vegre	ville Ford Sales & Servic		Phone#:	(780) 632- 2060	
Vegreville ED NEUDORF 5 54 2 39 DRV PE	Province RF,LACK/LOSS PWR ,AC	Alberta CEL,INTERI	Country : MITTENT	CAN	
V52 DRIVEABILI	ТҮ				
LIMP MODE					
Causal Componen	ıt:				
NIN1 Phone:	313 317-7071 Regn C	d: 06 06 FCS	SD REGION-CA	ANADA	
	Phone:		TAR:		
D NEUDORF	Phone: 000 000-0000		Title Cde: T		
5/2012 06:42PM BRJ					
	2012,F150 4X4 ,F1 ,1FTFW1ET6CF 20,771 M 6R80E CAN B6251 Vegre Vegreville ED NEUDORF 5 54 2 39 DRV PEI V52 DRIVEABILI LIMP MODE Causal Componen NIN1 Phone: 3	Reviewed Status: 2012,F150 4X4 ,F150 ,SUP CRW,STYSD ,1FTFW1ET6CF 20,771 M 20,771 M Engine: 6R80E Axle: CAN B6251 Vegreville Ford Sales & Servic Vegreville Province ED NEUDORF 5 54 2 39 DRV PERF,LACK/LOSS PWR ,ACC V52 DRIVEABILITY LIMP MODE Causal Component :	Reviewed Status: 20,771 M Engine: 3.5L- 20,771 M Engine: 3.73 6R80E Axle: 3.73 6R80E Province Alberta ED NEUDORF 5 54 2 39 DRV PERF,LACK/LOSS PWR ,ACEL,INTERN V52 DRIVEABILITY LIMP MODE Causal Component : NIN1 Phone: 3.13 317-7071 Regn CE:	Reviewed Status: Date: 2012,F150 4X4 / FTFW1ETGCF Build Date: 20,771 M Engine: 3.5L-GTDI 20,771 M Axle: 3.73 COCK A/C: 6R80E Axle: 3.73 COCK A/C: CAN B6251 Verstelle Ford Sales & Servic: Phone#: Phone#: Vegreville Province Alberta Country : 5 54 2 39 DRV PEF, LACK/LOSS PWR , ACELINTERNETTENT Status Country : V52 DRIVEABLUSE VERITIENT Status Status VS2 DRIVEABLUSE Status Status NN1 Phone: 313 317-7071 Regn CE 06 06 FCS-Stepen-S	

RECOMM 11/26/2012 06:42PM BRETT FENNING MSS - FCSD - TECH SVC HOTLINE

ED, THE CONCERN MUST BE DUPLICATED BEFORE ANY REPAIRS ARE ATTEMPTED. IF THE CONCERN CANNOT BE DUPLICATED, RECOMMEND YOU INSTALL

A VDR (IF AVAILABLE) TO CAPTURE A RECORDING OF THE EVENT. THE DATABASE INDICATES THAT AN INTERMITTENT ELECTRONIC THROTTLE BODY (ETB)

FAULT AS THE MOST LIKELY CAUSE OF THIS CONCERN, WITH NO DTC`S PRESENT. THE PCM WILL NOT SET AN ETB DTC UNTIL AN ERROR IN EXCESS OF 6 DEGREES FOR 400MS HAS OCCURRED. AN ETB RELATED DRIVABILITY CONCERN CAN START

TO OCCUR WHEN ERROR EXCEEDS 3 DEGREES AND OCCURRENCE THAT EXCEEDS 200MS. ENSURE THAT THE VEHICLES AIR FILTER IS NOT CONTAMINATED AND IS AN OEM STYLE FILTER. AFTER MARKET OR CONTAMINATED AIR FILTERS CAN CAUSE TURBULENT AIR FLOW ACROSS THE MAF, CAUSING SKEWED READINGS. ALSO

INSPECT THE AIR FILTER HOUSING AND AIR INTAKE SYSTEM FOR PROPER SEALING AND ENSURE NO LEAKS ARE PRESENT. MONITOR MAF_V AND TP2. MAF_V SHOULD BE APPROXIMATELY .7-.9 VOLTS AT IDLE AND SHOULD REMAIN FAIRLY CLOSE TO TP2 THROUGHOUT THE RPM RANGE. IF A CONCERN IS VERIFIED

AND THE AIR FILTER AND AIR INTAKE SYSTEM ARE OPERATING PROPERLY, REPLACE THE MAF SENSOR AND RETEST. IF THE MAF AND AIR INTAKE SYSTEM ARE OPERATING PROPERLY, MONITOR ETB PID`S TO VALIDATE PROPER ETB OPERATION. WHILE ROAD TESTING WITH THE IDS DATALOGGER, MONITOR ETB PID`S ETC_ACT AND ETC_DSD. IDEALLY THESE PID`S SHOULD REMAIN FAIRLY CLOSE (0-1 DEGREES) UNDER STEADY STATE CRUISE, IDLING CONDITIONS AND DURING THE CUSTOMERS CONCERN (IF IT CAN BE DUPLICATED). IF A VARIANCE OF 3 DEGREES OR GREATER IS OBSERVED WITH SMOOTH APP SENSOR INPUT, THIS

WOULD INDICATE AN ETB INTERNAL FAULT. IF VERIFIED, REPLACE THE ETB, RESET KAM AND RE-EVALUATE.

REPAIR 11/26/2012 07:43PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: AT HIWAY SPEED, THE WRENCH LIGHT WILL

COME ON AND SPEED IS LIMITED TO 90 KPM, THIS HAS HAPPENED 4 TIMES, GOES AWAY ON ITS OWN AFTER BEING SHUTOFF FOR SOME TIME DIAGNOSTICS ALREADY COMPLETED: SCANNED FOR CODES, NONE, RUNS FINE BY THE TIME THE

CUSTOMER GETS HERE PARTS REPLACED: NONE TECH'S QUESTION: ANY HELP? CUSTOMER IS BECOMING FRUSTRATED, THE ISSUE HAS OCCURED 4 TIMES, 3 TIMES WHEN EMPTY, 1 TIME WHILE PULLING A TRAILER

RECOMM 11/26/2012 07:43PM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

BRIAN, THIS CONCERN WILL LIKELY HAVE TO BE DUPLICATED IN ORDER TO PROPERLY DIAGNOSE. INSTALLATION OF THE FLIGHT RECORDER, OR A POSSIBLE ROAD TEST WITH THE CUSTOMER DRIVING, MAY BE USEFUL IN THIS TYPE OF SITUATION. WITH THE CONCERN PRESENT, MONITOR ETC ACTUAL VS. DESIRED PIDS FOR A DIFFERENCE OF OVER THREE DEGREES. THIS WOULD INDICATE AN INTERNAL ETB FAILURE, REQUIRING ETB REPLACEMENT. MONITOR FUEL TRIMS FOR A LEAN/RICH CONDITION, AND MODE 6/CYLINDER ACCELERATION PIDS FOR ANY MISFIRE DATA. ENSURE THAT FRP ACTUAL IS FOLLOWING FRP DESIRED WITH THE CONCERN PRESENT.

Attachments : 0

Report# :	CKZCS001 NHL			Received:	11/26/2012
CCRG/EPRC:	Reviewed Status: Date:				
Vehicle:	2012,F150 4X4 ,F150 ,SUP CAB,STYSD Build Date: 07/19/201 ,1FTFX1ET5CFC 07/19/201			07/19/2012	
Odometer :	12,154 M	Engine:	3.5L-GTDI	Calibration:	CF613C0A
Transmission:	6R80E	Axle:		A/C:	YES
Dealer:	USA 05668 Dempe	ewolf Ford		Phone#:	(270) 827- 3566
City:	Henderson	State:	Kentucky	Country :	USA
Originator:	RICK SMITHHAR	Т			
Symptom:	5 57 2 39 DRV PE	RF,HESITATES/STUM,AC	CCEL,INTER	MITTENT	
Status:					
VFG:	V52 DRIVEABILITY				
Additional Symptom:	STUMBLE ON ACCEL				
Fix:	Causal Component :				
Condition Code:	ode:				
Hotliner: BFEN	NNIN1 Phone: 313 317-7071 Regn Cd: G3 Cincinnati				
Engineering:	Phone: TAR:				
Dlr Contact: RI	RICK SMITHHART Phone: 270 827-3566			Title	e Cde: T
DTCs:					

DTCs: KOEO:

KOLO

KOEC:

KOER:

Comments

٠

REPAIR 11/26/2012 01:22PM BRETT FENNING MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUST STATES STUMBLE/MISSFIRE ON ACCELERATION DIAGNOSTICS: SCAN NO CODES THIS VISIT PARTS REPLACED:LEFT CAT LAST VISIT TECH QUESTION:I HAVE TSB 12-11-15 FROM OASIS BROADCAST MESSAGES BUT WHEN I RUN VIN ON OASSIS TSB IS NOT UNDER VIN CHECK BUILD DATE 12 JULY 2012 WITH BUILD DATE ON OR BEFORE 9/18/2012 PER TSB DO I STILL USE TSB EVEN THOUGH TSB NOT ON OASSIS UNDER VIN THANKS **RECOMM 11/26/2012 01:22PM BRETT FENNING MSS - FCSD - TECH SVC HOTLINE** RICK, TSB 12-11-15 APPLIES TO 2013 F150 3.5L GTDIS BUILT ON OR BEFORE 9/18/2012, THIS IS WHY THE TSB DOES NOT SHOW UP ON OASIS FOR THIS VIN (2012 F150 3.5L GTDI). PLEASE REVIEW AND PERFORM <="" td=""> HREF='HTTP://WWW.FORDTECHSERVICE.DEALERCONNECTION.COM/VDIRS/SPUBS/ANUM Q.ASP?FLAVOR=DEALERS&SZARTICLE=12-10-19' TARGET='_BLANK'>TSB 12-10-19 TO ADDRESS THIS CONCERN.

Attachments : 0

Report# : CCRG/EPRC:	CKZC4017 NHL Reviewed Status:		Received: Date:	11/26/2012	
Vehicle:	2012,F150 4X4 ,1FTFW1ET8C	,F150 ,SUP CRW,STYSD		Build Date:	05/02/2012
Odometer :	7,349 M	Engine:	3.5L- GTDI	Calibration:	CF613K0A
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES
Dealer:	USA 08518 Rot	USA 08518 Robberson Ford Sales, Inc.		Phone#:	(541) 382- 4521
City:	Bend	State:	Oregon	Country :	USA
Originator:	DAVID TUCKER				
Symptom:	5 57 2 39 DRV	PERF,HESITATES/STUM,AC	CEL,INTER	MITTENT	
Symptom: Status:	5 57 2 39 DRV	PERF,HESITATES/STUM,AC	CEL,INTER	MITTENT	
	5 57 2 39 DRV V52 DRIVEAB		CEL,INTER	MITTENT	
Status:		ILITY	CEL,INTER	MITTENT	
Status: VFG: Additional	V52 DRIVEAB	ILITY TRAC LIGHT	CEL,INTER	MITTENT	
Status: VFG: Additional Symptom:	V52 DRIVEAB JERK UPHILL/	ILITY TRAC LIGHT	CEL,INTER	MITTENT	

Hotliner: KMART171

Phone: 313 317-9381

Regn Cd: W5 Seattle

Engineering:

Phone:

TAR:

Dlr Contact: DAVID TUCKER

Phone: 541 388-2054

Title Cde: T

DTCs:

KOEO:C2807 U0401 KOEC: KOER:

Comments

:

REPAIR 11/26/2012 06:21PM KEVIN MARTIN MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CLIMBING HILL WITH NO TRAILER, VEHICLE JOLTED

> AND TRAC CONTROL LIGHT CAME ON DIAGNOSTICS: SELF TEST ALL MODULES. PPT A1 TBC CODE C2807 PARTS REPLACED:NONE TECH

QUESTION: ACCORDING TO PPT A1 IF VEHICLE DOES NOT HAVE TRAILER FAULT MESSAGE WITHOUT TRAILER HOOKED UP FAULT IS IN TRAILER. NO TRAILER ON VEHICLE NOW, NO TRAILER ON VEHICLE DURING CONCERN. C2807 IS ONLY CODE IN ANY MODULES EXCEPT THE U0401. AND WOULD THAT EVEN CAUSE A JOLT FEELING AND TRAC CONTROL LIGHT? ONLY HAPPEND ONE TIME. PULLED OVER AND

SHUT OFF AND RESTARTED AND HAS BEEN FINE. WHAT DO YOU RECOMMEND?

RECOMM 11/26/2012 06:21PM KEVIN MARTIN MSS - FCSD - TECH SVC HOTLINE DAVID, THE CONCERN THAT CAUSED THE C2807 SHOULD NOT HAVE RESULTED IN THE STUMBLE WITH NO TRAILER CONNECTED. PER PINPOINT TEST A1, IT IS UNCLEAR IF A FAULT MESSAGE IS PRESENT AT THIS TIME. IF IT IS NOT, WE DO STILL KNOW THAT THE DTC WAS NOT CAUSED BY A TRAILER, THEREFORE THE

TEST CAN BE PERFORMED PROCEEDING WITH A2. THE CIRCUITS CAN BE LOAD TESTED WHILE WIGGLING THE WIRES IF NECESSARY. IT WILL LIKELY BE NECESSARY TO DUPLICATE THE STUMBLE CONCERN IN ORDER TO FULLY DIAGNOSE.

ATTEMPT TO ALSO CAPTURE A RECORDING OF THE EVENT. CHECK FOR ANY LEAKS

OR RESTRICTIONS IN THE INTAKE. PERFORM A HIGH PRESSURE FUEL SYSTEM INJECTOR TEST. IF THE CONCERN CANNOT BE DUPLICATED THEN NO FURTHER DIAGNOSTICS ARE RECOMMENDED AT THIS TIME. THANK YOU.

REPAIR 11/26/2012 08:03PM JAMES KOLTZ MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: VEHICLE JOLTED WHILE CLIMBING HILL AND TRAC CONTROL LIGHT CAME ON DIAGNOSTICS: SELF TESTED ALL MODULES. CODE C2807 IN ABS MODULE PARTS REPLACED:NONE TECH QUESTION: PPT FOR TBC CODE C2807 SAYS TO CHECK FOR TBC MESSAGE WITHOUT TRAILER CONNECTED. NO TRAILER, NO MESSAGE. VEHICLE DID NOT HAVE TRAILER ON IT DURING CONCERN EITHER. ONLY HAPPENED ONCE. COULD THIS CODE EVEN CAUSE

THE JOLT THE CUSTOMER FELT? WHAT DO YOU RECOMMEND?

RECOMM 11/26/2012 08:03PM JAMES KOLTZ MSS - FCSD - TECH SVC HOTLINE
HI BRIAN, A FAULT WITH THE TBC MODULE WOULD NOT BE ABLE TO TRACTION
CONTROL LIGHT ON. IF THE TRACTION CONTROL LIGHT WAS ON TO INDICATE A
FAULT, A CODE WOULD BE PRESENT IN THE ABS MODULE INDICATING A
DIAGNOSTIC DIRECTION. IF THERE ARE NO CODES, SUSPECT THAT THE LIGHT
WAS FLASHING DUE TO A TRACTION CONTROL EVENT AT THE TIME. THIS
WOULD
ALSO EXPLAIN THE HAPTIC FEEDBACK AS DESCRIBED BY THE CUSTOMER.
PLEASE
REFER THE CUSTOMER TO THE OPERATION OF THE SYSTEM AS DESCRIBED
STARTING ON PAGE 293 OF THE NEWEST EDITION OF THE OWNER'S MANUAL
ONLINE.

Attachments : 0

Report# : CCRG/EPRC:	CKZD6008 NHL Reviewed Status:		Received: Date:	11/26/2012	
Vehicle:	2012,F150 4X4 ,F ,1FTFW1ETXCK	150 ,SUP CRW,STYSD		Build Date:	02/02/2012
Odometer :	12,503 M	Engine:	3.5L- GTDI	Calibration:	CF613C0A
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES
Dealer:	CAN B3230 Highland Ford Sales Limited		Phone#:	(902) 752- 8243	
City:	Westville	Province	Nova Scotia	Country :	CAN
Originator:	ROSS DAGENAIS				
Symptom:	5 57 2 39 DRV PERF,HESITATES/STUM,ACCEL,INTERMITTENT				
Status:					
VFG:	V52 DRIVEABILITY				
Additional Symptom:	MIL ON/LACK OF POWER				
Fix:	Causal Component :				
Condition Code:					

Hotliner: BFENNIN1 Phone: 313 31	Regn Cd: 03 03 FCSD REGION-CANADA
----------------------------------	--

Engineering:

Phone:

TAR:

Dlr Contact: ROSS DAGENAIS

Phone: 000 000-0000

Title Cde: T

DTCs:

KOEO:

KOEC:

KOER:

Comments

- :
- 11/26/2012 04:01PM BRETT FENNING MSS FCSD TECH SVC HOTLINE REPAIR WEB FORM DATA - CONCERN: CUSTOMER COMPLAINS OF ENGINE LIGHT ON AND RUNNING ROUGH AND LACKS POWER DIAGNOSTICS: IDS TEST P0430 RELEVENT TO TSB12-10-19 PARTS REPLACED:NONE TECH QUESTION:THE NEW CAC IS NOT AVAILIBLE AT THIS TIME (NO STOCK) DO YOU RECOMEND REPLACING THE CATALYST AT THIS TIME<="" td=""> REPLACE THE CAC AND CAT AT THE SAME TIME ,ASSUMING THE CAC IS THE CAUSAL FOR PREMATURE CATALYS FAILURE DUE TO MISFIRE CONCERN.....PLEASE ADVISE RECOMM 11/26/2012 04:01PM BRETT FENNING MSS - FCSD - TECH SVC HOTLINE ROSS, IT IS NOT RECOMMENDED TO REPLACE THE CATALYST CONVERTER UNTIL THE CAC IS INSTALLED. RECOMMEND TO EMERGENCY ORDER THE NEW CAC AT THIS TIME. ONCE THE NEW CAC IS RECEIVED IT IS RECOMMENDED TO PERFORM TSB 12-10-19 AND REPLACE THE CATALYST CONVERTER. PLEASE DO NOT UPDATE

THE

PCM UNTIL THE NEW CAC IS READY TO INSTALL.

From: Sent: To: Subject: Andersen, Erik (E.) Wednesday, February 06, 2013 7:16 PM Sowards, John (J.); Huang, Larry (L,.) FW: P415 CBV

FYI...my goal is to be there for this testing as well. What time do you think it will start? Right now it is slated to be the second run after the baseline.

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966

From: Devries, Jason (J.E.) Sent: Wednesday, February 06, 2013 2:52 PM To: Andersen, Erik (E.) Subject: RE: P415 CBV

Erik,

I have managed to get PT-diag setup to have the capability to open the CBV. Let me know when you are ready to do this on Friday and I will come down to DTF to get it setup to run that way.

Jason DeVries

Calibration Commodity Technical Specialist GTDI, I4, and V6 Powertrains Phone: 313-805-1035 e-mail: jdevrie4@ford.com

From: Andersen, Erik (E.) Sent: Monday, February 04, 2013 7:22 PM To: Devries, Jason (J.E.) Subject: RE: P415 CBV

I'd like to run the whole 60 minutes to see how it does. Analytical data suggest that if I drop the pressure even 2" I cut the formation rate in half.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Devries, Jason (J.E.) Sent: Monday, February 04, 2013 7:18 PM To: Andersen, Erik (E.) Subject: RE: P415 CBV

I will attempt to try it in one of our vehicles, I will also have to talk to the hardware guys to see how the hardware will handle it. I have been told in the past that with the electric valves the electronics will overheat if they stay in an energized state for a long period of time, I think it is more a long term durability thing, but I still want to ask. Do you want to run a whole 60 min. test or do you just want to open it during the cruise to see how much the pressure drops?

Jason DeVries

Calibration Commodity Technical Specialist GTDI, I4, and V6 Powertrains Phone: 313-805-1035 e-mail: jdevrie4@ford.com

From: Andersen, Erik (E.) Sent: Monday, February 04, 2013 6:17 PM To: Devries, Jason (J.E.) Subject: RE: P415 CBV

That would make it so much easier.

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966

From: Devries, Jason (J.E.) Sent: Monday, February 04, 2013 5:03 PM To: Andersen, Erik (E.) Subject: RE: P415 CBV

If it is a 2013 then it is an electric CBV so we should just be able to command it open. I think we can do it will PT-diag but we will have to try it.

Jason DeVries

Calibration Commodity Technical Specialist GTDI, I4, and V6 Powertrains Phone: 313-805-1035 e-mail: jdevrie4@ford.com

From: Andersen, Erik (E.) Sent: Monday, February 04, 2013 4:57 PM To: Devries, Jason (J.E.) Subject: RE: P415 CBV

It's a 2013.

2

Is this something you can check on one of your vehicles? If we need to figure out a vacuum source we can work on that now.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966

From: Devries, Jason (J.E.) Sent: Monday, February 04, 2013 4:55 PM To: Andersen, Erik (E.) Subject: RE: P415 CBV

What level of P415 do you have: 2011, 2012, or 2013? We can come up with a way to make it be open, but it will likely require an external vacuum source since even if we command it open we might run out of vacuum to hold it open during the cruise.

Jason DeVries

Calibration Commodity Technical Specialist GTDI, I4, and V6 Powertrains Phone: 313-805-1035 e-mail: jdevrie4@ford.com

From: Andersen, Erik (E.) Sent: Monday, February 04, 2013 4:33 PM To: Devries, Jason (J.E.) Subject: P415 CBV

Jason,

We are going to be running a P415 this Friday to baseline it against our latest test. I would like to run one with CBV open to reduce the pressure in the CAC. Are you guys able to put in a development PCM and force it open or somehow poke it in with PTDiag? I believe we ran this on one of the 2.0L before and saw a 2" difference in CAC pressure. The P415 has a huge hole, wondering if we can get a little more and see how it does.

What do you think?

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966 From: Sent: To: Subject: Huang, Larry (L,.) Monday, January 30, 2012 1:49 PM Andersen, Erik (E.) FW: P415 D35 GTDI Misfire Audio 742 280 62

FYI. Status of coating.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: Ihuang3@ford.com Building #2-3M29, Mail Drop: 1215

 From:
 Tyler, Jim (J.S.)

 Sent:
 Monday, January 30, 2012 1:24 PM

 To:
 Huang, Larry (L..)

 Subject:
 RE: P415 D35 GTDI Misfire Audio 742 280 62

Last week I sent an inquiry note to SLP Mexico engineering contacts (Blas, Guillermo, and Eduardo) and Joe Lumetta for feedback if they know of any surfactant. No response yet.

Jim Tyler T1/P552 Cooling 313-805-2565 Bld-2 23P25

 From:
 Huang, Larry (L,.)

 Sent:
 Monday, January 30, 2012 11:49 AM

 To:
 Tyler, Jim (J.S.)

 Subject:
 RE: P415 D35 GTDI Misfire Audio 742 280 62

Jim,

Did you get a chance to talk to Valeo to see if they can apply the coating for evaporator to our CAC, just a prototype for our testing? Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: Ihuang3@ford.com Building #2-3M29, Mail Drop: 1215

 From:
 Huang, Larry (L,.)

 Sent:
 Friday, January 27, 2012 12:47 PM

 To:
 Ladd, John (J.R.); Allan, Valerie (V.J.); Andersen, Erik (E.)

 Cc:
 Tyler, Jim (J.S.)

 Subject:
 FW: P415 D35 GTDI Misfire Audio 742 280 62

Please see the feedback from the person that the team recommended to contact.

It's unlikely we can find a "Implement-Ready" coating material (as well as manufacturing process) to resolve the issue in a short time of period. As matter of a fact, the coating that make water hard to "stick" on the surface will enhance the condensation (changing the "film condensation" to "droplets condensation". We can't say without the testing, if the coating is a resolution.

I suggest:

While we continue investigating the "coating" resolution, we may want to test the idea first: asking Valeo to apply surfactant (for evaporator) onto CAC with their existing process, and testing it. If the result is favorable, then we work 1) with the coating material supplier find right coating material, 2) with Valeo to introduce the "coating process" into the current CAC production line. Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: Ihuang3@ford.com Building #2-3M29, Mail Drop: 1215

From:	Bolyard, Jay (John.)
Sent:	Friday, January 27, 2012 12:31 PM
То:	Huang, Larry (L,.)
Subject:	RE: P415 D35 GTDI Misfire Audio 742 280 62

Applied to aluminum piston.

The skirt coating is for wear, scuff and friction reduction in oil flood environment - piston to cylinder bore The piston pin bore coating is for scuff elimination also in oil flood environment.

Neither has anything to do with water. But - surface tension of water on the surface of one or the other may be reduced vs. on parent aluminum... I do not know.

Best Regards, Jay Bolyard Piston & Conn Rod Assy Technical Expert Tel: (313)805-9465, Building #1, 12G003

 From:
 Huang, Larry (L,.)

 Sent:
 Friday, January 27, 2012 12:20 PM

 To:
 Bolyard, Jay (John.)

 Subject:
 RE: P415 D35 GTDI Misfire Audio 742 280 62

Hi Jay,

Thank you very much for the feedback.

The coatings you mentioned were not for reducing the condensated water to "stick" on the surface? Were the coating on steel or on aluminum? Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: Ihuang3@ford.com Building #2-3M29, Mail Drop: 1215
 From:
 Bolyard, Jay (John.)

 Sent:
 Friday, January 27, 2012 11:32 AM

 To:
 Huang, Larry (L,.)

 Subject:
 RE: P415 D35 GTDI Misfire Audio 742 280 62

Hello Larry - I apologize that I am running crazy with a stop ship and also traveling for business out of the country starting tomorrow.

There are two potential coatings - one is the skirt coating with is a Dow D10 coating screen printed and cured on the skirt surface. The other is a Manganese Phosphate bath for the pin bore as a solid film lubricant. I can't really imagine how either would prevent condensation on a surface?

Best Regards, Jay Bolyard Piston & Conn Rod Assy Technical Expert Tel: (313)805-9465, Building #1, 12G003

From:Huang, Larry (L,.)Sent:Thursday, January 26, 2012 1:54 PMTo:Bolyard, Jay (John.)Cc:Ladd, John (J.R.); Allan, Valerie (V.J.); Andersen, Erik (E.)Subject:RE: P415 D35 GTDI Misfire Audio 742 280 62

Hi, Jay,

We are having "misfiring issue" on P415. A possible root cause is that the condensed water is held inside the turbulator (walls and) channels, and was suddenly pushed out into the engine through AIS ducts when WOT suddenly. The team came up an idea: coating a layer of material on the turbulator surface to reduce the capability of aluminum surface to hold water. The team recommend me to contact to you to know if the coating on the piston can serve this purpose. Would you please share us your coating application on the piston, and provide us the input on the possibility of applying it on a CAC. Thank you very much.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: Ihuang3@ford.com Building #2-3M29, Mail Drop: 1215

From:	Norman, Kristofor (K.R.)
Sent:	Thursday, November 17, 2011 4:29 PM
То:	 Norman, Kristofor (K.R.); Fabien, Phil (P.A.); Smith, Craig (C.A.); Nault, Ben (B.D.); Pierce, Michael (M.A.); Sims, Ivan (I.D.); Morrow, Bill (N.W.); Donahue, Francis (Fran.); Cockerill, AI (C.A.); Fried, Marcus (M.W.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.); Krygowski, Richard (R.J.); Cowher, Terry (T.); Hargreaves, Gregory (G.J.); Garrett, David (D.P.); Sullivan, Todd (T.E.); Imarisio, Valerio (V.); Zott, Brian (B.R.); Mancini, Michael (M.A.); Pawlak, Greg (G.J.); Ahmed, Masood (M.); Dixon, Mark (M.R.); Wilson, David (D.G.); Dusa, Daniel (D.V.); Wagers, Sue (S.K.); Zimlich, Mary (M.); Mingo, Paul (P.C.); Rollinger, John (J.E.); Huberts, Garlan (G.); Baskins, Robert (R.S.); Michela, Mike (M.); Zhou, Jay (J.); Lehto, Scott (S.A.); Mazuchowski, James (J.A.); Hammoud, Mazen (M.); Boerger, Jim (J.G.); Merrell, Robert (R.J.); Stanley, Daniel (D.J.); Ronzi, Bill (W.C.); Palepu, Padmalaya (P.); Stefanski, John (J.C.); Russ, Stephen (S.G.); Glugla, Chris (C.P.); McDonagh, Scot (S.M.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.); Ducklow, Corey (C.S.); Bailey, Owen (O.R.); Gardner, Greg (G.D.); McCoy, Jim (D.); Saad, Thomas (T.J.); Nester, Darren (D.); Bld-1 13F040 (20); Kramer, Michael (M.T.); Ladd, John (J.R.); Madej, Jeanette (J.); Allan, Valerie (V.J.); Yamada, Shuya Shark (S.Y.); Mohan, Robert (R.); Huang, Larry (L.); Andersen, Erik (E.); Bishop, Chris (C.B.); Hermann, Erik (E.H.); Stec, Randall (A.)
Cc:	Baldwin, Damien (D.K.); Emery, Jim (J.M.); Bollman, Wes (W.); Lyon, Peter (P.M.); Dumler, Jeff (J.D.); Sparks, Douglas (D.S.); Schaffer, Scott (S.A.); McGeary, David (D.B.)
Cubicat	
Subject: When: Where:	P415 D35 GTDI Misfire Audio 742 280 62 Thursday, January 26, 2012 12:00 PM-1:00 PM (GMT-05:00) Eastern Time (US & Canada). Bld-1 13F040 (20)
wriere:	

[Do not add or change anything below this line. The information in this section may be replaced with your meeting details after you click Send.]

You scheduled this meeting:

Online Meeting Summary

Meeting Link: https://ford.webex.com/ford/j.php?J=719318688&PW=NMmE2NGY0MWYz

WebEx Meeting ID: 719 318 688 Meeting Password: 1414 Audio: None

Complete Meeting Details Teleconference Information:

None

Dialing Instructions: Ford Net: x13673 Non FordNet Access: Toll (International): +1.313.621.3673 Toll-free: 1.888.621.3673 U.K.: +44.1277.25.2555 Germany: +49.221.90.22555 Sweden: +46.31.3253673 Belgium: +32.89.619700

Meeting Number: 719 318 688 Meeting Password: 1414

To join this meeting (Now from mobile devices!)

1. Go to https://ford.webex.com/ford/j.php?J=719318688&PW=NMmE2NGY0MWYz

2. If requested, enter your name and email address.

3. If a password is required, enter the meeting password: 1414

4. Click "Join".

5. Follow the instructions that appear on your screen.

!!! Note: It is the responsibility of the meeting host to know who is attending their meeting on both audio and web conferencing and to make sure the attendees are authorized to see and hear the content of the meeting.

IMPORTANT NOTICE: This WebEx service includes a feature that allows audio and any documents and other materials exchanged or viewed during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to the recording, discuss your concerns with the meeting host prior to the start of the recording or do not join the session. Please note that any such recordings may be subject to discovery in the event of litigation.

MC12

http://www.webex.com

From:	Andersen, Erik (E.)
Sent:	Monday, March 04, 2013 7:42 PM
To:	Garrett, David (D.P.); Smith, Craig (C.A.); Devries, Jason (J.E.); Norman, Kristofor (K.R.)
Subject:	FW: P415 GTDI Misfire - CAC Moisture
Signed By:	eanderse@ford.com

Sensitivity:

Private

Guys,

This issue continues to plague us. Is there any merit in retesting any of these? Given that we have less than 18 months of production, I think we could probably rule some of them out. However, is there anything that could be done as a "service only" type corrective action?

I tend to shy away from anything that would involve active controls of any form. Seems it would be a service nightmare. However, I'm open to any feedback you have.

We can discuss further tomorrow at the misfire meeting, but you can see this is starting to get some high level attention.

Thanks,

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966

From: Ronzi, Bill (W.C.) Sent: Monday, March 04, 2013 5:12 PM To: Andersen, Erik (E.) Subject: RE: P415 GTDI Misfire - CAC Moisture Sensitivity: Private

Erik, Can you do an initial sort by re-wording, adding, or deleting items below? We can then provide that preliminary list to Bob Fascetti for his discussions with Mike Berardi with the intent being to show Mike that the team is engaged enough to send the SSM right away.

Bill

From: Ronzi, Bill (W.C.)
Sent: Monday, March 04, 2013 4:25 PM
To: Kramer, Michael (M.T.); Sparks, Douglas (D.S.); Madej, Jeanette (J.); Russo, Scott (S.); Andersen, Erik (E.)
Subject: RE: P415 GTDI Misfire - CAC Moisture
Sensitivity: Private

Erik, Have any of these alternatives been tested along with the latest and greatest CAC and blocker (ie. would be service only - no production).

		Cost
Incremental blocker plate		
Small weep drain (engine off only)		
Centrifugal collector		
CAC bypass duct		
Foam filter cold duct insert		
SS screen insert(s) - similar to old mafs screens		
TB gasket splitter/diverter (better distribution of water)		
Honey comb trap at bottom of CAC end tank		
VW TSB valve		

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, March 04, 2013 1:53 PM To: Kramer, Michael (M.T.); McCoy, Julie (.); Sparks, Douglas (D.S.); Madej, Jeanette (J.); Russo, Scott (S.); Andersen, Erik (E.) Subject: RE: P415 GTDI Misfire - CAC Moisture Sensitivity: Private

I'm checking on the Berardi meeting timing. I believe the intention was tomorrow. We need to convince FCSD that the appropriate work is happening so that they'll release the SSM telling dealers not to replace new CAC's.

We'll probably need a short list of Cooling and/or Engine potential "service only" actions under consideration that could provide

further directional improvement.

Let's discuss at 4:30 for a few minutes if possible.

Thanks, Bill

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Monday, March 04, 2013 1:35 PM To: Ronzi, Bill (W.C.); McCoy, Julie (.); Sparks, Douglas (D.S.); Madej, Jeanette (J.); Russo, Scott (S.); Andersen, Erik (E.) Subject: RE: P415 GTDI Misfire - CAC Moisture Sensitivity: Private

Clarification. The Berardi meeting is 3/26.

>Mike Kramer >RWD PT Cooling Supv. >Six Sigma Black Belt >Cell Phone: (313) 805-0190 >Text Page: mkramer1 >Page from outside Ford, External email: mkramer1@ford.com -----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, March 04, 2013 11:50 AM To: McCoy, Julie (.); Sparks, Douglas (D.S.); Kramer, Michael (M.T.); Madej, Jeanette (J.); Russo, Scott (S.); Andersen, Erik (E.) Subject: RE: P415 GTDI Misfire - CAC Moisture Importance: High Sensitivity: Private

I believe the Tuesday Mike Berardi meeting is about our plan to address the emerging QSF (repeats with new CAC's).

The 11MY/12MY TSB has been revised to require misfire codes or misfire freeze frame data before replacing CAC's (this was released Friday).

We also have an SSM ready to go out that advises dealers to not replace latest level CAC's with the same part (no added benefit).

FCSD does not want to release that SSM until we have agreement on how to handle the emerging QSF.

I've scheduled a 4:30 meeting today to discuss further.

Bill

-----Original Appointment-----

From: Schwartzenberger, Sandra (S.) On Behalf Of Berardi, Michael (M.A.) Sent: Monday, March 04, 2013 10:58 AM To: Fascetti, Robert (R.J.); McCoy, Julie (.); Sparks, Douglas (D.S.); Harrison, Michael (M.J.); Dobbs, Dan (K.D.); Norton, John (J.K.); Kramer, Michael (M.T.); Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Ricks, Kevin (K.J.) Subject: P415 GTDI Misfire - CAC Moisture When: Tuesday, March 26, 2013 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada). Where: Audio Sensitivity: Private

Michael Berardi invites you to an Audio Only Personal Conference Meeting.

Audio conference information

US Toll Free Number: +1-888-628-3668 FordNet 248-3668 / Toll: +1-313-248-3668 FordNet 248-3668 / Toll*: +1-313-248-3668 Global call-in numbers: https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=195382697&tol IFree=1 Toll-free dialing restrictions: http://www.webex.com/pdf/tollfree_restrictions.pdf Attendee access code: 222 358 99

* FordNet 248-3668 / Toll should only be used if the primary number does not work.

Use information below only if directed to by the host

Optional WebEx Link: https://ford.webex.com/mc Meeting Number: 716 466 518 Meeting Password: 22235899

MC08

http://www.webex.com

From:	Osepchook, William (W.R.)
Sent:	Wednesday, October 17, 2012 12:43 PM
То:	Nowaczyk, Rick (R.J.)
Subject:	FW: P415 Misfire QSF Closure

See Bill Ronzi input below.

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Friday, October 12, 2012 12:07 PM To: McDonagh, Scot (S.M.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); Osepchook, William (W.R.); Schiltges, Dave (D.); Selthofer, Adam (A.); White, Eric (E.); Kramer, Michael (M.T.); Wagner, Glen (G.C.) Cc: Sparks, Douglas (D.S.); Ricks, Kevin (K.J.); Madej, Jeanette (J.); Dixon, Mark (M.R.) Subject: RE: P415 Misfire QSF Closure

Rick/Dan/Glen,

I'm concerned that the verbiage is too loose, essentially only requiring drivability concerns to get the new CAC. When we scoped the plan for this TSB, and discussed a potential for a Prior Approval program, I believe we agreed that either a left bank misfire or catalyst DTC would be a requirement for getting a new CAC. We had then planned to check for one of those two DTC's within the TCA process.

Bill William C. Ronzi PTI Quality Supervisor (313) 805-6140 cell & pgr

-----Original Appointment-----From: McDonagh, Scot (S.M.) Sent: Wednesday, October 10, 2012 11:37 AM To: McDonagh, Scot (S.M.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); Osepchook, William (W.R.); Schiltges, Dave (D.); Selthofer, Adam (A.); Ronzi, Bill (W.C.); White, Eric (E.); Kramer, Michael (M.T.) Cc: Sparks, Douglas (D.S.); Ricks, Kevin (K.J.); Madej, Jeanette (J.); Dixon, Mark (M.R.) Subject: P415 Misfire QSF Closure When: Friday, October 12, 2012 11:00 AM-11:30 AM (UTC-05:00) Eastern Time (US & Canada). Where: Teleconference: x13673 Passcode: 21340179#

Please join the Powertrain Quality Team to discuss QSF Service closure plan.

1) Final content for 2011-2012MY and 2013MY TSB releases- Team Input

2) Confirmation from PS&L that Valeo will provide 2,000 2011-2012MY and 250 2013MY 6K775 CACs by ~10/22/12(PT Management request)- Eric White

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 <u>smcdonag@ford.com</u>

Scot McDonagh invites you to an online meeting using WebEx.

WebEx meeting information

Meeting Number: 710 284 606

Meeting Link: <u>https://ford.webex.com/ford/j.php?J=710284606</u> Meeting Password: This meeting does not require a password.

Audio conference information

To receive a call back, provide your phone number when you join the meeting, or call the number below and enter the access code. US Toll Free Number: +1-888-628-3668 FordNet 248-3668 / Toll: +1-313-248-3668 Global call-in numbers: <u>https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=185682342&tol</u> IFree=1 Toll-free dialing restrictions: <u>http://www.webex.com/pdf/tollfree_restrictions.pdf</u>

Access code:710 284 606

MC06

http://www.webex.com

From:	Kramer, Michael (M.T.)
Sent:	Monday, June 17, 2013 1:58 PM
To:	Weber, Erik (E.M.)
Cc:	Andersen, Erik (E.), Sowards, John (J.); Huang, Larry (L,.); Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Subject:	FW: P415 VPAT Meeting Assignments - 6/14

We are doing the condensation test with a J1 CAC, 7T8F stick-on blocker, and lower bumper grill insert this Friday (6/21). Also doing some other blocker configs in conjunction with J1 CAC and lower bumper grill insert to investigate potential alternative service action that would address both the aesthetic and condensate concerns.

Mike Kramer RWD PT Cooling Supv.

Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Leonardi, Scott (S.A.)
Sent: Monday, June 17, 2013 11:14 AM
To: Crawford, Gerald (F.); Demmith, David (D.J.); Roberts, Paul (P.W.); Michaels, Victor (J.); Kramer, Michael (M.T.); Weber, Erik (E.M.); Maynard, Roger (R.W.); DiTullio, Marc (M.J.); Cutting, Janice (J.M.); Dobbs, Dan (K.D.); Ricks, Kevin (K.J.)
Cc: Mocio, James (J.W.); Frantzeskakis, Petros (Peter.); Leonardi, Scott (S.A.)
Subject: P415 VPAT Meeting Assignments - 6/14

Team,

Below are the assignments from Friday's P415 VPAT. Please review and provide feedback / required info per the comments.

If there are issues with the assignment or uncertain about what is requested please contact me to discuss

NVH Shield Discussion F/UP: Crawford - Provide parts to NVH week of 8/17 for testing F/UP: Roberts - Provide Off Road Assessment to team on latest proposal

CAC Blocker Discussion

F/UP: Kramer / Weber - Verify no adverse issues with C/O CAC combined with Bumper Grill and Stick on Blocker F/UP: Michaels - Get stick on blocker from PT for water fording to verify no issues VE recommend approval of the blocker for service contingent upon passing 6/21 TASE testing and Water Fording (CR12695680)

Myanmar Fuel Concerns F/UP: Maynard - Work with J. Cutting and team to verify data and fuel info for next VPAT Torque Convertor Bearing VE recommends approval of the change for P415

Scott A. Leonardî F150 Vehicle Engineering Vehicle Integration Engineer PDC 1J-F46 2 313.805.2747 (Cell)

"The information contained herein is FORD PROPRIETARY information and may include FORD CONFIDENTIAL information as defined in Ford's Global Information Standard II. Reproduction of this document, disclosure of the information, or use for any purpose other than the conduct of business with Ford is expressly prohibited"

2

From:Alcaraz andrade, Alejandro (M.)Sent:Wednesday, May 15, 2013 1:26 PMTo:Raver, Jon (J.A.); Allan, Valerie (V.J.); Huang, Larry (L..)Cc:Kramer, Michael (M.T.)Subject:FW: Picture of two P415 parts on their way to Greensburg for SWAAT testAttachments:P415 with grill side blocker SWAAT test parts..doc

Hi,

We are running the SWAAT test and the Cyclic corrosion test on the P415 CAC (DL34 9L440 DA) for these tests we added the bottom sticky blocker. We requested Valeo to cover 7tubes and 8 fins, but they installed the blocker lower than it should be and it covers 7 tubes 7 fins(as shown in the pictures attached). I believe not covering the 8th fin row would not have a significant impact on the test results. Can we continue the test or should we make them change the blocker? Last option requires new blockers and new CACs. Thanks

Manuel Alejandro Alcaraz Andrade

PTI Cooling System D&R Engineer Product Development FoM T + 313 782 2580 USA T + 52 1 55 35229780 Mexico Ford: + 52 55 11033489 Mexico malcara2@ford.com

From: Joseph LUMETTA [mailto:joseph.lumetta@valeo.com] Sent: miércoles, 15 de mayo de 2013 12:05 p.m. To: Alcaraz andrade, Alejandro (M.) Cc: Carl HILDINGER; Corey SMALL Subject: Picture of two P415 parts on their way to Greensburg for SWAAT test

Hello Alejandro It turns out I was able to get a quick photo of the P415 parts on their way to Carl Hildinger at Valeo Greensburg prior to SWAAT testing. look to attachment Have a great day

Joseph Lumetta joseph lumetta@valeo.com office phone 248-209-8237 fax 248-209-8282 cell 248-709-8282 cell 248-709-4710 This e-mail message is intended only for the use of the intended recipient(s). The information contained therein may be confidential or privileged, and its disclosure or reproduction is strictly prohibited. If you are not the intended recipient, please return it immediately to its sender at the above address and destroy it.





From:	Smith, Craig (C.A.)
Sent:	Monday, June 11, 2012 11:31 AM
То:	Hammoud, Mazen (M.)
Subject:	FW: Pilot Downshifting 6-4-2 only when the bucket is full, Update.

Mazen,

The latest approach being investigated by EPD is a delay in downshifts depending upon the status of a TBD CAC condensate model. Please see my comments below. I think that this would like to D42 as well as shift response TGW.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From:	Smith, Craig (C.A.)
Sent:	Monday, June 11, 2012 10:47 AM
To:	Cockerill, AI (C.A.)
Cc:	Jungbluth, Karl (K.); LaVoie, Vince (V.P.); Devries, Jason (J.E.)
Subject:	RE: Pilot Downshifting 6-4-2 only when the bucket is full, Update.

AI,

Yes, I indicated that this would not be acceptable at the last meeting. I can see the following issues.

1) lack of downshift complaints (Trans Calibration TGW)

2) lack of power complaints (D42 Engine Calibration TGW)

3) inconsistent behavior, sometimes get a 6-2 immediately, sometimes it's a 6-4 following by a 4-2 after a few seconds. (Trans Calibration TGW)

Vince/Karl,

Your thoughts regarding the viability of variable shift response as a function of an inferred condensate model?

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From:Cockerill, Al (C.A.)Sent:Monday, June 11, 2012 10:32 AMTo:Smith, Craig (C.A.)Subject:FW: Pilot Downshifting 6-4-2 only when the bucket is full, Update.

FYI, I know you guys own drivability. Are you aware of this action?

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From: Yamada, Shuya Shark (S.Y.)
Sent: Monday, June 11, 2012 10:12 AM
To: Norman, Kristofor (K.R.); Glugla, Chris (C.P.); Ladd, John (J.R.); Kramer, Michael (M.T.); Palm, Jim (J.R.); Sowards, John (J.); Cockerill, Al (C.A.); Mazuchowski, James (J.A.)
Subject: Pilot Downshifting 6-4-2 only when the bucket is full, Update.

Team,

Here's my update for today.

I can't make today's Misfire Meeting but I a have face to face meeting at Livonia with Karl Jungbluth 6R80 Supervisor and Philip Wiethe TS regarding the feasibility of Pilot Downshifting 6-4-2 only when the CAC bucket is full. Full Bucket = Amount of condensate build up to cause misfire during steady state, plus 6-2 downshift at DTF tests.

The new high velocity CAC holds 80% less water than the production CAC so the idea is to pre-cleans the CAC in 2 seconds at 4th gear 23lb/min before we hit it with 2nd gear 36lb/min if customer manage to fill the bucket with gentle driving and no trailer.

If the RFR CAC has similar characteristics as P415 high velocity CAC, the same pre-cleansing strategy should work on RFR as well when the bucket is full.

Once we get the blessing from Karl and Philip, we will start testing this strategy.

Shark.

From: Sent: To: Subject: Attachments: Tyler, Jim (J.S.) Tuesday, August 14, 2012 10:16 PM Kramer, Michael (M.T.) FW: PVP&R. PVP&R CAC P415 NEW CAC eCBV Ford Hystorical changes.pdf

CAC misfire change PV proposal for review and approval.

Sent with Good (<u>www.good.com</u>) Jim Tyler T1/P552 Cooling 313-805-2565

-----Original Message-----From: Guillermo GUADARRAMA [guillermo.guadarrama@valeo.com] Sent: Monday, August 13, 2012 06:04 PM Eastern Standard Time To: Tyler, Jim (J.S.) Cc: David CASTILLO Subject: PVP&R.

Jim,

I am attaching the revised PVP&R for the plastic cover, please review it and send it me back signed, if possible, if not please send me the corrections to re-submit and get the signature.

In this PVP&R is also included another PVP&R for the capacity increase (Crimping machine added) and validation of alternative furnace.

Regards/Saludos,

Guillermo Guadarrama Valeo Engine Cooling, SLP Eje 130 Esq. C.F.E. CP 78395 AP 6-082 San Luis Potosi, Mexico Tel: +52 (444) 826-66-00, Ext. 6229 mail: guillermo.guadarrama@valeo.com

This e-mail message is intended only for the use of the intended recipient(s). The information contained therein may be confidential or privileged, and its disclosure or reproduction is strictly prohibited. If you are not the intended recipient, please return it immediately to its sender at the above address and destroy it.

From:Dobbs, Dan (K.D.)Sent:Wednesday, April 11, 2012 12:48 PMTo:Osepchook, William (W.R.)Cc:Ricks, Kevin (K.J.); Nowaczyk, Rick (R.J.)Subject:FW: RE: Misfire Tech PostingAttachments:http www.db.fmcdealer.dealerconnection.pdf

Okay see what you think I built on your approach.

We do appreciate your patience on this issue. Engineering is aware and working on the issue. There is no approved field service procedure available at this time. Any attempts to modify the Charge Air Cooler or associated Air Intake components will create other driveability concerns. Additionally, modifications will create a non-reimbursable warranty repair if the modified component is replaced. Continue to monitor OASIS for further updates.

Kevin, FYI we have a country cousin Technician who was passing along a proported fix via the message boards and feeding his fellow Techs. This is a posting that Bill and I would like to make to stop the flow of bad information. Your thoughts?

From: Osepchook, William (W.R.) Sent: Wednesday, April 11, 2012 12:17 PM To: Dobbs, Dan (K.D.) Cc: Cockerill, Al (C.A.); Nowaczyk, Rick (R.J.) Subject: RE: Misfire Tech Posting

Hi Dan,

Please review. This is how I would like to respond to the tech posting. Attached is the tech post. Please add to if you think it is necessary.

Unauthorized Modification of the F-150 Ecoboost Charge Air Cooler system for condensation could effect emissions; it could also lead to Lack of performance, drivability issues, DTCs, and possibly component failures.

William Osepchook GEE Global Engine Engineering V-Engine Service Engineer 313-805-9191 wosepcho@ford.com

Mb_Postings

		Search Discussion Board:	
View Most Recent Message Window	<u>Refresh</u> Open Discussion Boards in a New		Search -
Author	Topic: 2012 Ecoboost F-150 intermittent miss	Email Topic	Print Topic
DEKE HOFFMAN Tri Motor Sales, Inc. Oak Harbor, OH (419) 898-2931	I have one that came in with a miss complaint of highway cruise. Had p0306 in CM but hadn't do swapped the plug to #5 incase it did it again. It misfires in Mode 6. I thought I saw a few other engineering was "investigating" Anyone else see	ne it since. I inspected the basics did it again 6K miles later. No DT people posting about this and tha	and C's and no t
		March 26, 2012	02:59:23 PM
 Ben Ramsey Mooresville Ford Mooresville, NC (704) 664-1300 	I heard this had to do with condensation from th I would do. Our FSE was here and we were disc the CAC was too efficent causing condensation i noticeable on highway cruise decel.	ussing it and he said something to	o the effect
		March 26, 2012	03:51:25 PM
Mike Schindler Dempewolf Ford Henderson, KY	In a few days a p0430 will rear its ugly head Ive high speed miss and kills the cat,I think its the		s out as a:
(270) 827-3566		March 26, 2012	05:01:39 PM
FRANK SIMS O'Daniel Ford, Inc. New Haven, IN (260) 748-6200	had engineers here for a couple days they had me change the vacuum harness on top the engine from the turbos along with all plugs and left hand cat. the miss went away but still had the reprogram issues that ford didnot have out at the time so they bought the vehicle back. at that time also there was no moisture in the cac like there has been reported now also we replaced all the side 2 ign. coils. hope this helps		y but still le vehicle
		March 27, 2012 (08:23:24 AM
Mike Schindler Dempewolf Ford Henderson, KY	Ihave replaced the cat on one 2 times in 12k mi	les and it had new program in it March 27, 2012 :	10-15-30 AM
 (270) 827-3566 DEKE HOFFMAN Tri Motor Sales, Inc. Oak Harbor, OH (419) 898-2931 	This one has 11K and I personally know the customer. It has only done this twice so far. will ask more questions knowing what I know from you gus now and see it I can determi if this is whats happening. The first time he did say it was on a decel after a long highwa cruise. That I do know. I'll post back if I find out anything definate. Thanks for the good replies		e so far. I determine highway
		March 28, 2012	12:37:57 PM
 PATRICK WALTON Tipton Ford, Inc. Nacogdoches, TX (936) 564-7337 	Have had the same discussion with our FSE. Ha different trucks) The first one sound exactly like and I can give you the fix that we came up with maint. so far.	ve put on 2 drivers side cats so fa yours Deke. Shoot me an email a	ar (2 address
		March 28, 2012	08:26:48 PM
MICHAEL CARTA Rainbow Ford, LLC La Follette, TN (423) 562-2251	Ask your customer if it was raining at any point 11 f150 Ecoboost w/ similar problem. Problem of raining. We had the truck for a few days. Could raining heavy on one of the road tests. Drove a outside w/ no problem. Started to rain later in t Had some engineers involved with the cat conve decided to take the truck back to selling dealer heard anything since.	during his long highway cruise. W occured with customer on interstan o't duplicate on road tests until it gain next day same route, speed, he day, took truck out and duplica erter and coil replacements but cu	Ve had an te while started etc but dry ated again. istomer
		March 28, 2012	10:07:58 PM
Gary Gearner	Have had a couple here with that issue. Last on	the second se	he turbo.

Sanford, NC (919) 775-2221

Crossroads Ford Lincoln of San Found PCV valve stuck open allowing oil to get to the turbo and CAC. Had to clean the CAC and also found water in the CAC with oil from the PCV valve stuck open. Cleaned the turbo and the CAC tubes as well. Water in the CAC is definitely from the condensation issue. Vehicle still had issues after the repair and reprogram. Ended up going to RAV.

PE13-018 000278

http://www.db.fmcdealer.dealerconnection.com/messageboardsWeb/mbdisplaypostings.do?boardId=7&for... 4/9/2012

		1	March 29, 2012 12:19:31 PM
۲	DEKE HOFFMAN Tri Motor Sales, Inc.	Partick, I'd appreciate any info horspla65@hotmail.com	
	Oak Harbor, OH (419) 898-2931	1	March 29, 2012 04:31:18 PM
Þ	JAMIE HACK Don Franklin Ford, Inc.	patrick me to ive got 2 of them here my email is jhack71@googlen	nail.com
	Columbia, KY (270) 384-3016		Acush 20, 2012 04,50,10 DM
•	STEVEN CLINE Ford Country of Lewisville Lewisville, TX (972) 221-2900	Patrick, isnt this the discussion board for things like you have foun to know what you guys come up with down there. just my 0.02 thx	March 29, 2012 04:58:10 PM d? i bet we would all like
		1	March 29, 2012 05:41:09 PM
•	DEKE HOFFMAN Tri Motor Sales, Inc. Oak Harbor, OH (419) 898-2931	Steven, actually its not, but we just do it sometimes. I'm suspectir knowledge and experience and came up with something on his ow Fords world, if its not in the book, its not possible, which is dead w maybe he doesn't want to put it all out there. Just sayin	n, not from the book. In
		1	1arch 30, 2012 08:33:40 AM
•	kyle rosen Cox Motor Sales, Inc.	Patrick send it my way please!! hoheisel1@yahoo.com	
	New Richmond, WI (715) 246-2561	1	March 30, 2012 03:29:51 PM
•	Rick Barlau North Star Ford	Patrick send to smtech46@yahoo.com	
	Duluth, MN (218) 727-3673		April 2, 2012 04:31:38 PM
×	James Strothers New Holland Ford New Holland, PA	patrick send to jstrothers@newhollandauto.com	April 4, 2012 09:39:37 AM
	(717) 354-4901 Joshua Loney	natrick can i get an empil to thanks lengui?@gmail.com	April 4, 2012 05.55.57 APr
ſ	Kayser Ford Stoughton Stoughton, WI	patrick can i get an email to thanks loneyj2@gmail.com	
	(608) 873-5621		April 4, 2012 10:42:24 AM
Þ	james northam Hertrich Ford of Pocomoke	well while you are at it please send me one to thanks for your time	e doug290@earthlink.net
	Pocomoke City, MD (410) 957-3333		April 4, 2012 10:51:35 AM
۲	MARVIN BITSILLY Gurley Motor Company	i need all the help i can get.please send it my way. mnbitsilly@hot	mail.com
	Gallup, NM (505) 722-6621		April 4, 2012 11:27:32 AM
•	DONALD REIK JR Mullinax Ford East	djreik@yahoo.com	
	Wickliffe, OH		April 4, 2012 12:22:00 PM
•	(440) 585-8000 Daniel Toronski	please send me one? thanks for your time and input. dtoronski@no	
	Leith Lincoln Raleigh, NC		
	(919) 872-9500	Marka alasa ang taong ta	April 4, 2012 02:29:21 PM
ĺ	Vernie Newton Olathe Ford Lincoln Olathe, KS (913) 782-0881	Me too please. carslayer11@yahoo.com Thanks.	April 4, 2012 03:25:28 PM
•	John Lewis	one more please streetglider79@gmail.com	
	Classic Ford Lincoln of Columb Columbia, SC		April 4, 2012 04:13:15 PM
•	(803) 779-5977 Eric Wiedeman	send one my way if u get a chance. thanks. fritow1234@yahoo.cor	
	Courtesy Ford Lincoln Sales, I Norfolk, NE (402) 371-9350		April 4, 2012 05:33:44 PM
Þ	JEFFREY NEUHAUS		

PE13-018 000279 http://www.db.fmcdealer.dealerconnection.com/messageboardsWeb/mbdisplaypostings.do?boardId=7&for... 4/9/2012

Mb_Postings

	Ed Koehn Ford of Wayland, Inc. Wayland, MI (269) 792-2205	ADD ME PLEASE fordisking2003@yahoo.com Thanks	April 5, 2012 02:22:50 PM
•	GARY STUTZ Moon Township Ford Moon Township, PA (412) 264-2360	Send me 1 too gstutz1@verizon.net thanks	April 5, 2012 03:13:45 PM
•	JOSEPH POWERS Alan Jay Ford Lincoln Sebring, FL (863) 385-0144	I hate to do this,but I could use it too joemama@strato.net	April 6, 2012 02:45:42 PM
•	THOMAS NEHL Freese Motors, Inc. Monticello, IA (319) 465-3541	just got the ticket on one t-nehl@hotmail.com THANK YOU	April 6, 2012 04:45:50 PM
•	MICHAEL CARTA Rainbow Ford, LLC La Follette, TN (423) 562-2251	Send one our way please!! michaelbcarta@yahoo.com THANKS!!!	April 6, 2012 04:57:07 PM

Return to top of page Refresh

From: Sent: To: Cc: Subject: Cockerill, Al (C.A.) Thursday, June 02, 2011 3:55 PM Osepchook, William (W.R.); Gorgol, Kevin (K.) Reno, George (G.L.) FW: Report Summary for the CQIS Report#BEIA4008

Guy's, I would like to put a SSM out for any 3.5L Tivct GTDI vehicle that experiences lack of power, mis-fire, P0340 code, to inspect ground on the rear of the LH head

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender.

Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From: Steslicki, Michael (M.E.)
Sent: Thursday, June 02, 2011 12:40 PM
To: Crudo, Frank (F.J.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Cockerill, AI (C.A.); Reno, George (G.L.); Merrell, Robert (R.J.); Smith, Craig (C.A.); Sims, Ivan (I.D.); Parnell, Bill (W.)
Cc: Davis, Craig (C.B.)
Subject: FW: Report Summary for the CQIS Report#BEIA4008

Thanks Craig!

FYI - this is from a GCQIS report from about a month ago for a P415 GTDI with codes P0300, P0305, P0306, P0430. Craig is sending me the parts. Please note the last comment about the ground G105 being loose.

Mike Steslicki Quality Analyst Ford Motor Company Large Gas & Diesel Engine Engineering (313) 805-9888

From: Davis, Craig (C.B.)
Sent: Thursday, June 02, 2011 11:16 AM
To: Steslicki, Michael (M.E.)
Subject: RE: Report Summary for the CQIS Report#BEIA4008

Mike, just followed up with the dealer (rather has one of our French people re-contact the dealer)

- All stored DTCs...P0300, P0305, P0306, P0430

- Freeze Frame and Mode 6 Data...sent into Hotline

- Check ST and LT Fuel Trims for inference on whether E-85 is used (GTDI is not an FFV application) or other fuel issue...E85 not used, name brand fuels used 87 octane

- Replace all Bank 2 coils and plugs (assuming P430)...replaced Bank COPs, Cat and spark plugs returned to Warranty Parts Evaluation to be forwarde to engineering

- Replace catalyst

- Get any customer information on misfires (tactile misfire or reports of flashing MIL) and fuel use....travelling on the highway when the CEL came on

- Get fuel sample if any indication of E85 use

- Resistance Check on Bank 2 Coil Ground (G105) ... Ground bolt in back of head was loose, took two complete turns to tighten

Hope this helps

From: Davis, Craig (C.B.)
Sent: Thursday, May 12, 2011 2:28 PM
To: Steslicki, Michael (M.E.)
Subject: RE: Report Summary for the CQIS Report#BEIA4008

Michael, dealer has been contacted and advised to perform these additional tests/parts replacement and to forward to our Part return Centre for forwarding to you.

I have updated the GCQIS report

From: Steslicki, Michael (M.E.) Sent: Wednesday, May 11, 2011 3:00 PM To: Davis, Craig (C.B.) Subject: FW: Report Summary for the CQIS Report#BEIA4008

Craig, please call this dealer and have him replace the bank 2 catalytic converter, COP's, and spark plugs. Please request the parts and then ship them to me.

Please see the attached note for what we'd like to get from the dealer for this vehicle.

- All stored DTCs

- Freeze Frame and Mode 6 Data

- Check ST and LT Fuel Trims for inference on whether E-85 is used (GTDI is not an FFV application) or other fuel issue

- Replace all Bank 2 coils and plugs (assuming P430)

- Replace catalyst
- Get any customer information on misfires (tactile misfire or reports of flashing MIL) and fuel use.
- Get fuel sample if any indication of E85 use
- Resistance Check on Bank 2 Coil Ground (G105)

From: MSTESLIC@ford.com [mailto:MSTESLIC@ford.com]
Sent: Wednesday, May 11, 2011 2:59 PM
To: Steslicki, Michael (M.E.)
Subject: Report Summary for the CQIS Report#BEIA4008

Attachments : 0

Report# :	BEIA4008	NHL			Received:	05/09/2011
CCRG/EPRC:		Reviewed St	atus:		Date:	
Vehicle:	2011,F150 ,1FTFW1E	4X4,SUP CRW,STY ET6BF	(SD		Build Date:	04/14/2011
Odometer :	561 M	Engine:		3.5L-GTDI	Calibration:	
Transmission:	6R80E	Axle:		3800F3.73L	A/C:	YES
Dealer:	CAN B251	5 Jacques Olivier Fo	rd Inc.		Phone#:	(450) 445- 3673
City:	St-Hubert	Province		Quebec	Country :	CAN
Originator:	RONALD	PROULX				
Symptom:	6 98 2 98 I	DRVABL,INDICAT	OR,CHECK E	ENGINE,MIL	ONLY	
Status:						
VFG:	V29 CHECK ENGINE LIGHT					
Additional Symptom:	P0430, P0300, P0305, P0306					
Fix:	Causal Co	mponent :				
Condition Code:						
Hotliner: SLAM	IOND1	Phone: 313 317-929	6 Regn (C d: 02 02 FCS	SD REGION-C	CANADA
Engineering:			Phone:		TAR:	
Dlr Contact: R	ONALD PRC	DULX	Phone: 45	50 445-3673	Title	e Cde: T
DTCs:						
KOEO:						
KOEC:P0430 P030	00 P0305 P03	306				
KOER:						
Comments :						

REPAIR 05/09/2011 03:14PM SEBASTIEN LAMONDE MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: LUMIERE CHECK ENGINE RESTE ALLUME DIAGNOSTICS: VERIFIER PLAINTE CONFIRMER, IDS TEST PCM CMDTC P0300,P0305,P0306,P0430 CATALYSEUR BANK 2 DEFECT CONFIRMER AVEC IDS, KOEO KOER P1000 PARTS REPLACED:: NONE TECH QUESTION: EXISTIL AUTRE PLAINTE A SE SUJET POUR PROBLEME AVEC CATALYSEUR SELON UN CONFRERE DE TRAVAIL QUI A SUIVIE UN COUR CHEZ FORD A LAVAL , IL Y A UN PROBLEME AVEC LES CATALYSEURS F150 ECOBOOST

RECOMM 05/09/2011 03:14PM SEBASTIEN LAMONDE MSS - FCSD - TECH SVC HOTLINE SALUT RONALD, NOUS RECEVONS DES CONTACTS SIMILAIRES DE TEMPS À AUTRE

> MAIS, CE N'EST PAS TOUJOURS LA MÊME CHOSE QUI EST À LA SOURCE DU SYMPTÔME. BASÉ SUR L'INFORMATION QUE TU NOUS DONNE, NOUS TE RECOMMANDONS DE REMPLACER LE CATALYSEUR SUR LA RANGÉ DEUX ET RÉÉVALUE. TU DOIS DÉTERMINER S'IL Y A UNE CONDITION RICHE OU PAUVRE. VÉRIFIE LE 'MODE 6 DATA' POUR DE L'INFORMATION SUR LES RATÉS DE CYLINDRE POUR POSSIBLEMENT ISOLER UN CYLINDRE EN PARTICULIER. VÉRIFIE LA QUALITÉ ET LA PRESSION D'ESSENCE. LE CODE DE DIAGNOSTIQUE P0300 EST SOUVENT DU À UNE MAUVAISE QUALITÉ D'ESSENCE... EST CE QU'IL Y A UNE CONSOMMATION D'HUILE OU DE LIQUIDE DE REFROIDISSEMENT? IL EST POSSIBLE QU'UN INJECTEUR COULE...

From:	Graham, David (D.L.)
Sent:	Monday, December 19, 2011 3:22 PM
То:	Osepchook, William (W.R.); Cockerill, Al (C.A.); Donahue, Francis (Fran.)
Subject:	FW: Service Spark Plug for 3.5L TIVCT GTDI Warranty

Presume we will have a PPAP with multiple deviations for ES tests and such. That would be transparent to FCSD

Dave Graham

Sent with Good (<u>www.good.com</u>)

-----Original Message----From: Donahue, Francis (Fran.)
Sent: Monday, December 19, 2011 02:26 PM Eastern Standard Time
To: Ricks, Kevin (K.J.); Boerger, Jim (J.G.)
Cc: Nowaczyk, Rick (R.J.); Mazuchowski, James (J.A.); Dobbs, Dan (K.D.); Bonell, Paul (P.S.); Donahue,
Francis (Fran.); Graham, David (D.L.)
Subject: RE: Service Spark Plug for 3.5L TIVCT GTDI Warranty

Kevin, Jim:

Below are your questions/answers.

- WERS concern number: **C12503644.**
- Concern Status in WERS: The WERS Concern has gone to WERS Notice.
- When does the part go into production at the engine plant? **09Feb2012**

• When does the plug go into production at the assembly plant? Estimated 16Feb2012 assuming historical 1 week difference between Engine Build Date and Vehicle Build Date.

Paul Bonell will start the WERS Alert but we can wait until 03 Jan 2012 to put the details together. David Graham in Engine can help us with the Service Alert protocol/approval also. Delaying this until 03 Jan will not impact NGK's actions. They are building spark plugs – The discussion around the Alert is really about where the first shipment goes.

Thanks for your support. +Fran

Revel In Virtue

Francis "Fran" Donahue

Supervisor - Ignition Systems

Ford Motor Company

fdonahue@ford.com 313 622-6482

From: Ricks, Kevin (K.J.)
Sent: Monday, December 19, 2011 9:18 AM
To: Boerger, Jim (J.G.)
Cc: Donahue, Francis (Fran.); Nowaczyk, Rick (R.J.); Mazuchowski, James (J.A.); Dobbs, Dan (K.D.)
Subject: RE: Service Spark Plug for 3.5L TIVCT GTDI Warranty

I am supportive Jim and I will help pursue. Be aware we have great difficulty getting service parts released under an alert, they have to be very specific and will need to include rate and flow for service parts. We know we will get hit hard for demand as soon as the part is available to dealers. We will need some issue specific meetings but to start, can you advise:

- WERS concern number
- Concern Status in WERS
- When does the part go into production at the engine plant?
- When does the plug go into production at the assembly plant?

From: Boerger, Jim (J.G.)
Sent: Friday, December 16, 2011 4:23 PM
To: Ricks, Kevin (K.J.)
Cc: Donahue, Francis (Fran.)
Subject: FW: Service Spark Plug for 3.5L TIVCT GTDI Warranty
Importance: High

Hi Kevin ...

We were not able to connect via phone today - I am supportive of an urgent service action for 3.5L EcoBoost to provide a more robust spark plug produced from production tooling (but prior to full PPAP documentation). Let's discuss on Monday, but if "yes" is a straight forward response, pls reply via e-mail - thanks, Jim

Jim Boerger

Manager - Component Design C Department

Global Engine Engineering

Dearborn - Building 1 - Room 12B092

E-mail jboerger@ford.com - Tel: (313) 805 8536

ONE FORD: ONE Plan - ONE Team - ONE Goal

From: Donahue, Francis (Fran.)
Sent: Friday, December 16, 2011 4:11 PM
To: Boerger, Jim (J.G.)
Cc: Donahue, Francis (Fran.)
Subject: Service Spark Plug for 3.5L TIVCT GTDI Warranty

Jim:

NGK is scheduled to support Production with the new spark plug (stepped center electrode and smaller gap) on 09 Feb 2012. It would be beneficial to bring the spark plug into Service earlier than 09 Feb prior to NGK completing PPAP. Can we bring those spark plugs into Service under WERS Alert for this action while the PPAP paperwork catches up? This action could gain us 5-8 days in the 8 week timing plan.

Thanks +Fran

Revel In Virtue

Francís "Fran" Donahue

Supervisor - Ignition Systems

Ford Motor Company

fdonahue@ford.com 313 622-6482

From:Osepchook, William (W.R.)Sent:Friday, November 02, 2012 7:48 AMTo:Cockerill, Al (C.A.)Subject:FW: TSB 12-10-19 F150 GTDI - CAC Backorder

Do you have a CAC in your back pocket?

From: Osepchook, William (W.R.)
Sent: Friday, November 02, 2012 6:29 AM
To: Schiltges, Dave (D.); Selthofer, Adam (A.)
Subject: FW: TSB 12-10-19 F150 GTDI - CAC Backorder

Oh boy did I call that one.....and I gave them the benefit of the doubt....Nov 12.

From: Ridolfi, Dominic (D.R.)
Sent: Thursday, November 01, 2012 4:12 PM
To: Osepchook, William (W.R.)
Subject: FW: TSB 12-10-19 F150 GTDI - CAC Backorder

You were close...

From: Ridolfi, Dominic (D.R.)
Sent: Thursday, November 01, 2012 4:06 PM
To: Abercrombie, Robert (R.); Barrett, Dale (D.); Chatfield, David (D.); Dowdy, Jonathon (J.); Fenning, Brett (B.); Ferret, Shawn (S.); French, Sean (S.P.); Gammon, Charles (C.); Girard, Mario (y.); Graham, Brian (B.); Hebert, Adam (A.); Higgs, Justin (J.); Houston, Willie (W.); Jacobs, Phil (P.); Johnson, Seth (S.); Kvenvold, Derek (D.); Mason, Nicholas (N.G.); Massey, Stephen (S.); McEntee, Alec (A.); Meers, Brian (B.); Messina, Matthew (M.); Ridolfi, Dominic (D.R.); Romano, Tony (T.); Samson, Jean (J.); Sanders, Kevin (K.); Schmidt, Matthew (M.); Schober, Michael (M.); Sheahan, Karen (K.); Singleton, Sylvain (S.); Smith, Walter (W.A.); Stendardo, David (D.)
Subject: TSB 12-10-19 F150 GTDI - CAC Backorder

Team,

The CAC for TSB 12-10-19 (BL3Z- 6K775-B) is on national backorder.

Please direct dealers to emergency order the part. If they have additional part questions refer them to PACO.

The TSB should not be performed without the CAC – don't flash the PCM unless you've also got the part ready to put in.

Any questions come see Bob or I.

Dominic Ridolfi

3.0/3.5/3.7/GTDI Subject Matter Expert Ford Technical Hotline Diagnostic Service Center 1 1700 Fairlane Dr. Allen Park, MI 48101 (313) 248-8241

From:	Whitehead, Joseph (J.P.)
Sent:	Tuesday, April 10, 2012 2:14 PM
To:	Cockerill, Al (C.A.)
Cc:	Smith, Craig (C.A.); Ladd, John (J.R.); Palm, Jim (J.R.); Yamada, Shuya Shark (S.Y.); Krygowski, Richard (R.J.)
Subject:	FW: UNTITLED.PPT

AI,

Built a blocking plate from corrugated plastic found @ TEE. It's available for testing this Friday.



Thanks,

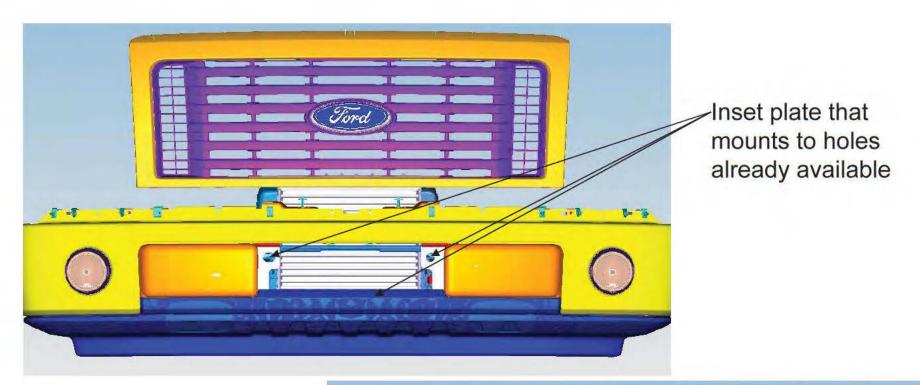
Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com 313 805-5481

From:Cockerill, Al (C.A.)Sent:Monday, April 09, 2012 12:10 PMTo:Ladd, John (J.R.); Yamada, Shuya Shark (S.Y.); Palm, Jim (J.R.); Whitehead, Joseph (J.P.); Kramer, Michael (M.T.)Subject:UNTITLED.PPT

Can someone make a blocking plate that is easy to remove and evaluate it effectiveness?



Eager Beaver Lawn Care & Landscaping Free Estimates 313999-481





From:Smith, Craig (C.A.)Sent:Monday, May 13, 2013 8:06 AMTo:Leisenring, Kenneth (K.C.)Subject:FW: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 -
2011 F150 3.5L Charge Air Cooler

Ken,

Just wanted you to know that we demo'd the CAC condensate misfire for the Government Investigations team by artificially inducing misfire via adding water in the CAC. Apparently they are meeting with NTHSA today or tomorrow and wanted to personally experience the issue.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Britton, Eric (E.J.)
Sent: Friday, May 10, 2013 3:39 PM
To: Whitehead, Joseph (J.P.)
Cc: Smith, Craig (C.A.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Thanks for pulling this off on such short notice Joe!

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

From: Smith, Craig (C.A.)
Sent: Thursday, May 09, 2013 11:28 AM
To: Britton, Eric (E.J.); Kramer, Michael (M.T.); Whitehead, Joseph (J.P.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Joe,

Eric wants his management to experience misfire FMEM. Please call (323-2966) him today and arrange a time to set up a quick demo.

The plan will be to disable injectors to emulate the issue during a passing maneuver. As I explained to Eric, the field issues can range from 1 to 3 cylinders misfiring but FMEM (injector disablement) is only active on up to 2 based upon the

1

strategies current capability. The 3rd cylinder, however, may not be making significant torque due to the misfire though FMEM action (injector disablement) isn't being taken.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Britton, Eric (E.J.)
Sent: Thursday, May 09, 2013 10:58 AM
To: Smith, Craig (C.A.); Kramer, Michael (M.T.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Friday or Monday would be best. We have to call NHTSA by COB Monday to discuss. I think we just need to discuss what is needed to set this up, who can help, and how to get priority if necessary. Thanks!

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

From: Smith, Craig (C.A.)
Sent: Thursday, May 09, 2013 10:54 AM
To: Britton, Eric (E.J.); Kramer, Michael (M.T.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

I can't set up a demo with a vehicle in the next 1/2 hour.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Britton, Eric (E.J.)
Sent: Thursday, May 09, 2013 10:11 AM
To: Smith, Craig (C.A.); Kramer, Michael (M.T.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

We need to drive a vehicle and experience this symptom. Do you guys have access to a vehicle?

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

From: Smith, Craig (C.A.)
Sent: Thursday, May 09, 2013 10:08 AM
To: Britton, Eric (E.J.); Kramer, Michael (M.T.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Besides describing how to recreate the problem, what else do you wish to discuss? This will drive who else, if anyone, needs to be invited.

Thanks,

Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Britton, Eric (E.J.)
Sent: Thursday, May 09, 2013 9:50 AM
To: Smith, Craig (C.A.); Kramer, Michael (M.T.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Is there anyone else I should invite?

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

From: Smith, Craig (C.A.)
Sent: Thursday, May 09, 2013 8:45 AM
To: Britton, Eric (E.J.); Kramer, Michael (M.T.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

I'm available 11-1130am this morning. You can simulate the problem by:

• Removing the air intake tube at the engine throttle plate.

- Pouring 6 oz's of water down the air intake tube such that it accumulates in the CAC.
- Reconnect the air intake tube to the engine throttle plate.
- Starting the engine and gently accelerating to approximately 50mph.
- Perform a quick wide-open-pedal acceleration to force a downshift from 6th to 2nd gear.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08 -----Original Message-----From: Britton, Eric (E.J.) Sent: Thursday, May 09, 2013 8:32 AM To: Kramer, Michael (M.T.); Smith, Craig (C.A.) Subject: FW: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Craig, we may need your help. We need to drive a vehicle that exhibits the symptoms in this TSB. Maybe the FMEM mode can be induced through the PCM? Are you available for a short phone call this morning?

Mike, what time is best for you?

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

-----Original Message-----From: Britton, Eric (E.J.) Sent: Wednesday, May 08, 2013 3:22 PM To: Kramer, Michael (M.T.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Thanks! Mike can this FMEM condition be induced on a vehicle drive?

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268 -----Original Message-----From: Kramer, Michael (M.T.) Sent: Wednesday, May 08, 2013 2:05 PM To: Britton, Eric (E.J.) Subject: FW: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com
-----Original Message----From: Kramer, Michael (M.T.)
Sent: Monday, May 06, 2013 10:07 AM
To: Fagerman, Todd (T.M.)
Cc: Wilson, Marie (M.); Spencer, Beth (B.); Madej, Jeanette (J.); Russo, Scott (S.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Here it is

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com
-----Original Message----From: Madej, Jeanette (J.)
Sent: Monday, May 06, 2013 9:59 AM
To: Fagerman, Todd (T.M.); Kramer, Michael (M.T.)
Cc: Wilson, Marie (M.); Spencer, Beth (B.)
Subject: Re: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air

Ill follow up with Mike

----- Original Message -----From: Fagerman, Todd (T.M.) Sent: Monday, May 06, 2013 09:57 AM Eastern Standard Time To: Kramer, Michael (M.T.); Madej, Jeanette (J.) Cc: Wilson, Marie (M.); Spencer, Beth (B.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Mike/Jeanette,

I don't believe we received this on Friday as promised. Status?

As indicted in the notes below, we need to close this document out w/ signatures ASAP. Who are you waiting on? I will engage directly with them.

Regards, Todd Fagerman Manager, Car and Truck Certification Sustainability, Environment and Safety Engineering (313) 59-40680 email: tfagerma@ford.com

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Thursday, May 02, 2013 12:41 PM To: Spencer, Beth (B.) Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.); Fagerman, Todd (T.M.); Kramer, Michael (M.T.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Asking for Raj's help for a signature on an EPRC document really??

Document signoff will be complete by tomorrow.

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com
-----Original Message----From: Spencer, Beth (B.)
Sent: Thursday, May 02, 2013 11:49 AM
To: Kramer, Michael (M.T.)
Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.); Fagerman, Todd (T.M.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Thanks for the update, Mike. We have to provide a signed copy of this fact sheet to Robert Brown next Tuesday, and he offered to call Raj Nair if necessary. We asked him to give us more time, so maybe if you could provide the name of who in the calibration team needs to sign, we can follow up with them and prevent it from being elevated that far. Thanks.

Beth Spencer Sustainability, Environment & Safety Engineering Ford Motor Company bspencer@ford.com (313) 33-72635

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Monday, April 29, 2013 8:31 AM To: Spencer, Beth (B.) Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.); Kramer, Michael (M.T.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Update. PT Cooling has signed off the Fact Sheet. Out for Calibration signoff. I will follow-up later today.

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com
-----Original Message----From: Spencer, Beth (B.)
Sent: Tuesday, April 23, 2013 1:07 PM
To: Kramer, Michael (M.T.)
Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air

Mike,

We just found out that we're being asked to review the status of this issue with our VP, Robert Brown, next Tuesday. Since this is earlier than the completion date we agreed on, I thought I would let you know and give you the opportunity to finish getting the signatures on your fact sheet by Monday so we can report it as complete when we talk to Robert.

If this isn't possible, we'll assume you're still on track to submit them by COB Wednesday to support the May 2 EPRC.

Thanks!

Beth Spencer Sustainability, Environment & Safety Engineering Ford Motor Company bspencer@ford.com (313) 33-72635

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Tuesday, April 16, 2013 11:34 AM To: Spencer, Beth (B.) Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.); Kramer, Michael (M.T.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

yes

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com

-----Original Message-----From: Spencer, Beth (B.) Sent: Tuesday, April 16, 2013 11:23 AM To: Kramer, Michael (M.T.) Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

OK; then would it be possible to complete for our next meeting, which would be May 2?

Beth Spencer Sustainability, Environment & Safety Engineering Ford Motor Company bspencer@ford.com (313) 33-72635

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Tuesday, April 16, 2013 11:22 AM To: Spencer, Beth (B.) Cc: Madej, Jeanette (J.); Wilson, Marie (M.); Russo, Scott (S.); Kramer, Michael (M.T.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

I will follow-up on the signatures, however, will not be able to complete by tomorrow.

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com
-----Original Message----From: Russo, Scott (S.)
Sent: Tuesday, April 16, 2013 11:17 AM
To: Spencer, Beth (B.); Kramer, Michael (M.T.)
Cc: Madej, Jeanette (J.); Wilson, Marie (M.)
Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request
- 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Who's signature are we missing?

Scott Russo Ford Motor Company PT Cooling Applications Manager srusso2@ford.com Phone: 313-805-3059 Page: 3138053059@vtext.com

From: Spencer, Beth (B.)

Sent: Tuesday, April 16, 2013 11:14 AM To: Russo, Scott (S.); Kramer, Michael (M.T.) Cc: Madej, Jeanette (J.); Wilson, Marie (M.) Subject: FW: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Hello, Mike and Scott,

I'm the new Chair of the EPRC, and Marie and I were just reviewing the open agenda items. It looks like your item has been open for some time for clerical updates and signatures. We need to officially close this item at our next meeting and require your updates and signatures by COB tomorrow.

Each week it remains open, it involves resources on our part to continue to track it.

Please let me know if you have any questions. Thanks! Beth Spencer Sustainability, Environment & Safety Engineering Ford Motor Company bspencer@ford.com (313) 33-72635

From: Wilson, Marie (M.) Sent: Monday, March 18, 2013 9:32 AM To: Kramer, Michael (M.T.); Russo, Scott (S.) Cc: McClenaghan, Dave (D.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Another reminder. I would like to close this item on the EPRC agenda. Please provide the signed fact sheet. Thank you.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Wilson, Marie (M.) Sent: Monday, February 18, 2013 11:06 AM To: Kramer, Michael (M.T.) Cc: McClenaghan, Dave (D.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Reminder: Please complete fact sheet revisions (per review meeting) and have the paper signed. Then, please scan and send the completed copy.

We can close this item in EPRC on Thursday with the completed fact sheet.

Thank you.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Kramer, Michael (M.T.) Sent: Wednesday, November 28, 2012 3:29 PM To: Wilson, Marie (M.) Cc: Oswalt, Greg (G.G.); McClenaghan, Dean (D.C.); Russo, Scott (S.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Fuher, Michael (M.J.); Leisenring, Kenneth (K.C.); McClenaghan, Dave (D.); Smith, Craig (C.A.); Ronzi, Bill (W.C.); Dixon, Mark (M.R.); Andersen, Erik (E.); Tyler, Jim (J.S.); Kramer, Michael (M.T.) Subject: RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Updated per your feedback.

<< File: P415 CAC EPRC Fact Sheet_11282012.doc >>

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford <https://text.vzw.com/customer_site/jsp/messaging_lo.jsp> , External email: mkramer1@ford.com

From: Kramer, Michael (M.T.) Sent: Wednesday, November 28, 2012 8:14 AM To: Wilson, Marie (M.) Cc: Oswalt, Greg (G.G.); McClenaghan, Dean (D.C.); Russo, Scott (S.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Fuher, Michael (M.J.); Leisenring, Kenneth (K.C.); McClenaghan, Dave (D.); Smith, Craig (C.A.); Kramer, Michael (M.T.); Ronzi, Bill (W.C.); Dixon, Mark (M.R.); Andersen, Erik (E.); Tyler, Jim (J.S.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Here is the consolidated Fact Sheet (mine and Craig's input) with all updates received as of 8:00 am this morning to support tomorrow's EPRC meeting. The document has been reviewed by both Managers (Scott and Ken).

<< File: P415 CAC EPRC Fact Sheet_11282012.doc >>

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford <https://text.vzw.com/customer_site/jsp/messaging_lo.jsp> , External email: mkramer1@ford.com

From: Wilson, Marie (M.) Sent: Tuesday, November 27, 2012 1:21 PM To: Smith, Craig (C.A.); Kramer, Michael (M.T.) Cc: McClenaghan, Dean (D.C.); Oswalt, Greg (G.G.); Russo, Scott (S.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Fuher, Michael (M.J.); Leisenring, Kenneth (K.C.); McClenaghan, Dave (D.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Thanks, Craig! Nice work.

I only have one recommendation. I believe that the OBD system functions as designed/intended even when there is misfire related to the CAC. If that is true, then the OBD section can be populated with "none".

Please send the updated copy to Mike so that he can consolidate for Thursday's meeting.

Thanks again for supporting.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Smith, Craig (C.A.) Sent: Tuesday, November 27, 2012 12:31 PM To: Wilson, Marie (M.); Kramer, Michael (M.T.) Cc: McClenaghan, Dean (D.C.); Oswalt, Greg (G.G.); Russo, Scott (S.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Fuher, Michael (M.J.); Leisenring, Kenneth (K.C.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler I don't have permission to access the link below but Mike provided a copy.

Mike,

Here is a draft of section 2 that I completed and reviewed with Ken.

<< File: FAF03-170-1 CAC Condensate Misfire Section 2 CSMITH24 112712.doc >> Please let me know if you have any questions.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Wilson, Marie (M.) Sent: Tuesday, November 27, 2012 10:56 AM To: Kramer, Michael (M.T.) Cc: Smith, Craig (C.A.); McClenaghan, Dean (D.C.); Oswalt, Greg (G.G.); Russo, Scott (S.); Madej, Jeanette (J.); Sparks, Douglas (D.S.); Fuher, Michael (M.J.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler Importance: High

We've been pushing the pause button on this one (for one reason or another) since last winter. I am not inclined to push it out further as my agenda is booked until January.

Mike and Craig, please send me your sections by 2PM tomorrow. I will review and recommend changes so that you can make updates prior to the EPRC meeting.

Thank you.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Kramer, Michael (M.T.) Sent: Tuesday, November 27, 2012 10:43 AM To: Wilson, Marie (M.) Cc: Smith, Craig (C.A.); McClenaghan, Dean (D.C.); Oswalt, Greg (G.G.); Kramer, Michael (M.T.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

I got a call today from Dean expressing a want/need to have a pre-review prior to this Thursday's EPRC. Apparently, this desire was included is some previous emails, however, I did not pick up on it nor have I seen any related meeting notices (I only have the Thur. EPRC on my calendar).

Bottom line is I can just make it for Thursday. I left a voicemail for Craig to check his status, however, anticipate he is in similar situation as myself.

Is there an opportunity to reschedule the EPRC for this item to enable Dean to schedule a pre-review?

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford <https://text.vzw.com/customer_site/jsp/messaging_lo.jsp> , External email: mkramer1@ford.com

From: Wilson, Marie (M.) Sent: Tuesday, November 27, 2012 8:49 AM To: Smith, Craig (C.A.) Cc: Kramer, Michael (M.T.) Subject: FW: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Craig, per your voicemail, see the link at the bottom of this chain for a blank fact sheet. Please collaborate with Mike Kramer to complete. Thanks.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Kramer, Michael (M.T.) Sent: Wednesday, November 14, 2012 4:49 PM To: Wilson, Marie (M.) Subject: FW: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler Can this item be covered between 10 and 11 on 11/29? I have a hard rock conflict at 11:00.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford <https://text.vzw.com/customer_site/jsp/messaging_lo.jsp> , External email: mkramer1@ford.com

From: Kramer, Michael (M.T.)
Sent: Wednesday, November 14, 2012 4:45 PM
To: Wilson, Marie (M.)
Cc: McClenaghan, Dave (D.); Oswalt, Greg (G.G.); Fuher, Michael (M.J.);
Sparks, Douglas (D.S.); Cockerill, Al (C.A.); Dixon, Mark (M.R.); Madej,
Jeanette (J.); Harrison, Michael (M.J.); Smith, Craig (C.A.); Dixon, Mark
(M.R.); Ronzi, Bill (W.C.); Russo, Scott (S.); Kramer, Michael (M.T.)
Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20
- 2011 F150 3.5L Charge Air Cooler

PT Cooling will have section 1 complete to support the 11/29 meeting. Will need the Calibration team (Craig Smith?) to handle section 2.

We can consolidate section 2 from the Calibration team into our document if needed.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford <https://text.vzw.com/customer_site/jsp/messaging_lo.jsp> , External email: mkramer1@ford.com

From: Wilson, Marie (M.)

Sent: Wednesday, November 14, 2012 4:18 PM To: Sparks, Douglas (D.S.); Cockerill, Al (C.A.); Dixon, Mark (M.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.); Harrison, Michael (M.J.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Russo, Scott (S.) Cc: McClenaghan, Dave (D.); Oswalt, Greg (G.G.); Fuher, Michael (M.J.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler I have added this item to the 11-29 EPRC agenda and sent the meeting notice to Mike Kramer. Thanks.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Wilson, Marie (M.) Sent: Monday, November 12, 2012 3:51 PM To: Sparks, Douglas (D.S.); Cockerill, Al (C.A.); Dixon, Mark (M.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.); Harrison, Michael (M.J.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.) Cc: McClenaghan, Dave (D.); Oswalt, Greg (G.G.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Mike K. will you have an PERC fact sheet for meeting review on 11-15? Please advise.

<< Message: CAC follow up >>

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Sparks, Douglas (D.S.) Sent: Monday, October 29, 2012 1:39 PM To: Wilson, Marie (M.); Cockerill, Al (C.A.); Dixon, Mark (M.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.); Harrison, Michael (M.J.); Smith, Craig (C.A.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Marie,

The CAC D&R is Mike Kramer. However, after quickly reviewing the Fact Sheet it appears the Calibration Team will need to help complete this document.

Mazen/Craig, Please work with Mike Kramer and help populate the EPRC fact Sheet.

Mark/Bill,

Please ensure Mike has the correct warranty data for this document.

Thank you,

Douglas S. Sparks P/T Quality and PVT Manager FNA P/T Integration and Program Management (PTIM) dsparks3@ford.com 313-805-6096

Administrative Assistant: Tina Tessadri ttessadr 313 594-1115

From: Wilson, Marie (M.) Sent: Monday, October 29, 2012 12:53 PM To: Cockerill, Al (C.A.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.) Subject: RE: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Who owns D&R for the CAC?

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Cockerill, Al (C.A.) Sent: Monday, October 29, 2012 11:57 AM To: Sparks, Douglas (D.S.); Dixon, Mark (M.R.) Cc: Wilson, Marie (M.) Subject: FW: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 - 2011 F150 3.5L Charge Air Cooler

Doug, Mark, Attached is the form that Marie is referring to. I do not feel that I am the correct person to be completing this. How do suggest we handle this? << File: FAF03-170-1.doc >>

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender.

> Vince Lombardi Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From: Wilson, Marie (M.) Sent: Monday, October 15, 2012 1:58 PM To: Cockerill, Al (C.A.); Smith, Craig (C.A.) Cc: Mazuchowski, James (J.A.); Oberski, Christopher (C.); Oswalt, Greg (G.G.); McClenaghan, Dave (D.) Subject: Emission Problem Review Committee Fact Sheet Request - 11EPRC20 -2011 F150 3.5L Charge Air Cooler

Al, per our discussions (and attached e-mail), please prepare an EPRC fact sheet for the subject concern. << Message: RE: Charge Air Cooler - 2011 P415 >> << Message: RE: P415 3.5L Catalyst replacement 2011MY, 2012MY >>

Please prepare an Environmental Problem Review Committee (EPRC) Fact sheet for Some 2011 F150 rucks with 3.5L GTDI engines may experience misfire conditions due to condensation build up in the charge air cooler, per the instructions below.

Obtain EPRC fact sheet at

https://www.tc2.ford.com/ts/VEE/certification/default.aspx <https://www.tc2.ford.com/ts/VEE/certification/default.aspx%20%20> (the fact sheet link is listed under "Reporting Compliance Sites" low on the left side of the page)

. Fill out both pages of the fact sheet as completely as possible. (NOTE: Please use Vehicle Line names like "Fusion" rather than Vehicle line codes like "CD338" in all sections referring to vehicles affected.)

. 11EPRC20 has been assigned to this item. Place this number in the Form Header.

. To facilitate an efficient review of the topic in EPRC, the CCM group will set up a fact sheet review meeting by the Friday before your scheduled EPRC presentation. Please plan to support this meeting. It will improve the quality of the EPRC meeting review and reduce your follow up requirements.

. Please send the completed fact sheet draft to me by close of business on the Monday prior to your scheduled EPRC meeting. (No paper copies are necessary for the meeting.)

. Please plan to present this item in the 11-15-12 EPRC meeting at 10:00 AM. Presentations should be made by LL6 or above employees with support from any employees required. Presentations should also be made in person (not via call in.) Please provide CDS id's for the appropriate meeting notice.

EPRC Background:

The Environmental Problem Review Committee is chaired by Vehicle Environmental Engineering. It has members from The Automotive Safety Office, Critical Concern Review Group (CCRG), Critical Concern Manager (CCM), The Ford Customer Service Division (FCSD) - Recall Group, The Office of the General Council (OGC)' Global Product Development and Vehicle Operations - GRC Manager . It's mission is to review all Production Vehicle/Engine Environmental Compliance related issues to determine the correct course of action for the company. Support from the organizations and individuals who have firsthand knowledge of environmental compliance related issues is critical to the committee's success.

Thanks in advance for your cooperation and support. Please feel free to contact me with any questions.

Marie Wilson Ford Motor Company Vehicle Environmental Engineering Homologation & Compliance Phone: 313-248-2404 MWILSO18@FORD.COM

From: Sent:	Whitehead, Joseph (J.P.) Wednesday, April 18, 2012 1:53 PM
То:	Smith, Craig (C.A.); Devries, Jason (J.E.); Yamada, Shuya Shark (S.Y.); Syrylo, Tom (T.M.); Lisi, Paul (P.)
Subject:	FW: Variable CAC

From:Palm, Jim (J.R.)Sent:Wednesday, April 18, 2012 10:06 AMTo:Ladd, John (J.R.); Madej, Jeanette (J.); Tyler, Jim (J.S.); Norman, Kristofor (K.R.); Whitehead, Joseph (J.P.); Cockerill, Al (C.A.)Cc:Germek, Rick (R.J.); Bishop, Chris (C.B.)Subject:Variable CAC

This is the boost actuated hot side variable CAC which Rick Germek and I have been working on as a possible PCA action. We plan on evaluating it for misfire this Friday in the WT. During low boost levels as encountered at cruise conditions it blocks air flow and condensation in the top 12 tubes of the CAC and greatly increases flow velocities in the lower 9 tubes thereby stripping water droplets out of the tubes. During WOT operation high boost levels fully open the flapper valve allowing flow through all 21 tubes thereby not hurting thermal efficiency..





From:Ricks, Kevin (K.J.)Sent:Tuesday, March 12, 2013 7:42 PMTo:Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)Subject:FW: 13MY CAC Replacement

Let's discuss in the am.

From: Ronzi, Bill (W.C.)
Sent: Tuesday, March 12, 2013 6:30 PM
To: Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Andersen, Erik (E.)
Subject: 13MY CAC Replacement

Rick/Dan,

We need the SSM out... Good example below.

Can you call the dealer on this one to discuss the repair? It appears the vehicle had a P0430 catalyst code but instead of replacing the LH catalyst they replaced the CAC, per the TSB, even though it was built outside the TSB dates (already had new CAC). That means the customer will likely be back very soon with another P0430 and got \$300 worth of new CAC parts that won't help.

									ASSY	PROD	WARRANTY					PART NUMBEF
DEL	VIN	* - EI	HICLE	Ŧ	+ +	-	SINE	ANS -	PLAN	DATE	START DA	DEALERSHIP	* *	*	* *	BASE
2013	1FTFW1ETXDK	#	T/F6	F	/B/A	T/E	T/KW	T/C3	AJ	26-Oct-12	17-Dec-12	D-PATRICK, INC.	97:	#	FOL3	6K775

Bill

□ illiam C. □on □ PTI □ualit □ Supervisor (313) 805-6140 cell & pgr

From:	Ladd, John (J.R.)
Sent:	Monday, June 04, 2012 10:10 AM
To:	Kramer, Michael (M.T.)
Cc:	Madej, Jeanette (J.)
Subject:	FW: 13MY P415 DEMS MISFIRE: FW: CT-Alert: DFA00029 (3.5L ECO / P415 / ATX)
	triggered P0300 @ 2012-06-01 21:19:02 GMT

If the TASE test proves adequate cooling performance, need to prioritize getting half the DEMs fleet updated. That is if VO lets us put parts on the trucks...

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Smith, Craig (C.A.)
Sent: Monday, June 04, 2012 10:02 AM
To: Tatro, James (J.E.)
Cc: Hammoud, Mazen (M.); Madej, Jeanette (J.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.); Ladd, John (J.R.); Kramer, Michael (M.T.); Yamada, Shuya Shark (S.Y.); Cockerill, Al (C.A.); Gernant, Tim (T.R.); Liebert, Mike (M.D.); VanHouten, Andrew (A.S.); Norman, Kristofor (K.R.); Cowher, Terry (T.); Dixon, Mark (M.R.)
Subject: 13MY P415 DEMS MISFIRE: FW: CT-Alert: DFA00029 (3.5L ECO / P415 / ATX) triggered P0300 @ 2012-06-01 21:19:02 GMT

James,

I reviewed the VDR data from Friday evening's misfire event on DFA00029 (13MY P415 GTDI DEMS vehicle). The event was a high load misfire on bank 2 where cylinders 4,5, and 6 were involved. Given the rainy, highly- humid conditions, I believe this event to be the classic condensate-induced misfire. Please disposition this issue accordingly.

My understanding is that the CAC 6-tube blocker plate was installed on all 13MY P415 GTDI DEMS units. Can you please confirm that this vehicle had the plate in place.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

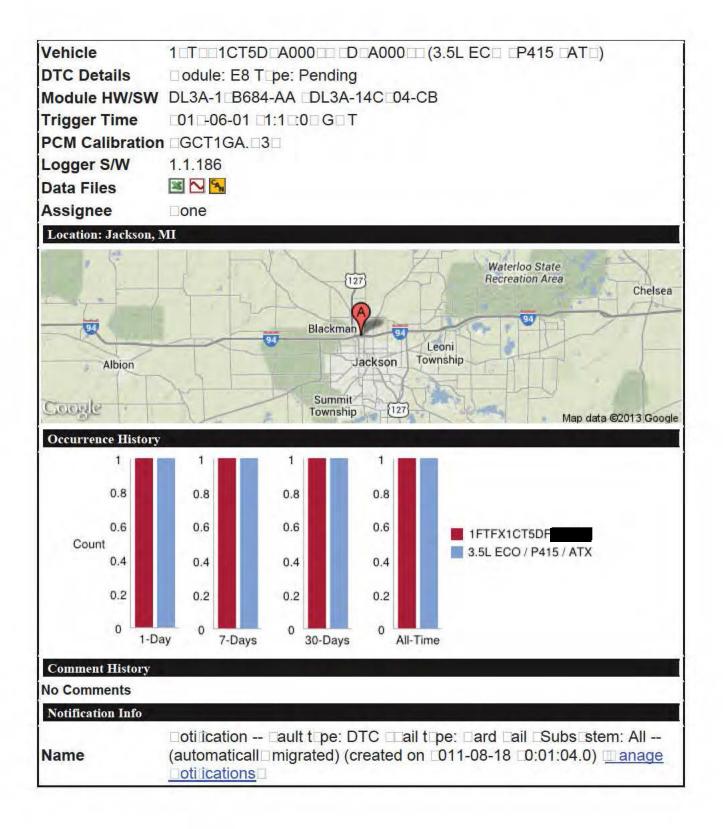
From: notifications@control-tec.com [mailto:notifications@control-tec.com] Sent: Friday, June 01, 2012 7:13 PM Subject: CT-Alert: DFA00029 (3.5L ECO / P415 / ATX) triggered P0300 @ 2012-06-01 21:19:02 GMT

CONTROLTEC

Issue

QUALIFIER

P0300 - Random Misfire Detected (Status: Open)



Kelly, Jim (J.) From: Thursday, October 04, 2012 2:14 PM Sent: Nowaczyk, Rick (R.J.) To: FW: 20088667-Request Saved Subject:

lick:

I have another one that I closed the TA on. That truck is also sitting at the dealer he wouldn t pick it up needs CAC. Should I reopen the TA and escalate that one too

Jim Kelly

Field Service Engineer - Philadelphia Region □ord □otor Compan□ kell ord.com phone: 03-4 8-3401 toll-free fax: 866-3 0-5 08

From: tfosys@ford.com [mailto:tfosys@ford.com] Sent: Thursday, October 04, 2012 1:59 PM To: Nowaczyk, Rick (R.J.); Kelly, Jim (J.) Subject: 20088667-Request Saved

This is an auto generated e-mail from Technical Field Operations Assignment Management System, Please do not reply.

Please click here to access this request

Additional Comments

Assigned RNOWACZY Esseleted ESE Support Request (from ESE to CSE)
Escalated ESE Summert Dequart (from ESE to CSE)
Escalated FSE Support Request (from FSE to CSE)
Field Service Engineer
1

Primary contact	
Primary contact's phone number	
Primary contact's email address	
Technician Name	
Technician certified in relevant speciality	
Dealership Name	GEO. M. YOCUM, INC.
P&A Code	01300
Facing Region (SDR separate from Contact Regions)	N3 - PHILADELPHIA
Geographic Region (SDR combined with Contact Region)	N3 - PHILADELPHIA
FCSD Sales Zone	A02
FCSD Technical Zone	T02
VIN	1FTFX1ET7CF
Vehicle year/model	II II AILI / GI
Vehicle mileage	9,134
Repair Order (R.O) #	N/A
Customer Name	11/11
Vehicle Down?	Yes
GCQIS Report #	CHGBC001
TAR Open?	Yes
CuDL Case #	105
Priority	High
Request description	5 57 2 34,DRVLIN,HESITATES/STUMBLE,ACCELERATION,HOT AFTER TSB/P0304 P0305 This vehicle exhibits sysmptoms, eveidence and DTCs consistent with water in charge air cooler(CAC). Customer has left vehicle at dealer and will not take it. Customer has open CUDL and is threatening legal action and buy back (RAV). I am requesting further engineering or customer handling information indicating the direction we should take at a local level given the circumstancesUpdated By JKELLY2209/13/2012 03:04:14 PM Please assign to Rick Nowaczyk (RNOWACZY)Updated ByBCAINES09/13/2012 03:47:38 PM
GCQIS Comments	08/07/2012 08:09AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE; WEB FORM DATA - CONCERN:AFTER LONG HIGHWAY CRUISE,THEN ATTEMPTING TO PASS THE TRUCK WILL BOG OUT THEN BUCK, STUMBLE THEN RECOVER AND ACCELLERATE NORMALLY.
	DIAGNOSTICS: ROAD TESTED OVER 20 MILES FELT
PE13-018 000317	2

NOTHING. PERFORMED SELF TEST, RECIEVED P0304,P0305. CHECK OASIS, FOUND AND PERFORMED TSB 12-06-04. TRUCK WAS THEN DRIVEN OVER 75 MILES BEFORE GIVEN BACK. CUSTOMER CALLED 3 DAYS LATER SAYS TRUCK STILL HAS SAME PROBLEM.

PARTS REPLACED:NONE

TECH QUESTION: IS ANYTHING

ELSE KNOWN ABOUT THIS PROBLEM? CUSTOMERS COMPLAINT MATCHES TSB PRETTY CLOSELY. BUT APPARENTLY DID NOT FIX IT.

08/07/2012 08:09AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE;

DUE TO THE EFFICIENCY OF THE CHARGE AIR COOLER. THERE MAY BE SOME CONDITIONS WHERE SOME CONDENSATION BUILDS IN THE CAC. EVEN WITH THE CAC SHIELD IN PLACE. VERY WET OR EXTREMELY HUMID CONDITIONS MAY ENHANCE THIS CONCERN. THE SHIELD WAS DESIGNED TO HELP WITH LESS CONDENSATION BUILD UP, BUT DUE TO HUMID AIR BEING COMPRESSED BY THE TURBOCHARGERS AND THEN COOLED BY THE CAC, THIS WILL NOT TOTALLY ELIMINATE THE CONDENSATION FROM FORMING UNDER THESE CONDITIONS. WHEN THE HUMID/COMPRESSED AIR IS COOLED BY THE CAC, IT CAUSES THE WATER GRAINS TO SEPARATE FROM THE AIR AND COLLECT ON THE CAC FINS, AT THIS TIME, IF WATER HAS BEEN VERIFIED IN THE CAC, AIS AND AROUND THE THROTTLE PLATE, CLEAN THE WATER AS BEST AS POSSIBLE AND

PE13-018 000318

INFORM THE CUSTOMER OF THE DESIGN OF THE SYSTEM AND THE POSSIBLY OF CONDENSATION BUILD-UP UNDER THESE CONDITIONS.

IF ABLE TO DUPLICATE THE CONCERN WITH CONTINUED ROAD TESTS AND/OR THE P0304/P0305 DTC'S HAVE RETURNED, RECOMMEND TO SWAP THE #4 AND #5 IGNITION COILS AND SPARK PLUGS WITH KNOWN GOOD CYLINDERS, THEN RETEST(RELEASE THE VEHICLE TO THE CUSTOMER FOR TESTING PURPOSES IF THE CONCERN CANNOT BE DUPLICATED).

IF THE DTC'S DO NOT FOLLOW THE SWAP, REPLACE THE #4 AND #5 FUEL INJECTORS.

09/12/2012 09:43AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE; WEB FORM DATA -

CONCERN: TRUCK WILL LOSS POWER WHEN YOU ATTEMPT TO ACCEL ON HIGHWAY AFTER DRING .

DIAGNOSTICS: PERFROM TSB 12-6-4 INSTALL DEFLECTOR PLATE AND CLEAN OUT COOLER. THEN CAME BACK IN WE CAME IN AND DRAIN COOLER .INFORMED CUSTOMER OF ISSUE WITH PROBLEM AND THAT FORD IS TRYING TO FIND A FIX.

PARTS REPLACED:CL3Z-19E672A W711281S300

TECH QUESTION:TRUCK IS BACK IN WITH SAME ISSUE AND CUSTOMER WANT FORD TO BUY TRUCK BACK.THERE IS A MESSAGE ON PARTS

&SERVICE DISCUSSION BOARD FROM WEBMASTER FROM GLOBAL ENGINE ENGINEERING TEAM. THAT ENGINEERING IS AWARE AND WORKING ON THE ISSUE. THERE IS NO FIELD SERVICE PROCEDURE AVAILABLE AT THIS TIME.ANY ATTEMPTS TO MODIFY THE CHARGE AIR COOLER OR AIR INTAKE COMPONENTS WILL CREATE OTHER DRIVABLITY CONCERNS.CONTINUE TO MONITOR OASIS FOR FURTHER UPDATES.CUSTOMER DOES NOT WANT HIS TRUCK BACK TILL WE FIX THE ISSUE.WHAT DO I DO. 09/12/2012 09:43AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE: DAVID. WE HAVE ESCALATED THIS CONCERN FOR ADDITIONAL **REVIEW.** A REPRESENTATIVE SHOULD CONTACT YOU BY PHONE OR THROUGH THIS HOTLINE ASSISTANCE REQUEST WITHIN ONE (1) BUSINESS DAY WITH ADDITIONAL INFORMATION OR RECOMMENDATIONS TO ASSIST IN THE **RESOLUTION OF THIS** VEHICLE CONCERN. 09/12/2012 09:43AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE: CONSULTED WILLIE HOUSTON NOTE TO EH TEAM MEMBER: THIS CONCERN IS BEING ESCALATED DUE TO MULTIPLE INCIDENTS OF THE SAME CONCERN. THE CUSTOMER REFUSING TO TAKE VEHICLE UNTIL THE CONCERN HAS BEEN FIXED. THERE IS AN OPEN CUDL WHICH MENTIONS THE CUSTOMER IS CONSIDERING HIRING AN ATTORNEY.

09/12/2012 11:58AM DALE BARRETT MSS - FCSD - TECH	SVC
HOTLINE;	
AN OUT BOUND CALL WAS PLACED TO THE DEALER;	SPOKE TO
SERVICE MANAGER	
DAVE LESSOR. THE VEHICLE WILL SET MISFIRE FAUL	TS P0304,
P0305 AND	
P0306 DURING ACCELERATION AFTER A LONG FREEW	AY CRUISE.
THE CUSTOMER	
REFUSED TO ACCEPT THE VEHICLE BACK UNTIL REPA	AIRED.
09/12/2012 11:58AM DALE BARRETT MSS - FCSD - TECH	SVC
HOTLINE;	
DAVE,	
TECHNICAL ASSISTANCE HAS BEEN REQUESTED BY T	HE
HOTLINE FOR THIS	
VEHICLE. THE FSE IN YOUR AREA SHOULD CONTACT	THE
DEALER MANAGEMENT	
(SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN	1 BUSINESS
DAY TO DISCUSS	
AND ASSIST IN THE RESOLUTION OF THIS VEHICLE CO	JNCERN.
09/12/2012 11:58AM DALE BARRETT MSS - FCSD - TECH	SVC
HOTLINE;	
NOTE TO FSE: TECHNICAL ASSISTANCE HAS BEEN RE	QUESTED
BY THE HOTLINE	
FOR THIS VEHICLE DUE TO LACK OF PROGRESS IN RE	PAIRING AN
ENGINE	
MISFIRE CONCERN. THE VEHICLE WILL SET MISFIRE F	FAULTS
P0304, P0305 AND	
P0306 DURING ACCELERATION AFTER A LONG FREEW	AY CRUISE.
THE CUSTOMER	
REFUSED TO ACCEPT THE VEHICLE BACK UNTIL REPA	AIRED. THE
VEHICLE HAS AN	
OPEN CUDL, CUSTOMER IS PREPARED TO SEEK BUY B	ACK.
PLEASE ASSIST THE	
TECHNICIAN IN RESOLVING THE VEHICLE CONCERN.	
ESTIMATED NUMBER OF	

REPAIR ATTEMPTS: 3 ESTIMATED NUMBER OF DAYS OUT OF SERVICE: 4 09/13/2012 07:18AM JIM KELLY (FSE) MSS - FCSD - REG -PHILADELPH: CONTACTED DEALER VIA E-MAIL 12:13 PM 9/12/2012. CALLED DEALER AT 4:55PM AND SM WAS GONE FOR THE DAY. WILL FOLLOW UP TODAY. THIS IS A KNOWN CONCERN (CAC OVER EFFICIENT - CONDENSES WATER AFTER LONG CRUISE)WITH A SERVICE FIX SCHEDULED FOR MID OCTOBER 2012 ACCORDING TO AEQ TRACKER. 09/13/2012 2:56PM JIM KELLY (FSE) MSS - FCSD - REG -PHILADELPH: REMOVED CAC TUBE HOSES AT BOTH ENDS AND FOUND WATER AT BOTTOM AND WATER STAINS AT TOP. KNOWN CONCERN, ENGINEERING EXPECTS NEW DESIGN CAC AVAILABILITY FOR SERVICE 10/5/2012. 09/17/2012 2:54PM JIM KELLY (FSE) MSS - FCSD - REG -PHILADELPH: ESCALATED ASSISTANCE REQUEST TO PCE RNOWACZY 9/13/2012. **RESPONSE VIA** PHONE THIS DATE 2:20 PM STATES THERE ARE NO NEW DESIGN CHARGE AIR COOLERS (CAC) AVAILABLE FOR SERVICE AT THE PRESENT TIME. THEY HOPE TO HAVE A BETTER IDEA OF AVAILABILITY DATE BY MID-OCTOBER. 09/20/2012 06:45AM JIM KELLY (FSE) MSS - FCSD - REG -PHILADELPH: ALERTED MY MANAGEMENT, PSOM AND ZM TO THE SITUATION VIA PHONE AND E-MAIL 9/18/2012 9:04 AM.

FSE Comments	
Initial Contact Date	
Person Contacted	
Dealership visit planned?	
Visit date, if planned	
Did Visit Occur?	
Concern Summary for Technical Assistance Contact Report	
Inspection Comments for Technical Assistance Contact Report	
Primary Root cause for Technical Assistance Contact Report	
Other Root Causes	
Please explain if "Other" is root cause	
Recommendation for Technical Assistance Contact Report	 FSE requesting new design CAC for this vehicle. Timing plan for New CAC to be available for service is mid to late OctoberUpdated By RNOWACZY09/13/2012 04:42:21 PM FSE to make sure that the dealer has an Emergency order in the parts system under part# BL3Z- 6K775-B. Working with PS&L to have a CAC drop shipped from the packager to the dealer for this vehicle. Also make sure dealer swaps over the defector to the new CAC with two new push pinsUpdated ByRNOWACZY 10/04/2012 01:58:41 PM
Missing tools/equipment(if identified)	
Missing tools/equipment ordered during visit?	
Total hours spent on request	0.0
Created by	JKELLY22
Created date	09/13/2012 03:04:15 PM EST
Last Revised by	RNOWACZY
Last revised date	10/04/2012 01:58:42 PM EST

This e-mail notification has been generated by: RNOWACZY Thank you..

Hamilton, Steven (S.C.) From: Thursday, August 18, 2011 8:14 AM Sent: To: Nowaczyk, Rick (R.J.) FW: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11) Subject:

FYI.....

Best regards,

Steve Hamilton

FCSD Service Engineering Operations F-150 PVT Program Manager (313)390-7750

From:	Hamilton, Steven (S.C.)
Sent:	Thursday, August 18, 2011 8:14 AM
To:	Hamilton, Steven (S.C.); Cockerill, Al (C.A.); Reno, George (G.L.); Mazuchowski, James (J.A.)
Cc:	Sims, Ivan (I.D.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Donahue, Francis (Fran.); McCoy, Jim (D.); Oyafuso, Kevin (K.G.); Ricks, Kevin (K.J.); Lehmkuhl, David (D.B.); Galas, Dean (C.K.);
	Gorgol, Kevin (K.)
Cublect	DE 2011 NV 2 EL CTDL DATE MINFING DATE ANAC CLAIME (0/2/11)

Subject: RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

FYI....QSF has been opened this morning. It will show up in AEQ tomorrow.

Best regards,

Steve Hamilton

FCSD Service Engineering Operations F-150 PVT Program Manager (313)390-7750

From:	Hamilton, Steven (S.C.)
Sent:	Tuesday, August 09, 2011 12:20 PM
To:	Cockerill, AI (C.A.); Reno, George (G.L.); Mazuchowski, James (J.A.)
Cc:	Sims, Ivan (I.D.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Donahue, Francis (Fran.); McCoy, Jim (D.); Oyafuso, Kevin (K.G.); Ricks, Kevin (K.J.); Lehmkuhl, David (D.B.); Galas, Dean (C.K.);
	Gorgol, Kevin (K.)
Subject:	FW: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

Team, FCSD needs to open a QSF on F-150 3.5L misfire due to report count. The QSF will open on Aug 17 so that the team is given plenty of notice. Your contuinued cooperation with this issue and root cause identification is much appreciated.

Best regards,

Steve Hamilton

FCSD Service Engineering Operations F-150 PVT Program Manager (313)390-7750

From:	Gorgol, Kevin (K.)
Sent:	Tuesday, August 09, 2011 12:13 PM
To:	McDonagh, Scot (S.M.); Ricks, Kevin (K.J.); Hamilton, Steven (S.C.)
Subject:	RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

QSF to open Aug 17th.

Kevin Gorgol Field Service Engineer Philadelphia Region 703-595-7263

From:	McDonagh, Scot (S.M.)
Sent:	Tuesday, August 09, 2011 11:54 AM
To:	Cockerill, Al (C.A.); Reno, George (G.L.); Mazuchowski, James (J.A.)
Cc:	Steslicki, Michael (M.E.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Sims, Ivan (I.D.); Donahue, Francis (Fran.); McCoy, Jim (D.); Oyafuso, Kevin (K.G.
Subject:	RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)
Importance:	High

FCSD has the Emerging Concern at RED status due to undetermined root cause. (2) more CQIS reports and FCSD will open the QSF. When the QSF is opened we have 68 days to release a Service fix(TSB) and 90 Days to close the QSF for Production.

Quality Team: F-150 Status: Emerging Open Date: 22/Jun/2011 VIN Count: 36 Threshold: 38 % of Threshold: 95% Function: Powertrain Days Open: 48 PCE: << OLE Object: Picture (Metafile) >> Last Updated: 4/Aug/2011 12:54:24 PM

F-150	2011- 2011	06920110034- 3.5L MISFIRE ON ACCEL w/o DTCs	W I-GRENO	CC:3.5L Misfire occurring without DTCs setting. MIL flashing with Catalyst Damage occurring resulting in lack of power on loaded acceleration. CA:TBD. SC:TBD. PC:TBD. ST:Aug/3: Report count increasing, no root cause identified. FAV and parts analysis on going are. Red due to help needed by engineering as QSF threshold is pending with no root cause. Service Red Due to: Other Production	Jun/22/201 1	44	3	38	36	95%	TBD RED	TBD RED	
3-018 00				Red Due to:Other									

0325

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From:	Cockerill, Al (C.A.)
Sent:	Tuesday, August 09, 2011 11:42 AM
To:	Hamilton, Steven (S.C.); McDonagh, Scot (S.M.); Reno, George (G.L.)
Cc:	Steslicki, Michael (M.E.); Dixon, Mark (M.R.); Gorgol, Kevin (K.)
Subject:	RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

So what happens when it turns red?

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender. Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From:	Hamilton, Steven (S.C.)
Sent:	Tuesday, August 09, 2011 7:47 AM
To:	Cockerill, Al (C.A.); McDonagh, Scot (S.M.); Reno, George (G.L.)
Cc:	Steslicki, Michael (M.E.); Dixon, Mark (M.R.); Gorgol, Kevin (K.)
Subject:	RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

AI,

This is probably too late since the item is already RED but we are close to QSF threshold and still don't have a good understanding of root cause. We appreciate the team's support and will continue to support the team in root cause identification with CQIS reports, FAV's, etc.

Best regards,

Steve Hamilton

FCSD Service Engineering Operations F-150 PVT Program Manager (313)390-7750

PEFrom: Sent: 3-018 000326 Cockerill, AI (C.A.)

Tuesday, August 02, 2011 1:34 PM

McDonagh, Scot (S.M.); Reno, George (G.L.); Hamilton, Steven (S.C.)

Cc: Steslicki, Michael (M.E.); Dixon, Mark (M.R.) Subject: RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

As you all know, there is a team fully dedicated to this multi-faceted issue. At this time work streams are in place but we can not define a resolution date with ICA's and PCA's in place. Steve, what can be done to keep this from going red?

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender.

Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From:	McDonagh, Scot (S.M.)
Sent:	Tuesday, August 02, 2011 7:58 AM
To:	Cockerill, Al (C.A.); Reno, George (G.L.)
Cc:	Steslicki, Michael (M.E.); Dixon, Mark (M.R.)
Subject:	RE: 2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

Do we have an action plan to close the Emerging Concern at 84% QSF threshold ?

F-150	2011- 2011	06920110034- 3.5L MISFIRE ON ACCEL w/o DTCs	W I-GRENO - SHAMILT3	CC :3.5L Misfire occurring without DTCs setting. MIL flashing with Catalyst Damage occurring resulting in lack of power on loaded acceleration. CA :TBD. SC :TBD. PC :TBD. ST :Jul/26: FAV roles resulting in dealer information obtained by engineering. Root cause Identification still occurring.	22/Jun/201 1	40	3	38	32	84%	TBD GREEN	TBD GREEN
-------	---------------	--	----------------------------	--	-----------------	----	---	----	----	-----	--------------	--------------

Scot G. McDonagh

8 000327

PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From:	Steslicki, Michael (M.E.)
Sent:	Tuesday, August 02, 2011 7:53 AM
То:	Ahmed, Masood (M.); Bailey, Owen (O.R.); Boerger, Jim (J.G.); Boughan, Alex (A.B.); Cervenan, Neil (N.J.); Cockerill, Al (C.A.); Crudo, Frank (F.J.); Dame, Andrew (A.C.); Dixon, Mark (M.R.); Dodds, Jordan (J.); Donahue, Francis (Fran.); Early, Curt (C.G.); Fodera, Jas (J.J.); Galas, Dean (C.K.); Gorgol, Kevin (K.); Hamilton, Steven (S.C.); Heck, Kevin (K.C.); Holland, Del (D.); Holmes, Douglas (D.A.); Klomp, Karl (K.R.); Langley, Scott (C.S.); Mazuchowski, James (J.A.); McDonagh, Scot (S.M.); Merrell, Robert (R.J.); Miller, Brian (B.J.); Moore, Andrew (R.); Morrow, Bill (N.W.); Nevels, Laurence (L.); Osepchook, William (W.R.); Oyafuso, Kevin (K.G.); Parnell, Bill (W.); Reno, George (G.L.); Ronzi, Bill (W.C.); Ruppert, Dave (D.R.); Saad, Thomas (T.J.);
PE	Siddall, Stephen (S.); Sims, Ivan (I.D.); Skurko, Jennifer (J.J.); Smith, Craig (C.A.); Sparks, Douglas (D.S.); Stanley, Daniel (D.J.); Treusch, Christopher (C.J.); Wodzisz, Ken (K.R.); Zimlich,
ω	Mary (M.)
Subject:	2011 MY 3.5L GTDI P415 Misfire Daily AWS Claims (8/2/11)

Six new claims today (3) COP

- (1) Spark Plug(1) Diag Misfire(1) Catalytic Converter

<< File: 2011 MY 3.5L GTDI P415 Misfire Claims.xls >> Mike Steslicki Quality Analyst Ford Motor Company Large Gas & Diesel Engine Engineering (313) 805-9888

From: Sent: To: Subject: Madej, Jeanette (J.) Thursday, June 28, 2012 3:56 PM Kramer, Michael (M.T.) Fw: 2012 F-150 3.5L GTDI (Built After TSB Cutoff) Misfire P0304/P0306 CQIS Report#CF1CG014

From: McDonagh, Scot (S.M.)
Sent: Thursday, June 28, 2012 12:04 PM
To: Sparks, Douglas (D.S.); Mazuchowski, James (J.A.); Madej, Jeanette (J.)
Subject: FW: 2012 F-150 3.5L GTDI (Built After TSB Cutoff) Misfire P0304/P0306 CQIS Report#CF1CG014

INFO

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Smith, Craig (C.A.)
Sent: Thursday, June 28, 2012 11:36 AM
To: Nowaczyk, Rick (R.J.); Oyafuso, Kevin (K.G.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.); Ladd, John (J.R.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.); Kramer, Michael (M.T.); VanHouten, Andrew (A.S.)
Cc: Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Hammoud, Mazen (M.)
Subject: RE: 2012 F-150 3.5L GTDI (Built After TSB Cutoff) Misfire P0304/P0306 CQIS Report#CF1CG014

This appears to be the same condensate ingestion misfire problem even though the blocker plate was installed.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08

From: Nowaczyk, Rick (R.J.)
Sent: Thursday, June 28, 2012 11:23 AM
To: Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.)
Cc: Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Nowaczyk, Rick (R.J.)
Subject: 2012 F-150 3.5L GTDI (Built After TSB Cutoff) Misfire P0304/P0306 CQIS Report#CF1CG014

Powertrain Engineering,

Tech Hotline received a call today on a 2012 F-150 3.5L GTDI built outside the production cutoff with intermittent misfire DTC P0304/P0306. There was evidence of water in the CAC and CAC tubes. No signs of water ingestion through the air filter box.

From: Chatfield, David (D.) Sent: Thursday, June 28, 2012 11:11 AM To: Nowaczyk, Rick (R.J.) Subject: water in CAC CQIS Report#CF1CG014

Rick,

As per our conversation, 2012 P415 low miles, water in CAC/ETB. Vehicle location is Tarpon Springs, Florida. This was the area that was affected by T.S. Debbie, high humidity and wet conditions for 7+ days.

Thanks,

David Chatfield

Service Engineer - Gas Engine 3.0/3.5/3.7/GTDI Subject Matter Expert Diagnostic Service Center I 1700 Fairlane Dr. Allen Park, MI 48101 <u>DCHATFIE@FORD.COM</u> (313) 317-7056

From: TROMANO7@ford.com [mailto:TROMANO7@ford.com] Sent: Thursday, June 28, 2012 10:54 AM To: Chatfield, David (D.) Subject: water in CAC CQIS Report#CF1CG014

105529673

Attachments : 0

Report# :	CF1CG014 NHL			Received:	06/27/2012		
CCRG/EPRC:		Reviewed Status:					
Vehicle:	2012,F150 4X2 ,F150 ,SU	JP CRW,STYSD ,1FTVW1C	Г5СК	Build Date:	06/04/2012		
Odometer :	998 M	Engine:	3.5L-GTDI	Calibration:			
Transmission:	6R80E	Axle:	3800F3.73L	A/C:	YES		
Dealer:	USA 04970 Karl Flamme	USA 04970 Karl Flammer Ford, Inc.					
City:	Tarpon Springs	State:	Florida	Country :	USA		
Originator:	ERIC BITTNER						
Symptom:	5 50 2 39 DRV PERF,RU	NS ROUGH, ACCEL, INTER	MITTENT				
Status:							
VFG:	V52 DRIVEABILITY						
Additional Symptom:	INTERMITTANT MISFI	RES					
Fix:	Causal Component :						
Condition Code:							

Hotliner: SFRENC20

Phone: 313 248-8007

Regn Cd: S3 Orlando

Engineering:

Phone:

TAR:

Dlr Contact: ERIC BITTNER

Phone: 000 000-0000

Title Cde: T

DTCs:

KOEO:P0304 P0306 KOEC: KOER:

Comments

:

REPAIR 06/27/2012 03:26PM SEAN FRENCH MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUSTOMER STATES WHEN ACCELERATING TRUCK MISFIRES AND LACKS POWER. HAPPENED WHEN PULLING ONTO INTERSTATE.WAS GOING 60 AND ENGINE WAS AT 3000 RPM. DIAGNOSTICS: SELF TEST. PARTS REPLACED:NONE TECH QUESTION:CAN NOT DUPLICATE CONCERN. CUSTOMER SAID THIS HAS HAPPENED A FEW TIMES. TRUCK WAS IN A FEW DAYS AGO AND I PERFORMED A MISFIRE MONITOR CORRECTION AND DID A VISUAL INSPECTION. HAVE THERE BEEN ANY ISSUES WITH THIS. THE CODES WERE SET FROM LAST VISIT BUT DID NOT SET ANY CODES THIS TIME.

RECOMM 06/27/2012 03:26PM SEAN FRENCH MSS - FCSD - TECH SVC HOTLINE ERIC, IF THE CONCERN IS DIFFICULT TO DUPLICATE, RECOMMEND SPEAKING WITH THE CUSTOMER REGARDING THE TIMING AND ANY UNIQUE CONDITIONS PRESENT FOR THE MISFIRES TO OCCUR. ONCE THE CONCERN HAS BEEN DUPLICATED, RECOMMEND SWAPPING SPARK PLUGS AND IGNITION COILS WITH KNOWN GOOD CYLINDERS AND MONITOR FOR CHANGE. IF THE MISFIRES FOLLOW THE SWAPPED COMPONENTS, RECOMMEND REPLACING THE SUSPECT COMPONENTS AT

THIS TIME AND REEVALUATE THE CONCERN. IF COMPONENT SWAPPING DOES NOT INDICATE A FAULT, RECOMMEND MONITORING FUEL TRIMS AT IDLE BY MONITORING PIDS: LONG_FT AND SHRT_FT WITH THE IDS DATA LOGGER. IF MORE THAN 10% TOTAL FUEL CORRECTION IS PRESENT AT IDLE AND GRADUALLY IMPROVES AS RPMS INCREASE, THIS WOULD INDICATE THE PRESENCE OF VACUUM LEAKS. IF A VACUUM LEAK CONCERN IS PRESENT; RECOMMEND SMOKE TESTING THE INTAKE SYSTEM AND MONITOR FOR LEAKAGE AND MAKE REPAIRS AS NECESSARY. IF SMOKE TESTING DOES NOT INDICATE ANY FAULTS, RECOMMEND CAPPING OFF VACUUM SOURCES AND MONITOR FUEL TRIMS FOR CHANGE. IF FUEL TRIMS IMPROVE WITH VACUUM LINES CAPPED OFF, RECOMMEND RE INSTALLING VACUUM LINES ONE AT A TIME UNTIL THE ORIGIN OF THE LEAK IS IDENTIFIED

AND REPAIR AS NECESSARY. IF NO VACUUM LEAKS ARE PRESENT, RECOMMEND PERFORMING AN IDS FUEL INJECTOR FLOW TEST. IF AN INJECTOR FAILS THE TEST, RECOMMEND REPLACING THE SUSPECT INJECTOR AS PER THE INSTRUCTIONS LISTED IN THE WSM SECTION: 303-04A --> REMOVAL AND INSTALLATION --> FUEL RAIL. IF NO FUEL INJECTOR FAULTS ARE IDENTIFIED, RECOMMEND INSPECTING A FUEL SAMPLE FOR SIGNS OF POOR QUALITY. IF SIGNS OF DISCOLORATION OR DEBRIS/SEDIMENT ARE IDENTIFIED, RECOMMEND DRAINING AND STEAM CLEANING THE FUEL TANK (IF NECESSARY), CLEAR OUT THE FUEL RAILS/LINES WITH SHOP AIR AND REFUEL WITH A KNOWN GOOD FUEL SOURCE. IF FUEL OUALITY IS OK. MISFIRES CAN ALSO OCCUR DUE TO EXCESSIVE ETHANOL CONTENT DUE TO THIS VEHICLE NOT BEING FLEX FUEL CAPABLE. TO TEST FOR ETHANOL: FILL A CLEAR CONTAINER HALF WAY WITH FUEL AND HALF WAY WITH WATER AND ALLOW 5 MINUTES FOR THE ETHANOL TO SEPARATE INTO THE WATER CONTENT. THE OVERALL LEVEL INCREASE OF WATER INDICATES THE PERCENTAGE OF ETHANOL PRESENT WITHIN THE TANK. IF MORE THAN 10% ETHANOL IS PRESENT, DRAIN THE TANK AND REFUEL WITH A KNOWN GOOD FUEL SOURCE.

- **REPAIR** 06/28/2012 09:47AM DALE BARRETT MSS FCSD TECH SVC HOTLINE I REMOVED CAC HOSE AT THE THROTTLE BODY AND SAW SIGNIFICANT WATER STAINING ON THROTTLE BODY.REMOVED CAC HOSE FROM COOLER AND LOOKED IN HOSE AND IT APPEARS TO HAVE DRIED UP WATER RUNS THROUGH IT.
- **RECOMM 06/28/2012 09:47AM DALE BARRETT MSS FCSD TECH SVC HOTLINE** ERIC, A AIR DEFLECTOR HAS BEEN ADDED TO THE CAC TO PREVENT CONDENSATION IN THE CAC. WITH THE VEHICLE BUILD DATE OF 6-4-2012 RECOMMEND REFERRING TO TSB 12-6-4 (REFERENCE ONLY) FOR ILLUSTRATION OF PROPER CAC AIR DEFLECTOR PLATE INSTALLATION. INSPECT THE AIR FILTER HOUSING FOR WATER INTRUSION.
- **REPAIR** 06/28/2012 10:52AM TONY ROMANO MSS FCSD TECH SVC HOTLINE AIR DEFLECTOR WAS INSTALLED CORRECTLY. DONT SEE ANY DAMAGE TO CHARGE AIR COOLER. INSPECTED AIR FILTER AND WAS DRY.
- **RECOMM 06/28/2012 10:52AM TONY ROMANO MSS FCSD TECH SVC HOTLINE** ERIC, IF NOT YET PERFORMED INSPECT THE AIR INTAKE FROM THE FILTER CASE TO ENGINE TO ENSURE NO WATER WAS TAKEN IN THROUGH THE AIR FILTER CASE EVEN THOUGH THE FILTER WAS DRY. IF ANY WATER WAS PRESENT IN THE SYSTEM CLEAR AS MUCH AS POSSIBLE AND RETEST. IF THE CONCERN IS NOT PRESENT NOW, INSPECT THE SPARK PLUGS FOR ANY CONCERNS AND RELEASE THE VEHICLE. WITH THE HEAVY RAINS IN THE AREA AND THE HIGH EFFICIENCY OF THE INTERCOOLER THE CONDENSATION MAY HAVE BUILT UP EVEN WITH THE ADDED AIR DEFLECTOR. PLEASE HAVE THE CUSTOMER MONITOR THE VEHICLE FOR ANY MORE CONCERNS.

From:McDonagh, Scot (S.M.)Sent:Wednesday, October 24, 2012 8:24 AMTo:Hughes, Scott (S.R.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)Subject:FW: 2012 F-150 3.5L GTDI Repeat Misfire at Highway Speeds (VIN: 1FTFW1ET1CFImportance:High

INFO

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Wednesday, October 24, 2012 7:55 AM
To: Oyafuso, Kevin (K.G.); Corning, Dan (D.C.)
Cc: Nowaczyk, Rick (R.J.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); McDonagh, Scot (S.M.)
Subject: FW: 2012 F-150 3.5L GTDI Repeat Misfire at Highway Speeds (VIN: 1FTFW1ET1CF
Importance: High

Kevin,

FSE (Dan Corning) has a Escalated Field case for repeat misfire at highway speeds. The FSE had the dealer install the new CAC, which I believe resolved one of the symptoms for the misfire. However, it appears the customer may be experiencing the surge at light throttle 6th gear going up hills.

Dan, do you have any IDS recordings you can send Kevin?

From: Sent: Wednesday, October 24, 2012 7:03 AM To: Nowaczyk, Rick (R.J.) Subject: 2012 F-150 VIN: 1FTFW1ET1CF

Rick,

This unit has an Escalated FSE Support TFOAM. It has continued problems with an intermittent random miss after the new CAC was installed. no DTCs. Any additional ideas you may have would be appreciated.

Thanks, Dan Corning Ford Motor Company Field Service Engineer (615) 579-1032

From: Corning, Dan (D.C.) Sent: Wednesday, October 24, 2012 12:21 AM To: Corning, Dan (D.C.) Subject: Report Summary for the CQIS Report#CGTB5003 Attachments : 0

Report# :	CGTB5003 NHI	- 		Received:	07/20/2012		
CCRG/EPR	C:	Reviewed Status:		Date:			
Vehicle:	2012,F150 4X4	F150 ,SUP CRW,STYSD ,1F	50 ,SUP CRW,STYSD ,1FTFW1ET1CF		01/09/2012		
Odometer :	11,736 M	Engine:	3.5L-GTDI	Calibration:	CF613C0A		
Transmissio	n: 6R80E	Axle:	3800F3.31C	A/C:	YES		
Dealer:	USA 06004 For	d Lincoln of Franklin		Phone#:	(615) 794- 4585		
City:	Franklin	State:	Tennessee	Country :	USA		
Originator:	PHILLIP RITER	R					
Symptom:	5 50 2 39 DRV I	PERF,RUNS ROUGH,ACCEI	L,INTERMITTENT				
Status:							
VFG:	V52 DRIVEAB	ILITY					
Additional Symptom:	RUNS ROUGH						
Fix:Y	Causal Compor	nent:	THROTTLE BO	DY AND MOTOR	R ASY RPL		
Condition C	ode:						
Hotliner:	BGRAHA43	Phone: 313 248-8050	Reg	n Cd: C3 Memphi	is		
Engineerin	g:	Phone:	ТА	TAR: 0-30			
Dlr Contac	t: PHILLIP RITER	Phone: 0	Phone: 000 000-0000		e: OT		
DTCs:							
KOEO:							
KOEC:							
KOER:							
Comments :							
REPAIR	07/20/2012 10:19AN	I BRIAN GRAHAM MSS - F	CSD - TECH SVC	HOTLINE			
	WEB FORM DATA - CONCERN: VEHICLE HAS A MISS AT HIGHWAY SPEEDS ON LIGHT						
	ACCEL GOING UP HILLS DIAGNOSTICS: #3 MISFIRE ON ROAD TEST-SWAP #3						
	COILS, MISFIRE CHANGED CYLINDERS. REPLACE #3 COIL AND ROAD						
	TESTED, INTERMINENT RANDOM MISFIRE BUT NOT AS EXTREME AS AN IGNITION						
	MISFIRE, MONITO	RED MODE 6 DATA-0 MISF	FIRES, REMOVED	CAC TUBES ANI)		
	INSPECTED FOR W	VATER OR CONDENSATIO	N-NONE PRESEN	T,PERFORMED T	SB		
		N STILL PRESENT. PARTS I		,			
		2					

REPROGRAM TECH QUESTION: ANY KNOWN CONCERNS

- RECOMM 07/20/2012 10:19AM BRIAN GRAHAM MSS FCSD TECH SVC HOTLINE PHILLIP, WITH THE MISFIRE BEING RANDOM, SUGGEST TO TAKE A FUEL SAMPLE AND CHECK FOR ANY CONTAMINATION IN THE FUEL. SUGGEST TO PERFORM A FUEL PRESSURE TEST WITH A MECHANICAL PRESSURE GAUGE AND VERIFY PROPER LOW SIDE FUEL PRESSURE. NORMAL LOW SIDE PRESSURE FOR THIS VEHICLE IS 62-73 PSI. COMPARE FRP_ACT WITH FRP_DSD DURING CONCERN. IF THE LOW SIDE PRESSURE IS LOW, A CONCERN WITH THE LOW SIDE PUMP IS SUSPECTED. IF THE CONCERN IS ON THE HIGH PRESSURE SIDE, THE HIGH PRESSURE PUMP IS SUSPECTED. VERIFY THE MISFIRE PROFILE HAS RE-LEARNED. THE MLP_LRND PID SHOULD INDICATE IT HAS. IF NOT CHECK THE IDS FOR THE RELEARN AUTOMATED PROCEDURE PER SSM 21703. NO REPORTS ARE IN OUR DATA BASE FOR THIS CONCERN.
- **REPAIR** 07/24/2012 10:52AM DAVID CHATFIELD MSS FCSD TECH SVC HOTLINE CHECKED FUEL QUALITY-OK,CHECKED ETHANOL CONTENT-10%,MPLRND-YES,LOW PRESSURE FUEL READING-55 TO 70 IDLE WITH RAPID FLUCTUATION,64 PSI AT 1500RPM,HIGH PRESSURE 214,FRP DSD 207.WHATS NEXT?COULD WE STILL HAVE CALIBRATION ISSUES FOR ENGINEERING TO INVESTIGATE?MISFIRE TEST DETECTS NO MISFIRES AT THIS TIME
- **RECOMM** 07/24/2012 10:52AM DAVID CHATFIELD MSS FCSD TECH SVC HOTLINE PHILLIP, IF THE INTERPRETED MISFIRE OCCURS IN A HIGH TRANSMISSION GEAR (6TH) UNDER A HEAVY LOAD WITH A DOWNSHIFT, THIS CONDITION MAY WELL BE A NORMAL CHARACTERISTIC. AT THIS TIME, PLEASE USE THE IDS AND COMMAND THE TORQUE CONVERTER UNLOCKED DURING THE EVENT. IF THE CONCERN

IS ALLEVIATED, THEN THE CONDITION IS MOST LIKELY NORMAL. IT WOULD BE RECOMMENDED TO COMPARE TO A LIKE VEHICLE WITH LIKE MILEAGE DURING THE CONDITION TO DETERMINE IF THE CONCERN IS A NORMAL OPERATING CHARACTERISTIC. IF THE CONCERN IS VERIFIED TO A LIKE VEHICLE TO BE ABNORMAL, IT IS RECOMMENDED TO MONITOR THE FOLLOWING PID`S APP(%), BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), FRP (PRESS), FRP_DSD, GEAR, KNK_CNTR_CYL (1-6), KNK_RATE_LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TQ_CNTRL, TR, VPWR, VREF, VSS TO SEE IF A FAULT CAN BE VERIFIED. PLEASE FEEL FREE TO UPDATE THIS REPORT WITH THE UPDATED PID INFORMATION IF THE CONCERN CAN BE DUPLICATED.

REPAIR07/25/2012 01:16PM SHAWN FERRET MSS - FCSD - TECH SVC HOTLINERUDY VICE CALLED AND STATED THE VEHICLE HAS A MISFIRE/BUCKING/JERKINGTHAT OCCURS UNDER MODERATE LOAD IN 6TH, 5TH, AND 3RD GEAR. SEVERAL

RECORDINGS WERE TAKEN OF THE CONCERN. FUEL TRIMS ARE OK. THE ISSUE OCCURS AROUND 1800 RPM. CYLINDER 5 WILL DROP UP TO 75% ON POWER BALANCE DURING THE CONCERN. THE ISSUE ONLY HAPPENS WITH THE TORQUE CONVERTER LOCKED. FRP ALWAYS MATCHES FRP_DSD.

- **RECOMM 07/25/2012 01:16PM SHAWN FERRET MSS FCSD TECH SVC HOTLINE** RUDY, RECOMMEND TO SWAP CYLINDER 5 COIL AND PLUG TO KNOWN GOOD CYLINDERS ON BANK 1 AND SEE IF THE MISFIRE CHANGES ON POWER BALANCE. PERFORM A HIGH PRESSURE FUEL SYSTEM TEST USING THE IDS TO VALIDATE THE INJECTORS ARE WORKING PROPERLY. REVIEW THE RECORDINGS AND MONITOR TCC_SLIP_ACT AND TCC_SLIP_DSD, ALONG WITH RPM COMPARED TO TSS TO SEE IF THE TORQUE CONVERTER IS MOMENTARILY SLIPPING DURING THE ISSUE. MONITOR THE WASTEGATE AND BYPASS VALVE PIDS TO DETERMINE IF THE BUCKING IS CONSISTENT WITH A CHANGE IN STATE.
- **REPAIR** 08/09/2012 04:40PM ROBERT ABERCROMBIE MSS FCSD TECH SVC HOTLINE RUDY MADE RECORDINGS OF THIS CONCERN AND NOTED THE FUEL TRIMS ARE -9 TO 10%. HE PERFORMED A FUEL SYSTEM TEST AND MONITORED THE FRP AND DESIRED AS THEY WERE THE SAME AT CRUISE. HE NOTED AT STEADY ACCELERATION CYLINDER ONE OR TWO AT A TIME WOULD SHOW A CONCERN IN CYLINDER CONTRIBUTION. HE ALSO NOTED A FLUCTUATION IN THE WAST GATE SOLENOIDS.
- **RECOMM 08/09/2012 04:40PM ROBERT ABERCROMBIE MSS FCSD TECH SVC HOTLINE** RUDY, RECOMMEND TO MONITOR THE MAP AND YIP_PRS_BOOST PID. LOOK FOR A SPIKE OR DIP IN THIS PID. IF NOTED THIS CAN AFFECT THE WAST GATE SOLENOIDS AND CAUSE MISFIRES. REPLACE THE TIP SENSOR AND RE EVALUATE.
- **REPAIR** 08/14/2012 09:55AM DAVID CHATFIELD MSS FCSD TECH SVC HOTLINE RUDY CALLED TO DISCUSS THE SURGE CONCERN IS GREATER DETAIL. HE STATED THAT HE CONFIRMED A V-SHAPE DIP IN TIP ON THE ROAD TEST. HE INSTALLED A TIP SENSOR FORM A DONOR VEHICLE OFF OF THE LOT AND RE EVALUTE. HE STATED AT FIRST THE CONCERN WAS GONE, BUT AFTER MULTIPLE ROAD TEST THE CONCERN HAS RE APPEARED. AT THE TIME OF THE CONCERN, THE TIP WITH DROP, MAP WILL BE STEADY, WASTE GATE WILL FLUCTUATE BETWEEN 25-55%, LOAD IS BETWEEN 70-90. THE CONCERN HAPPENS DURING LIGHT TIP-IN LIGHT LOAD SLIGHT GRADE AT APPROXIMATELY 65 MPH IN 6TH GEAR.
- **RECOMM 08/14/2012 09:55AM DAVID CHATFIELD MSS FCSD TECH SVC HOTLINE** RUDY, AS PER OUR DISCUSSION, PLEASE NAVIGATE TO THE AIR MANAGEMENT SELECT OF DATALOGGER AND MONITOR ETC_ACT AND ETC_DSD. PLEASE ENSURE THAT DURING THE CONCERN THESE PID DO NOT VARY MORE THAN 3 DEGREES. IF THERE IS A DISCREPANCY IN THESE PIDS DURING THE CONCERN, INSTALL A KNOWN GOOD ETB AND RE EVALUTE. ADDITIONALLY, WE HAVE ESCALATED THIS CONCERN FOR ADDITIONAL REVIEW. A REPRESENTATIVE SHOULD CONTACT YOU BY

PHONE OR THROUGH THIS HOTLINE ASSISTANCE REQUEST WITHIN ONE (1) BUSINESS DAY WITH ADDITIONAL INFORMATION OR RECOMMENDATIONS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.

- **ESCLHD** 08/14/2012 09:55AM DAVID CHATFIELD MSS FCSD TECH SVC HOTLINE NOTE TO EH TEAM: THIS VEHICLE IS BEING ESCALATED DUE TO LACK OF PROGRESS AND DOWN TIME IN EXCESS OF 27 DAYS. VEHICLE HAS HAD PREVIOUS REPAIR (TSB 12-6-4) IN JULY FOR A LIKE CONCERN.
- **REPAIR** 08/15/2012 10:35AM WILLIE HOUSTON MSS FCSD TECH SVC HOTLINE AN OBC WAS MADE TO THE DEALER TO DISCUSS THIS CONCERN WITH RUDY. HE WAS NOT AVAILABLE FOR THE TELEPHONE CALL. I SPOKE TO TRACY WHO STATED THAT THE VEHICLE HAS BEEN AT THE DEALER FOR 27 DAYS AND THIS IS THE SECOND REPAIR ATTEMPT.
- **RECOMM** 08/15/2012 10:35AM WILLIE HOUSTON MSS FCSD TECH SVC HOTLINE TRACY, DUE TO THE EXCESSIVE DOWNTIME, WE'VE REFERRED THIS CONCERN TO THE FIELD SERVICE ENGINEER (FSE) IN YOUR MARKET AREA. THE FSE SHOULD CONTACT YOU OR DEALERSHIP MANAGEMENT (SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN ONE (1) BUSINESS DAY. IF THE FSE DOES NOT CONTACT YOU DIRECTLY, PLEASE CONSULT WITH DEALERSHIP MANAGEMENT TO DISCUSS FURTHER RECOMMENDATIONS AND STEPS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.
- TAR08/15/2012 10:35AM WILLIE HOUSTON MSS FCSD TECH SVC HOTLINE
NOTE TO FSE: WE ARE REQUESTING TECHNICAL ASSISTANCE ON THIS VEHICLE
DUE TO EXCESSIVE DOWNTIME. THE VEHICLE CAME TO THE DEALER FOR A SURGE
AT CRUISE UNDER LIGHT TIP IN. THE TECHNICIAN HAS REPLACED A COIL PACK
AND PERFORMED TSB 12-06-04 WITH NO CHANGE TO THE CONCERN. HE HAS NOTED
A DOWNWARD SPIKE IN TIP-BOOST WHEN THE CONCERN OCCURS AND WAS
INSTRUCTED TO MONITOR ETB_ACT AND ETB_DSD PIDS DURING THE CONCERN.
UPON ESCALATION CONTACT HE WAS UNAVAILABLE FOR THE PHONE CALL.
ESTIMATED NUMBER OF REPAIR ATTEMPTS: 2 ESTIMATED NUMBER OF DAYS OUT OF
SERVICE: 27

ADD-ON 08/16/2012 11:00AM DAN CORNING(FSE) MSS - FCSD - REG - MEMPHIS FSE WENT TO THE DEALERSHIP 8/15/12 AND TEST DROVE THE UNIT. VERIFIED CONCERN. SYMPTOM: DURING A WARM ENGINE CRUISE AT 60+ MPH IN 6TH GEAR WITH TORQUE CONVERTER LOCKED. ACCELERATE LIGHTLY TO LOAD DRIVELINE WITHOUT DOWNSHIFTING. INTERMITTENTLY, THE ENGINE WILL SURGE AND MISS.

ADD-ON 08/16/2012 11:06AM DAN CORNING(FSE) MSS - FCSD - REG - MEMPHIS USED IDS TO MONITOR ECT-ACT VS ETC-DSD. THE TWO PIDS WERE NORMALLY WITHIN 3 DEGREES OF ONE ANOTHER BUT OBSERVED MOMENTARY WIDE VARIANCE WHILE ENGINE MISS OCCURRED. (30 DEGREE VARIATION) AT THE SAME TIME, TIP-PRS BECOMES RAGGED DURING ENGINE MISS.

ADD-ON 08/16/2012 11:22AM DAN CORNING(FSE) MSS - FCSD - REG - MEMPHIS

- TO DATE, THE DEALERSHIP HAS REPLACED THE THROTTLE BODY OFF A DONOR UNIT (THE ONE THEY PULLED FROM A DONOR UNIT WASN'T THE SAME P/N), TIP SENSOR, ALL SPARK PLUGS AND ALL COILS. RECOMMENDATION: I REQUESTED THE DEALERSHIP RESEARCH THE CORRECT THROTTLE BODY PART NUMBER IF THE ONE THEY INSTALLED WAS INCORRECT, INSTALL THE CORRECT ONE. ALSO, I ASKED THEM TO CHECK EXHAUST BACKPRESSURE ON BOTH BANKS DUE TO AN UNUSUAL "HISS" NOISE I HEARD ON LIGHT ACCEL.
- **REPAIR** 08/16/2012 03:16PM ROBERT ABERCROMBIE MSS FCSD TECH SVC HOTLINE FSE: DAN CORNING CALLED IN TO DISCUSS THE CONCERN IN FURTHER DETAIL. HE HAS THE TECH PERFORMING AN EXHAUST BACK PRESSURE TEST. THE AC TSB WAS ALREADY PERFORMED AND DURING THE CONCERN THE AMBIENT TEMP WAS HOT AND DRY.
- RECOMM 08/16/2012 03:16PM ROBERT ABERCROMBIE MSS FCSD TECH SVC HOTLINE IF THE CONCERN CAN BE DUPLICATED DURING A ROAD TEST ON A REGULAR BASIS, THEN IT IS MOST LIKELY NOT A CONDENSATION CONCERN. IT IS RECOMMENDED TO MONITOR THE FOLLOWING PID`S APP(%), BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), FRP (PRESS), FRP_DSD, GEAR, KNK_CNTR_CYL (1-6), KNK_RATE_LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TIP_PRS-BOOST, TQ_CNTRL, TR, VPWR, VREF, VSS.
- ADD-ON 08/28/2012 03:32PM DAN CORNING(FSE) MSS FCSD REG MEMPHIS DEALERSHIP REPLACED TIP SENSOR AND THROTTLE BODY. EXTENSIVE TEST DRIVE VERIFIED CONCERN RESOLVED.
- AUDIT 08/28/2012 03:32PM DAN CORNING(FSE) MSS FCSD REG MEMPHIS TECH ASSIST REFERRAL HAS BEEN CLOSED
- ADD-ON 10/05/2012 09:35AM JIM BROUSE(STI) MSS FCSD REG MEMPHIS JIM BROUSE WENT TO THE DEALERSHIP 10.4.12 YESTERDAY AFTERNOON AND SAT WITH THE SERVICE MANAGER AND SUCCESSFULLY PUT IN AN EMERGENCY PARTS ORDER.

THANKS

- **REPAIR** 10/16/2012 06:11PM DAVID STENDARDO MSS FCSD TECH SVC HOTLINE TECH CALLING IN AFTER THE UPDATED CAC (FOBL3Z-6K775-B) WAS INSTALLED AND THE CONCERN OF RANDOM MISFIRING WAS STILL PRESENT UNDER MODERATE LOADS. WHEN MONITORING THE POWER BALANCE, IT WAS NOTED THAT THE TRUCK WILL MISFIRE ON #6, THEN #1, THEN #3. THERE ARE NO DTC'S SETTING AT THIS TIME. THE TECH INSPECTED THE THROTTLE PLATE AND THERE WERE NO SIGNS OF WATER PRESENT.
- TAR 10/16/2012 06:11PM DAVID STENDARDO MSS FCSD TECH SVC HOTLINE

6

NOTE TO FSE: I AM REQUESTING TECHNICAL ASSISTANCE ON THIS VEHICLE DUE TO A RECURRING MISFIRE/BUCK/JERK SENSATION AFTER THE UPDATED CAC WAS INSTALLED AND CUSTOMER SEEKING BUY BACK IN CUDL PLEASE VERIFY ABOVE DIAGNOSTICS AND REPAIRS PERFORMED. TECH REPLACED THE CAC WITH FOBL3Z-6K775-B AS DIRECTED BY ENGINEERING AND THE CONCERN WAS SAID TO BE STILL PRESENT WITH NO DTC'S SETTING. THE CONCERN WAS SAID TO HAVE IMPROVED BY ABOUT 75%, BUT STILL THERE NONE THE LESS. THE SHOP FOREMAN IS CONCERNED WITH BUYBACK AS WELL THE CUSTOMER BEING IN CONTACT THE CRC. WHEN MONITORING POWER BALANCE, IT WAS SAID THAT THE MISFIRE WILL START ON #6, THEN #1, THEN #3. THE THROTTLE PLATE DOES NOT SHOW ANY MOISTURE STAINING. REVIEW THE CONCERN WITH THE TECHNICIAN AFTER THE MOST RECENT DIRECTED REPAIR WITH AN UPDATED PART AND PROVIDE AN APPROPRIATE DIRECTION BASED ON FINDINGS. REPAIR ATTEMPTS: 2 ESTIMATE OF TOTAL DAYS OUT OF SERVICE: 45(TECH DIESEL CERTIFIED)

RECOMM 10/16/2012 06:11PM DAVID STENDARDO MSS - FCSD - TECH SVC HOTLINE ADVISED TECH THAT THERE WERE PAST FSE INVOLVEMENT AND WITH THE MENTION OF BUY BACK IN CUDL, THE FSE WILL NEED TO BE INVOLVED AGAIN TO ASSIST WITH THIS CONCERN.

> **WE'VE REFERRED THIS CONCERN TO THE FIELD SERVICE ENGINEER (FSE) IN YOUR MARKET AREA. THE FSE SHOULD CONTACT YOU OR DEALERSHIP MANAGEMENT (SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN ONE (1) BUSINESS DAY. IF FSE DOES NOT CONTACT YOU DIRECTLY, PLEASE CONSULT WITH DEALERSHIP MANAGEMENT TO DISCUSS FURTHER RECOMMENDATIONS AND STEPS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.**

- AUDIT 10/16/2012 06:11PM DAVID STENDARDO MSS FCSD TECH SVC HOTLINE TECH ASSIST REFERRAL HAS BEEN REOPENED
- REPAIR10/18/2012 11:51AM BRETT FENNING MSS FCSD TECH SVC HOTLINE
DAN(FSE) RECEIVED UPDATED CHARGE AIR COOLER AND WAS IDENTICAL TO
ORIGINAL CHARGE AIR COOLER. VEHICLE WAS STILL MISFIRING WITH THE
UPDATED CHARGE COOLER INSTALLED. WAS LOOKING TO CONTACT RICK
NOAWACZYK

IN REGARDS TO THE CONCERN.

- **RECOMM** 10/18/2012 11:51AM BRETT FENNING MSS FCSD TECH SVC HOTLINE DAN, RICK NOWACZYK CAN BE REACHED AT (313)322-7251.
- ADD-ON10/19/2012 12:01PM DAN CORNING(FSE) MSS FCSD REG MEMPHIS
WORKED WITH JIM BROUSE (STI) YESTERDAY TO TRY AND DIAG THE CONCERN.
THE NEW CAC HAS BEEN INSTALLED WITH NO IMPROVEMENT. THE ENGINE HAS A
RANDOM MISS ON ACCELERATION. SOMETIMES THE CONCERN DOES NOT HAPPEN AT
ALL, SOMETIMES THE ENGINE MISS IS BAD ENOUGH THAT IT'S DIFFICULT TO

ACCELERATE THE VEHICLE. THE DEALERSHIP HAS ALREADY REPLACED ALL SPARK PLUGS AND COILS AND PERFORMED THE HIGH PRESSURE FUEL SYSTEM TEST MULTIPLE TIMES (PASSES EVERY TIME) AND HAS PERFORMED EVERY TEST (AND MORE) SEEN ABOVE. JIM BROUSE AND I TEST DROVE THE UNIT WHILE MONITORING DATALOGGER. AFTER A COUPLE HOURS OF DRIVING, THE CONCERN BEGAN TO HAPPEN FREQUENTLY. EVEN WHEN THE ENGINE BEGAN MISSING CONSTANTLY, THERE WAS NO DTC SET. OTHER THAN THE ENGINE GOING A BIT LEAN, NO ROOT CAUSE WAS VERIFIED. CALLED PVT RICK NOWACZYK TO REVIEW.

ADD-ON 10/19/2012 12:02PM DAN CORNING(FSE) MSS - FCSD - REG - MEMPHIS AT THIS POINT, NO CLEAR DIAGNOSIS HAS BEEN IDENTIFIED.

From:	Smith, Craig (C.A.)
Sent:	Monday, January 07, 2013 10:51 AM
То:	Ladd, John (J.R.); Whitehead, Joseph (J.P.); Leisenring, Kenneth (K.C.); Hughes, Scott (S.R.);
	VanHouten, Andrew (A.S.); Devries, Jason (J.E.); Cockerill, Al (C.A.)
Subject:	FW: 2012 F150 3.5L - Poor Power Turbo noise
Attachments:	Report Summary for the CQIS Report#CIQBO008 (7.87 KB); Report Summary for the CQIS
	Report#CLSCD008 (5.37 KB)

FCSD emerging issue: Getting CQIS calls about loss of power after CAC TSB performed. See two attached sample reports.

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: (313) 805-6345 TEE Bldg cube 1AD08 -----Original Message-----From: Davis, Craig (C.B.) [mailto:cdavis6@ford.com] Sent: Monday, January 07, 2013 9:28 AM To: McDonagh, Scot (S.M.); Merrell, Robert (R.J.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

Gentlemen, new emerging issue, following TSB 12-10-19 (updated CAC) dealer reporting same issue (miss power loss etc.) see attached emails

I am having the FSE work with the dealer to gather more details on drive cycles, and filter status

From: McDonagh, Scot (S.M.) Sent: Monday, December 10, 2012 10:51 AM To: Merrell, Robert (R.J.); Davis, Craig (C.B.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

Agreed- I was not expecting R/1000 on F-150 W/O 3.5L to be worse than 3.5L GTDI

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Merrell, Robert (R.J.) Sent: Monday, December 10, 2012 10:39 AM To: Davis, Craig (C.B.); McDonagh, Scot (S.M.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise Nothing really obvious, it's much lower then the gas engines. But lets examine some parts. << File: F150 8A080.xlsx >>

From: Davis, Craig (C.B.) Sent: Monday, December 10, 2012 8:47 AM To: McDonagh, Scot (S.M.); Merrell, Robert (R.J.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

I agree

My other concern - Is the potential for this to occur on any and all of our turbocharged engines? To allow dirt bypass once the filter becomes restricted (due to the higher AIS vacuum seen with turbos)?

Or is this related more to the Air Box design and we might see this on F150 3.7L and 5.0L as they use the exact air box as the 3.5L does

From: McDonagh, Scot (S.M.) Sent: Monday, December 10, 2012 8:41 AM To: Davis, Craig (C.B.); Merrell, Robert (R.J.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

If we ever really apply "Lessons Learned" we will be unemployed :-)

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Davis, Craig (C.B.) Sent: Monday, December 10, 2012 8:39 AM To: Merrell, Robert (R.J.) Cc: McDonagh, Scot (S.M.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

You been around as long as Scot has ..

From: Merrell, Robert (R.J.) Sent: Monday, December 10, 2012 8:39 AM To: Davis, Craig (C.B.) Cc: McDonagh, Scot (S.M.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise You guys are walking history books.

From: Davis, Craig (C.B.) Sent: Monday, December 10, 2012 8:36 AM To: McDonagh, Scot (S.M.); Merrell, Robert (R.J.); Mohan, Robert (R.); Ronzi, Bill (W.C.) Cc: Dixon, Mark (M.R.); Tiernan, Chris (C.D.); Oyafuso, Kevin (K.G.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

Robert, no I don't have any pieces as the air box was never requested (even though the dealer had it as the causal part)

All, Scot I agree with this possibility - the 7.3L had a revised air cleaner assembly developed see attached Ford of Canada released the attached bulletin advising the dealers of the changes made

<< File: Document.pdf.pdf >>

From: McDonagh, Scot (S.M.) Sent: Monday, December 10, 2012 8:27 AM To: Merrell, Robert (R.J.); Mohan, Robert (R.); Ronzi, Bill (W.C.) Cc: Dixon, Mark (M.R.); Davis, Craig (C.B.); Tiernan, Chris (C.D.); Oyafuso, Kevin (K.G.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

Thanks- Does P415 GTDI Airbox have a mechanism inside the Airbox to prevent the filter from buckling when plugged ? This scenario reminds me of 1998.5-2002MY P131 7.3L Diesel Turbo failures.

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Merrell, Robert (R.J.) Sent: Monday, December 10, 2012 8:16 AM To: McDonagh, Scot (S.M.); Mohan, Robert (R.); Ronzi, Bill (W.C.) Cc: Dixon, Mark (M.R.); Davis, Craig (C.B.); Tiernan, Chris (C.D.); Oyafuso, Kevin (K.G.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

Request is in.

Craig have anything you can send me asap.

From: McDonagh, Scot (S.M.) Sent: Friday, December 07, 2012 3:14 PM To: Mohan, Robert (R.); Ronzi, Bill (W.C.); Merrell, Robert (R.J.) Cc: Dixon, Mark (M.R.); Davis, Craig (C.B.); Tiernan, Chris (C.D.); Oyafuso, Kevin (K.G.) Subject: FW: 2012 F150 3.5L - Poor Power Turbo noise

Should we kick off a WPAC request to have 8A080 AIS Assemblies returned for 12-13MY P415 GTDI ?

224756 <http://www.wpac.ford.com/wprc/tools/req_detail.asp?REQNUM=224756> 9/13/2012 10:07:12 PM DTP1-01 9/13/2012 12/12/2012 UPS ACTIVE QUALITY REVIEW: LEVEL 5 Overnight DS **TRUCK 2012** ALL 8A080 B 1/Year FORD MOTOR COMPANY BL3Z А PVT DEPARTMENT GATE 6/GENERAL STORE 3001 MILLER RD, DEARBORN, MI-48120 NON-QUARTERBACK

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Davis, Craig (C.B.) Sent: Thursday, December 06, 2012 1:36 PM To: McDonagh, Scot (S.M.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

Scot, dealer has sent in photos from another unit showing dirt bypassing the filter - no other issues aside from the Check Engine light on for MAF, but you can see the traces of dirt in the upper air box cover

These trucks are not sitting, 1FTFX1ET7CK January 10 2012 and has 71,000+km

Dealer has been asked to input GCR

<< File: DSCN0095.JPG.JPG >> << File: DSCN0092.JPG.JPG >> << File: DSCN0091.JPG.JPG >> << File: DSCN0090.JPG.JPG >> << File: DSCN0089.JPG.JPG >> << File: DSCN0088.JPG.JPG >> << File: DSCN0087.JPG.JPG >> << File: DSCN0086.JPG.JPG >> << File: DSCN0098.JPG.JPG >>

From: Davis, Craig (C.B.) Sent: Thursday, November 29, 2012 11:57 AM To: McDonagh, Scot (S.M.) Subject: RE: 2012 F150 3.5L - Poor Power Turbo noise

this was put into service

Just checked the parts listing, the BL3Z 8A080 B is used on all 2011 and newer F150 3.7L/3.5L/5.0L, so I re-ran AWS no difference to the 3.5L count, showed 5 reports for 5.0L and nothing for the 3.7L

The 6.2L uses the BL3Z 8A080 A level part

So the question is, are the other part sales retail, due to the housing breaking during routine service for the air filter? Is there in fact an issue with the housing?

From: Davis, Craig (C.B.) Sent: Thursday, November 29, 2012 9:12 AM To: McDonagh, Scot (S.M.) Subject: 2012 F150 3.5L - Poor Power Turbo noise

Scot, here is an interesting one

2012 F150 - 1FTFX1ET9CF In service = January 25 2012 Last repair = September 26 2012 at 56,643 km Customer complaint Poor Power and Turbos noisy Dealer codes to the air box/coolant bottle (assembly) BL3Z 8A080 B for poor sealing causing the failure

Question

- have you been made aware of any issue relating to the air box/air box sealing?

I have ran AWS and only 2 repairs, both for coolant leak AWS against 2010 - 2012 F150 with the 3.5L and causal part "8A080" and full part number "BL3Z 8A080 B"

Canadian Part Sales shows a different story			
Calendar year	2011	SYTD	
BL3Z 8A080 B	31	95	

The photos of the turbos show the real story

<< File: Webb's Ford Turbo #1 .JPG >> << File: Webb's Ford Turbo # 2 .JPG >> << File: Webb's Ford .JPG >>

<< File: Normal Turbo .JPG >>

Let me know your thoughts

This e-mail and any attachments is intended only for the use of the person or persons addressed hereto and may contain legally privileged and/or

confidential information. If you are not the intended recipient of this e-mail, you are hereby notified that any dissemination, distribution or copying of this e-mail, and any attachments, is strictly prohibited. If you have received this e-mail in error, please notify me via return e-mail and permanently delete the original and any copy of any e-mail and any printout.

Craig Davis (cdavis6@ford.com) Technical Service Support (905) 845-2511 ext 1488 Dial net 853-1488 Fax (905) 845 9447 Ford of Canada Mail Drop C.H.Q.402 Room 420A

Accelerate Growth Through Customer Satisfaction and Loyalty

From:	Pitre, Rejean (R.J.) <rpitre4@ford.com></rpitre4@ford.com>
Sent:	Monday, January 07, 2013 9:13 AM
То:	Davis, Craig (C.B.)
Cc:	Pitre, Rejean (R.J.)
Subject:	Report Summary for the CQIS Report#CLSCD008

hi craig, any insight on the ecoboost hesitation after the CAC has been replaced with the updated one i have this one and another from Avalon that i will send the file to you next. thanks in advance

Attachments : 0

Report# :CLSCD008 NHL Received:CCRG/EPRC:Reviewed Status:Vehicle:2012,F150 4X4 ,F150 ,SUP CRWBuild Date:03/21/2012Odometer :8,441 K Engine: 3.5L-GTDICF613C0ATransmission:Transmission:6R80E Axle:3.73 LOCKDealer:CAN B3805 Downey Ford Sales Ltd			atus: ,SUP CRW,S GTDI (LOCK /	STYSD ,1 Calibrati A/C:	Date: .FTFW1 ion: YES	-	533-2200
City: Sain	t John	Province	New Bru	nswic	Countr	y:	CAN
Originator: BURT KELLY Symptom: 5 54 2 39 DRV PERF,LACK/LOSS PWR ,ACCEL,INTERMITTENT Status: VFG: V52 DRIVEABILITY Additional Symptom: MISS ON BANK2 Fix: Causal Component : Condition Code:							
Hotliner: TROMANO7 Phone: 313 337-9132 Regn Cd: 03 03 FCSD REGION-CANADA							
Engineerin	g: Phone	: TAR	: 0-30				
Dlr Contact	: BURT KEL	.LY Pho	ne: 506 654	4-0448	Title C	de: SF	
DTCs: KOEO: KOEC:P0304 P0305 P0306 KOER:							
Comments : REPAIR 12/19/2012 01:29PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: LOSS OF POWER ENGINE LIGHT ON ACCELL. ON							
WET DAY	S DIAGNOS	TICS: VERIFY (CUST. CONCI	ERN PEF	RFROM	EEC. TE	ST HAD CODES

1

P0304,P0305,P0306 CHECK ING. SYSTEM REPLACE # 4,5,6 PLUGS FOULED

PREVIOUS MISSFIRES ROADTEST OK AT THIS TIME. TRUCK COME BACK HAD

MISSFIRE CODE P0304 TRY NEW COIL ROADTEST POWER BAQLANCE TEST TURCK

HAS MISSFIRE ON#4 AND #6 CYLINDERS. REMOVE CAC AND CHECK HAD WATER

IN

FROM

IT AGAIN FOREMAN IS CONTACTING HOTLINE. PARTS REPLACED: REPLACE #

4,5,6 PLUGS FOULED FROM PREVIOUS MISSFIRES TSB 12-10-19 HAS BEEN

DONE,

ALSO A NEW INTERCOOLER AND A SECOND CONVERTER.ROAD TESTED TRUCK

YESTERDAY AND IT FELL ON ITS FACE .REMOVED INNERCOOLER AN FOUND WATE

RIN IT APROX 1/2 CUP AFTER ROAD TEST. TECH QUESTION: HAS THERE BEEN

ANY OTHER REPORTS OF WATER IN THE INNER COOLER AFTER THE INNNER

COOLER

HAS BEEN REPLACED? AND IF SO WHAT NOW? CUSTOMER REFUSES TO TAKE TRUCK BACK.

RECOMM 12/19/2012 01:29PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE BURT, THE FORD TECHNICAL HOTLINE HAS REVIEWED YOUR REQUEST AND HAS

DETERMINED THAT IT IS NECESSARY TO DISCUSS THIS MATTER VERBALLY OVER

THE TELEPHONE. YOU WILL BE CONTACTED SHORTLY BY A FORD TECHNICAL

HOTLINE REPRESENTATIVE.

REPAIR 12/19/2012 02:23PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE CALLED THE DEALERSHIP TO DISCUSS THE CONCERN IN MORE DETAIL. THE CAC

WAS UPDATED AND THE VEHICLE IS ON ITS 3RD CATALYST. THE MISFIRING

CAN

BE DUPLICATED EASILY WHEN THE WEATHER IS WET OR DAMP OUT. THEY HAVE

HAS SUCCESS WITH OTHER VEHICLES WITH THE NEW CAC BUT THIS TRUCK IS

NOT

RESOLVED.

RECOMM 12/19/2012 02:23PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE SPOKE WITH BURT THE SHOP FOREMAN AND ADVISED HIM THE CONCERN WOULD

ΒE

ESCALATED.

12/19/2012 02:23PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE ESCLHD NOTE TO ESCALATION TEAM : ESCALATED DUE TO THE OPEN CUDL AND COMPONENTS ALREADY REPLACED. PER INFORMATION THE VEHICLE HAS

RETURNED

TO THE DEALER 6-7 TIMES SINCE NEW JUST OVER 3 MONTHS. DISCUSSED THE

2

CONCERN WITH MR. RIDOLFI. THE VEHICLE IS IN THE PROCESS OF A

CANADIAN

RAV AND BURT REPORTS THE CUSTOMER IS IN ANOTHER VEHICLE AT THIS TIME.

REPAIR 12/20/2012 03:46PM DAVID STENDARDO MSS - FCSD - TECH SVC HOTLINE

REVIEWED BY THE ESCALATION TEAM CONTACTED DEALER THROUGH OUTBOUND CALL AND SPOKE WITH SERVICING TECHNICIAN BURT KELLY. TECH

MENTIONED THAT THE TRUCK IS COMMERCIAL USE AND IS DRIVEN ABOUT 80KM

А

DAY IN THE HIGHWAY. THE CAC HAS BEEN REPLACED WITH THE UPDATED

VERSION

AS PER TSB 12-10-19 WITH NO CHANGE. THE CAC WAS LATER REMOVED AND IT

WAS SAID THAT THERE WAS ABOUT 1 CUP OF WATER REMOVED. THE PLUGS ON

THE

L/S AS WELL AS BOTH CATALYSTS HAVE BEEN REPLACED WITH NO CHANGE.

RECOMM 12/20/2012 03:46PM DAVID STENDARDO MSS - FCSD - TECH SVC HOTLINE

ADVISED TECH TO CLOSELY INSPECT THE AIR FILTER HOUSING FOR PROPER

SEALING AS WELL AS THE AIR FILTER FOR ANY SIGNS OF SATURATION.

- **WE'VE REFERRED THIS CONCERN TO THE FIELD SERVICE ENGINEER (FSE) IN YOUR MARKET AREA. THE FSE SHOULD CONTACT YOU OR
 - DEALERSHIP MANAGEMENT (SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN

ONE

- (1) BUSINESS DAY. IF FSE DOES NOT CONTACT YOU DIRECTLY, PLEASE CONSULT
 - WITH DEALERSHIP MANAGEMENT TO DISCUSS FURTHER RECOMMENDATIONS AND
- STEPS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.** 12/20/2012 03:46PM DAVID STENDARDO MSS - FCSD - TECH SVC HOTLINE

**NOTE TO FSE: I AM REQUESTING TECHNICAL ASSISTANCE ON THIS VEHICLE

DUE TO A RECURRING MISFIRE CONCERN DURING HUMID OPERATION AFTER

SEVERAL DIRECTED REPAIR ATTEMPTS.** PLEASE VERIFY ABOVE DIAGNOSTICS

AND REPAIRS PERFORMED. VEHICLE BROUGHT TO THE DEALER FOR POWER LOSS

ON

ACCELERATION. DEALER VERIFIED THE CONCERN WITH MISFIRE DTC'S PRESENT

FOR THE L/S. TSB 12-06-04 WAS PERFORMED AS OUTLINED AND RETURNED.

THE

TECH HAS ALSO REPLACED PLUGS AND ONE COIL IN THE AFFECTED BANK DUE

то

THF	FOULING. THE CUSTOMER BROUGHT THE VEHICLE BACK WITH THE MIL ON AND
WAS	DEALER THEN PERFORMED 12-06-04 AGAIN FOR A P0430 AND THE CATALYST
WAS	REPLACED. THE VEHICLE THEN RETURNED AGAIN WITH THE MIL ON AND A LOSS
WAS	OF POWER. THE TECH THEN PERFORMED TSB 12-10-19 AND THE UPDATED CAC
VVA5	INSTALLED AND THE PCM REPROGRAMMED. THE CUSTOMER BROUGHT THE TRUCK
OF	BACK AGAIN FOR THE SAME CONCERN AND THE TECH HAS FOUND ABOUT 1 CUP
AND	WATER IN THE CAC WHEN DRAINED. REVIEW THE CONCERN WITH THE DEALER
	VERIFY ALL FINDINGS OF CONDENSATION BUILD UP AFTER DIRECTED REPAIRS
	HAVE BEEN PERFORMED. PROVIDE ANY ADDITIONAL INSPECTION OR TESTING AS
	NEEDED AS WELL AS AN APPROPRIATE REPAIR DIRECTION BASED ON FINDINGS. REPAIR ATTEMPTS: 3 ESTIMATE OF TOTAL DAYS OUT OF SERVICE:
	5(TECH CERTIFIED)

CUDL CASE #503403182

From:	Pitre, Rejean (R.J.) <rpitre4@ford.com></rpitre4@ford.com>
Sent:	Monday, January 07, 2013 9:14 AM
То:	Davis, Craig (C.B.)
Cc:	Pitre, Rejean (R.J.)
Subject:	Report Summary for the CQIS Report#CIQBO008

here is the other case. they have not yet reproduced it. on this unit.

Attachments : 0

Report# :CIQBO008 NHL Received:09/17/2012CCRG/EPRC:Reviewed Status:Date:Vehicle:2012,F150 4X4 ,F150 ,SUP CRW,STYSD ,1FTFW1ET7CF					
Build Date: Odometer : CF613C0N	01/26/20 16,450 K		e: 3.5L-GTDI	Calibration:	
Transmission			LOCK A/C: 1996 Limited		(709)
City: St Jo	าทร	Province	Newfoundland	Country :	CAN
Originator: SCOTT GAULTON Symptom: 5 50 2 39 DRV PERF,RUNS ROUGH,ACCEL,INTERMITTENT Status: VFG: V52 DRIVEABILITY Additional Symptom: HESITATION ON ACCEL Fix: Causal Component : Condition Code:					Т
Hotliner: SMASSE16 Phone: 313 317-4491 Regn Cd: 03 03 FCSD REGION-CANADA					
Engineering: Phone: TAR: 0-30					
Dlr Contact: SCOTT GAULTON Phone: 709 722-6600 Title Cde: SF					
DTCs: KOEO: KOEC: KOER:					
Comments : REPAIR 09/17/2012 10:43AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE					
WEB	WEB FORM DATA - CONCERN:HESITATES ,STUMBLES, LACK OF POWER ,MISS ON				
ACCE	LLERATION	ON HIGHWA	Y. DIAGNOSTICS: \	VEHICLE OPPERA	ATING OK AT

THIS TIME NO CODES , NO MIL LIGHT ON, THE ONLY MESSAGES FOUND ON OASIS

THAT FIT THE CUSTOMERS SYMPTOMS WERE FOR TSB 12-6-4 WHICH WAS COMPLETED AT ANOTHER DEALER JULY 13 2012, PARTS REPLACED:NOTHING

AT THIS TIME. TSB 12-6-4 ALREADY COMPLETED AT ANOTHER DEALER. TECH

QUESTION:THIS TSB 12-6-4 DOSENT SEEM TO BE FIXING THE VARIOUS PERFORMANCE ISSUES WITH THE 3.5 ECO BOOST F-150S ALOT THAT HAVE BEEN

DONE HERE AND OTHER DEALERS AROUND US HAVE CUSTOMERS COMING BACK

WITH

SAME ISUES MISSFIRES HESITATING STUMBLE , FALLING ON ITS FACE ON

HIGHWAY ACCELLERATION TO PASS WITH OR WITHOUT LOAD SAME WITH A FEW

THAT WERE BUILT AFTER 5/24/2012 THAT HAVE HAD THIS DONE FROM THE

FACTORY, ARE THERE ANY FIXES FOR THIS ISSUE IN THE WORKS, EXCESSIVE

MOISTURE BUILD UP IN CAC. CUSTOMERS ARE GETTING HARDER TO DEAL WITH

OVER THESE PERFORMANCE ISSUES AND TELL US UNSAFE WHEN TRYING TO PASS

ON HIGHWAY. ANY HELP MUCH APPREACIATED. RECOMM 09/17/2012 10:43AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE

SCOTT, PLEASE INSPECT THE CAC TUBING AND THROTTLE PLATE FOR SIGNS OF

WATER/ WATER SPOTS. IF WATER SPOTS ARE NOT FOUND, RECOMMEND TO CONTINUE WITH NORMAL DIAGNOSTICS. RECOMMEND TO MONITOR THE FOLLOWING

PIDS DURING THE CONCERN TO DETERMINE WHAT COMPONENT OR SYSTEM MAY BE

CAUSING THIS CONCERN: APP(%), BARO(PRESS), CHT(TEMP),

CYL_(1-6)_ACCL,

EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), FRP (PRESS), FRP_DSD, GEAR,

KNK_CNTR_CYL (1-6), KNK_RATE_LRND, LOAD, LONGFT1, LONGFT2,

MAP(PRESS),

NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1,

SHRTFT2, TQ_CNTRL, TR, VPWR, VREF, VSS. IF THE MISFIRE CAN BE ISOLATED

TO A PARTICULAR CYLINDER, RECOMMEND TO SWAP THE IGNITION COMPONENTS

FROM THE SUSPECT CYLINDER WITH A KNOWN GOOD CYLINDER. IF THE MISFIRE

FOLLOWS THE COMPONENT SWAP, REPLACE THE SUSPECT COMPONENTS AND RE-EVALUATE THE CONCERN. IF THE CONCERN CANNOT BE ISOLATED TO A

SYSTEM	PARTICULAR CYLINDER, RECOMMEND TO PERFORM A HIGH PRESSURE FUEL
STOLEN	TEST. IF THE TEST PASSES, PERFORM A MANUAL COMPRESSION TEST AND
	COMPARE YOUR RESULTS TO A SEVERAL CYLINDERS. IF COMPRESSION IS FOUND
WHERI	TO BE LOW, PLEASE PERFORM A CYLINDER LEAK DOWN TEST TO DETERMINE
WHER	THE LOSS OF COMPRESSION IS OCCURRING. IF WATER/ WATER SPOTS ARE
	FOUND ON THE THROTTLE PLATE OR IN THE CAC TUBING, SUSPECT
CONDI	IN THE CAC IS THE CAUSE. DUE TO THE EFFICIENCY OF THE CHARGE AIR
IN	COOLER, THERE MAY BE SOME CONDITIONS WHERE SOME CONDENSATION BUILDS
	THE CAC, EVEN WITH THE CAC SHIELD IN PLACE. VERY WET OR EXTREMELY
то	HUMID CONDITIONS MAY ENHANCE THIS CONCERN. THE SHIELD WAS DESIGNED
10	HELP WITH LESS CONDENSATION BUILD UP, BUT DUE TO HUMID AIR BEING
WILL	COMPRESSED BY THE TURBOCHARGERS AND THEN COOLED BY THE CAC, THIS
VVILL	NOT TOTALLY ELIMINATE THE CONDENSATION FROM FORMING UNDER THESE
	CONDITIONS. WHEN THE HUMID/COMPRESSED AIR IS COOLED BY THE CAC, IT
	CAUSES THE WATER GRAINS TO SEPARATE FROM THE AIR AND COLLECT ON THE
AND	CAC FINS. AT THIS TIME, IF WATER HAS BEEN VERIFIED IN THE CAC, AIS
AND	AROUND THE THROTTLE PLATE, CLEAN THE WATER AS BEST AS POSSIBLE AND
	INFORM THE CUSTOMER OF THE DESIGN OF THE SYSTEM AND THE POSSIBLY OF
CURRE	CONDENSATION BUILD-UP UNDER THESE CONDITIONS. ENGINEERING IS
CONNL	INVESTIGATING THIS CONCERN, AND FIX INFORMATION IS BEING PREPARED. A
	RELEASE DATE FOR THE FIX INFORMATION HAS NOT YET BEEN DETERMINED.
REPAIF AS	R 12/05/2012 09:06AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: CUSTOMER COMPLAINS OF SAME CONCERN
AJ	TSB 12-10-19, RAN TEST AND NO CODES, UNABLE TO REPRODUCE CONCERN.
	DIAGNOSTICS ALREADY COMPLETED: RAN OASIS, RAN TEST AND NO CODES.
	PARTS REPLACED: NONE TECH'S QUESTION: ANY KNOWNS OTHER THAN TSB

12-10-19

3

RECOM	IM 12/05/2012 09:06AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE DWAYNE, RECOMMEND TO CONTINUE TO ATTEMPT TO DUPLICATE THE CONCERN(OR
	INSTALL A VDR/VCM II) WHILE MONITORING THE FOLLOWING PID'S TO HELP
	DETERMINE THE CAUSE OF THE CONCERN; APP(%), BARO(PRESS), CHT(TEMP),
	CYL_(1-6)_ACCL, EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), FRP (PRESS),
	FRP_DSD, GEAR, KNK_CNTR_CYL (1-6), KNK_RATE_LRND, LOAD, LONGFT1,
00004	LONGFT2, MAP(PRESS), NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR,
02S21_	_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TQ_CNTRL, TR, VPWR, VREF, VSS. IF
	THE MISFIRES CAN BE ISOLATED TO A SPECIFIC CYLINDER, SWAP THE
IGNITIC	ON COILS AND THE SPARK PLUGS WITH KNOWN GOOD CYLINDERS AND RETEST.
	REPLACE THE AFFECTED IGNITION COMPONENTS IF THE MISFIRE FOLLOWS THE
	COMPONENT. IF THE CONCERN STILL PERSIST AFTER IGNITION COIL SWAP AND
	COMPRESSION TESTS DO NOT INDICATE A CONCERN, REPLACE THE INJECTOR
FOR	THE MISFIRING CYLINDER(S). WE HAVE ESCALATED THIS CONCERN TO THE
	TECHNICAL SERVICE HOTLINE'S ESCALATED HANDLING TEAM FOR ADDITIONAL
	REVIEW. A SERVICE ENGINEER FROM THIS TEAM WILL CONTACT YOU BY PHONE
OR	THROUGH THIS HOTLINE ASSISTANCE REQUEST WITHIN ONE (1) BUSINESS DAY
TO	PROVIDE ADDITIONAL INFORMATION AND/OR RECOMMENDATIONS TO ASSIST IN
THE	RESOLUTION OF THE CUSTOMER'S CONCERN. OUR TEAM AT THE HOTLINE WILL
	CONTINUE TO WORK WITH YOU AND YOUR DEALERSHIP TO HELP GET THE
CONCE	RN RESOLVED AND BACK TO THE CUSTOMER IN A TIMELY MANNER. IF WE HAVE
	EXHAUSTED ALL OF OUR RESOURCES AND ARE STILL UNABLE TO RESOLVE THE
	CUSTOMER'S CONCERN THROUGH THESE ADDITIONAL STEPS WITH YOU, THE
	HOTLINE WILL ALERT YOUR FIELD SERVICE ENGINEER BY OPENING A
TECHNI	CAL ASSISTANCE REQUEST. PLEASE BE PREPARED TO DISCUSS ALL DIAGNOSTICS
SERVICI	PERFORMED AND TEST RESULTS WITH THE TECHNICAL SERVICE HOTLINE E

ENGINEER IN MORE DETAIL. THANK YOU IN ADVANCE.

4

ESCLHD 12/05/2012 09:06AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE NOTE TO EH: THIS HAS BEEN ESCALATED DUE TO THE OPEN CUDL REQUESTING

BUY BACK. TSB 12-10-19 HAS BEEN FORMED AND THE CUSTOMER STATES THAT

THE SAME CONCERN IS STILL PRESENT. CONSULTED DALE BARRETT. CONTACT

ID 105940388.

ADD-ON 12/05/2012 09:07AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE FORWARD TO ESCALATION TEAM.

REPAIR 12/06/2012 09:31AM WILLIE HOUSTON MSS - FCSD - TECH SVC HOTLINE

AN OBC WAS MADE TO THE DEALER TO DISCUSS THIS CONCERN WITH DWAYNE

RUSSELL. HE WAS NOT AVAILABLE FOR THE PHONE CALL HOWEVER I SPOKE TO

SHAUN GILLIS. HE STATES THAT THE VEHICLE IS NOT AT THE DEALER. TSB

12-10-19 WAS PERFORMED ON 10/30 AND THE CUSTOMER REPORTS THAT THE

CONCERN IS STILL PRESENT. HE HAS DRIVEN AT HIGHWAY SPEEDS OF APPROXIMATELY 80-100 KPH FOR APPROXIMATELY 50 KM AND WHEN ATTEMPTING

TO PASS THE MIL STARTS TO FLASH AND THE VEHICLE LOOSES POWER. THIS

OCCURS MOST COMMONLY IN EXTREMELY WET CONDITIONS. THE CUSTOMER LIVES

ON THE COAST OF THE ATLANTIC OCEAN.

RECOMM 12/06/2012 09:31AM WILLIE HOUSTON MSS - FCSD - TECH SVC HOTLINE

DWAYNE, DUE TO THE CUDL COMMENTS AND REPEAT REPAIR, WE'VE REFERRED

THIS CONCERN TO THE FIELD SERVICE ENGINEER (FSE) IN YOUR MARKET

AREA.

THE FSE SHOULD CONTACT YOU OR DEALERSHIP MANAGEMENT (SERVICE MANAGER

NOT

OR SERVICE DIRECTOR) WITHIN ONE (3) BUSINESS DAYS. IF THE FSE DOES

CONTACT YOU DIRECTLY, PLEASE CONSULT WITH DEALERSHIP MANAGEMENT TO

DISCUSS FURTHER RECOMMENDATIONS AND STEPS TO ASSIST IN THE

RESOLUTION

OF THIS VEHICLE CONCERN.

ESCLHD 12/06/2012 09:31AM WILLIE HOUSTON MSS - FCSD - TECH SVC HOTLINE

TAR TO BE OPENED ON 12/10/12

TAR 12/10/2012 08:57AM WILLIE HOUSTON MSS - FCSD - TECH SVC HOTLINE

NOTE TO FSE: WE ARE REQUESTING TECHNICAL ASSISTANCE ON THIS VEHICLE

DUE TO REPEAT REPAIR AND CUSTOMER REQUESTING BUY BACK. THE VEHICLE

CAME TO THE DEALER BECAUSE OF A LOSS OF POWER AND FLASHING MIL

LIGHT.

THE CONCERN IS CONSISTENT WITH THE CONDITION DESCRIBED IN TSB 12-10-19

HOWEVER THE TSB HAS BEEN PERFORMED AND THE CONCERN IS STILL PRESENT.

THE VEHICLE IS NOT AT THE DEALER. ESTIMATED NUMBER OF REPAIR ATTEMPTS:

4 ESTIMATED NUMBER OF DAYS OUT OF SERVICE: 5

ADD-ON 12/10/2012 10:32PM REJEAN PITRE(FSE) MSS - FOC - CAN FIELD OPERAT

CALLLED DEALER THIS MORNING LEFT A MESSAGE WITH SERVICE MANAGER TO

CALL FSE AT 506-543-5850

From: Sent: To: Subject: Kramer, Michael (M.T.) Tuesday, May 14, 2013 9:12 AM Andersen, Erik (E.) FW: A couple open Valeo items

Forgot to cc you

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From: Kramer, Michael (M.T.)
Sent: Tuesday, May 14, 2013 9:12 AM
To: Corey SMALL <<u>corey.small@valeo.com</u>> (<u>corey.small@valeo.com</u>); Satish NADELLA; Kramer, Michael (M.T.); <u>ying.tang@valeo.com</u>; Guillermo GUADARRAMA; Blas-Fernando GUTIERREZ; Tyler, Jim (J.S.); Huang, Larry (L,.); Joseph LUMETTA; Larry ENGEL
Cc: Alcaraz andrade, Alejandro (M.); Tyler, Jim (J.S.); Kramer, Michael (M.T.)
Subject: A couple open Valeo items

A) On track for 5/16 or sooner for the following data sheets with original J1 CAC internals (these are the ones that were first run with the wrong CAC internals):

1) Externally block bottom 7 tubes / 8 fins

2) Externally block bottom 4 tubes / 5 fins

3) Externally block bottom 7 tubes / 8 fins 25% of the length across the CAC from the inlet side and the bottom 3 tubes / 4 fins the remainder of the length ("L" laying on its side).

B) Status of P415 CAC corrosion testing with 7 tube / 8 fin lower blocker.

Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805-0190 Text Page: mkramer1 Page from outside Ford, External email: mkramer1@ford.com

From:	McDonagh, Scot (S.M.)
Sent:	Thursday, October 18, 2012 11:55 AM
To:	Fodera, Jas (J.J.)
Cc:	Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.)
Subject:	FW: Customer Feedback on New CAC's Installed
Importance:	High

Will the (2) Convertors replaced on enclosed P415 GTDI be routed back to you for analysis ?

1FTFX1ET8CK - FSE Chris Hall

Reponii Summmeny Reponii Summmeny tion the COPS Res... tion the COPS Res...

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Nowaczyk, Rick (R.J.)
Sent: Thursday, October 18, 2012 9:16 AM
To: Sparks, Douglas (D.S.)
Cc: Oyafuso, Kevin (K.G.); McDonagh, Scot (S.M.); Kramer, Michael (M.T.); Dixon, Mark (M.R.); Dobbs, Dan (K.D.); Ricks, Kevin (K.J.)
Subject: FW: Customer Feedback on New CAC's Installed
Importance: High

Doug,

Unfortunately, we were not able to save this one from going buyback as part of the 12 CAC installed in the field. The dealer installed the new CAC and then the vehicle came back with P0430, so the dealer then installed a new CAT Conv. on 10/3. The vehicle returned again on 10/9 with a repeat P0430 DTC. Currently, the vehicle seems to be performing well.

From: Hall, Christopher (C.)
Sent: Thursday, October 18, 2012 8:25 AM
To: Nowaczyk, Rick (R.J.); Powers, Kurtis (K.S.)
Cc: Johnson, Jim (J.S.); Christoff, Donald (D.A.); Dripps, David (D.S.); Hammer, Richard (R.M.)
Subject: RE: Customer Feedback on New CAC's Installed

Rick,

Below is the reply on received from my dealer and the vin in question;

Chris,

The new CAC installed on 9/28 (ro 35366). The vehicle returned with a code 430 and p0301 on 10/3 after 125 miles ro (35447). Per hotline we replace the left hand cat conv. and cylinder #1 coil. The vehicle returned on 10/9 after 64 miles with a p0430 (ro 35744) and was traded in at that time. We cleared the code and have driven over 350 miles so far without a fault.

If you have any other questions, don't hesitate to call me. Mark J. Anderson Nick Nicholas Ford

Regards,

Chris Hall

Field Service Engineer Ford Customer Service Division Orlando Region cell-727-643-9285

"Fix it right every time with Rotunda!"



From: Nowaczyk, Rick (R.J.)
Sent: Wednesday, October 17, 2012 4:59 PM
To: Powers, Kurtis (K.S.)
Cc: Johnson, Jim (J.S.); Christoff, Donald (D.A.); Dripps, David (D.S.); Hammer, Richard (R.M.); Hall, Christopher (C.)
Subject: RE: Customer Feedback on New CAC's Installed

Ok, thank you. I will give the feedback to engineering.

From: Powers, Kurtis (K.S.)
Sent: Wednesday, October 17, 2012 4:20 PM
To: Nowaczyk, Rick (R.J.)
Cc: Johnson, Jim (J.S.); Christoff, Donald (D.A.); Dripps, David (D.S.); Hammer, Richard (R.M.); Hall, Christopher (C.)
Subject: RE: Customer Feedback on New CAC's Installed

Hi Rick,

1FTFW1ET0CF is still doing good, no issues with a misfire. The customer does state he feels like he has lost a little power at the top end (high way speeds) and also stated that his fuel economy has decreased a little.

Regards, Kurtis Powers Field Service Engineer, Miami Region (313) 805-0087

<< OLE Object: Picture (Device Independent Bitmap) >>

From: Nowaczyk, Rick (R.J.) Sent: Wednesday, October 17, 2012 4:11 PM To: Powers, Kurtis (K.S.); Dripps, David (D.S.); Hammer, Richard (R.M.); Hall, Christopher (C.) Cc: Johnson, Jim (J.S.); Christoff, Donald (D.A.) Subject: Customer Feedback on New CAC's Installed Importance: High

Field Team,

Any feedback from the customers on the following VIN#?

1FTFW1ET9CFE	- FSE Rick Hammer
1FTFW1ET4BF	- FSE Rick Hammer
1FTFX1ET8CK	- FSE Chris Hall
1FTFW1ET9CK	- FSE Dave Dripps
1FTFW1ETOCF	- FSE Kurtis Powers

Regards, Rick Nowaczyk FCSD Product Concern Engineer F-150, Freestar/Monterey, Ford GT, Th!nk E-mail: <u>mowaczy@ford.com</u> Diagnostic Service Center-I, Allen Park PH# 313-322-7251

From:	McDonagh, Scot (S.M.)
Sent:	Thursday, October 18, 2012 11:54 AM
To:	McDonagh, Scot (S.M.)
Subject:	Report Summary for the CQIS Report#CJBCT002

Attachments : 0

Report# : CCRG/EPRC:	CJBCT002 NHL	Reviewed Status:		Received: Date:	10/02/2012
Vehicle:	2012,F150 4X4 ,F1 ,1FTFX1ET8CK	50 ,SUP CAB,STYSD		Build Date:	02/24/2012
Odometer :	34,328 M	Engine:	3.5L- GTDI	Calibration:	CF613C0A
Transmission:	6R80E	Axle:		A/C:	YES
Dealer:	USA 01200 Nick N	licholas Ford, Inc.		Phone#:	(352) 726- 1231
City:	Inverness	State:	Florida	Country :	USA
Originator:	JOHN HYDE				
Symptom:	2 27 Q 30 AID/INF	O,WNG IND/MESS/C,ENGINE	IMAGE,FLA	ASHES	
Status:					
VFG:	V29 CHECK ENGINE LIGHT				
Additional Symptom:	P0301, P0430				
Fix:	Causal Component : COIL AS			RPL	
Condition Code:					
Hotliner: AHEBI	ERT8	Phone: 313 317-9379	Regn	Cd: S3 Orland	lo
Engineering:		Phone:		TAR:	
Dlr Contact: JOH	IN HYDE	Phone: 352 726-123	1	Title Co	de: T

DTCs:

KOEO:P0301 P0430 KOEC: KOER:

Comments :

REPAIR 10/02/2012 09:45AM ADAM HEBERT MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: VEHICLE HAS CHECK ENGINE LIGHT, FLASHES ON HARD ACCEL, MISSFIRING ON #1 CYLINDER. DIAGNOSTICS: CHECK CODES ROAD TEST PULL AND INSPECT #1 SPARK PLUG, LOOKS A LITTLE DARK BUT NOT BAD. PARTS REPLACED:NONE TODAY. BUT HAS HAD TSB 12-06-04, DONE 06-09-12 AT 15192MILES. LEFT CATALYTIC CONVERTER REPLACED 06-26-12 AT 18719MILES. LEFT CATALYTIC CONVERTER REPLACED 07-30-12 AT28754MILES. CHARGE AIR COOLER REPLACED 08-28-12 AT 34113 MILES. CAC WAS BROUGHT TO US BY CHRIS HALL OUR FIELD SERVICE ENGINEER. HE TOLD US A TSB WAS COMING OUT SOON BUT GOT US THE PART EARLY. TECH QUESTION:WHAT AM I GOING TO DO WITH THIS TRUCK. JUST SO YOU KNOW MOST OF THIS CUSTOMERS DRIVING IS INTERSTATE DRIVING AND HE RUNS TRUCK VERY HARD.

RECOMM 10/02/2012 09:45AM ADAM HEBERT MSS - FCSD - TECH SVC HOTLINE JOHN, IF THE P0430 IS CURRENTLY PRESENT, THE CATALYST WILL REQUIRE REPLACEMENT AGAIN. DUE TO THIS CONCERN BEING PRESENT ON BANK 1 SUSPECT THAT THIS CURRENT CONCERN IS NOT RELATED TO THE CHARGE AIR COOLER OR MOISTURE BUILDUP AS MOISTURE TYPICALLY AFFECTS BANK 2 DUE TO THE INTAKE DYNAMICS. IT WOULD BE RECOMMENDED TO SWAP THE NUMBER 1 INJECTOR, SPARK PLUG AND COIL WITH ANOTHER GOOD KNOWN CYLINDER THEN RE-EVALUATE.

REPAIR10/02/2012 10:40AM JIM MITCHELL MSS - FCSD - TECH SVC HOTLINEDATA FROM PRIOR APPROVAL REQUEST FORM: PLEASE DESCRIBE CUSTOMERSCONCERN.HAS MISSFIRE ON 1 CYLINDER UNDER HEAVY LOAD. DESCRIBEDIAGNOSTIC PROCEDURES COMPLETED AND THE RESULTS. BE SURE TO NOTEANY

PINPOINT OR OTHER DIAGNOSTIC TESTS COMPLETED. INCOMPLETE DIAGNOSIS WILL PROLONG

THE PRIOR APPROVAL PROCESS, SO BE SURE TO

INCLUDE ALL TEST RESULTS.RUN NORMAL DIAGNOSTICS, EEC TEST INJECTOR FLOW TEST POWERBALANCE ROAD TEST,SHOWS MISSFIRE 1. MOVE 1 COIL ON PLUG TO 2 .2 TO1 MISSFIRE MOVES FROM 1 TO 2. PLEASE LIST PART THAT WAS ROOT CAUSE OF FAILURE:12029 COP. LIST MAJOR COMPONENTS NEEDED FOR REPAIR:NONE PROVIDE ANY ADDITIONAL DETAILS NECESSARY. PLEASE INCLUDE ANY TECHNICAL INFORMATION

THAT YOU FEEL WILL HELP THE HOTLINE

PROCESS YOUR PRIOR APPROVAL REQUESTNONE REPAIR ESTIMATE -

LABOR: REPAIR ESTIMATE - TOTAL: VEHICLE/COMPONENT

ABUSE: MODIFICATIONS: LACK OF MAINTENANCE: RO#: 35447RO

DATE:2012-10-02WARRANTY TYPE:NEW VEHICLE WARRANTY SPW MILEAGE: SPW INSTALL DATE:

RECOMM 10/02/2012 10:40AM JIM MITCHELL MSS - FCSD - TECH SVC HOTLINE JOHN SWAPPED COIL,MISS FOLLOWED. THE DEALER IS APPROVED TO REPLACE THE #1 COIL ON PLUG (COP). PLEASE REFERENCE THE ONLINE WORKSHOP MANUAL FOR INSTALLATION INFORMATION.

From:	McDonagh, Scot (S.M.)
Sent:	Thursday, October 18, 2012 11:54 AM
То:	McDonagh, Scot (S.M.)
Subject:	Report Summary for the CQIS Report#CIRBB005

Attachments : 0

Report# : CCRG/EPRO	C:	CIRBB005 FCSDFS	S Reviewed Status:		Received: Date:	09/18/2012
Vehicle:		2012,F150 4X4 ,F15 ,1FTFX1ET8CK	50 ,SUP CAB,STYSD		Build Date:	02/24/2012
Odometer :		30,000 M	Engine:	3.5L- GTDI	Calibration:	CF613C0A
Transmission	n:	6R80E	Axle:		A/C:	YES
Dealer:		USA 01200 Nick Ni	cholas Ford, Inc.		Phone#:	(352) 726- 1231
City: Originator: Symptom: Status:		Inverness MIKE BAKER 5 50 2 39 DRV PER	State: F,RUNS ROUGH,ACCEL,INTE	Florida ERMITTENT	Country :	USA
VFG:		V52 DRIVEABILIT	Ϋ́			
Additional Symptom:		AFTER DRIVING IN RAIN				
Fix:		Causal Component :				
Condition Co	ode:					
Region Cod	le: S3		Region Name: Orlar	ıdo		
DTCs: KOEO: KOEC: KOER:						
Comments :						
OWNER	CHRIS HAD (LOOK THE B 1FTFX	S,WE HAVE A LOC CHECK ENGINE LI AT THE HISTORY BOSSES AND IS DR K1ET8CK	IS HALL(FSE) MSS - FCSD - RI AL FLEET WITH SEVERAL EG GHT AND PERFORMANCE IS ON THIS ONE IN PARTICULA IVEN HARD. NOT OVERLOAD IST WANT TO KNOW WHAT Y KING LEMON LAW. THANKS	COBOOST F SUES. IF YC AR. IT IS DR DED BUT H YOU THINK	-150'S AND A DU COULD PL LIVEN BY ONI ARD. WE MAY NE	EASE E OF ED TO DO

1

FORD PARTS AND SERVICE DIRECTOR

- ADD-ON 09/18/2012 01:42PM CHRIS HALL(FSE) MSS FCSD REG ORLANDO CONTACTED PCE AND HE IS IN PROCESS OF SHIPPING A CAC TO RESOLVE CUSTOMER CONCERN.PLEASE SEE AWS FOR WARRANTY HISTORY.
- ADD-ON 10/08/2012 06:55AM CHRIS HALL(FSE) MSS FCSD REG ORLANDO DELIVERED CAC TO DEALER ON 9/24 AND IT WAS INSTALLED SHORTLY AFTER.
- ADD-ON 10/18/2012 08:58AM CHRIS HALL(FSE) MSS FCSD REG ORLANDO CONTACTED DEALER REQUESTING STATUS ON VEHICLE SINCE NEW CAC INSTALLED AND RECEIVED THIS REPLY; CHRIS, THE NEW CAC INSTALLED ON 9/28 (RO 35366) . THE VEHICLE RETURNED WITH A CODE 430 AND P0301 ON 10/3 AFTER 125 MILES RO (35447) . PER HOTLINE WE REPLACE THE LEFT HAND CAT CONV. AND CYLINDER #1 COIL. THE VEHICLE RETURNED ON 10/9 AFTER 64 MILES WITH A P0430 (RO 35744) AND WAS TRADED IN AT THAT TIME . WE CLEARED THE CODE AND HAVE DRIVEN OVER 350 MILES SO FAR WITHOUT A FAULT. IF YOU HAVE ANY OTHER QUESTIONS, DON'T HESITATE TO CALL ME. MARK J. ANDERSON

From: Sent: To: Subject: McDonagh, Scot (S.M.) Wednesday, April 17, 2013 7:41 AM Ricks, Kevin (K.J.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.) FW: Engineering visit to Fla for misfire

Stay tuned

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Ronzi, Bill (W.C.)
Sent: Tuesday, April 16, 2013 4:09 PM
To: McDonagh, Scot (S.M.)
Cc: Dixon, Mark (M.R.)
Subject: FW: Engineering visit to Fla for misfire

Scot, Let's hold off on meeting with FCSD on service parts until sometime next week. We want to complete Friday's tunnel testing and also get some TASE MCT feedback before talking about service samples.

Thx Bill

From: Madej, Jeanette (J.)
Sent: Tuesday, April 16, 2013 1:10 PM
To: Dobbs, Dan (K.D.); Russo, Scott (S.); Kramer, Michael (M.T.); Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.)
Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Sowards, John (J.); Andersen, Erik (E.)
Subject: RE: Engineering visit to Fla for misfire

Scott McDonagh is going to get us together.

Jeanette Madej

Global Cooling Manager

313-805-0189

From: Dobbs, Dan (K.D.)
Sent: Tuesday, April 16, 2013 1:08 PM
To: Russo, Scott (S.); Kramer, Michael (M.T.); Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.)
Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Madej, Jeanette (J.); Sowards, John (J.); Andersen, Erik (E.)
Subject: RE: Engineering visit to Fla for misfire

Thanks All. We will wait for your update on effectiveness and timing. However due to the market weather conditions, this location may provide the best real-world opportunity to validate.

From: Russo, Scott (S.)
Sent: Tuesday, April 16, 2013 1:02 PM
To: Kramer, Michael (M.T.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.)
Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Madej, Jeanette (J.); Sowards, John (J.); Andersen, Erik (E.)
Subject: RE: Engineering visit to Fla for misfire

While I support a trip if this investigation will help us learn something new about customer duty cycle, the revised blocker is not a turnkey solution yet at this point in time. Implementing this blocker on this vehicle (before all validation/verification is complete) may just trade one problem for another.

Scott Russo Ford Motor Company PT Cooling Applications Manager <u>srusso2@ford.com</u> Phone: 313-805-3059 Page: <u>3138053059@vtext.com</u>

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Tuesday, April 16, 2013 12:41 PM To: Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.) Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Madej, Jeanette (J.); Sowards, John (J.); Andersen, Erik (E.); Kramer, Michael (M.T.); Russo, Scott (S.) Subject: RE: Engineering visit to Fla for misfire

Unfortunately, test data does not support ability to do a field assessment.

>Mike Kramer
>RWD PT Cooling Supv.
>Six Sigma Black Belt
>Cell Phone: (313) 805-0190
>Text Page: mkramer1
>Page from outside Ford, External email: mkramer1@ford.com

-----Original Message-----From: Andersen, Erik (E.) Sent: Tuesday, April 16, 2013 12:38 PM To: Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.); Madej, Jeanette (J.); Sowards, John (J.) Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Kramer, Michael (M.T.) Subject: RE: Engineering visit to Fla for misfire

Hold on....We should discuss before any customer vehicles are updated. There are a number of engineering issues that we are still sorting through.

Bill,

If you can set up some time that would be helpful.

Erik Andersen Core P/T Cooling eanderse@ford.com 313-805-2966

-----Original Message-----From: Nowaczyk, Rick (R.J.) Sent: Tuesday, April 16, 2013 12:35 PM To: Dobbs, Dan (K.D.); McDonagh, Scot (S.M.); Madej, Jeanette (J.); Andersen, Erik (E.); Sowards, John (J.) Cc: Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.) Subject: RE: Engineering visit to Fla for misfire

I agree with Dan. It's shouldn't be a problem.

-----Original Message-----From: Dobbs, Dan (K.D.) Sent: Tuesday, April 16, 2013 12:24 PM To: McDonagh, Scot (S.M.); Madej, Jeanette (J.); Andersen, Erik (E.); Sowards, John (J.) Cc: Nowaczyk, Rick (R.J.); Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.) Subject: RE: Engineering visit to Fla for misfire

I do not see a problem.

From: McDonagh, Scot (S.M.) Sent: Tuesday, April 16, 2013 12:17 PM To: Madej, Jeanette (J.); Andersen, Erik (E.); Sowards, John (J.) Cc: Nowaczyk, Rick (R.J.); Ricks, Kevin (K.J.); Sparks, Douglas (D.S.); Dobbs, Dan (K.D.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.) Subject: RE: Engineering visit to Fla for misfire Importance: High

Can we trial Creative Foam/3M bottom CAC blocker on customer vehicles in parallel with DTF testing ?

<< Message: FW: 3.5 L Engine CEL on Hesitates >> Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Ricks, Kevin (K.J.) Sent: Friday, April 05, 2013 10:31 AM To: Sparks, Douglas (D.S.); Dobbs, Dan (K.D.); Dixon, Mark (M.R.) Cc: Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.) Subject: Engineering visit to Fla for misfire

Doug, we would like to request an engineering visit to a couple critical customer vehicles in coordination with our TSOM Jim Johnson in Florida. This could accomplish a couple objectives, real world feedback on the new proposed blocker and partially to show goodwill to dealers in the area. Perhaps we could get a couple blockers to try out. We can coordinate.

Kevin Ricks Manager - Truck Service Engineering FCSD - Service Engineering Operations KRICKS@Ford.com 313-323-6574 From: Sent: To: Cc: Subject: Johnson, Jim (J.S.) Wednesday, October 10, 2012 10:18 AM Nowaczyk, Rick (R.J.) Dobbs, Dan (K.D.) FW: F-150 CAC

FYI – Two more dealers ordered parts

From: Dripps, David (D.S.)
Sent: Wednesday, October 10, 2012 12:02 AM
To: Christoff, Donald (D.A.); Kuffel, Adam (A.B.); Hall, Christopher (C.); Gibula, Jeff (J.P.); Carey, John (J.P.); McCall, Kris (K.J.); McClung, Shannon (S.T.); Powers, Kurtis (K.S.); Hammer, Richard (R.M.); Jackson, Robert (R.P.); Kocher, Michael (M.); Sonnen, Stuart (S.J.); Triplette, Wesley (.)
Cc: Johnson, Jim (J.S.)
Subject: RE: F-150 CAC

They're shipping now. I had two dealers pressing me for one and I had them order it emergency last week and both got them this morning. Part number: BL3Z- 6K775-B.

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458 From: Sent: To: Subject: Dobbs, Dan (K.D.) Friday, February 01, 2013 2:39 PM Nowaczyk, Rick (R.J.) FW: F150 GTDI CAC Misfire Emerging QSF

Here you go skippy – now you're in the big time.... Again.

From: Ronzi, Bill (W.C.) Sent: Friday, February 01, 2013 2:28 PM To: Dobbs, Dan (K.D.) Subject: F150 GTDI CAC Misfire Emerging QSF

Dan, Are you the keeper of the file for the above? If so, can you send me the VINS that are currently included?

Thanks,

Bill William C. Ronzi PTI Quality Supervisor (313) 805-6140 cell & pgr

From:	Hamilton, Steven (S.C.)
Sent:	Monday, September 12, 2011 12:36 PM
То:	Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Subject:	FW: Misfire Status

Not sure if I sent this last week.

Best regards,

Steve Hamilton

FCSD Service Engineering Operations F-150 PVT Program Manager (313)390-7750

From:	Cockerill, AI (C.A.)
Sent:	Thursday, September 08, 2011 8:48 AM
To:	Hamilton, Steven (S.C.)
Subject:	FW: Misfire Status

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender. Vince Lombardi

Al Cockerill RWD V6 Engine System Supervisor 313-805-2333 C 313-845-0475 O

From:Cockerill, Al (C.A.)Sent:Thursday, September 08, 2011 8:46 AMTo:Saad, Thomas (T.J.); Galas, Dean (C.K.); Sims, Ivan (I.D.); Mazuchowski, James (J.A.)Subject:Misfire Status

Tom,

Per our conversation, I will not be able to provide an update for the PRT at 9:30. The team is meeting with the PT Chiefs today at 11:30 to discuss next steps based on our findings from vehicle testing at DTF. The status at this time is as follows:

1. Warranty trends continue to show a significant decrease. No significant change since the review with Bennie.

2. We have confirmed the an entire bank needs to be misfiring before catalyst damage occurs

3. We have confirmed that if a cylinder is misfiring and FMEM action is not taken, then the misfire will propagate and cause the other cylinders on that bank to misfire

4. We have multiple COP warranty items that have been addressed with ICA's and PCA's in place

5. There is a COP item, (Primary Layer Short or PLS), which we can not confirm as a supplier quality issue or a result of electrical damage in vehicle.

6. We have been able to replicate the misfire drive cycle at DTF with a PLS coil and thus we are discussing next steps with the PT Chief today.

The spirit, the will to win, and the will to excel are the things that endure. These qualities are so much more important than the events that occur. The harder you work, the harder it is to surrender. Vince Lombardi 313-845-0475 O

From: Sent: To: Cc: Subject: Hamilton, Steven (S.C.) Tuesday, October 11, 2011 2:18 PM Nowaczyk, Rick (R.J.) Garrett, David (D.P.); McDonagh, Scot (S.M.) FW: P415 3.5L GTDI MisFire QSF

Rick,

Is this the correct QSF tracking number?

Thanks.

Best regards,

Steve Hamilton

FCSD Service Engineering Operations Diesel Commodity Manager (313)390-7750

From: Cervenan, Neil (N.J.)
Sent: Tuesday, October 11, 2011 2:16 PM
To: Hamilton, Steven (S.C.)
Cc: Garrett, David (D.P.); McDonagh, Scot (S.M.)
Subject: P415 3.5L GTDI MisFire QSF

Steve,

PCSE wants to add the official QSF tracking number for P415 3.5L GTDI Misfire to a WERS concern.

Please verify the following number in bold, that I've copied from the weekly QSF report, is correct:

06920110034-3.5L MISFIRE ON ACCEL w/o DTCs

Thanks,

Neil Cervenan Phone: 313-805-7036 ncervena@ford.com Bldg #2 24Q34 From: Sent: To: Cc: Subject: Ricks, Kevin (K.J.) Thursday, February 28, 2013 12:53 PM Holzheuer, Bill (W.P.) Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.) FW: P415 GTDI Misfire - CAC moisture

Unbelieveable.

From: Norton, John (J.K.)
Sent: Thursday, February 28, 2013 12:48 PM
To: Ricks, Kevin (K.J.)
Cc: Dwan, Patrick (P.J.); Klump, Robert (R.F.)
Subject: FW: P415 GTDI Misfire - CAC moisture

FYI... If the revised TSB has not gone, please hold until we have a response from Bob Facetti.

Regards,

John Norton

Global Chief Engineer Customer Service Engineering Ford Customer Service Division Phone: (313) 322-9454 Email: <u>inorton@ford.com</u>

From: Berardi, Michael (M.A.)
Sent: Thursday, February 28, 2013 12:43 PM
To: Fascetti, Robert (R.J.)
Cc: Norton, John (J.K.)
Subject: FW: P415 GTDI Misfire - CAC moisture

Bob, We should probably get our teams together to see if we may have a concern on our hands (oh by the way – hope your vacation was a good one and you actually got to slow down a little!) on the CAC TSB that we are getting ready to republish. Looks like we have some reports where the CAC has been replaced and the concern is still present. Either the dealer didn't diagnose it correctly, or something else is happening. Before we re-publish the TSB, is your team aware that we have these potential repeat repairs out there?

Mike Berardi Director - Service Engineering Operations Ford Customer Service Division Administrative Assistant - Sandy Schwartzenberger (38468) Phone - (313) 323-8467 Fax - (313) 845-2580

Share the Ford Story at <u>www.TheFordStory.com</u> Save Paper - Do not print this email unless absolutely necessary From: Norton, John (J.K.) Sent: Thursday, February 28, 2013 12:31 PM To: Berardi, Michael (M.A.); Ricks, Kevin (K.J.) Subject: RE: P415 GTDI Misfire - CAC moisture

ike,

We have reached the SF threshold for reports where the new CAC has been installed and customers are still having the problem. The new CAC is a significant improvement, but it does not appear that it is fi . The thought would be to meet with owertrain management to determine if further actions are necessary or even possible before we open another SF. Are you with this approach?

Regards,

John Norton

Global Chief Engineer Customer Service Engineering Ford Customer Service Division Phone: (313) 322-9454 Email: <u>inorton@ford.com</u>

From: Ricks, Kevin (K.J.) Sent: Thursday, February 28, 2013 11:48 AM To: Norton, John (J.K.); Berardi, Michael (M.A.) Subject: FW: P415 GTDI Misfire - CAC moisture Importance: High

Part of our strategy of putting out the TSB with improved diagnostics was to open our emerging concern on this concern for those cases that still have issues after the latest and greatest hardware and software revisions. Before we open a QSF, I want to make sure all parties are overtly aware. I will call a brief teleconference with us, PT Sparks, Baum, McCoy, Fascetti, can you suggest other key stake holders?

From: Nowaczyk, Rick (R.J.) Sent: Thursday, February 28, 2013 9:08 AM To: Ronzi, Bill (W.C.); McDonagh, Scot (S.M.) Cc: Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.) Subject: RE: P415 GTDI Misfire - CAC moisture

I went through some more 2011-2012 GCQIS reports and we have reached the QSF threshold of 25. I will be e-mailing the updated GCQIS folder when the system has down loaded the reports to the server. We will <u>not</u> be flipping this to QSF just yet. Kevin Ricks wants to have a discussion with John Norton and Mike Berardi first. Thanks

From: Ronzi, Bill (W.C.)
Sent: Wednesday, February 27, 2013 9:43 AM
To: McDonagh, Scot (S.M.); Nowaczyk, Rick (R.J.)
Cc: Dobbs, Dan (K.D.); Dixon, Mark (M.R.)
Subject: RE: P415 GTDI Misfire - CAC moisture

Rick, Would like to get the updated VIN list when you have a chance.

From: McDonagh, Scot (S.M.) Sent: Wednesday, February 27, 2013 7:20 AM To: Ronzi, Bill (W.C.); Nowaczyk, Rick (R.J.) Cc: Dobbs, Dan (K.D.); Dixon, Mark (M.R.) Subject: RE: P415 GTDI Misfire - CAC moisture

(20) Reports not including 11-12MY

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Tuesday, February 26, 2013 4:51 PM To: Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.) Cc: Dobbs, Dan (K.D.) Subject: RE: P415 GTDI Misfire - CAC moisture

Rick, Can you provide an update when you have a chance? I believe we're up to 18 now?

Thx Bill Ronzi

-----Original Message-----From: Nowaczyk, Rick (R.J.) Sent: Monday, February 04, 2013 1:09 PM To: McDonagh, Scot (S.M.); Ronzi, Bill (W.C.) Cc: Dobbs, Dan (K.D.) Subject: RE: P415 GTDI Misfire - CAC moisture Importance: High

Sorry for the delay...GCQIS was not cooperating last Friday.

-----Original Message-----From: McDonagh, Scot (S.M.) Sent: Monday, February 04, 2013 11:54 AM To: Ronzi, Bill (W.C.); Dobbs, Dan (K.D.) Cc: Nowaczyk, Rick (R.J.) Subject: RE: P415 GTDI Misfire - CAC moisture

I asked Rick to provide latest folder with (14) CQIS Reports

Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, February 04, 2013 11:48 AM To: McDonagh, Scot (S.M.); Dobbs, Dan (K.D.) Subject: RE: P415 GTDI Misfire - CAC moisture

Scot, Were you able to find the emerging QSF folder VINS? I shot Dan a note on Friday but not sure if he's the right guy for this one.

Bill

From: Dixon, Mark (M.R.) Sent: Monday, February 04, 2013 11:18 AM To: Leisenring, Kenneth (K.C.); Cervenan, Neil (N.J.); Ronzi, Bill (W.C.) Cc: McDonagh, Scot (S.M.); Smith, Craig (C.A.) Subject: RE: P415 GTDI Misfire - CAC moisture

Ken, yes, we have 1 and 2 MIS data. Meant to include you on attached email.

Neil, lets plan to update Joe on this tomorrow. Bill, any information on a service fix as this is heading for QSF levels.

<< Message: RE: 2013 MY 3.5L GTDI P415 Misfire Daily AWS Claims (Post 9/18/12 Vehicle Build Date) - (1/22/13) >>

From: Leisenring, Kenneth (K.C.) Sent: Monday, February 04, 2013 10:08 AM To: Dixon, Mark (M.R.); Cervenan, Neil (N.J.) Cc: McDonagh, Scot (S.M.); Smith, Craig (C.A.) Subject: RE: P415 GTDI Misfire - CAC moisture

Did we ever get an R/1000 estimate for before and after the CAC PCA? This should come into Joe Baum's FQR tomorrow as well.

Thanks.

Ken Leisenring Manager, Powertrain Calibration Cell: (313) 805-5459 kleisenr@ford.com

From: Dixon, Mark (M.R.) Sent: Tuesday, January 22, 2013 4:33 PM To: Leisenring, Kenneth (K.C.); Cervenan, Neil (N.J.); Smith, Craig (C.A.) Cc: McDonagh, Scot (S.M.) Subject: RE: P415 GTDI Misfire - CAC moisture

Mike Kramer is the cooling supervisor we need to invite. I asked Paul Ng to take the latest misfire claims file for vehicles with the new CAC (post 9/18 production) and calculate the R/1000 improvement. Should have a 1 and 2 MIS number to compare against the old CAC data.

From: Leisenring, Kenneth (K.C.) Sent: Tuesday, January 22, 2013 3:38 PM To: Cervenan, Neil (N.J.); Smith, Craig (C.A.) Cc: Dixon, Mark (M.R.); McDonagh, Scot (S.M.) Subject: RE: P415 GTDI Misfire - CAC moisture

Who did you invite the previous 20 times this issue was reviewed in the FQR and it was allegedly solved? I's like to hear what they have to say.

On a serious note, I think Craig Smith knows who is currently leading this investigation for the Cooling team.

Ken Leisenring Manager, Powertrain Calibration Cell: (313) 805-5459 - note: back to old number kleisenr@ford.com

From: Cervenan, Neil (N.J.) Sent: Tuesday, January 22, 2013 3:36 PM To: Leisenring, Kenneth (K.C.) Cc: Dixon, Mark (M.R.); McDonagh, Scot (S.M.) Subject: P415 GTDI Misfire - CAC moisture Ken,

The P415 GTDI issue for 'continued moisture in CAC & misfire after CAC update' is an emerging issue @ 48% QSF threshold.

Who from the PTI Cooling team should I invite to the FQR to present their status to Joe?

Thanks,

Neil Cervenan 313-805-7036 ncervena@ford.com Bldg #2 24Q34